PROFESSIONALISATION

AND

OPHTHALMIC OPTICS

Thesis submitted as requirement for the

degree of Doctor of Philosophy in the Faculty of Management

University of Aston in Birmingham,

April 1978

Alan Fielding B.A., M.Phil.

Summary

This thesis is a sociological study of the ophthalmic optical profession in Britain. It includes a survey of the development of ophthalmic optics as an occupation and three questionnaire surveys, one each of first and final year ophthalmic optics students, and one of practising opticians.

The developmental survey showed that four themes have been important in the occupation's process of professionalisation - the actions of the opticians' leaders, the gradual unification of the bodies representing segments of the profession, the sturggle with medicine and the involvement of ophthalmic opticians in state-organised optical welfare schemes.

The student surveys showed that the profession is now recruiting largely from middle class, state educated groups, and increasingly from women, who hold significantly different attitudes to income, independence and career commitment. In general, both first and final year students considered service to be rather more important than furthering knowledge.

Practising opticians have been recruited increasingly from middle class backgrounds, mostly from state selective secondary schools, but with a large minority from non-state schools. The self-recruitment rate of the profession (18.9%) is very similar to that for British medical students. Significant differences in concepts of professionalism were found among ophthalmic opticians of different ages, sexes and types of practice but few among those in different areas of practice. In general, ophthalmic opticians seemed to stress service more than furthering knowledge.

It is suggested that the leaders of the profession have 'negotiated' considerable autonomy for its members and that the possibilities for commercialism within the ophthalmic optician's professional role are intrinsically no greater than those in more 'established' professions.

Acknowledgements

The writer wishes to acknowledge the encouragement, guidance and perceptive comments of his supervisor, John Child, Professor of Organisational Behaviour in the Faculty of Management of the University of Aston in Birmingham.

He also wishes to thank Mr. Peter Prime of the Department of Ophthalmic Optics of the University of Aston, Mr. David Pickwell of the Department of Ophthalmic Optics of the University of Bradford, Professor Ronald Fletcher of the Department of Ophthalmic Optics & Visual Science of City University, Professor Ralph Millodot of the Department of Optometry of the University of Wales Institute of Science & Technology, Mr. Donald Loran of the Department of Ophthalmic Optics of the University of Manchester Institute of Science & Technology and Dr. Adrian Hill of the Department of Ophthalmic Optics of Glasgow College of Technology for their co-operation and many kindnesses, and in particular for arranging the 'captive audiences' without which the student samples would have been impossible.

Lastly, he would like to thank the ophthalmic opticians and academic colleagues who contributed invaluable information, advice, insights and constructive criticism. Particular thanks are due to Mr. Reginald Pine, Secretary of the Association of Optical Practitioners who, by his friendly co-operation greatly facilitated the operationalisation of the practising opticians' survey, and Mr. Derek Portwood of the Department of Economics & Social Studies, Faculty of Social Science, Wolverhampton Polytechnic for his valuable comments on the draft copy of this thesis.

CONTENTS

List of Tables

CHAPTER ONE

Introduction

The basic objective of this thesis is to undertake a sociological study of the process of professionalisation of the ophthalmic optical profession in Great Britain. The topic was chosen for several reasons. Firstly, the study will broaden the empirical base of the sociology of the professions for, as Freidson (1971 : 7) has noted:

> "We really have very little systematic, empirical information about most of the professions."

Secondly, most theoretical discussion and such empirical studies of professions as there are have been either of the 'ideal-type' professions of medicine and law (Freidson 1963, 1970, Vollmer & Mills 1966) or of the semi-professions of teaching, nursing, and social work (Vollmer & Mills, Etzioni 1969, Toren 1972). Little attention has been paid to occupations at other points on a 'professional - non-professional' continuum. Thirdly, opticians are the most recent occupation in Great Britain to achieve professional status in terms of state registration - via the Opticians Act 1958.[1] As such they represent an occupation which has reached a key point in the process of professionalisation and this thesis attempts to trace this process and tries to analyse why the

---

[1] The Professions Supplementary to Medicine Act 1960 gave the occupations of physiotherapy, occupational therapy, dietetics, remedial gymnastics, medical laboratory technology and chiropody (orthoptics were added later) an improved status but still left them, as the title of the Act implies, clearly subordinate to the medical profession.

ophthalmic opticians, unlike most the occupations which can be described as 'para-medical' (Freidson 1968 : 114-120), have achieved a position where they are virtually independent of control by doctors.

Fourthly, ophthalmic opticians, unlike most other professions or semi-professions except pharmacy, have an overt commercial element in their role i.e. the dispensing of spectacle frames and, in many cases now, contact lenses. This thesis is concerned with the consequences of this element in terms of the concept of professionalism which ophthalmic opticians possess. Fifthly, ophthalmic optics is a profession which does not possess monopoly control over the services it offers. The market for optical services is shared with ophthalmic medical practitioners and their dependent semi-profession, dispensing opticians. Since the advent of the National Health Service in 1948, during which period reasonably accurate statistics have been available, ophthalmic medical practitioners have undertaken about 20% of all eye-examinations each year. Lastly, the university to which this thesis is being submitted is one of the six institutions of higher education in Great Britain at which student ophthalmic opticians are educated and clinically trained. This has its advantages in operationalising part of the empirical research for the thesis.

This rationale lies behind the aims of the thesis. The study of the profession is in three parts:

1. a historico-sociological analysis of the development of the occupation of ophthalmic optician, especially in the twentieth century.
2. a survey of student ophthalmic opticians in order to discover their social and educational origins, their reasons for

choosing ophthalmic optics and their conception of their chosen profession.

3. a survey of practising opticians to try to elicit the nature of their professional values and concept of professionalism as well as information regarding their social and educational background.

The survey of practising opticians is of particular significance for, as Elliott (1972 : 76) has pointed out, the study of professional practice has been relatively neglected. Most studies within the field of the sociology of the professions have been of professional education and training because of the convenience of "captive audiences from whom data can readily be obtained". This thesis represents an attempt to redress this imbalance. In turn, the empirical work is directly related to the theoretical objective of the thesis which is to contribute to the sociological understanding of the concepts of professionalisation and professionalism and the associated ones of professional career and professional identity.

The Concept of Profession

From what has been said so far it is clear that the concepts of 'profession', 'professionalisation' and 'professionalism' are taken as problematical and they will now be discussed in turn, together with the relation of each to the ophthalmic optical profession. Within the sociology of the professions two main approaches to the term 'profession' have so far been suggested. The first is the approach which tries to identify the characteristics of professional occupations i.e. those which

set such occupations apart from other, non-professional occupations. There are many examples of this approach, from the first serious attempts at analysis by Flexner (1915) in the United States and Sidney and Beatrice Webb (1917) in Great Britain, through the still in many ways definitive one of Carr-Saunders & Wilson (1933) to the recent one by Millerson (1964). Flexner identified five elements of a profession - skill based on theoretical knowledge; the need for training and education; the organisation of the profession; altruistic service, and service applied to the affairs of others. The Webbs (1917 : 4) accepted the following definition:

> "A profession is a vocation founded upon specialised educational training, the purpose of which is to supply disinterested counsel and service to others, for a direct and definite compensation, wholly apart from expectation of other business gain."

The vocation was to be seen in the identity of training and technique among the profession's members.

Carr-Saunders & Wilson (1933 : 284) stated that any attempt to distinguish vocations which were professions from those which were not would be arbitrary.

> "Nevertheless the term profession ... clearly stands for something. That something is a complex of characteristics."

The characteristics they identified were skill based on theoretical knowledge; prolonged and specialised training and education; concern for the competence and honour of the practitioners; the existence of a professional association; adherence to a code of ethics, and fixed remuneration for professional services be fee or salary. According to them (1933 : 284):

> " ... the distinguishing and overruling characteristic is the possession of a technique. It is the existence of specialised and intellectual techniques, acquired as the result of prolonged training which gives rise to professionalism."

It will be noticed that although the characteristics identified by Flexner and Carr-Saunders & Wilson overlap they are not identical. This lack of uniformity among writers on professions was noted by Millerson (1964 : 5), and he lists in a summary chart some 23 characteristics suggested by 21 writers on the subject in the twentieth century and although he identifies six essential features which occur most often he points out that there is not even unanimity on these among the writers he cites.[1] He criticises such analyses for ethnocentrism, lack of dynamism and originality. However, he ends up by offering basically another version. Although he speaks of "principles to be accepted" (1964 : 9) he identifies in effect six characteristics:

(a) a profession is a higher-grade, non-manual occupation possessing an intellectual or practical technique based on a substantial theoretical foundation.

(b) The term 'profession' refers to a comparative status level reached after deliberate action by an occupation.

(c) Professional status is a dynamic quality, reflecting economic and social changes.

(d) A well-defined area of study, or concern, must exist and be applied to give a definite service. To provide competent service, knowledge and experience must be obtained. Competence may be demonstrated by actual

---

[1] It should be noted that less than half of these are social scientists, let alone sociologists.

performance, or more conveniently, by some standardised examination. Organisation of the profession by itself is not enough.

(e) The need for a professional code of ethics depends on the nature of the work involved i.e. on the professional situation.

(f) The aspiring occupation must be subjectively and objectively recognised as a profession. Recognition can take the form of high remuneration, delegation of responsibility or authority etc.

This identification of characteristics approach is described by Johnson (1972) as 'trait-mongering'. He criticises it on the following grounds. Firstly, such an approach implies that all professions are in the process of moving towards an 'ideal type' profession i.e. what the profession 'ought to be like'. Medicine and/or law are usually cited as being the nearest to this ideal type, found in social reality. Secondly, there is little attempt to relate the characteristics identified in any theoretical manner e.g. the relationship between the building of a systematic body of theory and the authority of the professional practitioner Thirdly, the approach too easily accepts the professionals' own definitions of themselves and the professional situation. Little attempt is made to examine alternative, and possibly conflicting, definitions of the same situation. Lastly, Johnson argues that the 'trait' approach is historicall specific and ethnocentric, generalising from 'Anglo-American culture' in the nineteenth and twentieth centuries.

The second theoretical approach to the concept of 'profession' is the functionalist one. This has been expounded principally by Parsons

(1951, 1968) and Barber (1963). They stress the functional value of professional activity for all groups and classes in society. As such it is subject to all the general criticisms of functionalism (see Cohen 1968 : 47-64) but in particular that it ignores the power dimension, the part played in any social situation by the volition of the participants, and cannot explain satisfactorily social change - and, by extension, professionalisation. Johnson suggests a new theoretical approach, that of focussing attention on the practitioner-client relationship. He considers that this approach which will include an examination of the changing distribution of power in society, will identify and account for variations in the ways in which professional occupations have been controlled. The form of the practitioner-client relationship which is the result of a particular complex of power relations in a society at a given moment in time is seen as the crucial relationship in understanding any profession.

The Concept of Professionalisation

Other sociologists have considered that to concentrate on the concept of 'profession' is of limited utility. This feeling is perhaps best expressed by Hughes (1963):

> " ... in my own studies I passed from the false question 'Is the occupation a profession?' to the more fundamental one, 'What are the circumstances in which people in an occupation attempt to turn it into a profession, and themselves into professional people?'"

Hughes thus draws attention to the process of professionalisation. Others share the same feelings. Foote (1953) saw little use in static definitions of a 'profession' to describe something as dynamic as occupational change. Existing work on professionalisation, as Turner

& Hodges (1970) have noted, is closely related to the concept of 'profession' and particularly the identification of characteristics, or 'trait-mongering', approach, in that it makes certain assumptions, if only implicit, about the nature of a profession. An example of this in its simplest form is the definition of 'professionalisation' used by Millerson (1964 : 10):

> "Professionalisation is the process by which an occupation undergoes transition to become a profession."

This definition is clearly problematic since the definition of 'profession' is itself problematic.

Earlier examples of this approach seek to identify some sort of developmental temporal sequence. Caplow (1954) equates the start of the process with the formation of a Qualifying Association. Wilensky (1964) describes the 'natural history of professionalism among established professions (law, medicine) as following a typical sequence'. His five stages of professionalisation are:

(a) doing the work full-time

(b) determining standards of work and establishing training schools

(c) promoting an effective occupational organisation

(d) gaining legal protection of the monopoly of skills

(e) establishment of a code of ethics

In a more recent work Harries-Jenkins (1970)[1] has concentrated on identifying elements rather than a temporal sequence and suggests six main

---

[1] In J. A. Jackson: Professions & Professionalisation. Cambridge UP 1970, pp. 58-59

elements which sub-divide into some 21 elements of professionalisation, as set out below:

1. Structural element
   - (a) Specialisation : the exclusive nature of group activity
   - (b) Centralisation : the locus of authority-sanctions mechanisms
   - (c) Standardisation : the control of non-occupational behaviour

2. Contextual element
   - (a) Spatio-temporal dimension
   - (b) Size of the occupational group
   - (c) Resources of the occupational group
   - (d) Group relationships

3. Activity element
   - (a) The goals of the occupational group
   - (b) The role of individual members

4. Educational element
   - (a) Occupational intelligence requirements
   - (b) Basis of systematic theory
   - (c) Institutionalised educational process
   - (d) Length of training
   - (e) Cost of training

5. Ideological element
   - (a) Personality involvement
   - (b) Sense of group identity
   - (c) Group culture
   - (d) Status
   - (e) Socialisation process

6. Behavioural element
   - (a) Code of conduct
   - (b) Evaluation of merit

Detailed though this analysis is, it remains an a priori construct and there has been only one serious attempt so far to measure professionalisation empirically - that of Hickson & Thomas (1969). Taking a sample of 43 Qualifying Associations from Millerson's list of 134 they applied 18 scale items to them and found that the following 13 were significant or discriminating items:

1. Relevant work experience required between Finals and Full Professional Status.
2. Either or both recognised Disciplinary Procedure or Committee.
3. Length of training required - 3 years.
4. Royal Charter of Incorporation.
5. Scale of recommended Charges/Fees.
6. Three Examination stages - Prelim, Intermediate & Finals.
7. Eight or more specialist committees over and above governing body.
8. Members explicitly not allowed to undercut each other.
9. Advertising explicitly forbidden.
10. GCE 'A' Level required for entry.
11. Explicit ethic of confidentiality.
12. Length of training - up to five years.
13. Members explicitly not allowed to criticise a fellow professional.

When the data were subjected to a cumulative scaling procedure the 13 gave a mean item analysis value of 0.73. They then applied these 13 items to each Qualifying Association and derived its professionalisation score. This was found to be positively correlated with the age of the Qualifying Association. A major disadvantage of this procedure is that occupations that have been regarded by social scientists as semi-professions can also achieve a high score e.g. the General Nursing Council scores 9. The reason is that the procedure ignores the dimension of autonomy. It

also ignores the degree of control over members and comprehensiveness of membership. Thus the approach to professionalisation has been one which concentrates on the tangible formalistic signs of the process and there has been little discussion or analysis of the consequences of professionalisation e.g. changes in relationships with other professions and with the state, effects on recruitment etc.

As Vollmer & Mills (1966 : vii-viii) point out the process of professionalisation has been frequently referred to as professionalism. They, however, distinguish between the two concepts. 'Professionalisation' is:

> "the dynamic process whereby many occupations can be observed to change certain crucial characteristics in the direction of a 'profession'."

'Professionalism' is:

> "an ideology and associated activities that can be found in many and diverse occupational groups where members aspire to professional status."

In commenting on this distinction they make the significant point that professionalism may be a necessary part of the professionalisation process but it is not sufficient cause per se for that process, for some occupations which express the ideology of professionalism are not very advanced in the process of professionalisation e.g. undertakers, estate agents.

The Concept of Professionalism

There are as many attempts to define 'professionalism' as there are of 'profession'. The following appear to be the more useful

contributions. Strauss (1963) associates four values with professionalism - expertise, autonomy, commitment and responsibility. Kleingartner (1967) says that some 30 goals or values that professional workers seek in their work and careers can be identified from the literature but that most of these fall within four categories:

A. Individual satisfaction and career development
B. Autonomy
C. Economic security and enhancement
D. Occupational integrity and identification.

Freidson (1970) states that professionalism seems to be comprised of three major sets of attitudes, values and orientations:

1. Commitment to the professional ideals of knowledge and science.
2. Commitment to the concrete life-career of the profession and to concrete historically-located institutions.
3. Commitment to the character of professional work - and a special pride based on a conception of the special nature of the work.

Johnson (1973a) argues that there is inherent tension in the professional/client relationship resulting from the client's inability to judge the service provided. Therefore, control is necessary, the degree varying according to the nature of the service. 'Professionalism' is one of three kinds of control of the professional/client relationship. It exists when the professional controls the relationship. This is in contrast to patronage, or client control, and third party control - via the church historically and the state in the twentieth century. He argues that professionalism is declining and that the other two forms of control are of increasing social significance.

The most recent contribution is that by Kerr, Von Glinow and

Schriesheim (1977). It is similar to that of Kleingartner but identifies ideal professional characteristics which the authors equate with professionalism. These are:

1. Expertise - normally stemming from prolonged specialised training in a body of abstract knowledge.
2. Autonomy - a perceived right to make choices which concern both means and ends.
3. Commitment - to the work and to the profession.
4. Identification - with the profession and fellow professionals.
5. Ethics - a felt obligation to render service without concern for self-interest and without becoming emotionally involved with the client.
6. Collegial maintenance of standards - a perceived commitment to help police the conduct of fellow professionals.

Within the last ten years the actions of the state vis-a-vis the professions have become increasingly consumer-orientated e.g. the motives underlying the Monopolies Commission inquiry into restrictive practices in professions 1969-70.[1] Such action is largely a response to consumer criticism of professions, which in turn is perhaps based both on an increased need for their services and a greater ability to judge the service provided. The ophthalmic optical profession has been directly affected by this process via the Prices Commission inquiry into the cost of private spectacles and contact lenses.[2]

The outline of the major contributions to the understanding of the

---

[1] Monopolies Commission: Report on Professional Services (and Appendices): Cmds. 4463 and 4463-1, HMSO 1970

[2] Prices of Private Spectacles and Contact Lenses: Price Commission Report, No. 20, HMSO September 1976

concept of 'professionalism' show that Johnson tries to put professionalism into its social context while Strauss, Kleingartner, Freidson and Kerr et al, focus on the level of the occupation/profession itself and on the social-psychological characteristics of the individual practitioner.

The Concepts of Profession, Professionalisation and Professionalism In relation to Ophthalmic Optics

The general outline and discussion above of the three concepts of 'profession', 'professionalisation' and 'professionalism' has considered them seperately for reasons of analytical convenience. In social reality they are integrally and dynamically interrelated. The discussion of their specific application to the ophthalmic optical profession which now follows is based upon this same assumption of interrelatedness.

At the end of the 19th century, the occupation of optician was just beginning to evolve beyond the craft stage. The Census Report 1901[1] lists 5,954 opticians, 534 (or 8.9%) of whom were women, and classified them under the Eleventh Order of Occupations - Precious Metals, Jewels, Watches, Instruments, Games - alongside Scientific Instrument Makers. According to Caplow's criterion of the establishment of the Qualifying Association, the process of professionalisation of opticians began in 1895 when the British Optical Association was founded; it began examining the following year. If, however, the criteria of Wilensky are applied it is clear that the process (a) began much earlier and (b) took much

---

[1] General Report with Appendices, Cmd. 2174, 1904

longer than in the case of the 'established' professions which Wilensky took as his basis of comparison:

1.	Work full-time	- spectacle-making at least from the early 17thC - Spectacle-Makers' Charter 1629. refraction - at least from the 1850s and the invention of the ophthalmoscope (Helmholz)
2.	Determining standards of work and establishing training schools	- BOA (1895) started to define standards First training school 1898 - Lionel Laurance in London
3.	Promoting effective occupational organisation	- BOA (1895) developed because of lack of interest in optics of the Spectacle Makers Company
4.	Gaining legal protection of monopoly of skills	- Partially 1937 via National Ophthalmic Benefit Committee (N.H.I. body) Completely 1958 Opticians Act (fully effective June 1st 1961)
5.	Establishment of a code of ethics	- BOA & SMC joint code 1936 - accepted by NOBC in 1937.

It is also clear from the above that the process occurred in the ophthalmic optical profession in a different sequence than in Wilensky's 'established' professions. The particularly noteworthy difference in the temporal sequence of opticians' professionalisation is the reversal of 4 and 5 in Wilensky's sequence. This is consistent with the thoughts of other writers on professions e.g. Orzack & Uglum (1958) who consider that the final proof of professionalisation lies in having gained the protection of the state rather than in possessing certain characteristics or attributes. The likelihood of a difference in the sequence was foreseen by Wilensky himself (1964 : 416). He attributes this to power struggles and status strivings and a consequent tendency for aspiring occupations to "try everything at once or anything opportunity and expediency dictate", in order to advance professional aspirations.

Any attempt to apply the 21 sub-elements of professionalisation identified by Harries-Jenkins is necessarily a complex procedure. Discussion here is confined to those sub-elements on which knowledge is currently available. First a comment on the specialisation sub-element of the Structural Element in relation to ophthalmic opticians. Specialisation is a fairly recent development within the profession. Until the last twenty years most opticians were 'jacks-of-all-trades' in terms of optical practice. However, there are now several specialisms, although at different stages of development. These are contact lenses (well-established), basic research (within the university departments) and (less well established via private practice) paediatric and geriatric optics, sub-normal vision and orthoptics.[1] The growth of these specialisms has been related to the increasing educational standards and knowledge of the profession and the final settling of a reasonably clear demarcation line between ophthalmic optics and ophthalmology via the Opticians Act 1958.[2]

Harries-Jenkins' third element is the Activity Element, the second sub-element of which is the role of individual members. Three individuals immediately spring to mind in the ophthalmic optical profession. The first is Charles Hyatt-Woolf who founded and edited "The Optician" in 1891 and remained its editor until his death in 1938.[3] He used "The Optician" as a platform for the views and interests of the aspiring occupation and held strong views about the deficiencies of medicine.

---

1 Orthoptics is a profession supplementary to medicine dealing with the correction of squints.

2 The struggle between opticians and the medical profession is fully discussed in Chapter Two and is not pursued in detail here.

3 For much of this time "The Optician" was the only journal in optics.

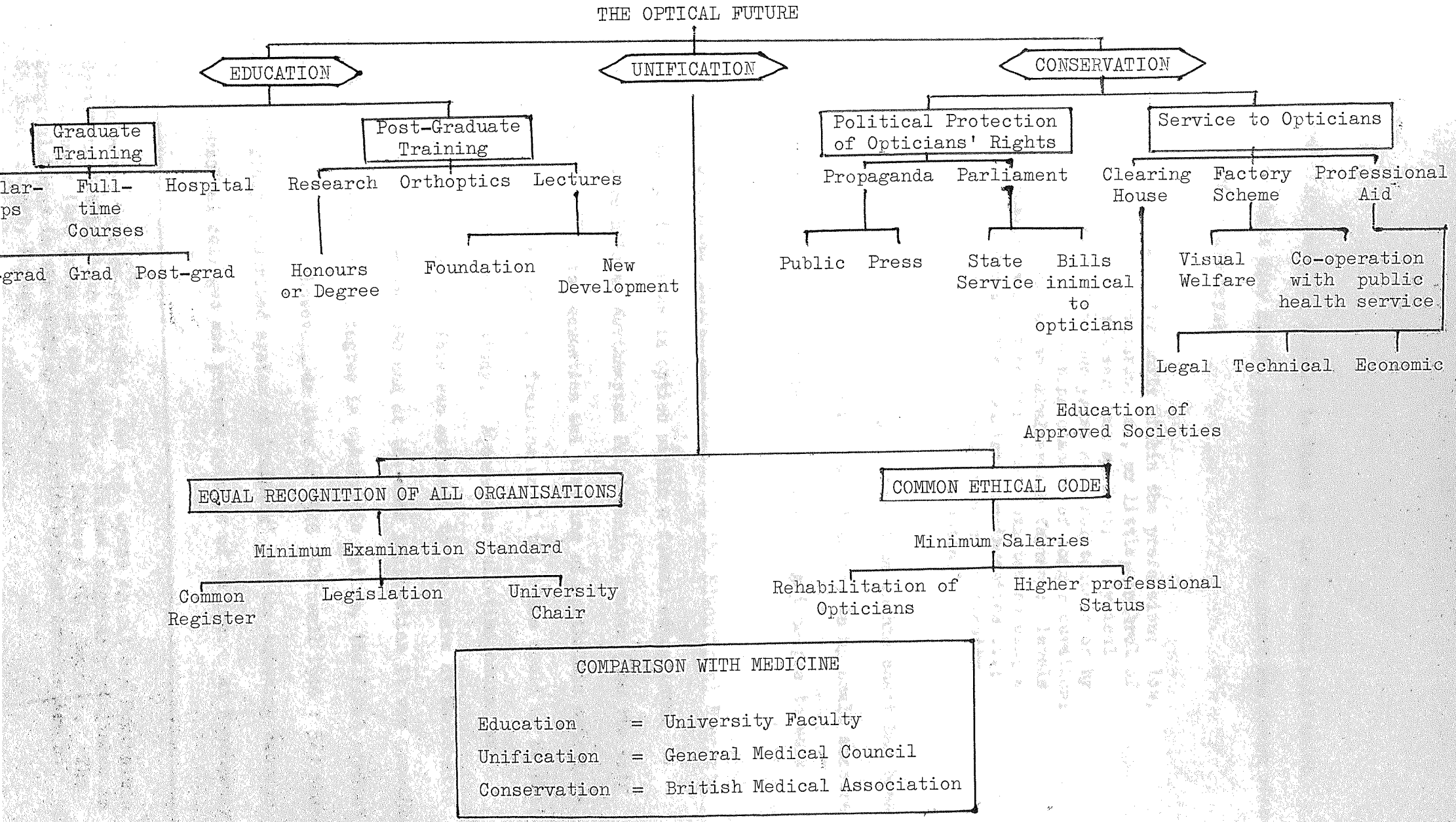
He was especially critical of its 'trade union' activities. The second individual was John H. Sutcliffe, the first Secretary of the British Optical Association, an office he held from 1895 until his retirement in 1940. He played a leading role in organising the earliest education and training, the Army Spectacle Scheme in the First World War, and the involvement of opticians in the National Health Insurance Approved Society optical welfare schemes from 1923. He lived long enough to see partial state registration via the National Ophthalmic Benefit Committee scheme of 1937. According to his contemporaries, he was a stern man of high academic and cultural tastes, and with great organising and negotiating abilities.[1]

The name of the third person, however, perhaps stands out above all others in the optical profession. This is George H. Giles, Secretary of the British Optical Association from 1942 until his death in 1965. He was also Secretary of the Association of Optical Practitioners from its inception in 1946 and editor of the Dioptric Review (from 1961 as the Ophthalmic Optician) as well as sitting on various government advisory committees including the Crook Committee 1949-52, which advised on eventual state registration in 1958. In his spare time he qualified as a barrister! He seems to have been what is now described as a "workoholic" although he was also apparently a natural exponent of human relations.

At his interview in late 1941 for the post of Secretary of the British Optical Association he presented a chart called "The Optical Future" (see p.18) which foresaw its transformation to a position where its education and training, standards of entry, legal protection and

---

[1] See C. Lyons, The George Giles Story. Ophthalmic Optician, October 4, 197


THE OPTICAL FUTURE
EDUCATION
UNIFICATION
CONSERVATION
Graduate Training
Post-Graduate Training
lar-ps
Full-time Courses
Hospital
Research
Orthoptics
Lectures
-grad
Grad
Post-grad
Honours or Degree
Foundation
New Development
Political Protection of Opticians' Rights
Service to Opticians
Propaganda
Parliament
Clearing House
Factory Scheme
Professional Aid
Public
Press
State Service
Bills inimical to opticians
Visual Welfare
Co-operation with public health service
Legal
Technical
Economic
Education of Approved Societies
EQUAL RECOGNITION OF ALL ORGANISATIONS
COMMON ETHICAL CODE
Minimum Examination Standard
Minimum Salaries
Common Register
Legislation
University Chair
Rehabilitation of Opticians
Higher professional Status
COMPARISON WITH MEDICINE
Education = University Faculty
Unification = General Medical Council
Conservation = British Medical Association

ethical standards would be similar to those of the medical profession with which the chart drew direct comparisons.[1] The chart was drawn when as Stanton (1963 : 47) says:

> " ... there was little unity within the profession; low, if any, pre-entry standards; no, or little, control of ethical standards; quackery was rampant; a typical qualifying course took two years at a Polytechnic or by correspondence, or by evening classes of longer duration; a degree in optics was an unbelievable fantasy; levels of examination varied greatly; there existed no single body to speak for all the organisations in optics ...; and finally there was considerable personal animosity among many of the leaders of the profession."

By the time he died the vast majority of the items on his chart had been achieved and most of the remainder were about to be, in no small measure due to his own political expertise and ability to get people to work together.

Harries-Jenkins' fourth main element is the Educational Element. Although the first classes in optics within a formal educational institution were held at Northampton Polytechnic, London (now the City University) in 1903, the education and training of ophthalmic opticians developed relatively slowly. Training until the 1960s could be by full-time, part-time of private study. A one-year full-time course was introduced in the 1920s. This was extended to two years at Manchester College of Technology in 1930 and at the same institution it was possible from 1928 to take a M.Sc. degree in ophthalmic optics, the first student graduating in 1933. However, as late as 1946 (Cornwell 1946 : 52) there was 'no rigidly prescribed system of training' and the existing courses ran in technical colleges and private schools of optics. At Manchester

---

[1] It has often been re-published - see e.g. Lyons op.cit and Ophthalmic Optician, October 16th 1965, p.1048. It was originally published in the January 1942 issue of the Dioptric Review & JCQO Journal. The original hangs in the study of the British Optical Association at 65 Brook Street, London.

a three-year course with matriculation entrance requirements was introduced in 1949, and in 1960 at Aston (then a CAT) a GCE 'A' Level entry requirement was introduced for the Diploma courses of the BOA and SMC.[1] It was not until the mid-1960s that degree courses in ophthalmic optics were introduced in five universities, three of which had evolved from CATs. The course at Manchester was the first to start in 1964; Aston produced its first graduates in ophthalmic optics in 1966, the students converting from the Diploma courses they originally came to study. Thus only within the last 15-20 years has the education and training of ophthalmic opticians come within the ambit of higher education and within that of the universities only within the last fifteen years. Nevertheless the occupational ability requirements are now of university standard and the ophthalmic optician now receives 4 years' education and training - a 3 year degree course and one year's pre-registration clinical training at the end of which he/she takes his professional examinations.[2] Further, all newly registered ophthalmic opticians are graduates, which is not the case with engineers, accountants, or even solicitors.[3]

Harries-Jenkins' fifth main element is the ideological one[4] and the fourth sub-element of this deals with status. As with the two sub-elements already discussed there is clear evidence of formal professionalisation when one applies this status sub-element to ophthalmic optics.

---

1 In 1963 by the BOA for its Diploma courses wherever taught.

2 It should be noted that a student can fail his degree and still register with the GOC, and therefore practise, by passing his professional examinations.

3 This will, however, change when new training regulations for the legal profession are introduced in 1979. Thereafter only graduates will be able to qualify as solicitors.

4 See p.9 for full list of Harries-Jenkins' elements and sub-elements.

Firstly, the Census classification of opticians reflects their continuously rising social status during the twentieth century. From being classified as skilled craftsmen from 1851-1921 (and presumably Social Class III, although this classification was not introduced until 1911) they were re-classified in 1931 under Order XXV - Professional Occupations, sub-order 799E - subordinate medical service. In the Classification of Occupations 1951 they were classified under medical auxiliary services along with pharmacists, physiotherapists, radiographers, chiropodists etc. In social class terms they were now rated Social Class II. In the Classifications of 1960 and 1966 they were grouped with the same occupations as above but the sub-group was re-named 'Medical workers n.e.c.'. Most recently, in the Classification of 1970 ophthalmic opticians (and dispensing opticians) were separated from this sub-group and given a sub-order of their own; they were also re-classified as Social Class I.

This increasing status is also reflected in the structure of the National Health Service and in the employment conditions of the ophthalmic opticians within it. When the NHS was established in 1948 its main services were General Medical and Dental Services, a Pharmaceutical Service and a Supplementary Ophthalmic Service. The title 'Supplementary' meant that the Minister had power under section 41(4) of the National Health Service Act 1946 to close the service at any time that he felt that it could be more adequately given within the projected Health Centres. This represented a latent threat of a return to a status formally subordinate to medicine. This threat was finally removed in 1968 when, under the re-organisation of the NHS the Supplementary Ophthalmic Service became a General Ophthalmic Service. Even before this structural change, however, the employment conditions of ophthalmic opticians within the NHS

were identical to those of ophthalmic medical practitioners.[1]

The preceding discussion has stressed the advances made by ophthalmic opticians in the fields of specialisation, education and training and status, and the role of leading members in promoting the opticians' construction of reality. There are, however, elements in which there is still room for further advance. In relation to specialisation, for example, it should be noted[2] that ophthalmic medical practitioners still undertake some 20% of all eye-examinations each year and have done so throughout the history of the NHS, during which time reasonably accurate statistics have been available. Further the prescriptions which result from most of these examinations are dispensed by the OMP's dependent semi-profession, the dispensing optician.[3] Thus the ophthalmic opticians can claim neither the monopoly of the market for optical services nor that of optical skills. This division of the market and skills as well as the long struggle to break free from medical domination is still reflected in the composition of the Registering and rule-making body, the General Optical Council, which was established under the Opticians Act 1958. The 26 members divide as follows:

10 Ophthalmic opticians
3 Dispensing opticians
6 Medical representatives
1 University representative (ophthalmic optics)
6 Laymen appointed by the Crown (Privy Council)

---

[1] See Handbook for Ophthalmic Medical Practitioners, Ophthalmic Opticians and Dispensing Opticians, NHS (revised to July 1969)

[2] Already mentioned in different context - see p.2

[3] A dispensing optician is legally restricted to the dispensing of the optical appliance which has been prescribed by an ophthalmic medical practitioner or an ophthalmic optician. He/she is legally barred from examining eyes.

Thus the ophthalmic opticians are not in a majority. The dispensing optician representatives have on several occasions openly admitted their commercial orientation when professional matters e.g. rules on publicity, have been discussed.[1] The strength of the 'commercial' element was such that the GOC is forbidden under the Opticians Act to make a rule abolishing window displays. The division of the optical market and the commercial element is also illustrated by the increasing share of the market enjoyed by public companies operating in ophthalmic optics - the 'multiples'. The Crook Committee 1952,[2] whose findings were the basis for the eventual registration of opticians, recommended the abolition of practice by such companies, but existing ones were allowed to continue, largely because the support of the Labour Party for the Opticians Bill (a Private Member's Bill) was conditional on the Co-operative Societies' optical departments being allowed to continue.

Although the 1958 Act forbade the formation of new public companies unless they had a majority of optician directors, those in existence have expanded by 'taking over' private practices e.g. the largest multiple, Dollond & Aitchison, had 91 branches listed in the Opticians Register 1966 and 250 in the 1974 Register. In the late 1960s a change in the nature of the financial control of the largest multiples added fuel to the already existing fear that they were run on clearly commercial lines and many opticians feel that the requirement that such practices include ophthalmic opticians on their boards of directors is not sufficient safeguard against this.[3] This process is still continuing. Dollond & Aitchison, Harrison's and Hudson Verity, the three biggest multiples,

---

1 See e.g. Ophthalmic Optician, February 10th 1962, p.146

2 Report of Interdepartmental Committee on the Statutory Registration of Opticians (Crook Committee) 1952, Cmd. 8531

3 See Politicus in Ophthalmic Optician, November 30th 1968 and letters, December 12th, 1968.

were 'taken over' by Slater Walker Securities in 1968 and were, in turn, sold to Gallacher's in 1972.

There is still room for further advance in terms of status. A NHS patient who goes to an ophthalmic optician to have his/her eyes examined for the first time requires a certificate (NHS Form OSC/1) from a doctor before the optician may legally examine the patient's eyes. However, no such restriction exists for a private patient and opticians regard the regulation as an annoying anomaly which serves no useful purpose. Implicitly, if not explicitly, it is a symbol of the optician's former subordinate status. Similarly annoying to opticians is the fact that medical students may legally examine eyes but not ophthalmic optics students. A third area concerns the status of ophthalmic opticians serving in the armed forces. In the Second World War opticians serving as opticians were given non-commissioned rank although ironically a number were commissioned in other optics-related branches, e.g. photo-reconnaissance. By the 1950s opticians could obtain short-service commissions as opticians but had to switch to being a general company officer above the rank of Captain in the Army lest they outrank the senior ophthalmologist. The situation today is basically the same.

Despite these remaining areas for further advance, it is clear that, overall, ophthalmic opticians show clear structural signs of professionalisation in the twentieth century. They became a state-registered profession in 1958 (1961) but the process of professionalisation, as indicated above, did not end there. Education is within the universities and about 80% of ophthalmic opticians are in individual or group private practice. This percentage if higher than that for any of the professions listed by the Royal Commission on Doctors' and Dentists' Remuneration 1960

and is among the highest for any profession in the United Kingdom. Thus ophthalmic opticians today have all the structural characteristics of a profession. Applying Hickson and Thomas's professionalisation formula to the British Optical Association gives a score of 10 (max. possible 13). In 1954 the BOA would have scored 7 and in 1934 scored 2. This rapid professionalisation is not adequately reflected in the assessment of the optical profession by social scientists in the last forty years. Carr-Saunders & Wilson (1933 : 144) were to some extent sympathetic to the professional aspirations of opticians but while they "admitted that the qualified opticians were skilled refractionists" they also considered that:

> "the optician is a shopkeeper and it is to his financial interest to prescribe spectacles ... "

This was not an unreasonable conclusion in 1933 given the score of the BOA at that time according to Hickson & Thomas's criteria. Lewis & Maude (1952 : 107-108) considered that opticians were professionals but among those who entered 'the field of trade'.

> "The spectacle-maker has become more than a tradesman with the development of ophthalmology. From sight-testing to qualification and full statutory registration has been a gradual process, in which the opticians have organised and trained themselves in the face of obstruction by doctors. The provisions of the Health Act have completed the state registration of opticians, which was partially achieved by the preceding Act of 1936. Nonetheless, opticians keep open shop, and will continue to do so until health clinics are instituted ... "

Conversely, Carr-Saunders (1955 : 279-287), although writing later, distinguished four major types of professions in modern society, the established, the new, the semi-professions and the would-be professions.

He placed opticians in the third group, thus:

> "The semi-professions replace theoretical study by the acquisition of technical skill. Technical practice and knowledge is the basis of such semi-professions as nursing, pharmacy, optometry, and social work."

The Concept of Semi-Profession and Ophthalmic Optics

At this point it is relevant to examine the concept of 'semi-profession' and to discuss its application to ophthalmic optics. The basic question which can be legitimately asked is: 'Is ophthalmic optics still a semi-profession rather than a "full" profession despite its obvious movement along the continuum of professionalisation?' Apart from Carr-Saunders, only Toren (1969)[1] has attempted a definition:

> "Semi-profession denotes that the profession does not rest on a firm theoretical base ... Heteronomy ... means that members of the professions are guided or controlled not only from within - but also by administrative rules and by superiors in the organisational hierarchy."

Later, in an extended analysis of American social workers as semi-professionals (Toren 1972 op.cit.) she outlines the following eight characteristics of semi-professions:

1. The profession does not rest on a firm theoretical base.
2. The period of training involved is relatively short.
3. There is no monopoly of exclusive skills or special area of competence.
4. Rules to guide practice exist which are laid down by non-professionals.

---

[1] In Etzioni ed. The Semi-Professions and their Organisation. Free Press 1969. Etzioni uses the term uncritically.

5. There is less specialisation.
6. Control is exercised by non-professionals.
7. Recruitment is from the lower classes.
8. They possess an ethic of serving people.

Jarvis (1975) has criticised the seventh characteristic on the grounds that it is more an indication of the status of the occupation in society than of the occupation's degree of professionalisation and suggests that the second might be a more meaningful criterion of discrimination between professions and semi-professions in an American rather than a British context. While these points are well made, it may still be relevant to include them when applying these characteristics to the ophthalmic optical profession, in order to further illustrate the professionalisation process of the occupation. Ophthalmic optics has claim to a firm theoretical base via its grounding in optics, the science dealing with the phenomena of light and vision. Toren never makes clear just how short the relatively short training of the semi-profession is. If it is the three year period of teachers and nurses, then ophthalmic optics can claim superiority with their 4 year period of education and pre-registration clinical training. This period is only slightly shorter than that for dental students although it is still shorter than that for law or medicine. Opticians are bound by the rules of the General Optical Council and of one or both of the professional examining bodies, the British Optical Association and the Spectacle Makers Company.[1] The Monopolies Commission Report on Professional Services (1970 : 247) showed that the rules guiding practice for ophthalmic opticians were very similar

---

[1] Plus the Scottish Association of Opticians in Scotland.

to those applicable to medicine. Control exercised over opticians by non-professionals occurs only (allegedly) in large multiples where financial pressure is applied by non-optician directors who are legally in a minority. Control is exercised by non-colleagues in the Hospital Eye Service, where ophthalmic opticians operate under the supervision of ophthalmologists. Altogether about 20% of ophthalmic opticians practise in these two types of situation. The remaining 80% in private practice (individual or group) are subject to certain administrative restraints as personnel of the NHS General Ophthalmic Service but these in no way inhibit their clinical freedom. The area of restraint is confined to their obligation to follow standardised procedures in relation to submitting claims for payment for eye-examinations and supply of optical appliances to the relevant Executive Council for authorisation. The same restraint is exercised over the doctors and dentists operating within the NHS.

As for recruitment from the lower classes, Fielding (1975) has shown that of the 1974 entry to ophthalmic optics degree courses, 83.2% were from middle class social origins, again a figure comparable to those in recent analyses of medical students.[1] This of course is relevant only to current recruitment and the social origins of older ophthalmic opticians may be different. However, in terms of five of Torem's characteristics the ophthalmic optical profession can claim a position superior to that of the classic semi-professions of teaching, nursing and social work and more akin to those of the 'ideal type' professions.

In respect of the other three characteristics, the comparison is

---

[1] See R.C. on Medical Education (Todd Report) 1965-68. HMSO Cmd. 3569

not so favourable. As mentioned earlier, ophthalmic opticians do not possess a monopoly of the skills or of the special area of competence because of the share OMPs and dispensing opticians have of the market for optical services and of the available competence. Ophthalmic opticians can be said to dominate this market[1] and area of competence but not to monopolise them. Also, there is less specialisation within ophthalmic optics than medicine but it is growing as research and consequent knowledge increases. Clearly, though, optics will never develop the number of specialisms (over forty) that medicine has, for the settling of a line of demarcation between medicine and optics meant the acceptance by the latter of a 'limited' area of practice and therefore field of knowledge.

Lastly, Toren cites the possession of an ethic of serving people. The contrast here is with the professional codes of ethics which, according to her, in turn citing Greenwood (1957), regulate the relationships of professionals with clients and colleagues. The Monopolies Commission Report 1970 again shows that the ethical code of ophthalmic opticians is concerned with the same areas of control as that of medicine. If, despite the existence of these formal codes, both ophthalmic optics students and practising opticians do possess an ethic of serving people, this could indicate that the ophthalmic optical profession is still semi-professionally orientated in this respect. Alternatively, it could be that the public have too readily accepted as facts the values which, for example, the medical and legal professions claim for their members but which, unfortunately, have never been

---

[1] Particularly in Scotland where OMPs carry out less than 10% of eye-examinations.

empirically validated. Further, it is possible to argue a priori that doctors or ophthalmic opticians could, at one and the same time, adhere to a code of ethics concerned with control of advertising, confidentiality, supplantment of colleagues etc., and possess a less specific ethic of serving people. The consequence of the latter would be as great as the former in terms of professional behaviour. A reasonable conclusion is that it is problematic whether an ethic of serving people distinguished a 'semi-profession' from a 'profession'. This ethic may exist in occupations which are professionalised to widely different extents.

Overall, the application of Toren's characteristics of a semi-profession to the ophthalmic optical profession therefore reinforces the conclusion reached earlier[1] that ophthalmic optics has professionalised very rapidly in the last two decades, and has crossed the nebulous dividing-line between semi-profession and profession implied by the 'trait' approach. The features which are apparently still semi-professional may more meaningfully reflect the fact that occupations undergoing a process of professionalisation do not advance uniformly in all respects e.g. the biggest changes in the education and training of ophthalmic opticians have come about in the last twenty years, and since state registration was achieved.

The Professionalisation of Ophthalmic Optics (The Attitudinal Dimension)

While it has been argued that ophthalmic optics is structurally a profession this is only half a description for as Olesen & Whitaker (1970)

---

[1] See p. 24

point out there are two levels of professionalisation - the level of structure and the level of values, attitudes and behaviour. The second level has just been touched upon in the preceding discussion of Toren's characteristics of a semi-profession but it manifested itself perhaps most obviously within the profession via the basic issue of commercialism versus professionalism and the ensuing issue of shop window displays. This issue also illustrates the interrelation of values and structure for, as previously mentioned, it is strongly felt that the public companies (a structural element) represent the biggest threat to professionalism. A second example of such an interrelatedness is Hall's (1969) opinion that autonomy is a key element of professionalisation because it has both structural and attitudinal aspects.

Most studies in the sociology of professions tend to assume uniformity of values among professional groups i.e. in terms of their nature and the degree to which they are adhered e.g. Parsons' (1939) discussion of professional and business values. More recent studies, however, particularly Cotgrove and Box (1970) have shown that among chemists working in industry can be found different groups who adhere to the professional values with varying degrees of tenacity and appear to have different concepts of professionalism. This thesis takes this a stage further and tries to relate these differences to variables such as age, sex, and therefore type and length of training, and type of practice. It sees the terms 'profession', 'professionalisation', 'professionalism' 'semi-profession' and their associated terms, 'professional career' and 'professional identity' as problematic. Stubbs (1972) has shown that these terms have different meanings for different groups of teachers. Similarly, within the ophthalmic optical profession it is possible to

identify several groups or segments[1] who a priori might have different 'definitions of the situation':

1. The Chemist-optician.

   In 1976 there were 566 chemist-opticians or 9.8% of all ophthalmic opticians. Of these 98.0% were born before 1930 and thus their numbers have fallen rapidly - in 1967 there were 1,207 (19.2% ophthalmic opticians). They tend to practise in small towns and/or suburbs. They practise jointly a profession and a para-medical semi-profession. They have undergone two processes of socialisation and the two may provide very different proportions of income.

2. The Professionally qualified optician.

   The group who possess the Diploma of the BOA, SMC or SAO (or more than one) constitutes the largest group within the profession - some 4,581 or 80.8% in 1976. There are, however, considerable variations within the group in terms of how their qualifications were obtained e.g. by full-time study, part-time study, privately or at a formal educational institution or permutations of these methods. From the letters in the professional journals on window displays, rules on publicity, Saturday opening etc., it is clear that there is no uniformity of view on these matters within this majority group but clearly a sizeable minority at least must have supported the leaders of the occupational group in their efforts to professionalise in order for the structural professionalisation discussed at length in preceding sections to

---

[1] As defined by Bucher & Strauss (1961).

have occurred.

3. The Formally unqualified.

Those allowed to practise by virtue of their registration under Section 3 (2) of the Opticians Act 1958 after having passed tests or competency applied by the General Optical Council. The vast majority who entered the Register in this way did so in the period 1960-61 i.e. as the Act became fully implemented (June 1st, 1961). In the 1975 Register some 183 or 3.2% apparently did not possess any formal qualifications.

4. Multiple opticians.

i.e. those employed by public companies practising in ophthalmic optics. These range from Dollond & Aitchison with more than 250 'branches' to small 'family multiples' with two or three 'branches'. The general criticism of their alleged commercial orientation has already been mentioned. Specifically, it is alleged that professional optician managers are subject to commercial pressure if the profits of the 'branch' fall below limits acceptable to the central management and that the female receptionists in large multiples play a key role in attracting myopic flies to the glittering optical web where they then subtly 'push' the more expensive frames. Thus some ophthalmic opticians work in organisations and are thus subject to the conflicts arising from the co-existence of professional and business values. It may be that not all the optician's professional values are threatened in such a practice situation - (cf. Hastings and Hinings' (1970 op.cit.) work on the values of

chartered accountants in industry) which suggested that four out of six values they identified would be affected by industrial practice but it is unlikely that their values will be the same as those opticians in private practice. Estimates of the size of this group vary from 1,000 to 1,300.

5. The graduate optician.

Those who are graduates as well as possessing professional qualifications are those who have been recruited since the mid-1960s plus a few who have taken higher degrees before or after this date. Most graduates are less than 30 years of age and there were 992 or 17.2% graduates of all types in the Opticians Register 1976.

6. Women opticians.

Although in 1976 women were only 12.4% (716) of all ophthalmic opticians, in the last ten years the percentage of student opticians who are women has risen from 25.9% to around 40%, peaking at 46.5% in 1973. If this trend continues women could form a substantial minority of ophthalmic opticians in 30-40 years' time. According to Etzioni (1965, 1969 op.cit) this carries with it the danger of becoming a semi-profession for he notes that the "classic semi-professions of teaching, nursing and social work are all predominantly staffed by women" and draws the conclusion that all such higher status occupations are likely to be semi-professions rather than professions. Caplow (op.cit) and Lieberman (1956) go farther than Etzioni and argue that a preponderance of women leads directly to the "unorganisability of

of the profession". These conclusions are perhaps suspect. An alternative explanation for the status of these occupations could be that the level of their training is sub-degree and largely extra-university. No-one, social scientists or layman, has ever suggested that women doctors or dentists are less 'professional' than their male counterparts, even in the USSR where 70% of general practitioners are women.[1] Corwin (1961) found that nurses in the US who followed a college-based degree course were more professionally orientated than those who had completed a hospital-based diploma course. By extension, therefore, it is possible to hypothesise that the graduate women opticians of the future will be no less professionally orientated than male opticians.

7. The Hospital Eye Service

Few opticians work in this type of practice situation - estimates are fewer than 200 - perhaps deterred by the low salaries. However, the significant point for this introduction is that opticians in this practice situation are in a subordinate position to the medical ophthalmologist and therefore semi-professionals.

Thus at least seven apparently discrete 'segments' can be identified within the profession each of which could have signficantly different concepts of professionalism; the basic criteria of distinction being type of practice, nature of qualification and training, sex, and last

---

[1] See Guardian, November 11th, 1976, p.9

but not least, method of remuneration - fees or salaries. In practice, the groups overlap. Many women opticians are also graduates. Those in multiples can be graduates, diploma qualified or unqualified, of either sex.

It is also clear that the balance of the profession's personnel is changing. Chemist-opticians are almost all late middle-aged or elderly and will literally die out in the next generation. Since the vast majority of the apparently formally unqualified were practising in 1958 when state registration came they too must be at the very least 40 years old and thus they too will disappear over the same period. Meanwhile the profession will become increasingly a graduate one and existing evidence suggests that such opticians are more professionally orientated than their non-graduate counterparts. Two points relevant to this are clear from an analysis of the Registers. Firstly, some young graduates are describing their work premises as 'surgeries'. Secondly, they are practising in formerly neglected or recently developed areas of practice e.g. ophthalmic paediatrics, industrial optics, sub-normal vision. In addition, an academic role is now possible within the university departments and basic research has increased significantly in the last decade. Specialisation as previously mentioned is one of the areas of professionalisation where opticians have until recently been 'underdeveloped'.

These developments suggest that ophthalmic opticians are continuing their process of professionalisation. At the same time the number of opticians working for public company multiples has signficantly increased, a practice situation in which opticians are exposed to commercial pressures. It is hoped that the empirical research will show which of the criteria above are the sources of significant difference in concepts of

professionalism. According to Kleingartner (op.cit.) differences can be anticipated, for lack of uniformity of values within a profession is one of the consequences of professionalisation. The research does not assume that a commercial orientation is simply a throw-back or residue from a less professionalised past. It could exist for this reason but equally because of the spread of 'multiples' and the growing concern of NHS professionals over their reward levels - as has been shown by the action of doctors and dentists in recent years.

The basic task of my empirical research into the practising ophthalmic opticians is to try to establish the actual pattern of values held by opticians in various types of practice and to distinguish these values from those claimed for the profession by its leaders and spokesman.

To discuss fully the value element of professionalisation the attitude of the public towards a profession must be discussed as well as the values of the professionals themselves for as Millerson (op.cit.) indicates in his "principles" of professions[1] an aspiring occupation must be subjectively and objectively recognised as a profession. Obviously, a favourable attitude on the part of the state is important in the achievement of objective recognition but it is not its sum total; the attitude of the public is at one and the same time part of the subjective and objective recognition of an occupation's claim to professional status.

There is probably only one piece of empirical work that casts any light on the British public's view of the ophthalmic optical profession. This is a small survey by Walker (1976) within a thesis on marketing as a semi-profession, where a stratified sample of 200 members of the public

---

[1] See pp. 5-6

were asked to say whether a number of occupations, which varied widely in their degree of professionalisation, were old established professions, new professions, developing into professions, not professions at present or unlikely to become professions. Optician[1] was one of the occupations in the survey and 7% rated the occupation as an old established profession, 68% a new profession, 9% thought it was developing into a profession, 11% said it was not a profession and 5% thought it was unlikely to become a profession.

Although 68% rated 'optician' as a new profession, the survey also showed that the occupation was rated in each of the five categories, while the ratings of dentists, accountants and solicitors were confined to the first three categories. This may be an example of a 'cultural lag' for it is only 16 years since glasses could be purchased at Woolworths and in street markets. Cross-tabulation of Walker's data by age, sex, occupation and socio-economic group suggested slight tendencies for older people and women to rate 'optician' lower than younger people and men. There were no clear trends by occupation or socio-economic group, except that professionals (Registrar-General's Social Class I) rated them much higher than any other occupation or socio-economic group.

The other interesting point in relation to recognition which was not covered by Walker's survey is how far the general public is aware of the existence of two types of optician, ophthalmic and dispensing, and the difference in their functions. The ophthalmic optician both examines eyes and dispenses optical appliances, if necessary; the

---

[1] No distinction was made between ophthalmic and dispensing optician.

dispensing optician's role, as the name implies, is confined to the dispensing of optical appliances. This he or she does to the prescription, usually, of an ophthalmic medical practitioner i.e. a doctor with additional qualifications or, less often, an ophthalmic optician.

The empirical part of this thesis is, for reasons of space, time and expense, confined to an investigation of the values of student and practising ophthalmic opticians but obviously any comprehensive study of the profession would need to investigate this 'public' recognition dimension of professionalisation.

Theoretical Framework

The basic argument of this introduction has been that while there is little doubt that ophthalmic opticians are structurally a profession, it is problematic whether all practising opticians are professionally rather than commercially orientated towards the dispensing or sale of spectacle frames, contact lenses etc. While an investigation of the concepts of professionalism held by the various groups in the ophthalmic optical profession represents an advance per se over most previous studies (which have assumed a uniformity of values among the practitioner group), for such an investigation to achieve maximum rigour and validity it must be placed within a clear theoretical framework. Johnson (1972 : 24) for example, has criticised the 'trait' approach for failing to relate the various elements identified theoretically. The present empirical research will attempt to use two related theoretical approaches in a

complementary way. The first of these is the social action approach to organisations outlined by Silverman (1968). He suggests that such an approach should not assume goals but

> "establish empirically what ends individuals and groups do actually pursue and therefore establish what social situations arise."

He also cites Rex's (1962) assertion that power is a crucial variable in the study of organisations for it determines whose or which definitions of reality shall predominate. The approach seeks to find out the consequence of the actions of participant groups for the empirically established ends or goals of these different groups. Silverman suggests a six-point paradigm for such an approach:

1. Establish the ends held by different groups and the degree of conflict between these ends, economic or social.
2. Understand how these ends relate to social situations which groups face, both inside and outside the organisation.
3. Examine the means typically used by different groups to attain their ends.
4. Attempt to explain why certain means are used by groups at certain times in terms of either the availability of means or the relationship of one means to others.
5. Examine the consequences that any piece of action has for the social situation of each group.
6. Consider the likely course of change by examining how ends may be modified and how the availability and effectiveness of different means may vary.

This approach provides a superior framework to that of functionalism for explaining the process of professionalisation in that it does not

reify the system (or in this case the 'profession') or assume that the goals of all professional practitioners are identical. It also attempts to place the ends of groups in a wider social perspective i.e. professionalisation as a process within industrial society.

The second theoretical perspective is closely related to the first. It is the social phenomenological approach of Berger & Luckmann (1966). Their approach is concerned basically with the role of knowledge in social situations. 'Knowledge' they define as the certainty that phenomena are real (independent of our own volition) and that they possess certain specific characteristics. To them a sociology of knowledge has to deal not only with the empirical variety of 'knowledge' but also with the processes by which <u>any</u> body of 'knowledge' comes to be socially established as 'reality'. Since all human knowledge is developed, transmitted and maintained in social situations, the sociology of knowledge is concerned with the analysis of the social construction of reality. This approach, like the first, has its obvious relevance to the sociology of the professions. As Krause (1971 : 113) says:

> "the mandate of a profession is based on the expertise which it can successfully claim in a society, regardless of whether the expertise is real or not in terms of some outside or objective criterion."

Further, the approach goes further than the social action approach in trying to relate the subjective and objective levels of reality. Berger & Luckmann stress the role of language in objectivating subjective meanings and the dominating reality of everyday life which is "a zone of lucidity behind which there is a background of darkness".

This knowledge of everyday life is structured in terms of relevances. Within the ophthalmic optical profession these relevances may be the type

and area of practice, the level of qualification, sex and age. There may also be a pattern to the relationship between these relevances, upon which ophthalmic opticians may construct their realities.[1]

The two approaches together provide a framework which tries to take account of the objective and subjective levels of analysis, is dynamic and recognises the purposive nature of human action in constructing realities. Applied to the ophthalmic optical profession, this framework will encompass the structural aspects of professionalisation and the nature and origin of the concepts of professionalism within the practitioner group. The two levels of analysis are interrelated as Berger & Luckmann (1966 : 208) clearly recognise:

> "Integration of such analyses (of role of knowledge) into the body of sociological theory ... requires a systematic accounting of the dialetical relationship between the structural realities and the human enterprise of constructing reality ... A purely structural sociology is in danger of reifying phenomena."

It is hoped that these two theoretical approaches will provide a framework for the critical task of developing a more satisfactory way of enquiring into the concept of professionalism which various segments of the ophthalmic optical profession may hold.

Overall Plan of Thesis

The remainder of the thesis will be organised as follows:

(a) a chapter on the historico-sociological analysis of the development of the ophthalmic optical occupation with particular reference to the period since the end of the nineteenth century.

---

[1] Explanation of the operationalisation of these two related approaches follows in Chapter Three.

(b) a chapter on the development of the hypotheses which underlay the student and practising optician questionnaire surveys and of the methodological procedures used.

(c) one chapter on the analysis of the ophthalmic optics student surveys.

(e) two chapters on the analysis of the practising optician survey.

(e) a chapter of findings and conclusions, discussion and suggestions for further research.

Summary

This introduction discusses the British ophthalmic optical profession in terms of some of the main concepts of the sociology of the professions, namely 'profession', 'semi-profession', 'professionalisation' and 'professionalism'. It is argued that, structurally the occupation has clearly undergone a process of professionalisation, which has been particularly rapid in the last twenty years. It is further argued that it is problematic whether the attitudes and values of the profession's members have kept pace with these rapid structural changes and that segments might exist which possess significantly different concepts of professionalism, some more commercially-orientated than others. Lastly, a theoretical framework based on the social action approach of Silvermann and the social phenomenological approach of Berger & Luckmann is suggested within which the issues of the objective and subjective dimensions of the professional reality of ophthalmic opticians might be meaningfully analysed and discussed.

The following chapter consists of a survey of the development of the occupation of ophthalmic optics with particular reference to factors advancing or retarding the professionalisation of the occupation.

CHAPTER TWO

The Development of the Ophthalmic Optical Profession

The aim of this chapter is not simply to set out chronologically key events, significant as they are, but to concentrate on aspects which are important in the process of professionalisation. The idea is to identify the factors advancing or retarding the process at different moments in time. The period covered in detail is approximately the last hundred years.

The Period up to 1914

The occupation of spectacle maker in Britain has been a full-time one since at least the early seventeenth century as evidenced by the Charter granted to the Worshipful Company of Spectacle Makers in 1629

> "for the better order rule and government ... and for the profit commodity and relief of the good and honest men and to the fear and terror of evil and wicked offenders."
>
> (Champness 1968 : 3)

This Company, like others that developed as part of the mediæval guild system, concerned itself with the maintenance of standards of apprenticeship and workmanship and was empowered to discipline its members by fines and to search premises to ensure that badly-made spectacles were not sold within the boundaries of the City of London. By the middle of the eighteenth century, however, the Company was losing control over those

who dealt in spectacles, though not over the actual makers.

The term 'optician' rather than spectacle maker was first used circa 1750. A record of a meeting of the Court of the Spectacle Makers Company in 1756 says "a John Berge was apprenticed to Mr. Peter Dollond, an optician". By the end of the eighteenth century the searches of the Company had virtually ceased and the Court's principal task seems to have been to try to maintain the formal system of apprenticeship, the lynch-pin of the guild system.

Table 2.1

Growth of Optical Personnel in England and Wales 1831-1901

		Female	Male
1831	Opticians	-	799*
	Spectacle makers	-	8
1841	Opticians	17	987
	Spectacle makers	11	189
1851	Watch & philosophical instrument makers; opticians	462	2973
1861	Opticians and spectacle makers	125	2003
1871	Philosophical instrument makers and opticians	169	3073
1881	Philosophical instrument makers and opticians	220	3385
1891	Philosophical instrument makers and opticians	350	4492
1901	Scientific instrument makers and opticians	534	5420

* figures refer to males 20+ only

Sources: Occupational Tables of Censuses

In the first half of the nineteenth century the Company became even less influential within the optical trade. In 1831 it elected Mr. James Harmer, a lawyer, as its Master and by this time barely half the Court were opticians. Its business was confined to formal domestic affairs and administration of the Company's charities. Throughout the nineteenth century, however, the optical trade was expanding via the cumulative effects of a rapidly growing population, increasing technical knowledge and specialisation and the availability of books, newspapers and magazines, as Table 2.1 illustrates, even allowing for the limited reliability of early Census data.

It will be noticed from Table 2.1 that the categorisation changes in the various Censuses and usually separate figures are not given for opticians. There are no figures before 1831 because that year's Census was the first to include a detailed occupational breakdown. A comparison of the 1851 and 1861 figures indicates that opticians were at least a majority of the Sub-Order called Philosophical Instruments Makers : Opticians and therefore despite the inconsistencies in the categories the number of opticians grew steadily in the period shown. The 1831 and 1841 Censuses also give an occupational breakdown for London ('The Metropolis') and this shows that of the 799 opticians in 1831, 516 were working in London as well as all 8 spectacle makers listed. Similarly, in 1841, 536 of the 1004 opticians and 38 of the 200 spectacle makers worked in London. This seems to indicate that other towns and areas were extremely deficient in access to optical services e.g. only 1 optician was listed for Wales in 1831, but that this deficiency was starting to decrease in the decade 1831-41.

The title 'optician' could indicate, in modern terminology, an

eye-examiner alone, an examiner and dispenser, an examiner-cum-dispenser-cum-lens grinder and frame maker. It could also indicate someone who derived most of his income from sources other than examining eyes and selling glasses i.e. an instrument maker, jeweller, telescope seller. Ibbs (1955 : 586) states that circa 1850 instruments were still the optician's chief concern. The making and selling of telescopes was a profitable activity and George Dollond, a descendant of Peter,[1] was appointed optician to Queen Victoria and fitted out the royal yacht with optical and nautical instruments. However, by 1875 the growth of the market for traditional instruments and the 'new' camera lenses had made it possible for either instrument making or optics to provide a sufficient living on their own.

Also during the second half of the nineteenth century the trial-and-error method of testing eye-sight began to give way to a more scientific approach with the development of objective techniques and a greater medical understanding of conditions such as astigmatism. King (1955 : 344) states that:

> "After 1860 systematic sight-testing at the five London eye hospitals and those in the provinces widened the gulf between scientific refraction and the empiricism of counter-trade."

But, according to King by 1890 few opticians could prescribe for astigmatism and refraction techniques were largely subjective. Nevertheless, according to Stanton (1963 : 7) in the 1860s opticians prescribed almost all the spectacles worn, and even Moorfields Eye Hospital sent

---

[1] see p.45

out their refraction cases to opticians for testing. This practice ended in 1869 when J. Soelberg Wells, a clinical assistant at Moorfields Hospital expressed alarm at "the reckless destruction of good eyes through the ignorance and carelessness of unscientific opticians". (King 1955 : 344) Wells went on to advocate the exclusive right of sight-testing for medical men. This antagonism between doctors and opticians was not new. Until the middle of the nineteenth century some doctors had opposed the very use of spectacles on the grounds that they exacerbated eye conditions and could be the cause of eye deformities. Other doctors however approved of opticians both in their refractive and dispensing capacities. This anti-optician feeling among some doctors (perhaps centred on those who are now called ophthalmologists) became a greater threat when the Medical Act 1858 was passed which gave qualified doctors some privileges, although it still allowed the unqualified to continue to flourish at least up till the end of the century. The long-term importance of the Act was that it created a powerful pressure group in the British Medical Council with and through which the medical profession could protect itself and attack those encroaching on the medical preserve. The fact that the medical profession reached this key point in its own professionalisation process in the mid-nineteenth century was to the disadvantage of ophthalmic optics when it formally started its own process of professionalisation at the end of the same century.

The position of sight-testing opticians at the end of the nineteenth century was similar to that of the dentists some fifty years before. Opticians fell into three main types. First there was the small minority who were medically and surgically qualified. Secondly, a middle group

who were unqualified but by no means uneducated who had learnt their craft by apprenticeship and described themselves variously as 'optologists', 'sight-testing opticians' and 'eye-sight specialists'. Finally there were uneducated quacks who lived more on their wits than on any optical knowledge or skill.

The foundation of "The Optician" in April 1891 by a journalist, Charles Hyatt-Woolf, quickly provided a vehicle through which some of the middle group could express their growing self-consciousness as a like-minded group. In his first editorial he made it clear that the publication was first and foremost intended as a trade journal.

> "There is always a want in every great association of people, whatever their object, of a mouthpiece or organ. A voice that is a common one - speaking for all and to all - intoned by the community itself. The want we refer to has been long and keenly felt by Opticians, and a new journal fortunate enough to supply it efficiently, should do good service, both to its proprietors and the public." [1]

Its full title was "The Optician, the Organ of the Optical, Mathematical, Electrical and Photographic Instrument Industries and Review of the Jewellery and Allied Trades", an indication of the range of trades that could be followed jointly with optics at this time. The columns of "The Optician" soon reflected the urge to educate and examine which many of the middle group of opticians possessed. Hyatt-Woolf had shared this feeling for, before he started to publish "The Optician" he had approached the Spectacle Makers Company inviting them

> "to co-operate in standardising and raising the knowledge of the craft they had so long dumbly represented. To this end I proposed technical classes and an examination board.

---

[1] "The Optician", April 2nd, 1891, p.1. It has appeared every week since.

> The uplift of the ophthalmic world was, I considered in no other way possible.... " [1]

In the early edition[2] he commented on the anti-optician policy of ophthalmic hospitals and declared

> "What we advocate, however, is the certification of opticians. This would raise the industry to a higher level and a Fellow of the Royal College of Opticians would be an individual whom it would be impossible for oculists to ignore or defame."

Opticians soon took up the torch and in September 1891 A. Capultzi suggested a certification scheme backed by the Spectacle Makers Company and in September 1893 L. J. Troulan suggested a Chartered Institute of Opticians. This latter scheme was hotly debated in the correspondence columns and led to a Robert Sutcliffe laying a similar scheme before the Spectacle Makers Company in 1894. Nothing came of his suggestion. According to Morris (1941 : 27) this was because leading opticians in London were under the spell of the Company which was in turn governed by a Court having little or no contact with the optical trade and "likely to be impressed more by medical opinion than by that of the trade it was supposed to represent". The Company's failure to act led directly to the formation of the occupation's first national organisation,[3] the British Optical Association, founded in February 1895 in Ridler's Hotel, Holborn, London, by a group of fifteen opticians, following a circular sent out to all opticians in contemporary trade directories by Robert Sutcliffe, pointing out the advantages of union "more especially

---

[1] "The Optician 1891-1941", Hatton Press, April 1941, p.22

[2] "The Optician", August 13th, 1891

[3] The Spectacle Maker Company was empowered to control the trade in the City of London only.

among refractionists". (Sutcliffe 1896 : 3) The Association started to publish its own journal, the Dioptric and Ophthalmometric Review and in the April 1896 issue Arthur S. Stoneman 'spelt out' the task of professionalisation for refractionists as opposed to lens grinders or dispensing opticians:

> "In the consideration of our subject we first of all take the position that the Optician as Refractionists has a future; he is not to degenerate into a mere fitter of frames, and a grinder of lenses to Oculists' prescriptions.
>
> "The position of our professional men today has been a matter of evolution. Did not the medical men of old times combine the business of barber and leech? And where was the dividing line between the astrologer and astronomer? So that, whatever the status of the Optician has been and is, there is nothing in the nature of things to prevent its steady growth in influence and dignity.
>
> "Let us briefly consider a few methods by which this improvement may be brought about.
>
> I Scientific methods of conducting business.
>
> II Association for mutual benefit.
>
> III Scientific training, education, and examination of future Opticians.
>
> IV Legal enactment."
>
> (Stoneman 1896 : 6-7)

The reference to medicine shows a good understanding of the developmental nature of the process of professionalisation. The rest of the article is an elaboration of the four headings and a concluding exhortation. It is of relevance to quote again at length from the fourth heading (Legal enactment) and the concluding exhortation, for the whole article is illustrative of the important fact that there existed at the end of the nineteenth century a group of opticians who wanted to professionalise, knew how to set about the task, and could give reasons why they wanted to do it.

> "IV. The future position of Opticians is likely to be improved by legal enactment, in the same way that medical men, solicitors, chemists, dentists, and others have had their positions defined and secured. This will be done only as a protection to the public, and not for our benefit, but most people will admit that it is quite time that something should be done to put a stop to the quackery of itinerant vendors and others, who do immense mischief to the sight of their dupes, and whose only recommendation is colossal ignorance and impudence."
>
> "We would urge all Opticians to use every means in their power by the conscientious treatment of every customer, and especially by the avoidance of quackery and blatant advertising, to increase the influence and dignity of the industry to which we belong."
>
> (Stoneman 1896 : 8)

After reading of the priorities of this group it is not surprising to learn that one of the earliest decisions of the British Optical Association was to institute examinations in three grades - ophthalmoscopic, dioptric and optic. The Articles of Association were published in November 1895 and the first examinations were held in 1896.

The foundation of the British Optical Association and the efforts of Hyatt-Woolf in "The Optician" provided the spurs for the Spectacle Makers' Company to re-involve itself in optical matters and in 1897 the Court passed a motion that diplomas be issued to opticians. In November 1898 the Company held its first examinations at Northampton Polytechnic (now City University) in elementary mathematics, heat and optics. Sight-testing was not examined until 1904, because of medical opposition.

Between 1900-14 several other groups within the optical trade felt the need to organise to serve their special interests - as they saw them. For ease of reference these are set out in chronological order in Table 2.2, together with the two oldest organisations already referred to in several places.

Table 2.2

Organisations of the Optical Trade

1900-14

Name of organisation	Date Founded	Date started to examine
Worshipful Company of Spectacle Makers	1629	1898
British Optical Association	1895	1896
Optical Society	1899	-
Scottish Optical Association	1903	1924*
Society of Chemist-Opticians	1904	1924
Institute of Ophthalmic Opticians	1905	-
National Federation of Ophthalmic Opticians	1910**	1922

* from 1924-34 as the Association of the College of Optics

** reconstituted as National Association of Opticians in 1914

The Optical Society represented the industry i.e. manufacturing opticians, frame-makers, lens grinders. The groups attracted to the Scottish Optical Association and Society of Chemist-Opticians need no further explanation except to say that only qualified chemists could take the examinations of the latter introduced in 1924. The Institute of Ophthalmic Opticians was a non-examining body whose purpose was to protect the interests of Spectacle Makers' Company diplomates. Lastly, the National Federation of Ophthalmic Opticians seems to have been a reaction to the southern-dominated British Optical Association and Spectacle Makers Company. Its origin lay in a conference in 1910 of

all optical bodies, proposed by the Manchester and North of England Optical Society. The conference, which was not attended by the British Optical Association, Spectacle Makers Company or Institute of Ophthalmic Opticians, decided upon a federation of northern and Scottish optical societies to be called the National Federation of Ophthalmic Opticians. This organisation was reconstituted in March 1914 as the National Association of Opticians.

The mushrooming of these optical organisations soon had its consequences in an attempt to secure state registration. This move was initiated when the growing conflict with medicine came to a head via the Medical Acts (Amending) Bill in 1904. This Bill defined the necessity for spectacles as a defect of the human body to be treated only by a regularly qualified medical practitioner. If the Bill had been passed opticians would no longer have been able to practise refraction and only their dispensing role would have remained.[1]

The response of the British Optical Association in December 1904 was to decide to promote a Bill to define and regulate the practice of Optology.[2] As a result of a circular letter sent out in January 1905 by Samuel Cowan (the first vice-president of the British Optical Association in 1895) and Lionel Laurance (a teacher in optics and the convenor of the meeting that led to the foundation of the Institute of Ophthalmic Opticians), a General Board of Opticians was established consisting of representatives of the British Optical Association, the Spectacle Makers' Company and 7 other societies or associations of

---

[1] This Bill was eventually defeated by the actions of the chemists.

[2] This was the name recommended by the British Optical Association's Nomenclature Committee in 1903 after considering some 52 alternatives - see The Optician's Title in The Chemist-Optician: Chemist & Druggist 1908, pp.174-5

opticians.[1] The Board pursued the British Optical Association's decision to promote a Bill and found a sponsor in the Hon. Alban Gibbs (later Lord Aldenham). When he suggested that the Bill might stand a better chance if there was only one registering and certificating body, the Spectacle Makers Company passed a motion in the General Board of Opticians naming itself as this body. Consequently, the British Optical Association representatives resigned en bloc and the Bill was eventually abandoned. Soon after the British Optical Association petitioned the Privy Council for the grant of a Charter of Incorporation but this was refused.

It is somewhat ironic that this internicene rivalry between the two examining bodies was responsible for the failure to proceed with this first attempt to secure registration, for in another respect their competition had had only beneficial effects i.e. their competition as examining bodies had raised the standard of examining all round. Bateman (1965 : 788) speaking of this rivalry over a longer period argues that the only thing uniting the various bodies in optics was the desire for registration.

Before attempting to summarise the period up to 1914 mention must be made of one further significant event. This is the legal case of Markham v. Thomas 1910-11, which still has consequences for the practice of ophthalmic optics. The plaintiff (Miss Markham)complained that the defendant, an optician in business in Manchester under the name Wood Abrahams had failed to detect, after five visits by the plaintiff over the period 1907-9, that she suffered from conical cornea, a disease in

---

[1] Manchester and North of England Optical Society, IOO, SAO, W. Riding Optical Society, Glasgow Optical Society, SCO, Nat. Ass. of Goldsmiths

which continuous reading and close work was fatal to the eyes. Thomas had described himself on billboards as an 'eyesight specialist' and plaintiff's counsel argued that he had been negligent, for had he possessed the knowledge he professed he would have discovered the disease in the plaintiff's eyes. The jury had to decide whether Thomas had advised the plaintiff as an optician or as a person possessed of medical knowledge i.e. whether or not he ought to have discovered the conical cornea. The jury after one and a half hours could not agree and the case was re-tried in March 1911 before the Lord Chief Justice. This time the jury found for the plaintiff and assessed damages of £25.

The decision in the case placed a legal duty upon opticians thereafter to detect disease in the course of an eye-examination. Hyatt-Woolf in "The Optician" pointed out that qualified refractionists were bound by the decision while quacks were not:

> "Of course, the whole trouble hinges on the question of an optician's responsibility for making a diagnosis of ocular diseases. Thus, paradoxical as it may seem, those charlatans who practically never refer one of their dupes to a qualified medical practitioner enjoy an immunity from prosecution which is now denied to refractionists ... None the less does the recognition of eye disease remain a duty the optician should try to perform - without accepting either payment or responsibility - for the benefit of his customer and for the honour of his own profession." [1]

In turn there were several other consequences. Opticians insured themselves against possible charges of professional negligence. The British Optical Association immediately arranged several courses of lecture demonstrations on ocular diseases for the benefit of members.

---

[1] "The Optician 1891-1941", op.cit. p.34

Lastly, it gave a tangible dimension to the conflict between opticians and doctors - the problem of a dividing-line between optics and medicine which was not finally resolved until the Opticians Act 1958.

Thus by 1914 there had developed among those involved in the optical trade a group which had organised itself into several associations and societies, all representing various sub-groups[1] or segments involved in refraction in some way and interested in raising the standard of knowledge and skill of their members. This rapid organisation and growth of self-consciousness is the main characteristic of the 'advancing' factors operating to start the formal process of professionalisation in Caplow's[2] terms, i.e. the formation of a qualifying organisation. The factors retarding even more rapid advances were the increasing hostility of the medical profession and the lack of unity among the opticians themselves. Finally, in this period the state did not play any discernable role in either advancing or retarding the efforts of those within optics who wished to construct a professional reality.

The Period 1914-1937

While the direct task of pursuing the aim of state registration was to all intents and purposes in suspension during the First World War, the opticians' leaders achieved indirect advantage to the developing occupation by gaining government recognition of a kind via the Army Spectacle Scheme. In June 1915 J. H. Sutcliffe, the Secretary of the British Optical Society, wrote to the War Office suggesting a scheme by which soldiers could obtain their spectacles through the Army authorities.

---

[1] See Table 2.2, p.53

[2] See Chapter One, p.8

The suggestion was taken up and Sutcliffe was made personally responsible for implementing the Scheme. He established a central depot in Cornhill, London and another 200 centres from France to Iraq, with an optician attached to each. According to Stanton (1963) over 1 million pairs of spectacles and 2 million goggles were supplied from 1916-18. The effectiveness of the Scheme resulted in Sutcliffe being awarded the OBE at the end of the war. The goodwill generated, however, was apparently limited for when the British Optical Association petitioned the Privy Council for a Charter of Incorporation in 1919 they were again refused.

The early post-war period saw the renewal of activities among opticians to further raise their status, especially in relation to educational standards. In 1923, following on Markham v. Thomas, the British Optical Association introduced a supplementary examination on eye diseases.[1] In the same year it introduced Fellowship and Honours examinations. They also insisted on Matriculation (the predecessor of GCE) as an entrance requirement for their examinations and also required all students to attend a recognised college for training.[2] As in the 1890s the Spectacle Makers Company responded to the British Optical Association stimulus by altering their examinations to bring them into line, but did not lay down any preliminary educational standard.

In 1922 the London Refraction Hospital was founded by the Council of the Institute of Ophthalmic Opticians and opened in 1923 as an out-patients clinic for the treatment of non-pathological defects of the eyes including squints. New techniques were tried out, and it provided research facilities and post-graduate training. Guests from overseas

---

[1] This was fully incorporated into the Fellowship examinations in 1930.

[2] Rather than one of several private schools of optics.

visited and lectured. According to Bateman (1965) the founding of the Hospital was a turning-point in the history of the profession for it fostered a fundamental change of attitude.

> "For the first time students and the younger people of the profession met together, discussed with ever growing excitement the future prospects, began to realise that with the acquiring of knowledge, the carrying of responsibility is associated."
>
> (Bateman 1965 : 788)

Up to this time

> " ... the balance between what was called 'training' and the supply of appliances was such that the vast majority of ophthalmic opticians ... considered spectacles as commodities, profit on them as legitimate and the taking of an examination a preparation for this activity. With this as the end-all there could be no question of not having a shop or making a good display of the commodities concerned."
>
> (Bateman 1965 : 788)

This process of change from a business orientation to a more professional attitude was evidenced by the introduction by about 1930 of the word 'practice' as opposed to shop among the younger opticians.

In addition the early 1920s saw the appearance of three new examining bodies. In 1922 the National Association of Opticians started its own examinations. When it was founded (as the National Federation of Ophthalmic Opticians) in 1910 its membership was open to all opticians of repute - qualified or unqualified, but its original rules had stated its intention to start examining. In the same year the Association of the College of Optics[1] was founded and held its first examinations in Glasgow in December. During the First World War the

---

[1] the examining body of the Scottish Optical Association

membership of the Society of Chemist Opticians had fallen rapidly and the Institute of Chemist Opticians was founded in 1923 to serve the needs of the chemist-optician. It held its first examinations in January 1924. These three bodies had not felt that the examinations of the British Optical Association and the Spectacle Makers Company were suitable for their members, despite the fact that the Society of Chemist Opticians had supported them for twenty years and continued to do so.

The real motive for these three bodies to introduce examinations was the commencement of ophthalmic benefit in 1921 under the National Health Insurance Scheme of 1911. The Approved Societies who administered the scheme found themselves at the end of the war with considerable surpluses and decided to provide Additional Benefits (dental and optical) as well as the original statutory ones. Opticians wishing to participate in the scheme had to persuade the societies of their worth and competence. Morris (1941 : 28) succinctly expressed their problem:

> "Whilst opticians could correctly assess the worth of their confreres who were 'qualified by experience', public bodies might reasonably be expected to demand something more tangible in the way of a certificate issued as a result of an examination." 1

Initially, the Approved Societies did have difficulty in determining the competence of individual opticians. The British Optical Association, the Spectacle Makers Company and the Institute of Ophthalmic Opticians responded by agreeing to put aside their differences and formed the Joint Committee of Qualified Opticians in 1923 which at once drew up a register of qualified opticians and succeeded in winning the support of

---

1 "The Optician 1891-1941", op.cit., p.28

of many Approved Societies. Membership was confined at the beginning to ophthalmic opticians who held the diploma of the British Optical Association or Spectacle Makers Company and the insured members of the Approved Societies were required to obtain their optical benefits (tests and appliances) only from opticians on the Register. Opticians were called upon to provide the new service as there were not enough ophthalmic medical practitioners and the Approved Societies were deterred by the fees they demanded.[1]

The distinction between qualified and unqualified opticians was also highlighted by the publication of two government reports. The first, that of the Departmental Committee of the Ministry of Health into the Causes and Prevention of Blindness in 1922 (pp. 105-9) was extremely critical not only of the ability of opticians to detect disease but also of their competence to prescribe glasses. The publication of this Report was another motive for the formation of the Joint Committee of Qualified Opticians in 1923. The second report was that of the Royal Commission set up in 1924 to consider the workings of the National Health Insurance Acts (1911 onwards), which was published in 1926. The Report included consideration of the optical benefits and various optical bodies gave evidence. It commented on the growth of unqualified practice but made no decisive recommendation as to whether or not opticians should be state registered. It did suggest that

> "if it became necessary to regulate the practice of opticians much was to be gained by taking the necessary steps while the problem was still manageable." 2

---

[1] One guinea/test. Opticians charged 5s.

[2] i.e. before the number of unqualified opticians became too large - see Report of R.C. on NHI 1926, Cmd. 2596, p.45

Aware of some truth in the criticisms of the two Reports yet at the same time encouraged by the overall success of their members' involvement in the Approved Societies' scheme[1] since 1923 the Joint Committee of Qualified Opticians took up the suggestion in the Report and published a draft Bill at the end of 1926 which was prohibitive i.e. it restricted registration to the qualified. For reasons which are not entirely clear a second draft which was non-prohibitive was eventually introduced into the Commons in 1927 entitled the Optical Practitioners (Registration) Bill. The Bill envisaged a Central Optical Board, which would compile a register of opticians. An optical practitioner was defined as one who practises optometry.[2] Clause 3(1) allowed the Board to register three categories of optician - those holding a recognised certificate, those engaged in optometry for 5 years before the Act and had passed the Board's practical examination, providing application was made within six months of the commencement of the Act and thirdly, anyone who received from the Board's examiners a certificate of competency in the practice of optometry. The Bill was similar to the Dentists Act 1921 in that it would have allowed the formally unqualified to continue to practise. In the case of dentistry this was to ensure that there were sufficient registered dentists to provide the necessary service. Similar reasoning may have persuaded the Joint Committee of Qualified Opticians to drop its first prohibitive draft of the Bill.

The Board itself was to consist of:

---

[1] Some 12 million people were members by 1927

[2] The American counterpart to the ophthalmic optician today is called an optometrist.

8 optical practitioners initially appointed by the Minister of Health and subsequently elected by the members of the register

1 member appointed by the Minister of Health

1 member appointed by the Scottish Board of Health

1 member appointed by the Board of Education

1 member appointed by the General Medical Council

The structure of this Board (although it was stillborn) bears interesting comparison with that of the existing General Optical Council established in 1959[1] in that the proposed 1927 Board was more democratic, contained a clear majority of opticians, no representatives of the dispensing opticians and fewer representatives of medicine.

The Bill was introduced as a Private Member's Bill by Mr. West Russell, Conservative MP for Tynemouth. Immediately, on its First Reading the Minister of Health proposed that a Departmental Committee be formed so that enquiries could be made into matters relevant to the registration of opticians. This offer was accepted and the Bill was formally negatived when it came up for Second Reading on May 13th 1927, pending the report of the Committee.

Nevertheless, the opportunity was taken on this occasion to air at some length[2] many of the arguments which were repeated in evidence to the Committee. They summarise the arguments for and against statutory registration and illustrate the nature and origin of the 'advancing' and 'retarding' factors operative at the time. Mr. Russell in moving the Second Reading outlined five reasons for state registration. These

---

[1] See Chapter One, p. 22

[2] The debate took up some 46 columns in Hansard - see Hansard, May 13th, 1927, cols. 805-50

were that the work of the profession[1] affected the welfare of the country, a certain standard of qualification, skill and knowledge was a matter of public interest, that this standard could only be maintained if practitioners were given time to specialise, that the status and powers for the optician proposed in the Bill were not to the disadvantage of any considerable section of the community and lastly, that the work of opticians affected public health.

He went on to stress that although non-prohibitive, the Bill would enable the public to distinguish between the qualified and the unqualified:

> "There is nothing to hinder anyone who is carrying on the work of an optician from doing so. All it will do is to enable the public to distinguish between men with regard to whose qualifications some guarantee is given ... and opticians whose qualifications cannot be vouched for by a responsible organisation." 2

Opposition to the Bill came from the unqualified opticians (who were unrepresented in Parliament) and from the medical and Co-operative Party spokesman. A Dr. Davies said in effect that doctors approved of opticians provided they accepted a limited role:

> "I say at once, that if the optician were to be satisfied with the purely refractive work there would not be a word to say against it; but the difficulty is that they claim to be able to detect disease and to send on any case of disease for medical treatment." 3

Sir George Berry, an ophthalmologist, claimed that only a full medical training qualified anyone to detect eye disease successfully:

---

[1] Note the use of the term rather than 'trade', 'industry' or 'occupation'.

[2] Hansard, op.cit., col. 810

[3] ibid, col. 822

> "The optician ... may be able to know of the existence of these diseases, and he may be able, perhaps, to discriminate in some cases between defects due to diseases of the eye and optical defects, but he cannot do so without being liable to make a great many mistakes, unless he has had the full training of a medical man." 1

Mr. Barnes, the Co-operative spokesman, said that the interests of the recipient of the services should be the primary governing consideration and expressed fears that 'co-ops' would not be able to employ opticians because of the increase in fees that would follow the tyranny of the corporate body that would control the registered profession. An alternative interpretation of the medical spokesmens' remarks was provided by a Mr. Rhys Davies:

> " ... The British Medical Association, naturally, takes the usual attitude towards this question - the attitude of malignant opposition to any progress of any kind anywhere ... But when any other organisation proposes to touch its preserves, it at once becomes the mightiest and most influential trade union organisation in this country." 2

The Departmental Committee's membership of 13 included three doctors, three opticians, one Approved Society representative, two lay persons, one Ministry of Health representative and three MPs, including Mr. Merriman the Chairman. Apart from the obvious numerical disadvantage of the opticians, the Minute of Appointment at the beginning of the Committee's Report symbolises their relative lack of status in a trivial yet significant way - no qualifications are credited to the three opticians although they held the diploma of the British Optical Association and/or Spectacle Makers Company. This is in contrast to

---

1 Hansard, op.cit., col. 826

2 ibid. col. 838

the later Crook Committee 1949-52.

The Committee sat from April and reported in December 1927 and its majority recommendations were a vindication of the remarks of Mr. Rhys Davies (who was also a member of the Committee) in the Second Reading debate. The Committee published three Reports, a majority one, and two minority ones, one from the three opticians and one from Mr. Rhys Davies.

The majority report acknowledged both the satisfaction of the members of the Approved Societies with the services of the Joint Committee of Qualified Opticians and that legislation abroad had been effective in putting down the unregulated sale of spectacles and in raising the standard of qualification of opticians. They concluded there was a prima facie case for the registration of opticians to distinguish the competent from the incompetent but nevertheless stated:

> "While we have been forced to conclude that it is not in the public interest that a State register of opticians should be set up, we desire to emphasise that one of the principal reasons on which we base this opinion is our view that it is possible and probable that the medical profession will be able to provide insured persons entitled to ophthalmic benefit with the services of oculists at any early date, and at fees within the limit of the funds from time to time available to approved societies for this purpose. We hope, also, that such a service will be extended to the non-insured population. If, however, for any reason, these hopes are not fulfilled within a reasonable time we do not wish our Report to preclude the possibility of a reconsideration of the question ... "
>
> (1927 Report, p.18)

As Stanton (1963 : 34) remarks it was twenty-four years before this reconsideration took place.

The minority report of the three opticians stated:

> "We consider it ... unreasonable for the Majority Report to conclude that a State Register is almost inevitable and then ride off from this conclusion on the strength of an unexplored promise from one of the interested parties (traditionally jealous of subsidiary professions bordering upon its own) ... "

That of Mr. Rhys Davies approved of state registration of opticians although with some reservations, largely on the grounds that there were insufficient ophthalmic medical practitioners to supply the service needed.

The medical profession having forestalled the registration of opticians by a promise to provide the service themselves, had quickly to take steps to do so.

> "Spurred on by this threat the medical profession set up the National Ophthalmic Treatment Board composed of representatives of the B.M.A. and of the Association of Dispensing Opticians.[1] The Board arranges to give ophthalmic treatment to insured persons and their dependants, and also to others in similar economic circumstances, at fees which are considerably below those charged to the private patient, though they remain higher than those demanded by the sight-testing optician."
>
> (Carr-Saunders & Wilson 1933 : 142)

The Board was in fact established in 1930 and staffed by 350 consultant ophthalmologists, 500 GPs with ophthalmic experience but no training and 300 dispensing opticians. (Stanton 1963 : 35) The Board enabled insured persons to receive the services of an oculist for half a guinea.

Although disappointed by the failure of the 1927 Bill ophthalmic opticians continued to improve their standards of education and training. From 1928 it was possible to take a research degree (M.Sc. Tech) at

---

[1] Formed in 1925 by about 9 firms of opticians who wanted to confine their optical activities to dispensing.

Manchester. Since medical evidence laid before the 1927 Departmental Committee had stressed opticians' inability to recognise ocular disease, from 1930 onwards all five examining bodies included examinations on Abnormal Ocular Conditions. The process continued in the 1930s via a change in the Approved Societies regulations in 1930 which made it possible for a member to have free choice of optician. The immediate unintended consequence was that this could include 'quack' opticians since the Societies could now only recommend the members of the Joint Committee of Qualified Opticians.

By 1932 the administrative confusion and threat to the livelihood of qualified opticians led to the formation of the Ophthalmic Benefit Joint Committee to consider the problem and suggest a solution. The Committee members were made up of representatives from the five optical examining bodies, the Joint Committee of Qualified Opticians, one of the unexamined opticians plus an equal number of representatives of the Approved Societies. By 1935 it had issued three Reports. The first followed a survey by a Dr. Martin on the various optical examinations and made several criticisms of those of the National Association of Opticians, the Association of the College of Optics and the Institute of Chemist Opticians, as a result of which they were brought into line with those of the two older examining bodies.

As well as instigating further improvements in the examination system the further Ophthalmic Benefit Joint Committee reports led directly to partial state registration in 1937. In 1934 the Committee fathered the Ophthalmic Benefit Approved Committee consisting of equal numbers of opticians and Approved Societies, whose task was to negotiate with the government the administration of new regulations covering

ophthalmic benefit i.e. to remove the anomalous situation created by the 1930 Regulations.

Despite continuing intense medical opposition the Committee succeeded in achieving a much improved status via the National Insurance Act 1936 which made it illegal for any practitioner not on the list kept by the Committee (which was given statutory recognition by the Act) to examine the eyes of a panel patient. To qualify for inclusion on the list an optician had to hold the diploma of one or more of the five examining bodies. The Committee also established a Tribunal which disciplined opticians who failed to comply with the terms of service. There was, however, no legal bar to any unqualified person practising ophthalmic optics outside the scheme. The scheme started to operate in 1937 and covered according to Giles (1962 : 217-8) some 50% of the insured population or about 25% of the total population.

The more favourable attitude of the Ministry of Health illustrated by the establishment of the scheme may have reflected not only the growing public confidence in opticians' abilities but also the failure of the medical profession to 'deliver the goods' promised in 1927. A PEP report in 1937 made the following comment:

> "The provision for looking after the nation's teeth is, however, almost satisfactory compared with the provision for looking after its eyes. Ordinary GPs do not feel competent to treat ocular defects unless they have had a special training. This is not possessed by nearly enough medical men and women to meet the national requirements and very large numbers of people have glasses to correct their sight defects, not only made but prescribed for them by opticians whose Joint Committee has prepared a list of some 3,500 'registered optical practitioners'." (page 12)

Eckstein (1959 : 42) also comments on the deficiency of provision of optical services at this time.

The success of the negotiations by the Ophthalmic Benefit Joint Committee prompted further action by the opticians. In 1936 the Spectacle Makers Company and the British Optical Association adopted codes of ethics which placed controls, albeit permissive, on advertising. The Joint Committee of Qualified Opticians adopted this code in November 1937 and it thus applied to their members who participated in the new Ophthalmic Benefit Approved Committee Scheme. In the same year the Joint Committee tried to promote another registration Bill. A minority of members of the Executive, representing the Institute of Ophthalmic Opticians, thought the time was inopportune as the Minister of Health was proposing to issue regulations governing the Ophthalmic Benefit Approved Committee scheme outlined above. The majority nevertheless pressed ahead on the assurance from Parliamentary reports that the interests of the profession would not be endangered by proceeding with the Bill.

The Institute of Ophthalmic Opticians persisted with their misgivings and circulated their members giving their reasons and asking for opinions. The Bill was withdrawn at the eleventh hour following the confusion created by what appears to have been a hoax telegram purporting to have been sent by the Secretary of the Institute of Ophthalmic Opticians to local associations which said that the Approved Societies representatives on the Ophthalmic Benefit Joint Committee viewed the Bill as an act of sabotage and that, if introduced, the Societies would arrange with the Ministry an alternative medical scheme to the detriment of the opticians. The statements were denied by the Secretary and the Approved Societies representatives but the damage had been done and another attempt to achieve statutory registration lost, at least partly by

persisting internicene rivalry between optical organisations.

Before summarising the events of the period 1914-37 another development should be mentioned. This was the appearance of the public company practising in optics. According to Bateman (1965) this took place in the 1920s and they contributed an important new type of service.

> "Branches were opened in small towns and provincial cities where the only ophthalmic services were represented by a silversmith, ironmonger, umbrella store, a hospital possibly. The full-time specialist ophthalmic optician was a new man. The managerial society in ophthalmics was also a new social fact."
>
> (Bateman 1965 : 788)

As the introduction to this thesis makes clear they later became the subject of great criticism by virtue of their business rather than professional orientation. However, in 1937 this criticism had not been made but there were a sufficient number of companies practising for them to form their own protective organisation, the Society of Opticians in that year.

Thus the year 1937 marks a watershed in this respect and in the achievement of partial state registration via the Ophthalmic Benefit Approved Committee scheme. The features identified in the previous period were still apparent i.e. the advancing factors of continuous raising of standards of education and training and the attempt to apply an ethical code to members, and the retarding factors of internicene rivalry between optical organisations and the continuing bitter opposition of the medical profession which according to Lewis & Maude (1952 : 189) maintained as late as 1930 that the use of sight-testing opticians was 'wholly undesirable'. The new factor the importance of

which increased as the period went on was the attitude of the state. At first influenced by medical opinion this was a retarding factor inhibiting professionalisation but by 1937 had arguably become an advancing one as medical influence decreased (but by no means disappeared) with the failure to provide the alternative medically organised ophthalmic service promised in 1927.

Before leaving the period 1914-37 it is relevant to place this progress of ophthalmic optics in terms of professionalisation into its contemporary international context. In particular, comparison with optometry in the United States and ophthalmic optics in the British Empire shows that professionalisation in terms of state registration had already been achieved in these two 'Anglo-Saxon' areas of the world. Havighurst (1973 : 10-14) applied Wilensky's (1964) criteria of professionalisation to optometry in the United States as follows:

"Optometry has attained each step on the dates listed here:

Became a full time occupation	by 1890
First training school established	1892
First university school established	1910
First local professional association formed	1896
First national professional association formed	1897
First State license law	1901
Formal Code of Ethics	about 1935"

(Havighurst 1973 : 10)

By 1900 over 60 private training schools existed and in 1910 a two-year course in optometry was established at Columbia University. Approximately each decade the university courses were extended by a year so that by the 1960s the basic qualification at the twelve training institutions was and is a Doctorate in Optometry taking at least six years

to complete. Thus by 1940, roughly the end of the period under discussion an American optometry course was four years long as against the two of its British counterpart. Further, in the United States all students followed a college course by 1930 whereas private tuition remained a feature of ophthalmic optics training in Britain until the 1960s.

The first American State to license and control the educational requirements of optometrists was Minnesota in 1901. The rest (47 then) had followed by 1924. The formal code of ethics was officially adopted by the American Optometric Association in 1944 and rules of practice in 1950. In this respect the experience of ophthalmic optics in Britain is nearer to that of optometry in the United States. The first code of ethics in Britain was introduced in 1936 although it was not rigidly binding until effective state registration was achieved in 1961.

Although there is less information concerning the Empire, the situation at the end of this period (1937) is fairly well illustrated by Cornwell (1946):

> "Whereas in this country the optician is subject to no State control, in practically every other English-speaking country Optometry Acts provide for a State register, together with the regulating of professional activities. This difference is all the more difficult to understand when, in some parts of the Empire, as New Zealand, the West Indies etc., a British diploma entitles the holder to admission to the State register, thus giving him privileges that are denied him at home.
>
> "Throughout the U.S.A., Optometry Acts are in force in all the 48 States of the Union and in the District of Columbia. In practically all parts of the Empire the same is true, by virtue of the following statutes:
>
> Australia:
>
> New South Wales: Opticians Act, 1930/38
> Queensland: Opticians Act, 1937/39
> South Australia: Opticians Acts, 1920/22
> Tasmania: Opticians Act, 1913
> Victoria: Opticians Registration Act, 1935

British Guiana:

Opticians Act, 1933

Canada:

Alberta: Optometry Act, 1921
British Columbia: Optometry Acts, 1921/35
Manitoba: Optometry Act, 1909
New Brunswick: Optometry Acts, 1921/36
Nova Scotia: Optometry Acts, 1921
Ontario: Optometry Act, 1936
Prince Edward Is.: Optometry Act, 1922
Quebec: Optometrists and Opticians Acts, 1907/37
Saskatchewan: Optometry Act, 1928

Newfoundland:

Optometry Act, 1928

New Zealand:

Opticians Acts, 1928/34

West Indies:

Jamaica: Opticians Law, 1926
Trinidad: Opticians Registration Ordinance, 1933."

(Cornwell 1946 : 50-51)

According to Havighurst (1973 : 12) all optometric colleges "in the other English-speaking countries", except five in the United States, are university-affiliated and he states that there are two in Canada, one in New Zealand and three in Australia. However, he does not give the dates of establishment nor the length of these optometric courses.

The Period 1937 to 1961

During the Second World War as in the First the opticians' leaders took every opportunity to promote the interests of their members and further the process of professionalisation, and in both respects they were more successful than in 1914-18.

In fact they organised a Joint War Emergency Committee at the time

of Munich in September 1938. In September 1939 its membership widened to include representatives of all optical bodies including manufacturing opticians, public company opticians and "the Optician" itself. An attempt to set up an Army Optical Corps failed but more successful projects were to supply the police, ARP, Observer Corps and Home Guard with spectacles and the Royal Ordnance Factory scheme whereby opticians visited such factories at intervals to re-examine eyes, following the discovery in 1940 that one third of all rejection from the factories were because of defective vision. As the manpower demands of the war increased it became apparent that such waste could not be afforded. In July 1945 the assistant chief medical officer of the Ministry of Supply said:

> " ... all the Ministry of Supply medical officers were grateful for the good work done by the ophthalmic opticians and ... without them it would have been impossible to keep up a proper standard of vision in the factories ... factory medical officers, on the whole, do not have any special knowledge of ocular disease and have found the opticians extremely useful in referring such cases to them."
>
> (Stanton 1963 : 49)

Even during the war the profession considered and planned for the post-war period in several ways. In 1941 the term 'War' was dropped from the Joint Emergency Committee's title. In 1942 the Committee issued a report on optical education and convened a Joint Advisory Board to make recommendations on post-war optical education and minimum standards for new entrants. This led in 1949 to the three-year full-time course followed by a one year period of clinical training. Also in 1942 the Joint Committee of Qualified Opticians and the Institute of Ophthalmic Opticians established a committee under Sir Alexander

Carr-Saunders, then Director of the London School of Economics, to consider the future of the two bodies whose functions had often overlapped and clashed to the detriment of professional advancement.[1] The Committee recommended the fusion of the two associations and the formation of a new body, more democratic than the existing two, which would become for the optical profession what the BMA was for the medical profession i.e. a protective association. Following overwhelming support for the recommendation in a referendum of the members of the two associations, the Association of Optical Practitioners was formed in 1946 and the two fusing bodies wound up.

Thirdly, the wartime coalition government published a White Paper on the Health Service in 1944. The Joint Emergency Committee submitted a memorandum and a supplementary memorandum to the Ministry of Health stating their case for full involvement in the proposed health service, working on the basis of the Ophthalmic Benefit Approved Committee scheme of 1937 and pointing out that in the seventeen years since 1927 the medical profession had failed to provide a complete service for the nation's eye care needs, as they had promised to in the Report of the 1927 Committee. The memorandum (1944 : 2) said that the eye needs of the nation were being dealt with by:

350 consultant ophthalmologists
650 ophthalmic medical practitioners
7,000 optical practitioners (registered with the OBAC)
600 dispensing opticians)
120 orthoptists) on Medical Auxiliaries Register

---

[1] e.g. the internicene rivalry over the 1906 and 1936 Bills

The Joint Emergency Committee diplomatically asserted that opticians should continue to provide most of the eye care needed since:

> "The technique of ophthalmic optics has developed largely as a result of optical practitioners' own effort and the field of work is already too wide and too distinctive for ophthalmology, with its own extensive and rapidly growing field, to encompass it."
>
> (1944 : 2)

The Committee had some backing in this claim from the Approved Societies who financed the 1922 and 1937 optical benefit schemes. These Societies had unanimously recommended to the Beveridge Committee on Social Insurance & Allied Services (1942b : 51, 56, 73, 90, 126) that Ophthalmic Treatment Benefit should be made statutorily available to all insured persons i.e. the whole population, in the comprehensive post-war social insurance scheme which the Beveridge Report proposed. However, in the Report proper there is only one reference (its 1938 cost) to ophthalmic benefit (1942a : 26-27).

The memorandum also said that ophthalmologists and optical practitioners had separate fields of work i.e. pathology and refraction, and argued that:

> "There can be little doubt that the highest available standard for the service as a whole is to be obtained by the use of ophthalmologists and optical practitioners as the respective authorities in the spheres of pathology and refraction, since their supremacy in these fields of work cannot be seriously questioned."
>
> (1944 : 3)

With the election of a Labour government in 1945 and the subsequent passing of the National Health Service Act 1946 the nature of the Supplementary Ophthalmic Service envisaged in the Act became a matter of

practical significance in the period before the vesting of the NHS on July 5th 1948. The contents of the Act made ophthalmic opticians seriously question whether they should participate at all in the proposed NHS. Although the Act used the term 'ophthalmic optician' instead of 'sight-testing optician' and defined his function as

> "a person having the prescribed qualifications in optics, including the measurement of errors of refraction, in orthoptics, and in the fitting and supply of optical appliances."
>
> (King 1955 : 553)

The main threat to the profession was Section 41(4). This sub-section empowered the Minister of Health to abolish the Supplementary Ophthalmic Service at any time he thought it could be better carried out through hospitals and clinics via the Health Centres proposed in the Act i.e. the Service was intended only as an interim measure pending the development of a full hospital service. This power carried with it the threat of a return to a position where opticians were subservient to medicine and their scope limited, not to mention a potential decimation of private practice.

At the same time the medical profession itself was bitterly fighting the whole idea of the NHS which they saw as a threat to the doctor's autonomy, particularly Aneurin Bevan's insistence that the NHS doctors operate within group practices. The opticians' leaders eventually persuaded their members to take part in the Supplementary Ophthalmic Service and in 1947 lengthy discussion took place in the Eyes Services Committee as to the form the Service should take. This Committee consisted of representatives of the Ophthalmic Sub-committee of the Negotiating Committee of the medical profession and of the Joint

Emergency Committee of the optical profession, including dispensing opticians. Despite the doctors' overall objections to the NHS the former representatives had been given a special dispensation by the BMA to negotiate.

The Annual Report of the Ministry of Health for the year ending March 31st, 1948[1] shows that the medical representatives did their best to ensure that although the majority of the proposed service might be given by ophthalmic opticians, it would be under close medical supervision.

> "There was some difference of opinion between ophthalmologists and opticians as to the method of approach to Supplementary Eye Services. The doctors contended that in the interests of the patient's general health a medical examination by a person's GP should precede sight-testing on every occasion the service was used. The opticians, on the other hand, maintained that this was unnecessary and unacceptable to public opinion."
>
> (Annual Report, p.196)

The Minister decided after consideration of the views expressed that it would be in the patient's interest to visit his GP before using the Supplementary Ophthalmic Service for the first time and, accordingly, provision was made in the regulations for an initial medical recommendation on the first occasion only that a person used the new service. The fact that the doctors failed to get their proposal accepted illustrates the fact that medical opinion per se was no longer bound to dominate any other in the government's considerations of matters related to eye services.

The opticians in fact gained considerable advantages from their decision to participate in the NHS. Firstly, the conditions of service

---

[1] Cmd. 7734, HMSO, July 1949

for ophthalmic opticians were identical to those of ophthalmic medical practitioners. Secondly, in November 1947 the Minister of Health established a Central Professional Committee consisting of 14 ophthalmic opticians and 6 dispensing opticians to compile a list of opticians whose qualifications were approved for sight-testing and dispensing under the Act - a sort of State Register. Thirdly, the conditions of service referred to above included the abolition of advertising and canvassing, the introduction of fees for appliances and professional services and of Whitley Council to adjust these fees. There was also established a complaints procedure through which opticians could be disciplined and even removed from the list, if appropriate. Fourthly, the Joint Emergency Committee was statutorily recognised as the negotiating body for all matters except fees. Last but not least, ophthalmic opticians could for the first time work in hospitals in the Hospital Eye Service, although as the introduction pointed out[1] this meant that such opticians were subject to medical supervision.

All these advantages represented advances in terms of professionalisation even if the controlling body was not that of the profession but the Ministry of Health. For this reason Lewis & Maude (1952) describe the opticians as a 'socialised profession'. There were also two important unintended consequences. First, the Central Professional Committee interpreted the regulations relating to 'recent including adequate experience' to mean one year's experience under supervision. Thus when the wartime Joint Advisory Board's plans for optical education were implemented in 1949 the length of training became four years - a

---

[1] See Chapter One, p. 35

three year full-time course plus the year's supervised experience. Secondly, as glasses were initially supplied free under the NHS,[1] this had the effect of temporarily decimating the number of private patients, but long enough to force many opticians to register and participate in the Supplementary Ophthalmic Service, who otherwise might not have done so. As a consequence the number of unregistered (and unqualified?) opticians decreased.

The overall improvement of the legal position of ophthalmic opticians and their relationship with the state encouraged them to again seek full state registration. In September 1949 Aneurin Bevan announced the establishment of an Inter-Departmental Committee to

> "advise, on the assumption that it would be in the public interest that provision should be made by legislation for the registration of opticians, how registration could best be carried out, and what qualifications should be required as a condition of registration," (Stanton 1963 : 60)

in answer to the pressure to this end from the optical organisations. The composition of the Committee was similar to that of the 1927 Committee and in April 1952 it presented an unanimous Report. The more important of their 28 recommendations were:

1. The establishment of a General Optical Council with representatives of ophthalmic and dispensing opticians and the medical profession.

6.[2] The establishment of 3 registers; one for opticians who test sight and dispense glasses; one for dispensing opticians; and one for opticians engaged solely in sight-testing. The intention was that the first register would eventually be closed.

---

[1] Charges were introduced in the 1951 Budget

[2] Numbers refer to recommendation numbers in Report of Interdepartmental Committee on Statutory Registration of Opticians: Cmd. 8531, HMSO 1952 (Crook Report): 1-4

8. All opticians who had been approved by the Central Professional Committee would be eligible for registration plus any others who possessed a diploma from one of the recognised examining bodies.

12. The General Optical Council should organise inspection of optical examining bodies and training institutions.

18. The titles 'ophthalmic optician', 'dispensing optician' should be restricted to use by registered opticians.

19. The General Optical Council should enforce discipline and an ethical code throughout the profession.

20. No new ophthalmic optical companies should be formed and existing ones permitted to continue at the discretion of the Council.

24. Ophthalmic opticians and ophthalmic optical students should receive more instruction by medical men especially in recognition of ocular abnormality. Doubt about the respective scope and aims of the two professions should be cleared up, both among the professions themselves and amongst the public.

25. Registered ophthalmic opticians should be recognised as competent to test sight and supply any necessary glasses, but not to diagnose ocular or other diseases.

The recommendations show that the proposed General Optical Council was to be comparable with the General Medical Council and General Dental Council, with powers to discipline and protect the use of the title 'ophthalmic optician' and 'dispensing optician'. They also show that a line of demarcation between ocular pathology and refraction had been agreed by the representatives of medicine and optics, and that there was the intention to abolish corporate practice which the Committee did not think was appropriate 'to the development of a professional service'.

The Report was discussed at length within the professions concerned and with the Ministry of Health. The result was the understanding that the Report represented a basis for legislation when the government could find time to include it in its legislative programme. Five years in fact went by without this time being found. In the interim several

changes of significance were taking place within the ophthalmic optical profession. Three organisational changes occurred. In 1948 the Institute of Chemist Opticians changed its name to the Institute of Optical Science and became a purely optical body. In 1955 the National Association of Opticians decided to merge with the British Optical Association, reducing the number of examining bodies to four. In 1956 the Joint Emergency Committee changed its name to the Joint Committee of Ophthalmic Opticians. Secondly, the Supplementary Ophthalmic Service in its initial stages could not cope with the demands put upon it to carry out eye-examinations and supply appliances. This was, according to Eckstein (1959 : 42), because

> " ... private charity never made up for the inadequacies of public legislation in regard to these services. For both dentistry and ophthalmology the poorer classes were almost entirely dependent on their Approved Societies and on the special services for mothers and young children supplied by some local authorities. But neither the insurance societies nor the local councils provided services in any sense universally ... Thus by the time the NHS went into operation there was an immense hunger for dental treatment, false teeth and spectacles, the effects of which were felt soon enough in the Health Service itself."

The government, fearful of the increasing costs of the NHS services, imposed charges for teeth and spectacles in the 1951 Budget. The result was the revival of private practice. In 1952 the new Conservative government increased the NHS charges and in 1953 changed the Supplementary Ophthalmic Service regulations to allow NHS lenses to be inserted in private frames, thus giving birth to the 'hybrid' appliance. More significantly, this apparently minor change may have been the de facto acknowledgement that the government had no intention of implementing Section 41(4) of the National Health Service Act 1946.[1] Later in the

---

[1] See p. 78

1950s several Ministers of Health made this clear but did not amend the Act to remove the offending sub-section.

The removal of this latent threat of a return to medical domination in Health Centres was also signified in the Report of the Guillebaud Committee in 1956. The Supplementary Ophthalmic Service was applauded for its low costs compared with the General Medical and Dental Services and the Pharmaceutical Serivce, as set out in Table 2.3 below.

Table 2.3

Comparative Costs of NHS Family Practitioner Services England and Wales 1948-54[1]

£ms.

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-5
Central administration	2.1	1.9	1.9	2.5	2.3	2.3
General medical service	44.2	45.7	49.9	50.5	52.0	51.9
Pharmaceutical service	27.7	33.2	38.5	44.1	42.5	39.5
Dental service	39.0	46.4	37.7	29.9	21.1	22.3
Ophthalmic service	20.4	20.1	18.4	7.9	6.3	7.1
TOTAL	133.4	147.2	146.5	134.9	124.2	123.1

Further the Report said that the Eye Services had attracted less criticism than any other part of the NHS.[2]

The Report also considered the future of the Supplementary Ophthalmic Service. Medical evidence to the Committee said that it should be gradually closed down and the Hospital Eye Service developed in its stead. This would enhance the status and prestige of ophthalmic medical practitioner

---

[1] Table 17, p.20, in Guillebaud Report

[2] See Table E.13

and cost less. Evidence from opticians was entirely contrary and maintained that a comprehensive Hospital Eye Service would be impractical, unpopular with the public and involve heavy capital expenditure in building the necessary hospitals and clinics. If ophthalmologists screened all patients requiring eye-tests, this would be an immense waste of trained manpower and money. The opticians saw the Hospital Eye Service and Supplementary Ophthalmic Service as complementary.

The Committee largely accepted the opticians' rather than the medical view of the situation for they concluded

> " ... the weight of evidence presented to us is against the abolition of the supplementary ophthalmic service and its replacement by a comprehensive hospital eye service. To accomplish this would involve additional capital expenditure in constructing, expanding and equipping eye clinics all over the country; it would also entail a considerable addition to the number of qualified ophthalmologists ... at a comparatively modest cost to the Exchequer ... the supplementary ophthalmic services are meeting efficiently the needs of by far the greatest part of the population which obtains its spectacles through the NHS ... We recommend accordingly that the supplementary ophthalmic services and the hospital eye service should continue to function side by side."
>
> (Guillebaud Report, para 562, p.188)

The recommendations of the Guillebaud Report served to increase the pressure of the optical leaders on the government to implement the recommendations of the Crook Report. The Association of Optical Practitioners in particular lobbied every MP and many members of the House of Lords. The pressure only drew further promises of action as soon as possible. As late as November 1957 the Minister of Health said once again that he intended to introduce a Bill 'as soon as Parliamentary time permits'.

In the same month, however, the element of chance took a hand for

according to Flick (1961 : 681):

> "In November Mr. Ronald Russell, MP for Wembley South, drew a place in the ballot for an opportunity to introduce a Private Member's Bill. He went along to the Whip's office to find out if there was a nice little non-controversial Bill awaiting a sponsor and was handed the Opticians Bill."

Together with Mr. W. Griffith, a Manchester MP who was also an ophthalmic optician, he piloted it through the Commons and Lords Amherst and Crook did the same in the Lords, and the Bill received the Royal Assent in July 1958. The Bill as introduced was based on the recommendations of the Crook Committee[1] but was non-prohibitive - it protected the title of the ophthalmic optician and dispensing optician but not the function.

However, the passage of the Bill was not straightforward. Although the Conservative government let it be known that it approved of the Bill, there was fierce opposition from the dispensing opticians and the medical profession. The Ophthalmic Group of the BMA opposed the Bill on a number of grounds:

(a) it prevented the public obtaining eye-examinations at Medical Eye Centres i.e. by OMPs at the shops of dispensing opticians.
(b) it did not preclude sight-testing by unqualified opticians.
(c) it did not establish the third register for ophthalmic opticians who wished to test eyes only and not dispense.
(d) there were insufficient medical representatives (5) on the proposed General Optical Council.
(e) it did not make clear the dividing line between medicine and optics. 2

The first three medical objections were shared by the dispensing opticians. In addition they objected to:

---

[1] See p.81

[2] See Memo from Ophthalmic Group of BMA to Members of House of Commons, December 2nd, 1957

(a) the powers given to the General Optical Council to control advertising and publicity (they were, and are, keen to retain shop windows)

(b) the insistence on institutional training of dispensing opticians - (this would debar children of parents of limited means)

(c) the small number of dispensing opticians (3) on the General Optical Council - (decisions could be taken contrary to their interests)

There was also an objection from the co-operative societies who saw a threat to the provision of optical services to their members if the Bill prevented the formation of new corporate bodies in ophthalmic optics. If a new co-operative branch was opened it could not provide such a service.

These objections (persisting retarding factors) meant that the final Act was an amended version of the Bill which met all these objections. All medical practitioners are allowed to test sight and the shops of dispensing opticians can still bear the sign 'Medical Eye Centre'. It allowed eye-examinations to be carried out only by registered ophthalmic opticians or registered medical practitioners. The General Optical Council was given the duty of drawing up the third register of ophthalmic opticians who did not wish to dispense optical appliances. The number of medical representatives on the Council was increased to six. The duty to refer to a doctor when an ophthalmic optician detected injury or disease was written into the Act (Section 25(3)). The first objection of the dispensing opticians was met by Section 25(2) which forbids the General Optical Council to make a rule prohibiting window displays. The training of ophthalmic opticians and dispensing opticians must be in 'approved training institutions' i.e. approved by the General Optical Council, but dispensing opticians can

still train part-time. The co-operative societies' objection was met by Section 4(2c) of the Act:

> "A body corporate shall be entitled to enrol in the appropriate list -
>
> (c) if it satisfied the Council that the greater part of its business consists of activities other than the testing of sight and the fitting and supply of optical appliances and that so much of its business as consists of the testing of sight is carried on under the management of a registered ophthalmic optician and that so much thereof as consists of the fitting and supply of optical appliances is carried on under the management of a registered optician ... "

The formation of the General Optical Council on January 1st, 1959 and the full implementation of the Opticians Act on June 1st, 1961 marks the end of this period within which the ophthalmic optical profession moved from partial to full state registration. Within the period one of the advancing factors as in the previous periods was the optical organisations' efforts to further raise the standards of optical education and training, but arguably more important was the profession's full participation in the NHS. The Supplementary Ophthalmic Service ran smoothly after the initial flood of demand in 1948-51 and the service cost least and received fewest complaints from the public of all the Family Practitioner Services, despite the opticians being subject to disciplinary procedures similar to those of the doctors and dentists. This participation also had the effect, according to Lindsey (1962 : 429) of promoting closer ties between opticians and doctors. The Guillebaud Committee officially legitimised the favourable impression created by the ophthalmic opticians within the NHS. It was this goodwill on the part of the government which enabled state registration to be achieved, even if the government's goodwill did not extend to finding time to

promote the Opticians Bill as their own measure.

The relationship with the state achieved by the actions of the profession's members within the NHS meant that the retarding factor of medical opposition was overcome. The relative lack of complaints about opticians plus their increasing educational standards meant that doctors could no longer credibly dismiss them as tradesmen. Moreover, the opticians had provided the service the medical profession had promised in 1927 but never implemented. It is significant that the Ophthalmic Group of the BMA's memo to the Opticians Bill complained that the Bill did not prevent the unqualified from sight-testing i.e. the phraseology tacitly admits that there were qualified and unqualified opticians - as late as 1930 the British Medical Journal maintained that the use of sight-testing opticians was 'wholly undesirable'. Thus the medical objections to the 1957 Bill were not against the standards of optical education and training but were really economic ones - the medical memorandum to the Bill says that the abolition of the Medical Eye Centres:

> "would ... endanger the livelihood of a very large number of ophthalmologists."
>
> (Memo, p.2)

This represents a blurring (deliberately?) of the issue, for the living of the ophthalmologist working in hospital was in no way affected - it was rather that of the OMP who serviced the dispensing optician in his shop whose living was affected along with that of the dispensing optician himself. Thus to speak of medical opposition by the end of this period really meant the opposition of a section of the profession whose livelihood was directly threatened by the professionalisation of ophthalmic

opticians.

The Period 1961 - Present

As the introduction indicated[1] the process of professionalisation within the ophthalmic optical profession did not end with the achievement of state registration, although clearly it was a key point in that process. As Bateman (1965 : 788) pointed out, the desire for registration was probably the only unifying factor among the various optical organisations. The formation of the General Optical Council in 1959, however, gave the profession a statutory controlling body which potentially could supply post-registration unity.

The first few years after 1961 were spent applying and interpreting the Act. The General Optical Council made rules controlling training (1961), displaying prices (1962) and advertising and publicity (1964), and there were test cases which clarified the limits of the restrictions in the Act. In Webster v. Butcher 1964 it was held that a spectacle frame without lenses was an 'optical appliance' within Section 30 of the Act and accordingly could only be sold by or under the supervision of a registered optician or medical practitioner.

In 1962 a further structural change took place in the profession when the Institute of Optical Science (whose qualifications many chemist-opticians held) decided to amalgamate with the British Optical Association and consequently the number of examining bodies fell to three (BOA, SMC, SAO).

G. H. Giles in the editorial of the 'Ophthalmic Optician' for June 3rd 1961, the issue following the full implementation of the Act on June 1st, considered that there was little for the Council to do:

---

[1] See Chapter One, p.24

> "By voluntary effort the profession has achieved much ... Certainly the high educational standards already achieved ... leave very little for the General Optical Council to do in the immediate future, except to encourage more and more co-operation and understanding with our medical colleagues and perhaps better teaching facilities. Similarly, with ethical standards. The profession has gained for itself as a result of its splendid work in the NHS, a wonderful name in its high regard for the public, and for its ethical approach, apart altogether from its admitted skill in refraction and its allied techniques." (p.673)

Since the mid 1960s, many ophthalmic opticians have been disappointed with the relative inaction of the General Optical Council. It has been described as a 'dog without teeth' and indeed in respect of two areas which are directly related to professionalisation, it is. It cannot by law make a rule abolishing window displays; it cannot abolish corporate practice in optics. These are the two features which many opticians feel are inhibiting the development of 'full' professional status. In two definitive articles Bateman (1965) argued the case for abolition of multiples and for an Amending Act to do away with an estimated 1100 incorporated firms.[1] The question of window displays has been a constantly recurring theme via letters in the optical journals before and after state registration. The main arguments for and against abolition appear to be:

FOR:

1. Displays prevent full co-operation with medicine without which full ophthalmic care was impossible (August 14th 1965)*
2. Abolition improved the relationship with the patient - they were less aggressive (June 24th 1967)
3. Time was not wasted with casual passers-by looking at frames to kill time (June 24th 1967)
4. Time was saved in not having to clean out windows (June 24th 1967)

---

[1] The 1975 Opticians Register lists only 627 corporate bodies but there have been many 'take-overs' in the intervening period. See also Politicus Ophthalmic Optician, November 30th, 1968, p.1292

5. Stock did not deteriorate in strong sunlight (June 24th 1967)
6. Windows are expensive (May 18th 1963)
7. Only 2 - 5% consulted opticians because they had been attracted by the window display (March 24th 1962, September 1st and November 11th 1973)
8. The public are aware that any optician will have as good a range of frames as available anywhere (March 31st 1973)

AGAINST:

1. It allows the public aesthetic discrimination - to view items of fashion at leisure (April 18th 1970)
2. There should be no limited ban; it should apply to both ophthalmic and dispensing opticians, for the public cannot distinguish (March 21st 1970)
3. It is the attitude of the practitioner that matters - all the window display does is to say 'Optician here' (November 16th 1974)
4. Ophthalmic medical practitioners operate in dispensing opticians' shops without apparent hurt to their professional pride (April 28th 1973)

*Dates refer to issues of the 'Ophthalmic Optician'

The British Optical Association has tried to encourage the trend towards abolition. In 1967 it appealed to Fellows to reduce frames in windows to a maximum of 12, but it has not as yet gone beyond this. Any action it took, in any case, would be restricted to its own members (some 5,000+ in 1975).

The other major changes that have further raised the status of the ophthalmic optical profession since registration have emanated from sources other than the General Optical Council. The development of university degree courses in ophthalmic optics (mostly in former Colleges of Advanced Technology) was the result of action by the educational institutions themselves, albeit with the support of the optical associations and the 'approval' of the General Optical Council. The ophthalmic optical departments of the six institutions[1] now involved in such courses pride

---

[1] Five universities plus Glasgow College of Technology

themselves on their independence and do not pay any direct heed to the manpower needs of the profession in determining the number of students recruited each year - this is related rather to the laboratory space available.[1] If departments are subject to any pressure it is from the university authorities to keep up numbers.

The second change was the transformation of the Supplementary Ophthalmic Service of the NHS into the General Ophthalmic Service by the Health Services and Public Health Act 1968, effective from September of that year. This made de jure what had been a de facto situation for a long time. From 1953-4 it was clear that the possibility of the ophthalmic service being provided in hospitals or health clinics was in abeyance. In 1956 the Guillebaud Report said such a change was unnecessary and expensive. In 1961 the Minister of Health's (Enoch Powell) speech opening the International Ophthalmic Optical Congress acknowledges that it was the government's original intention to provide ophthalmic services largely through the medium of the hospital service, but since then there had been a change and a natural evolution in that the 'vastly greater part' of the ophthalmic services were being provided by the Supplementary Ophthalmic Service who had carried out 60 million eye-tests since 1948. This had been done with few problems and little controversy, and had brought great satisfaction to the public. He thought that the profession was a happy one in that it was able to bring to people a greatly valued service 'so quickly, inconspicuously and effectively'.

The election of a Labour government in 1964, committed to a re-organisation of the NHS brought the hope that the formal change might at

---

[1] According to conversations with Heads of Departments

last be effected, as G. H. Giles made clear in the editorial of the 'Ophthalmic Optician' for October 31st 1964:

> "One thing that the new government might be expected to do is to erase the word 'Supplementary' from the Ophthalmic Service, and to make them part of the Family Health Services. This has been the policy of the Health Committee of the Parliamentary Labour Party for some years past. We hope this will be one of the earliest reforms, one indeed which the government with its small majority, will not find difficult, for from all the replies received all parties support the idea."
>
> (p.1095)

The 1968 Act thus established a General Ophthalmic Service of equal status to the General Medical and Dental Services. The optical leaders also tried to have the regulation dating from the establishment of the NHS in 1948, whereby a patient using the ophthalmic service for the first time had first to visit their GP removed, but without success. The failure, however, was probably attributable more to government policy than persisting medical opposition. The most recent indication of good relations between the state and the profession was perhaps in 1974 when opticians were exempted from VAT on the grounds that they dealt in medical goods.

It was indicated in the introduction[1] that existing sociological literature on professionalisation has stressed the causes rather than the consequences of the process. One important consequence for the profession has been in the origins of its recruits since registration and more particularly the establishment of ophthalmic optics degree courses. Equally important has been the improvement of relations with medicine. As with recruitment this cannot be divorced from changes in

---

[1] See Chapter One, p.11

the optical education system but it is unlikely that it would have happened without state registration. One head of a university optics department who has taught optics since 1951 expressed the change succinctly, and with a wry smile:

> "When I wrote to ----- Hospital from ----- Technical College asking if my students could attend lectures by ophthalmologists and work in the eye clinic I received a frosty reply after six weeks. When I wrote from ----- College of Advanced Technology I received a reply after a week offering grudging help. Now I write as Professor -- from ----- University and the Chief Ophthalmologist 'phones on receipt to ask how he can help." 1

The practical effects of this improving relationship can be seen in that since 1975 ophthalmic optics students at Manchester have spent three quarters of their pre-registration year in private practice and one quarter in a hospital eye clinic, in addition to the time spent in hospital during their degree course. Yet only in 1961 the 'Ophthalmic Optician' felt it necessary to print a specimen letter of referral of a patient to a doctor[2] and as late as 1964 Gayer Morgan, Chairman of the Ophthalmic Sub-Committee of the BMA, gave reasons for persisting medical opposition to opticians and hoped that registration would mean the improvement of the inter-professional relationship. In the treatment of squints, the use of drugs and the fitting of contact lenses there was still danger of encroachment but he was hopeful that the passage of time would bring about agreements. He did, however, acknowledge that opticians did have to make what were in fact medical judgements and that they were legally obliged to do this.

---

1 In an interview with the writer.

2 See Ophthalmic Optician, April 8th, 1961, pp.432-3

Thus there have been areas in which an obvious continuation of professionalisation has taken place since state registration. The process has also continued by virtue of the profession setting itself new targets. The editorial of the 'Ophthalmic Optician' of June 8th 1968 (pp.637-& 639) reports a forum of the Southern Optical Congress on 'The Next Decade' and lists nine priorities for the coming decade:

1. More consolidation of ophthalmic optical bodies.
2. A higher proportion of ophthalmic opticians on the General Optical Council.
3. The examining bodies using their influence to steer educational thought towards greater emphasis upon education for good practice.
4. The Ministry of Education and/or the Ministry of Health paying towards the pre-Fellowship and pre-registration year, and day, or other short period, release for hospital attendance during that year.
5. Encouragement of research, and the profession as a whole taking more interest in research and publication.
6. A resurgence of interest in orthoptics, and the G.O.S. widened to include provision for orthoptic treatment in the daily N.H.S. practice of ophthalmic opticians.
7. The profession united against outside control of its practices.
8. Fair remuneration of the work undertaken by opticians.
9. Greater attention being paid to the international scene in ophthalmic optics.

A speaker in the forum thought that the educational advances were most important. The decade is almost over now and he has been proved right in so far as most of the advances have been in that area of professionalisation. The new university degree in ophthalmic optics do contain courses in professional, legal and social aspects, techniques of practice management, and some of the pre-registration year at Manchester does take place in hospital; there is more research in optics within the six institutions involved, and Ministry refresher courses are more frequent.

Of the other priorities of 1968, there has been no further consolidation of ophthalmic optical bodies,[1] the number of ophthalmic opticians on the General Optical Council has not changed, and orthoptics is still largely practised within the Hospital Eye Service. The seventh priority listed above referred to the take-over of private practices by financially-controlled multiples. In 1968 the three largest[2] were taken over by the Slater Walker group and in turn sold to Gallachers in 1972. In the Opticians Register 1975, Dollond & Aitchison, Hudson Verity and Harrisons had 283 branches listed and the latter two had the same company address as the former.

Letters expressing the threat to private practice filled the columns of the optical journals following the 1968 take-over[3] including letters from the Socialist Medical Association, and in due course Dollond & Aitchison responded with the following statement:

> DOLLOND & AITCHISON
>
> BELIEVE THAT
>
> THE PATIENT'S WELFARE must be the primary concern of every optical practice.
>
> THE PROFESSIONAL FREEDOM of all Opticians is their inalienable right and the vital safeguard of every patient.
>
> COMMERCIAL PRESSURES on Opticians are least when their incomes are assured by regular salary, also covering holidays and sickness.

---

[1] Although in 1976 discussions between the BOA, SMC and SAO started, with a view to organising a common professional examination system via a proposed College of Optics.

[2] See Chapter One, p.23

[3] See e.g. Ophthalmic Optician, December 14th 1968, pp.1379-80

EFFICIENT PRACTICE ADMINISTRATION frees the maximum time for applying specialised professional knowledge to the needs of the public.

PRE-REGISTRATION EXPERIENCE and opportunities for post-graduate study without loss of income are important factors ensuring high standards of patient care.

THE STATUS OF OPTICIANS in the public's mind is best enhanced by the confidence instilled through the maintenance of high standards of refraction and dispensing in well-equipped and well-maintained premises.

AND WILL CONTINUE TO CONDUCT ITS PRACTICES IN ACCORDANCE WITH THESE PRINCIPLES

This statement appeared as a full-page advertisement in the 'Ophthalmic Optician' (issued fortnightly) for several months in 1972. The anti-multiple opticians claimed that the statement only appeared because the multiples were finding it difficult to recruit staff for their 'branches' and that although opticians were granted more professional freedom, pressure was still applied if profits of a 'branch' fell below a level acceptable to the 'head office'. The multiples organisation, the Society of Opticians, also commissioned a manpower survey of ophthalmic optics by the Economist Intelligence Unit which was published in April 1974. The Report concluded that the number of recruits needed to provide the services demanded was greater than that currently entering the profession. The British Optical Association and the Spectacle Makers Company, however, consider that recruitment is adequate at present. Some opticians claim that the Report was a device to legitimise the recruitment of more opticians to multiple practice. The controversy still rages over the multiples' commercial orientation - a letter in the April 27th 1974 issue of the 'Ophthalmic Optician' says that Dollond & Aitchison should change their name to 'Display & Attract', but at the

time of writing no action has been taken and although Sir Ronald Russell suggested to the General Optical Council that they might draft an Amending Bill[1] in 1972, he drew only 14th place in the ballot for Private Member's Bills. He died in 1976 and the profession lost a Parliamentary spokesman of long standing.

The question of fair remuneration for work undertaken by opticians (priority 8) has been of increasing relevance in the last 4-5 years. The NHS sight-test fee rose from an average of 81p in the period July 1958 - August 1964 to £1.69 in July 1974.[2] Since then rapid inflation has meant that the Whitley Council can hardly adjust it quickly enough to keep pace. The latest fee is £3.60 as from September 1976. The significant effect of this is that opticians find themselves turning more to private dispensing to provide a reasonable professional income.[3] It is this aspect of their role which leads to public criticism of 'selling glasses'. This change of emphasis is evidenced by the Price Commission Report on Spectacles and Contact Lenses,[4] which found that the charges for an identical pair of spectacles could vary from £23 to £64. It remains to be seen how far this is a temporary phenomenon or whether it will have long-term consequences both for the practice of ophthalmic optics and the public image of opticians.

The last point is related to the so-called cosmetic element in the optician's role. This element is not new as Baster (1935 : 80) makes

---

[1] See Ophthalmic Optician, December 9th 1972, p.1259

[2] See Ophthalmic Optician, April 13th 1974, p.334

[3] ibid. pp.334 and 366 for discussion of this point.

[4] See Chapter One, p.13

clear:

> "Discreet, but oft reiterated reference to the fact, for example, that propriety now demands a minimum of four pairs of spectacles for everybody who has to wear them at all ... One pair, in tortoiseshell and nickel, for business, one pair in gold for evening wear, gold-mounted pince-nez for full dress, and a fourth pair, framed in pure tortoiseshell for sport and relaxation."

The wording of the advertisement quoted by Baster was clearly aimed then at a middle class clientele but the higher standard of living of the last twenty years has meant that while still being instrumental spectacles have at the same time become increasingly objects of fashion for the majority of the population with a corresponding increase in the number of frames available. This is a complex phenomenon, the effect of which on the health professions is not yet clear and does not as yet appear in the literature of the sociology of the professions. It can be argued that it is linked in the case of opticians with the more commercially suspicious dispensing part of their role which in turn is related to the 'running sore' of window displays and therefore is a retarding factor in terms of their professionalisation process - a de-professionalising element.

Alternatively, it could be seen as a manifestation within the ophthalmic optical profession of the changing nature of health care in an industrial society with a high standard of living. In such a society psychological aspects of health become more important and in these terms cosmetically attractive spectacles can be seen as an aid to psychological well-being. The medical profession now carries out 'cosmetic' operations within the NHS to straighten noses, remove warts etc. Dentists cap teeth, and false teeth are both instrumental and 'cosmetic'. Thus, the

cosmetic element can be interpreted as a response by the profession to changing patient needs and therefore not a de-professionalising element. The phenomenon is even more complex, interwoven as it is with the growing consumer protection movement which Johnson (1972) sees as reducing the autonomy of the professional. The relationship between these five contemporary dimensions of ophthalmic optics - 'cosmetic' spectacles, multiple practice, window displays, inflation and consumer protection - and particularly the importance of the last is well brought out in the following anti-multiple letter to the 'Ophthalmic Optician', in answer to another advocating a ban on window displays for both ophthalmic and dispensing opticians:

> "His (the previous letter writer) remedy is that ophthalmic opticians should continue to disguise themselves as shop-keeper/dispensers so as to ensure that the public never will learn the difference.
>
> This will also, of course, ensure that we are taken over by Messrs. Slater Walker in due course, just as pharmacy is now to all intents and purposes run by Messrs. Boots and Timothy Whites. I bet that the Consumers' Association can hardly wait to put pressure on Parliament and the G.O.C. to abolish the ban on advertising prices so that they can nominate Blogg's two-tone as the 'best buy'!
>
> Of course, we could aim at a status more like that of dentists who receive N.H.S. fees comparable with those of doctors instead of having to subsidise N.H.S. practice out of any private work, as we do. But perhaps Mr. McNair does not want professional status and the income that goes with it?" 1

Thus in the period since state registration the factors advancing the professionalisation of ophthalmic optics have been the actions of the profession's leaders, the continuing good relationship with the state and the improving relations with other professions, particularly medicine.

---

1 Ophthalmic Optician, April 18th 1970, p.426

The retarding factors have been the growth of the commercially-orientated 'multiple' segment of ophthalmic practice and the growth of the consumer protection movement with its accompanying concern with accountability, which carries with it the threat of loss of autonomy. It remains to be seen whether the increasingly important cosmetic element in ophthalmic optics is an advancing or a retarding factor.

Overall Summary

Several themes (which continue across the arbitrarily divided periods discussed) emerge quite clearly from the preceding account of the development of the ophthalmic optical professions. The first and most obvious is the consistent action of the body of men within optics whose target has been the achievement of professional status as signified by state registration. Since 1895 the process of raising educational standards and involving the profession in what the leaders saw as status-enhancing activities has been a continuous and progressively more effective one. The profession has been fortunate in having able men with a vision of the future who served for long periods.

Between 1895 and 1965 the British Optical Association, very much the front-running organisation, had only three General Secretaries, and the middle one died in office after only eighteen months. The editor and founder of "The Optician" in 1891 continued in these roles until his death in 1938.

This theme is related in turn to the gradual unification of the profession. The seven main bodies of 1910[1] have only been reduced to five (GOC, BOA, SMC, SAO & AOP) but these bodies can be seen as

---

[1] See Table 2.2, p.53 and footnote 1, p.91

complementary rather than rivals as hitherto. The General Optical Council is the profession's registering association, the Association of Optical Practitioners its protective association, the British Optical Association, the Spectacle Makers Company and the Scottish Association of Opticians its qualifying associations according to Harries-Jenkins' (1970) typology of professional organisations. The process of unification and rationalisation of organisations is not complete because of the continuing rivalry between the British Optical Association and the Spectacle Makers Company, the former proud of its initiatory role in 1895 which was a direct result of the latter's inactivity in optical matters, and the latter jealous of its long history and links with the status-worthy City of London.

The third theme is the struggle with medicine which grew in the early twentieth century as the opticians organised, educated and became a real threat. This phase perhaps came to a climax in 1927. Thereafter the struggle went increasingly in favour of the opticians as they proved their worth in practice and the doctors correspondingly failed to provide a sufficient number of optically qualified practitioners to supply the service needed.

Fourthly, there has been the involvement of the profession with the state-organised health service from the Approved Society-administered scheme of 1923 covering half the population to the comprehensive NHS from 1948. The profession's provision of the majority of the optical services in this period has meant that successive governments of both parties have cast a kindly eye upon it. The profession has shown itself to have all the supreme virtues which governments applaud - as Enoch Powell

said in 1961[1], it was able to bring to people a greatly valued service so quickly, inconspicuously and effectively - and, he tactfully forgot to add, cheaply.

It is this earning of government plaudits that has been the critical theme in the profession's process of professionalisation, for the backing of the government meant that it was able to break free from medical domination. The professionalisation of ophthalmic optics seems to be a case in which the process was interdependent with bureaucratisation - compare Cicourel & Kitsuse's (1963) account of the way American school counsellors carved a professional niche within the school via their control of the filing system. This is in contrast to most accounts of the relationship between the two processes which see them in terms of mutual exclusivity (Parsons 1939, Etzioni 1965). The process is similar but not identical to that of the American school counsellor for ophthalmic opticians have participated in the NHS while still maintaining their functional autonomy i.e. practising in their own premises. Freidson (1968 : 118) points out that para-medical personnel are more easily able to resist medical domination if they work outside medically-dominated clinics and hospitals. It is now somewhat ironic that many more ophthalmic opticians are in private practice (circa 80%) than doctors (33%).

These have been the four main issues in the process of professionalisation of ophthalmic optics. Finally, it is perhaps relevant to consider the reasons given by Freeman, Levine & Reeder (1963 : 222) for the high standing of optometry in the United States. According to them, optometrists:

---

[1] See p. 93

1. Master the 'hard' science of optics.
2. Are concerned with the eyes which are symbolically a 'good' part of the body compared with those treated by dentists, chiropodists, and physicians.
3. Dispense spectacles which may serve as a status symbol associated with learned and prestigious occupations.
4. Use no drugs or knives and little pain, emotion or anxiety is associated with refraction.
5. As well as patients can easily delimit the scope of optometry, which reduces confusion regarding his function and is less threatening to organised medicine.

If the first, second and fourth reasons have any significance in the British context they are marginal compared with the four main issues outlined above. The third reason, however, is related to the 'cosmetic' element of optics discussed earlier.[1] The last reason is perhaps most relevant for as Gayer Morgan made clear[2] the medical profession is still wary of encroachment via the use of drugs and treatment of squints. Finally, it prompts the realisation that state registration was achieved at a price. The price was that ophthalmic opticians are not a majority on the General Optical Council (cf. the structure of the British Dental Council) and the multiples and the ophthalmic medical practitioners together with the dispensing opticians each share about 20% of the market for optical services. While the share of the latter has remained static, that of the former is by all accounts increasing and part of the future of the profession will be the struggle to resist this threat to the autonomy of private practice.

The following chapter gives an account of the development of the hypotheses to be tested via data from the empirical surveys, and of the methodological procedures adopted.

---

[1] See p. 99

[2] See p. 95

CHAPTER THREE

Development of Hypotheses and Methodological Procedures

This Chapter is concerned with two related matters. Firstly, it outlines the hypotheses tested in the three empirical surveys together with the reasons for their formulation, and secondly it gives an account of the methodological procedures followed in the surveys. Chapter One[1] indicated that three questionnaire surveys would constitute the empirical work, relating respectively to first year students, final year students and practising ophthalmic opticians.

The questionnaire has many well-known disadvantages as a means of collecting survey data. According to Oppenheim (1966 : 33-34) these are:

1. No additional explanations can be given to potential respondents.
2. It lacks the personal introduction of the research project by the interviewer.
3. Respondents can peruse the questionnaire before answering it, can answer questions in any order, skip questions or come back to them, all of which can bias the replies.
4. The questionnaire can be passed on to others, thus distorting the sample.
5. They usually produce a very poor response rate (the chief disadvantage).

However, the research programme was constructed, as far as possible, to minimise or even remove these disadvantages. The student questionnaires were personally administered to captive audiences by the author so that a

---

[1] See p.2

high response rate was obtained.[1] This also meant that a personal introduction to the research was possible and any problems of question understanding and/or interpretation could be dealt with 'on the spot'. Since the students completed the questionnaire 'there and then' they could not pass it on to others and any tendency to peruse or answer the questions in a peculiar order was minimised.

These disadvantages were more apparent with the practising opticians' survey. Ideally, this might have been an interview survey but the difficulties of arranging and carrying out the interviewing of some 700 opticians in just over two years, presumably during evenings and weekends in the vast majority of cases, at addresses all over Great Britain were considerable to say the least. Accordingly, a postal questionnaire was sent to a 10% random sample of the 1975 Opticians Register. A full letter of introduction, phrased and constructed on the advice of optician contacts, was used to try to minimise the lack of personal contact and give as full an explanation as possible[2] without being so long as to deter any further participation. This letter did make it clear that it was part of a random sample and was to be completed by the person to whom it was addressed. In three cases the respondent admitted that he/she was not the addressee. In two cases a father and a husband were not practising and the son and wife respectively (both also opticians) responded instead. In the third case the optician was willing to participate in principle but lacked time and passed it to a colleague. Lastly it was hoped[3] that the educational level of the

---

[1] See Chapter Four, p.132 for full details of response rates.

[2] See Appendix A for a copy of these letters.

[3] Justifiably - see Chapter Five, p.1

respondents and their interest in the survey would ensure an above average return rate for a mail questionnaire. Nothing could be done to prevent the respondents completing the questionnaire after reading it through beforehand and/or completing it in any order they chose.

The remainder of the chapter now considers the three surveys in turn in terms of the methodological procedures used and the rationale underlying the formulation of the hypotheses related to each of them.

The First Year Student Survey

This survey was administered as soon as possible after the students had started their degree course. In most cases this was within the first few days, at the most a fortnight later. The reason for this timing was to minimise the effect on replies of student interaction with staff and other students. In turn, this enabled a ready comparison of findings with parallel surveys of final year students and practising opticians.

The timing of the survey had its consequences for the length and contents of the questionnaire. Students at this stage could hardly be expected to have knowledge of or considered attitudes to the type of career in optics they envisaged, except perhaps in the case of children of opticians. It could not even be assumed that all desired a career in optics since it is possible to complete the course as a non-vocational degree. Thus the questionnaire was confined to areas about which students at the start of their degree course could reasonably be expected to have opinions or be able to express some judgement, however ill-informed. Indeed one of the hypotheses (see below) was to test how well-informed the student concepts of ophthalmic optics were.

The hypotheses to be tested were as follows:

1. Ophthalmic optics students would generally be of lower ranking class origins than is the case with British medical students.

The origin of this hypothesis lies firstly in the empirical findings of surveys of medical students. The Todd Report on Medical Education (1968) Johnson (1971 a & b) and Cruikshank & McManus (1976) all found that medical school entries were overwhelmingly middle class. Secondly, Elliott (1972 : 69) suggests that perhaps professions based on science and technology might have a wider social base. In these terms is optics more like engineering or the less technological medicine? Thirdly, the relatively recent 'trade' origins of the occupation suggest a priori recruitment from lower ranking class groups.

2. The self-recruitment rate of ophthalmic optics students will be lower than that for the established professions.

Kelsall (1954, 1957), the Todd Report, Johnson and Cruikshank & McManus all found that between 17% and 21% of medical students had doctor fathers. Rogoff (1957) reports that those with such fathers or adult friends received support and encouragement in their career aims. This hypothesis seeks to establish the self-recruitment rate of ophthalmic opticians and a priori suggests it is lower because the development of ophthalmic optics degree courses within the last decade as part of the UCCA scheme has changed the nature of the pool from which prospective opticians are drawn. Experienced members of university departments all gave rates of 30% or above in respect of pre-university diploma courses. Conversely, it might still be fairly high because of the predilections and prejudices,

conscious and unconscious, underlying the departmental selection procedures (Elliott 1972 : 67).

3. The majority of ophthalmic optics students will have been educated in state schools in contrast to British medical students.

The Todd Report and Johnson (1971 a & b) found that a majority of medical students had attended non-state schools and Cruikshank & McManus (1976) slightly less than a majority (45.9%). If optics attracts more working class students (Hypothesis 1) one would expect to find a correspondingly large percentage who attended state schools since type of secondary school is related to social class - see e.g. the Crowther Report 1959-60 and the Robbins Report 1963.

4. Many ophthalmic optics students would ideally have preferred to study medicine.

A study of selection procedures within the ophthalmic optics department of Aston University by Brown (1970) included the interviewing of a small sample of students from each year of the course. Of these 60% had originally wanted to read medicine and half of these had actually been rejected by medical schools. Johnson (1971 a & b) looking at this phenomenon from the medical perspective suggests that optics (and dentistry and pharmacology) are obvious medically-related second choices for medical school rejects. This hypothesis tried to establish whether this ideal choice of medicine existed in larger samples of ophthalmic optics students.

5. Ophthalmic optics students make their career choice later than comparable research on medical students indicates.

The main piece of work here is the study of American medical students by Merton, Kendall et al (1957). The part of this study relating to the age of decision to study medicine is by Rogoff (1957) and she found that 69% of her sample first considered a medical career before they were sixteen. This hypothesis is related to the previous one for if many ophthalmic optics students considered medicine as a first choice and tried to obtain a place at medical school then logically they should have turned to optics as a second or even lower choice later than sixteen.

6. Judgments of the importance of the income and status of an ophthalmic opticians by middle and working class students will be significantly different.

The reasoning underlying this hypothesis is that qualifying as an ophthalmic opticians represents an avenue of upward mobility for working class students whereas for middle class students it represents at the most status maintenance. Accordingly, the a priori assumption here was that working class students would rate the income and status of an ophthalmic opticians more important than would middle class students.

7. First year ophthalmic optic students will possess a naive and idealistic conception of the ophthalmic optical profession.

This hypothesis is related to the third, fourth and fifth hypotheses. If the rate of self-recruitment is low, if many ideally would have preferred to study medicine and if they decided on optics fairly late,

the net result will be that many if not most will come to start their course with somewhat idealised 'professional' expectations of the occupation which owe more to the rosy public relations literature of the university departments and/or profession than to any experiential knowledge of optical practice. This would not be true, of course, of the children of ophthalmic opticians.

8. The conception of the ophthalmic optical profession possessed by male students will be significantly different from that held by female students.

In the period 1965-73 the percentage of female ophthalmic optics students rose from 25.9% to 46.5% of the total entry. Since 1973 the percentage has fallen to between 35-40% but this is still high when related to the figures for practising opticians. Women comprised only 14.2% of registered ophthalmic opticians in December 1976. According to Etzioni (1965, 1969) any profession containing a large number of women is in danger of becoming a semi-profession.[1] While not accepting Etzioni's conclusions the assumption is made that women will possess a different concept of the ophthalmic optical profession by virtue of different attitudes to specific aspects of professional life and practice e.g. the importance they give to status, income, autonomy, the career they envisage, specialisation etc. Such a concept may be different but at the same time no less 'professional' in terms of efficiency and commitment to the professional role.

---

[1] See discussion in Chapter One, pp.26-30

The questionnaire which was used to test these hypotheses contained 22 questions,[1] seven of which were 'background items' relating to sex, age, the area of origin, the region in which secondary education was obtained, the type of secondary school, any previous occupational training or experience, social class and religion. The questions relating to social class and secondary education were obviously related to the first three hypotheses outlined above. The other 15 questions related to the following areas:

		Questions
(a)	Age of choice of ophthalmic optics	1 & 2
(b)	Reasons for and influences on this choice	3-5 & 9
(c)	Feelings about a career in optics	6
(d)	Opinion of aspects of optician's role and status	7
(e)	Essential task of ophthalmic optician	8
(f)	Conception of ophthalmic optical profession	10-12
(g)	Qualities needed by good ophthalmic optician	13 & 14
(h)	Concept of ophthalmic optician - patient relationship	15

Most of these questions were pre-set and the range of possible answers included ones relevant to the dimensions of professionalism outlined in Chapter One[2] e.g. status, income, autonomy, service to public, responsibility, commitment. These pre-set codes in various questions provided the data for the testing of hypotheses 6 - 8 while questions 1, 2 and 3, 4 related to hypothesis 5 and 4 respectively. Most of these non-

---

[1] See Appendix A for sample copy of questionnaire,

[2] See Chapter One, pp.12-13

background questions were not original. Question 15 was taken from Coxon's (1965) questionnaire to Anglican ordinands and questions 1, 3, 5, 6, 10, 13 and 14 were adapted and anglicised from Merton et al (1957 : 313-351) which referred originally to American medical students. Although the questions were almost twenty years old by the time of my research they were still appropriate after minor changes in wording i.e. they could not be significantly improved. Question 12 was taken from Orzack's (1971) survey of prestige deficits among American nurses and optometrists. Fifteen pilot questionnaires were distributed in May 1974 to first year students at Aston University and thirteen were completed.

Staff co-operation at the six centres running a degree course in ophthalmic optics was obtained by letters and visits and the modified main sample questionnaire was administered to the incoming first year entry in all six centres in October 1974 and to their successors in 1975 and 1976. The three surveys of successive years' entries was deliberately undertaken in preference to a longitudinal cohort type survey for two main reasons. The first was to obtain as large a sample as possible in the two year period between the first and third surveys, and the second was that a study of the effects of professional socialisation per se was not a principal aim of this research. A similar logic formed the rationale for the two final year student surveys. The time taken to complete the questionnaire ranged from 15-40 minutes with an average time of 30 minutes. Details of the returns and analysis of the data follow in Chapter Four.

The Final Year Student Survey

This survey was administered at the end of the spring term in the third (or in the case of Glasgow College of Technology the fourth)[1] year of the student's degree course. The rationale for this timing was that students were nearing the end of their course and therefore had absorbed almost all the influence it provided directly and indirectly, and yet were not obsessed by Finals to the exclusion of all else - which may have biased otherwise considered replies.

The hypotheses tested were as follows:

1 to 5. As in the first year survey.

6. Final year students will possess a highly developed concept of professionalism.

This hypothesis was based on several observations and consequent assumptions. The work of Merton, Reader & Kendal eds. indicates the power of the medical school as an instrument of professional socialisation. Secondly, the professional journals in ophthalmic optics make it clear that university staff are professionally, rather than commercially, orientated. Thirdly, this was confirmed by the author's observations when visiting the six departments and talking with staff. Thus the hypothesis seeks to test whether an ophthalmic optics department performs the task of professional socialisation in a manner similar to that of a medical school, even if the course is three years as opposed to five.

---

[1] This is a 4-year CNAA course

7. Final year students' values will be professionally rather than commercially orientated.

The reasoning is similar to that for hypothesis 6. In particular, university staff in general will admit to a preference for private practice, and therefore any influence they have is likely to be, implicitly at least, anti-multiple. Sometimes this gets into print.[1]

8. Final year students will possess a clear and specific concept of the optical careers they wish to pursue.

The assumption here is that as the course is basically a vocational one leading to the education, training and qualification of ophthalmic opticians, by the final year students, even if they started their course uncommitted to a career as an ophthalmic opticians, will have made their decision or be rapidly approaching it. Two universities, City and UMIST, have attempted to structure their courses so that other occupations are open to their graduates e.g. research, industrial optics, but even in these two departments, students will be under a similar pressure to make a career decision.

9. Female students will possess a concept of their optical career which is significantly different from that of male students.

This hypothesis is grounded in the work of Etzioni (1965, 1969) and Martin & Katz (1961) who have argued that even educated women see their role as wife and mother as more important than their career. There is

---

[1] See e.g. the editorial of the 'Ophthalmic Optician' for May 2nd 1970. This was written by Professor Dunn of City University when he was the editor of the journal.

some recent British evidence to support this from Kelsall, Jones and Poole (1972) who found this to be true among their sample of 1960 graduates. Thus the assumption is that the female student's concept of her optical career will at least take some cognisance of an expected competing role as wife and mother.

10. The concept of professionalism possessed by female students will be significantly different from that of male students.

The underlying reasoning here is similar to that for hypothesis 9. In particular, the suggestion is that female students will not consider certain dimensions of professionalism so important as will male students e.g. status, autonomy, level of income.

The questionnaire used to test these hypotheses[1] contained 37 questions. The first 15 and the seven relating to background items were identical to those in the first year student questionnaire. The latter 15 related to areas which first year students could not be expected to have thought about in any detail and/or were not relevant to them at the beginning of their course. These areas were as follows:

		Questions
(a)	Attitude to the income-service relationship	16
(b)	Commitment to optics	17
(c)	Specialist interest	18 & 26
(d)	Career commitment	19-20 & 28
(e)	Type of practice preferred	21-23
(f)	Preference of type of area in which to practise	24
(g)	Income expectations	25
(h)	Furthering knowledge	27

[1] See Appendix A for copy

In addition questions 29 and 30 were self-analysis ones containing fifteen pre-set answers each most of which referred to the eight areas above. The relationship between these questions and the hypotheses is set out in full in Chapter Five.

As with the first year student questionnaire several questions were adapted from those used in other studies. Questions 17-19, 25 and 27-30 were amended and anglicised from those used by Merton, Kendall et al (1957). The remainder were original. Fifteen pilot questionnaires were distributed to third year students at Aston University in May 1974 and nine were completed, a lower rate than for the first year students but reasonable in view of the proximity of the volunteers' Finals. With similar staff co-operation as in the first year survey the modified main sample questionnaire was administered to students in all six centres in March and April 1975 and to their counterparts in 1976. The time taken to complete this longer questionnaire was 25-60 minutes with an average time of 45 minutes. Details of the returns and the analysis of the data obtained follow in Chapter Five.

The Practising Optician Survey

This survey consisted of a 10% random sample of the 1975 Opticians Register, a questionnaire, letter of introduction and pre-paid return envelope being sent to every tenth name on the Register unless the optician practised or lived outside the United Kingdom, in which case the next name was taken. The survey was also weighted in respect of three groups. First it was assumed that many younger women in the Register would not in fact be practising and the original number of women (65) in the 10% sample of 593 was increased by 53 to ensure a

representative number of returns from female opticians. This brought the percentage of women in the sample to twice that in the Register (11.4%). Secondly, the analyses of recent registers revealed that the apparently formally unqualified[1] numbered less than 5%. There were 24 in the 10% sample and even a 100% return (extremely unlikely in view of the age of many) would have given cell numbers too small for useful statistical analysis. Therefore a further 22, apparently unqualified opticians were selected from the Register to offset this potential deficiency in the sample and to bring the percentage of unqualified to twice that in the Register (4.4%). Thirdly, it was calculated from the staff lists of the six ophthalmic optics departments that there were 46 lecturers qualified as opticians. A 10% sample of these would have given only 4-5 lecturers if all replied, so a questionnaire was sent with a modified letter of introduction,[2] to all 46 lecturers. The final composition of the sample population is given below in Table 3.1.

Table 3.1

Practising Opticians Sample Population

Random 10% sample of 1975 Opticians Register	593
Weighted female optician sample	53
Weighted unqualified optician sample	22
Ophthalmic optics/optometry lecturers	46
TOTAL	714

---

1 i.e. those who were allowed to register, mostly in the period 1960-62, under section 3(2) of the Opticians Act 1958, after tests of competence conducted by the GOC.

2 See Appendix A for copy

The hypotheses to be tested by data from this survey were as follows:

1. The older the group of opticians the lower their social origins.

This hypothesis was based on the rapid professionalisation of ophthalmic optics discussed in Chapter One.[1] Only forty years ago ophthalmic optics was an emerging or a semi-profession and if Toren's (1969) assumptions about the class origins of recruits to semi-professions are correct then one would expect to find middle-aged and elderly ophthalmic opticians to be of lower social origins than young graduate opticians drawn from a middle class-dominated university pool.

2. The vast majority of ophthalmic opticians will have been educated at state schools.

This hypothesis is related to the first in that type of post 11 education[2] is related to social class (Robbins Report 1963) and the underlying assumption is the older the optician the lower his social origins and therefore the less likelihood of his attending a non-state school.

3. The older the optician the more likely he will have obtained his optical qualifications by part-time study.

The new graduate optician has completed his degree in most cases with the aid of a grant. He has the choice of six centres throughout Great Britain. Forty years ago there were very few state grants and few scholarships. There were only two full-time diploma courses at Northampton Polytechnic (now City University) and Manchester. These

---

[1] See Chapter One, pp. 14-24

[2] 'Secondary education' cannot be used as a generic term here since some older opticians attended elementary schools.

factors would seem to suggest strongly that many older opticians were obliged to study part-time. An additional factor, although perhaps of relatively minor significance, is that more older opticians are chemist-opticians. As they qualified in almost all cases as pharmacists first the likelihood is that they almost inevitably achieved their optical qualifications by evening and weekend study i.e. in after shop hours.

4. The self-recruitment rate among ophthalmic opticians will be lower than that for doctors.

The underlying rationale is similar to that for the first and second hypotheses. Established professions appear to have high self-recruitment (see especially Kelsall 1954) partly because on the one hand of the status maintenance function and on the other because it is difficult for sons of doctors or lawyers to achieve a higher occupational status. Emerging professions cannot lay claim to either of these forms of motivation. Older opticians might have wished their children to achieve an even 'higher' status occupation e.g. by becoming a doctor. Conversely, younger opticians 'enjoying' a higher status might not feel this so strongly in relation to their own children.

5. The optician's concept of professionalism will be related to his age.

This hypothesis is related in part to the third hypothesis. The older the optician the shorter the period of professional socialisation since a three-year diploma (later a degree) course was introduced only in 1949. There are opticians still practising who completed only a one-year course. If the third hypothesis is validated and many older opticians obtained

their optical qualifications by part-time study, it means that within the professional body there exists a wide variety of types of opticians in terms of the length of the course they completed and the form of study they undertook to complete it. Older opticians have seen their occupation develop during their working life from a semi-profession to a state-registered profession, and many served a formal apprenticeship. The young graduate is entering a 'taken for granted' profession with no direct experience of the rapid process of change his elder colleagues have lived through. Thus a priori opticians of different ages may possess significantly different conceptions of professionalism.

6. The optician's concept of professionalism will be related to his type of practice.

The five main types of practice are individual private, group private, the Hospital Eye Service and public company 'multiple' practice and chemist-opticians. As discussed at length in Chapter One[1] the public company multiples have been accused of commercialism. Within the Hospital Eye Service opticians are subject to the supervision of ophthalmologists and are thus formally in a semi-professional situation. Thus a priori opticians in both these types of practice might possess a different concept from those in private practice. Further, in the latter situation those in individual practice may possess a different concept from those in group practice e.g. the optician in practice by himself may be subject to greater pressure to sustain his income by any means available, especially if his practice is in close proximity to a multiple practice. Lastly, the chemist-optician practises jointly a

---

[1] See Chapter One, pp.22-23

profession and a semi-profession.

7. Female opticians will possess a significantly different conception of their optical career from that of male opticians.

The underlying assumptions here are similar to those relating to hypothesis 9 of the final year student survey, except that practising women opticians will have (unless they are unmarried, or perhaps more accurately, childless) experienced the difficulty of trying to reconcile their professional and family roles. The question to be answered is whether female opticians put their families or their optical careers first.

8. The optician's concept of professionalism will be related to the type of area in which he practises.

This hypothesis was based on several a priori assumptions. Firstly, it can be argued that professional-patient relationships may differ in middle and working class practices or in urban as opposed to rural ones. Secondly, some seekers of optical services may be regarded (and/or regard themselves) as patients, others as customers or clients. This may be related to class or position on the urban-rural continuum. An analysis of the data according to these variables would go some way to testing the strength of these arguments.

The questionnaire used to collect data with which to test these hypotheses contained 44 questions and was divided into four sections[1] as follows:

---

[1] See Appendix A for copy

Section 1 (8 questions)

The questions related to the respondent's reasons for choosing to become an ophthalmic optician. Questions 1-4 & 6 referred to the age of choice, other occupations considered, persons influencing the choice and the importance of various aspects of an ophthalmic optician's role i.e. the same areas covered in the two student surveys. There were some changes in the wording to take account of the fact that the respondents were practising opticians and not students and their greater age-range.

Question 5 asked the respondent whether he, looking back, would still have chosen ophthalmic optics as a career. Question 7 was similar to the questions in the student surveys which asked about their feelings towards a career in optics, except that a further code was added - 'I don't really find it satisfying as a career'. This obviously was of no relevance to a student who had not experienced the practice situation. Question 8 asked whether the optician thought he would practise for the whole of his working life, under what circumstances he would cease to practise and if he did cease to practise what would he do instead. The three parts of the question were thus related to career commitment.

Section 2 (11 questions)

The questions in this section were constructed to try to understand the respondent's view of the ophthalmic optical profession. Questions 1-3,1 & 4-10 were identical to questions in the final year student survey. They referred respectively to the following areas:

(a) the essential task of the ophthalmic optician
(b) the best description of the ophthalmic optical profession
(c) classification of ophthalmic optician and other occupations
(d) importance of various characteristics of a good ophthalmic optician

(e) importance of types of behaviour to success of opthalmic optician

(f) prestige awarded to ophthalmic optics by other professions, the community and patients

(g) opinion of ophthalmic optician - patient relationship

(h) income - service relationship

(i) commitment to optics

(j) source of satisfaction in life

Of the two remaining questions, 3.2 asked the respondent to grade the occupation of ophthalmic optician and other occupations according to their value to society, from essential to no value. Question 11 was an open-ended one which asked the respondent what he considered to be the most important professional values in his practice as an ophthalmic optician. Supplementaries related to the easiest and most difficult to which to adhere and the one to which the respondent thought most opticians had difficulty in adhering. The object of this question was to try to compensate for any suggestion of values to respondents which might be inherent in the pre-set codes in other questions referring to status, autnonomy, commitment, specialisation, furthering knowledge, etc., i.e. those dimensions of professionalism identified by Freidson (1970) Kleingartner (1967) and Strauss (1963).

Section 3 (14 questions)

The questions in this section were concerned with the nature and location of the respondent's work as an ophthalmic optician. Questions 1.1, 6.3 & 6.4, 7.1 & 7.2, 8.3 & 14.1 were identical to those in the final year students' survey. They referred respectively to the following areas:

(a) the optical specialism preferred
(b) type of practice preferred and the reasons for choice
(c) type of practice least preferred and reasons for choice
(d) type of area in which respondent practised (in student survey 'would like to')
(e) importance of activities for success as an ophthalmic optician

The remainder of the questions in this section were ones to which students would not be expected to be able to reply. Question 1.2 asked respondents on which specialism they in fact spent most of their working time (irrespective of their preference in 1.1). Questions 2-5 related to the premises where the optician worked. They asked how many premises the optician worked in, how he described the premises and whether he opened on Saturdays and had a window display. Question 6.1 asked the respondent to say in which types of practice he had worked and for how many years. The supplementary (6.2) asked in which practice the respondent worked at the time of the survey. Questions 8.1 and 8.2 were similar to 6.1 and 6.2 except that they referred to the area in which the respondent practised.

Questions 9 & 10 referred to the people who sought the services of the respondent. The first asked how he described them (as clients, customers or patients etc.). The second asked him to assess the attitude towards him of most such people (caution, friendliness, suspicion, trust etc.). Question 11 asked how many days the respondents practised ophthalmic optics and question 12 asked how many eye examinations he carried out in an average week. Question 13.1 asked him how many hours in an average week he spent on various activities (examining eyes, fitting contact lenses, helping patients to choose frames, advising on suitable lenses, making minor repairs and adjustments, administration). Question

13.2 asked the respondent to assess each of these activities in terms of how professional they were, from professional to not professional. Finally, question 14.2 asked the respondents to state how often they had undertaken each of the activities outlined in 14.1 (all of which referred to furthering optical knowledge) in the past year, irrespective of how important they considered them in answer to 14.1.

Section 4 (11 questions)

This was the personal characteristics or background items section. Questions 1, 3, 6, 8 & 11 were identical to those in the parallel sections in the two student surveys. These questions related respectively to sex, region of origin and post 11 education, previous experience in other occupations, social class and religion.

Of the remaining questions, number 2 related to age but codes were different in consideration of the greater age-range of the sample. Question 4 was identical to the student survey question on type of secondary education except that the code of 'elementary school' was added. Question 5 asked the respondent to state his optical qualifications professional and academic. A comprehensive pre-set list was provided which divided into initial academic, further academic, initial professional, further professional and others. The sample were also asked whether they obtained these qualifications by full- or part-time study, or both. Question 7 asked if the optician held any qualifications in respect of other professions or occupations and, if so, which ones. The primary purpose of this question was to discover the chemist-opticians in the sample. Question 9 related to the optician's income. The first part (9.1) asked him to say in which of a number of £2,000 income ranges his

income from ophthalmic optics fell in the financial year 1974-75. The supplementary (9.2) asked him to assess this income in relation to that of other opticians - was it above, about or below average?

Question 10 related to participation in community affairs and asked the respondent to state if he held any appointed or elected positions. A pre-set list was given, including optical association official, cultural and sporting club official, voluntary welfare organisation official, political party official, JP and others. This list was intended to cover all the obvious types of organisation of which the optician might be a member and/or official and thus elicit how far his non-work time was centred on his optical career - see Jesser (1968) and Wilensky (1961).

When the questionnaire was finalised, twelve pilot ones were sent out or given by Aston University lecturers and post-graduate students in ophthalmic optics to opticians they knew personally. Nine were completed and the questionnaire modified in the light of the replies. The pilot respondents reported completion times ranging from 45 minutes to four hours. This was found to be related to the age of the respondent, the older opticians taking longer.

The main sample questionnaires, together with the letter of introduction[1] and a pre-paid return envelope were sent out in March 1976. A code number was put on the top right hand corner of the return envelope to avoid sending out unnecessary follow-up questionnaires. By the middle of May 1976 a return rate of 43.3% had been obtained. The questionnaires to the university lecturer sample were sent out in April 1976.

In that month the author was contacted by the General Secretary of the Association of Optical Practitioners, the opticians' protective

---

[1] See Appendix A for copy

organisation, who said that he had been contacted by several opticians who wanted to know what the survey was about. Some were suspicious of its motives, some curious, others simply keeping the Secretary informed of something they thought he ought to know. Having met the General Secretary before and formed a friendly relationship, the author was able to persuade him to include an item referring to the survey in approving terms in the AOP news page of the fortnightly optical journal, the 'Ophthalmic Optician'. This duly appeared in the issue of May 15th 1976 (page 457).

The follow-up questionnaires were not sent out until late May 1976 and at the bottom of the letter of exhortation[1] which accompanied the follow-up questionnaire there was a note referring opticians to this item. The item was at least partly responsible for the final return from the weighted female and unqualified 10% sample of 71.6% (or 69.9% including the university lecturers). Returns apparently dribbled to a halt in September 1976.[2] Full details of the return rate are given in Chapter Six.

Coding of Questionnaires

The questions in the questionnaires relating to the three surveys discussed above, when broken down in coding, gave the following numbers of variables:

---

[1] See Appendix A for copy

[2] But as often happens a final return arrived in January 1977 too late for inclusion in the computer analysis.

	Number of Questions	Variables
First year student survey questionnaire	22	102
Final year student survey questionnaire	37	164
Practising optician survey questionnaire	44	204

Despite the difference in the total number of variables, where questions in the three surveys related to the same variable e.g. sex, age, social class, etc., and were coded identically, they were given the same variable number to facilitate comparative computer analysis of the data from each survey.

The following chapter contains the analysis of the data relating to the surveys of first and final year ophthalmic optics students.

CHAPTER FOUR

The Student Surveys

This Chapter sets out the findings of the two student surveys (first and final year) with particular reference to the hypotheses outlined in Chapter Three.[1] Eight hypotheses were tested via data collected in the first year survey and ten via that collected in the final year one. The first five in each survey were identical and in order to avoid undue and tedious repetition the data which relate to these from the two surveys will be presented in joint tables.

Accordingly the chapter falls into six main parts:

A. introductory and background data for the two student surveys in turn

B. joint tables and comment referring to Hypotheses 1 to 5 (identical in both surveys)

C. tables and comment referring to Hypotheses 6 to 8 of the first year survey

D. tables and comments referring to Hypotheses 6 to 10 of the final year survey

E. comparison of data relating to the two student surveys

F. summary of chapter

A. THE FIRST YEAR STUDENT SURVEY

This survey was administered to the incoming students in all six centres in Great Britain running a degree course in ophthalmic optics

---

[1] See pp. 108-117

(Aston, Bradford, UWIST, City and UMIST + Glasgow College of Technology) in October 1974 and again in 1975 and 1976, giving 18 sub-populations in all.[1] Table 4.1 below gives the size and return rate for these samples.

Table 4.1

Samples of First Year Ophthalmic Optics Students

Year	Total Entry	Total Sample	Sample as % of entry
1974	268	245	91.4
1975	262	246	91.3
1976	264	241	91.3
TOTALS	794	732	92.2

The sex composition of these samples was as follows:

Table 4.2

First Year Ophthalmic Optics Students - By Sex

YEAR	Sample		Female students as % total sample	Entry		Female students as % total entry
	Female	Male		Female	Male	
1974	102	143	41.6	105	163	39.2
1975	98	148	39.8	99	163	37.8
1976	94	147	39.0	96	168	36.4
TOTAL	294	438	40.0	300	494	37.8

[1] Detailed breakdown of these samples is given in Appendix C

It is clear that each of the three samples slightly overrepresents female students and underrepresents male students. Two possible explanations for this are immediately obvious. One is that some of the missing students were from overseas and had not arrived in this country at the times of the three surveys. More of these were male than female. More likely, perhaps, is the explanation in terms of the relative willingness of the two sexes to appear for 'non-functional' purposes even early in their degree courses. The author noticed that where a group had assembled for the survey before or after a lecture the return rate was higher than where the students had been called together for the express purpose of the survey, and in the latter situation more female than male students appeared. Nevertheless the difference between the sex composition of the entries and the samples was marginal and overall a satisfactorily high return rate was achieved, which was clearly representative of the total entry.

THE FINAL YEAR STUDENT SURVEY

This survey was administered to final year students[1] in all six centres in Great Britain offering a degree course in ophthalmic optics in March-April 1975 and again in March-April 1976, giving 12 sub-populations in all.[2] Table 4.3 on p.134 gives the size and return rates for these samples.

The overall return rate for the final year samples of over 80% disguises a range of variation between centres of 72% to 100% which

---

[1] Third year at five centres, fourth year at Glasgow College of Technology which has a 4-year CNAA degree.

[2] Detailed breakdown of these sub-populations is given in Appendix C.

reflects to some extent the organisation of teaching in particular institutions. The lower return rates tended to be from those institutions which taught their final year students in two half-year groups and the higher ones from those where the year-group was taught as a whole. Since the former tend to be the institutions with the larger departments, the effect on the size of the overall size of the sample was, correspondingly, proportionately greater.

Table 4.3

Samples of Final Year Ophthalmic Optics Students

Year	Total Entry	Total Sample	Sample as % of entry
1975	205	184	89.8
1976	242	202	83.5
TOTAL	447	386	86.4

The sex composition of the samples was as follows:

Table 4.4

Final Year Ophthalmic Optics Students - By Sex

YEAR	Sample		Female students as % total sample	Entry		Female students as % total entry
	Female	Male		Female	Male	
1975	94	90	51.1	106	99	51.7
1976	92	110	45.5	109	133	45.0
TOTAL	186	200	48.2	215	232	48.1

Table 4.4 shows that both samples very closely reflect the proportions of the two sexes in the total entries.

B. ANALYSIS OF DATA RELATING TO HYPOTHESES 1 to 5
(First and Final Year Surveys)

Hypothesis 1 - ophthalmic optics students would generally be of lower ranking class origins than British medical students.

Table 4.5

Ophthalmic Optics Students - By Social Class

SOCIAL CLASS	First Year Students %	Final Year Students %	All Students %
I	20.9	22.3	21.4
II	49.0	51.6	49.9
III non-manual	9.8	6.7	8.7
III manual	15.4	14.2	15.0
IV	2.6	2.8	2.7
V	1.4	0.8	1.2
Unclassifiable	0.5	1.6	0.9
No Reply	0.3	-	0.2
TOTAL	(n= 732) 100.0	(n=386) 100.0	(n=1118) 100.0

Table 4.5 gives the class backgrounds of the sample populations using a modified version of the Registrar-General's Social Class classification which divides Social Class III into Class III non-manual

(middle class) and Class III manual (working class), thus giving a six-fold classification. While this is not an entirely satisfactory classification (Kahan, Butler & Stokes 1966) it does allow a more precise comparison with similarly categorised data for other professions.

The questionnaire asked the sample for information relating to their father's occupation at two moments in time - when the student was born and when he started his degree course. This made it possible to calculate whether the father had been socially mobile during the course of the student's life and also to re-classify the replies of those students whose fathers were dead, retired or unemployed at the start of their degree course (some 16 or 6.7% in the first year sample in 1974), according to the father's occupation when the student was born. In this way it was possible to classify all but a very few of the sample. Except for these latter cases, Table 4.5 refers to the father's occupation at the start of the student's degree course.

Table 4.5 shows that 584 or 79.7% of the first year sample were from middle class and 142 or 19.4% from working class backgrounds. The corresponding figures for the final year survey were 311 or 80.6% and 69 or 17.8% i.e. the final year sample was marginally more middle class.

Table 4.6 compares these findings with those of the Todd Report and Cruikshank & McManus (op.cit.) relating to medical students. The former survey provides a more accurate and valid comparison since the latter (a) refers only to Birmingham medical students and (b) achieved only a 53% response rate. Conversely, the Todd Report survey by the Association for the Study of Medical Education (cited by Johnson op.cit.) was a national one and the response rate was almost 96%.

Table 4.6

Ophthalmic Optics and Medical Students - by Social Class

SOCIAL CLASS	Ophthalmic optics students		British medical students 1961 & 66	Birmingham medical students 1974
	First year	Final year		
I	20.9	22.3	36.4	49.1
II	49.0	51.6	35.5	31.6
III non-manual	9.8	6.7	25.1	15.6
III manual	15.4	14.2		
IV	2.6	2.8	3.0	3.7
V	1.4	0.8		
Unclassifiable/ no reply	0.8	1.6	-	-

The table shows a striking similarity overall between the social distribution of ophthalmic optics students and the national sample of medical students - 69.9%, 73.9% and 71.9% in Classes I and II, 25.2%, 20.9% and 25.1% in Class III (the medical students' surveys did not give separate figures for non-manual and manual) and 4%, 3.6% and 3% for Classes IV and V, for the first year ophthalmic optics, final year opthalmic optics and medical students respectively. The most noteworthy difference between the optical and medical distributions is in the relative proportions of Social Class I and II students. The two classes provide almost equal numbers in the sample of medical students (36.4% from Class I, 35.5% from Class II), whereas among the samples of ophthalmic optics students there were more than twice as many Class II

as Class I students (49% as against 20.9% in the first year sample and 51.6% as against 22.3% in the final year sample). This difference between the two professions may be related in part to their different self-recruitment rates (see Table 4.7) that for medicine being higher. It may also be related to the ease with which applicants can gain entry to medical school, since optics recruits in part from rejects from medical school (see Table 4.11).

The relative proportions of Social Class I and II students in the two professions may reflect the greater social desirability of medicine, in which case easing the access to medical school might decrease the numbers of Class I candidates entering medicine, or choosing not to enter optics. Alternatively, the relative proportions might be due more to Class I candidates already enjoying the education and connections which ease entry to medical school, in which case an easing of entry requirements might even increase the percentage of Class II candidates entering medicine.

On the evidence of the two surveys of ophthalmic optics students, Hypothesis 1 is not substantiated since the number of working class students was found to be very similar to that found in the most recent surveys of British medical students. However, there are still important differences between the two professions in respect of the particular middle class group from which each recruits.

Hypothesis 2 - the self recruitment rate of ophthalmic optics will be lower than that for medicine, taken as an 'ideal-type' profession.

Table 4.7 sets out the rates found in the two student surveys.

Table 4.7

Ophthalmic Optics Students - Self-recruitment Rate

Sample	Total Sample	Students with optician fathers[1]	
		No.	% total sample
First Year Students	732	51	7.0
Final Year Students	386	39	10.1
TOTAL	1,118	90	8.0

The overall figure of 8.0% is slightly higher than the 7.0% found in the first year sample. One explanation may be that the higher final year figure represents the latter stages of a progressive decline in self-recruitment from the a priori estimates of ca. 30% in the pre-degree diploma courses reported by university lecturers of long standing. In these terms the 1975 and 1976 final year samples are respectively the 'remains' of the 1972 and 1973 entries,[2] and the lower figure for the first year sample illustrates the continuation of the process.

An alternative explanation turns on the word 'remains' above. The total year-group numbers for the two final year samples were 205 in 1975 and 242 in 1976. The General Optical Council recruitment figures[3] show that 256 students in 1972 and 266 in 1973 started ophthalmic optics degree courses. Allowing for the fact that it is not possible to calculate precisely the drop-out rate because Glasgow has a four-year

---

[1] Ophthalmic, dispensing or manufacturing opticians

[2] 1971 and 1972 in the case of Glasgow College of Technology

[3] Issued annually with restricted circulation ca. January

CNAA course, it is clear that the rate between 1972-75 was approximately 20% and that between 1973-76 approximately 10%. It may be (the surveys did not cover the students who dropped out) that few of those who dropped out were from optician families, because of reinforcement from home, thus raising the self-recruitment rate of the remaining students. The two explanations are not necessarily mutually exclusive and the apparent decline in the self-recruitment rate may be from the cumulative effects of these two explanations plus others not directly illuminated by the survey data. The overall figure of 8.0% is less than half the average figure of 20% found in the three entries of medical students surveyed for the Todd Report and the figure of 18.4% found by Cruikshank & McManus in their survey of Birmingham medical students.

The conclusion in relation to Hypothesis 2 is that it is supported in so far as the average rate of self-recruitment for ophthalmic optics students was less than half that for the most recent national sample of medical students. The rider must be added, however, that the final year percentage was a little higher than that for the first year sample and this may indicate the continuation of a long-term trend of decline.

Hypothesis 3 - most ophthalmic optics students will have been educated at state secondary schools, in contrast to British medical students

Table 4.8 gives the breakdown of the samples by type of secondary school. This table shows that of the first year sample 72.8% went to state school, 12.3% to grant-aided schools and 9% to non-state schools, plus 5.9% to others. The last figure refers largely to students from overseas. The corresponding figures for the final year sample were

70.6%, 13.7%. 10.6% and 4.1% i.e. the distribution is very similar to that of the first year sample. Within the overall distribution the number from grammar schools is much greater in the final year samples and that from comprehensive schools much smaller, illustrating the trend towards attendance at comprehensive schools.

Table 4.8

Ophthalmic Optics Students - By Type of Secondary Education

Type of School	First Year Students %	Final Year Students %	All Students %
Comprehensive	15.6	6.0	12.3
Local authority grammar	42.5	54.7	46.7
Secondary modern	6.1	4.7	5.6
Secondary technical	1.5	1.6	1.5
More than one school[1]	7.1	3.6	5.9
Direct grant school	12.3	13.7	12.8
Private (independent)	3.4	3.9	3.6
Public	5.6	6.7	6.0
Others	5.9	4.1	5.3
No reply	-	1.0	0.3
TOTAL	100.0 (N = 732)	100.0 (N = 386)	100.0 (N = 1118)

This distribution is very different from that of the secondary educational backgrounds of medical students as found in the Todd Report survey and that of Cruikshank & McManus. This contrast is set out in Table 4.9.

[1] Those attending more than one school, all attended state schools

Table 4.9

Ophthalmic Optics and Medical Students - By Type of Secondary School

Type of Secondary School	Ophthalmic Optics students		British Medical Students 1961 & 66	Birmingham Medical Students 1974
	First Year	Final Year		
State	72.8	70.6	43.4	53.6
Grant-aided	12.3	13.7	22.1	20.9
Non-state	9.0	10.6	34.5	25.5
Others	5.9	4.1	not given	not given

Even allowing for the non-inclusion of an 'others' category in the two samples of medical students, the differences are clear. Medical students are much more likely to come from grant-aided and non-state schools - a clear majority (56.6%) in the Todd Report surveys and a substantial minority (46.4%) in the Birmingham survey. This is in contrast to a figure of 21.3% for the first year and 24.3% for the final year ophthalmic optics students. This difference is a reflection of the different proportions of students from Class I background in medicine and ophthalmic optics noted in discussion of Hypothesis 1 above. As the Robbins Report (1963) and more recently Taylor & Ayres (1969) have shown, attendance at non-state schools is directly related to a high position in the social scale.

Thus on the evidence of the samples of ophthalmic optics students the third hypothesis is substantiated.

Hypothesis 4 - many ophthalmic optics students would ideally have liked to have studied medicine.

In the questionnaire the students were asked if they had seriously considered any other professions or occupations before definitely deciding on ophthalmic optics. Table 4.10 sets out the replies.

Table 4.10

Ophthalmic Optics Students - Occupations/Professions Considered before deciding on Ophthalmic Optics

Occupation Considered	First Year Students %	Final Year Students %	All Students %
Ophthalmic optics first choice	13.1	17.1	14.5
Medicine	33.5	28.8	31.9
Dentistry	8.7	5.4	7.6
Pharmacy	8.2	6.5	7.6
Other health occupations	6.8	6.5	6.7
Scientific occupations/ professions	14.8	18.1	15.9
Others	14.8	16.6	15.4
No reply	0.1	1.0	0.4
TOTAL	100.0 (N = 732)	100.0 (N = 386)	100.0 (N = 1118)

The table shows that ophthalmic optics was the first choice for only 14.5% of the sample. Conversely, almost a third had seriously considered medicine. The number who had actually tried to gain admission

to medical school was brought out by the following question which asked which factors influenced their eventual choice of ophthalmic optics. Table 4.11 sets out the numbers who replied in terms of 'grades not good enough for medical school', 'could not get into medical school', 'rejection from medical school', etc.

Table 4.11

Ophthalmic Optics Students - Rejections from Medical School

Sample	Total Sample	Rejections from Medical School	
		No.	% total sample
First Year Students	732	175	23.9
Final Year Students	386	71	18.4
All Students	1,118	246	22.0

Thus at least a fifth of the sample reported their rejection from medical school. A further question asked the students to state their ideal choice of subject to study. The results set out in Table 4.12 show that while a substantial minority had quickly reconciled themselves to ophthalmic optics, even if to most it was not their first choice, about a half of those who had considered medicine still cited it as their ideal choice, after eight terms[1] of their ophthalmic optics degree course.

Of the first year sample some 43.6% chose ophthalmic optics and only some 12.3% medicine. The latter figure is the interesting one. It is lower than the 20.5% for the final year students. This is not a

[1] Or eleven terms at Glasgow

reflection of the relative percentage of rejections from medical school, for these were 23.9% for the first year sample and only 18.4% for the final year sample. The data appear to indicate that the ophthalmic optics degree course fails to act as a satisfying para-medical substitute for some students.

Table 4.12

Ophthalmic Optics Students - Choice of Ideal Subject to Study

Ideal Subject	First Year Students %	Final Year Students %	All Students %
Ophthalmic optics	43.6	35.7	40.9
Medicine	12.3	20.5	15.1
Other health professions	2.9	3.4	3.0
Other professions	0.5	1.0	0.7
Scientific occupations/ professions	7.8	6.0	7.2
Personal interest choices	16.2	21.8	18.2
No reply/Don't Know	16.7	11.6	14.9
TOTAL	100.0 (N = 732)	100.0 (N = 386)	100.0 (N = 1118)

At the same time it is clear from Table 4.13 that for just under a fifth of the sample (18.1%) ophthalmic optics was their first choice career for, in answer to Question 6 which asked the sample which statement best described the way they felt about a career in ophthalmic optics, this group said that it was the only career that could really satisfy them, which seems to indicate some career commitment on their

part. Table 4.13 sets out the full range of replies to this question which overall confirm the conclusions drawn from Tables 4.10 and 4.11.

Table 4.13

Ophthalmic Optics Students - Degree of Commitment to Career in Optics

Feelings about career	First Year Students %	Final Year Students %	All Students %
Only career that could really satisfy me	18.7	16.8	18.1
One of several careers I could find satisfying	63.4	57.2	61.3
Satisfying but I could have found others more satisfying	7.9	12.7	9.6
Career I decided on without considering whether I would find it satisfying	5.2	10.4	6.9
Haven't really thought about a career in ophthalmic optics yet	4.1	2.6	3.6
No reply	0.7	0.3	0.5
TOTAL	100.0 (N = 732)	100.0 (N = 386)	100.0 (N = 1118)

The table shows that 18.1% said that a career in optics was the only career that could satisfy them as against 14.5% in Table 4.10 who said they had not seriously considered occupations or professions other than ophthalmic optics.

The data indicates that there is some support for Hypothesis 4, to the extent that 31.9% of the student sample considered studying medicine

and 22% reported rejection from medical school. What is also clear from Table 4.10 is that ophthalmic optics is a second or even lower choice for many students e.g. medicine, dentistry and pharmacy together account for 47.1% of the choices.

Hypothesis 5 - ophthalmic optics students make their career choice later than comparable research for medical students indicates

The students were asked at what age they first considered studying ophthalmic optics. The results are set out in Table 4.14.

Table 4.14

Ophthalmic Optics Students - Age of First Thoughts of Studying Ophthalmic Optics

Age of First Thoughts	First Year Students %	Final Year Students %	All Students %
Less than 16	22.3	22.0	22.2
16	24.3	21.5	23.3
17	24.7	26.9	25.5
18	14.1	15.6	14.6
19	6.8	5.2	6.3
20	1.9	2.3	2.1
More than 20	5.9	6.2	5.9
No reply	-	0.3	0.1
TOTALS	100.0 (N = 732)	100.0 (N = 386)	100.0 (N = 1118)

Thus 22.2% of the sample first thought of studying ophthalmic optics before they were sixteen, 48.8% at sixteen or seventeen and 28.9% at eighteen or more. The distribution of the ages at which the students made their definite decision to study ophthalmic optics is set out in Table 4.15.

Table 4.15

Ophthalmic Optics Students - Age of Definite Decision to Study Ophthalmic Optics

Age of Definite Decision	First Year Students %	Final Year Students %	All Students %
Less than 17	15.7	16.3	15.9
17	34.2	32.1	33.4
18	24.7	27.5	25.7
19	11.3	10.6	11.1
20	4.5	4.9	4.7
More than 20	9.6	8.3	9.1
No reply	-	0.3	0.1
TOTAL	100.0 (N = 732)	100.0 (N = 382)	100.0 (N = 1118)

Table 4.14 shows that 48.4% of the sample first thought of studying opthalmic optics at sixteen or seventeen; Table 4.15 shows that by the age of eighteen, 75% had made a definite decision to study ophthalmic optics. The latter table also shows that only 15.9% had definitely decided before they were seventeen i.e. most decided during the course of their "A" level studies.

A comparison of these findings with those of Rogoff (1957) for American medical students (none exist for British medical students) is set out in Tables 4.16 and 4.17 for age of first thoughts and definite decision respectively.

Table 4.16

British Opthalmic Optics and American Medical Students
Age of First Thoughts of Studying Optics and Medicine

Age of First Thoughts	Ophthalmic Optics Students First Year %	Ophthalmic Optics Students Final Year %	American Medical Students 1957 %
Less than 16	22.3	22.0	69.1
16 or 17	49.0	48.4	16.6
18 or older	28.7	29.3	14.3
No reply	-	0.3	-
TOTAL	100.0 (N = 732)	100.0 (N = 386)	100.0 (N = 1118)

The difference between the two samples is readily apparent. Medical students had their first thoughts about studying medicine much earlier than ophthalmic optics students did optics. This perhaps is related to two interrelated phenomena - the age at which a child becomes aware of the existence of doctors and opticians, the former usually in a 'crisis' situation, and the relative status of the two occupations, which in turn is in part related to differences in their indispensability and greater self-recruitment among medical students.

Table 4.17

British Ophthalmic Optics and American Medical Students
Age of Definite Decision to Study Optics and Medicine

Age of Definite Decision	Ophthalmic Optics Students First Year %	Ophthalmic Optics Students Final Year %	American Medical Students 1957 %
17 or less	49.9	48.4	43.1
18 - 20	40.5	43.0	41.5
More than 20	9.6	8.3	15.4
No reply	-	0.3	-
TOTAL	100.0 (N = 732)	100.0 (N = 386)	100.0 (N = 747)

The table shows that the differences between the two groups are much less and the overall distribution of responses is similar. This is perhaps related more to the length and timing of courses which it is necessary to pass in order to enter ophthalmic optics and medicine i.e. a concrete decision has to be taken at a specific time - about eighteen or nineteen in the case of both professions.

Thus Hypothesis 5 is supported by the data in so far as American medical students first think of studying medicine much earlier than do British optic students optics. However, it is not supported by the data referring to definite age of decision which shows, if anything, that ophthalmic optics students tend to decide somewhat earlier than do medical students.

C. FIRST YEAR STUDENT SURVEY - HYPOTHESES 6 to 8

Hypothesis 6 - Judgments of the importance of the income and status of an ophthalmic optician by middle class and working class students will be significantly different

The following 5 variables in the questionnaire were directly related to income:

1. Importance of being able to earn a good income as a factor in choosing ophthalmic optics (Question 3(c) - Variable 013)

2. Extent of liking being sure of earning a good income as a consequence of being an ophthalmic optician (Question 7(a) - Variable 034)

3. Would student have still chosen ophthalmic optics if the condition of lower level of income applied (Question 9 - Variable 039)

4. Profession that is secure and lucrative as a description of the ophthalmic optical profession (Question 10(a) - Variable 046)

5. Importance of ability to maximise income as a characteristic of a good ophthalmic optician (Question 13(a) - Variable 064)

In addition 6 variables related to status:

1. Importance of status of an optician as a factor in choosing ophthalmic optics (Question 3(c) - Variable 010)

2. Extent of liking status of an optician as a consequence of being an ophthalmic optician (Question 7(a) - Variable 031)

3. Would student have still chosen ophthalmic optics if lower level of social prestige applied (Question 9 - Variable 040)

4. Profession of high standing as description of ophthalmic optical profession (Question 10(a) - Variable 044)

5. Importance of maintaining a restrained and dignified manner to success of ophthalmic optician (Question 14 - Variable 075)

6. Importance of wearing conservative clothing to success of ophthalmic optician (Question 14 - Variable 076)

Thus there were 15 possibly significant relationships (5 variable x 3 surveys) between social class and income variables and 18 (6 x 3) between social class and status variables. The actual number of relationships that were found to be significant at the .05 level or above is set out in Tables 4.8 and 4.9. This level of significance has been taken as the lowest acceptable in all the tables relating to both the student and practising optician surveys. Although this may seem a high threshold for a preliminary survey, in view of the difficulties of ascertaining validity with a questionnaire, the more rigorous level of .05 was preferred.

Table 4.18

Cross-Tabulation of Social Class and Income Variables

Income Variable	Social Class		
	1974	1975	1976
Variable 013	-	.001	-
Variable 034	-	.005	-
Variable 039	-	-	-
Variable 046	-	-	-
Variable 064	.001	-	.041

Table 4.19

Cross-Tabulation of Social Class and Status Variables

Status Variable	Social Class		
	1974	1975	1976
Variable 010	-	-	-
Variable 031	-	-	-
Variable 040	-	-	-
Variable 044	-	.005	-
Variable 075	-	-	-
Variable 076	-	-	.019

The tables show that only 4 income variable and 2 status variable relationships were significant above the .05 level. Even those relationships which were at a significant level were not consistent in their directional trend e.g. in relation to Variable 064 the working class students in the 1974 sample rates income less important than middle class students whereas in the 1976 sample the reverse was true. In relation to Variable 044 the working class students in the 1974 sample considered status less important than middle class students which is contrary to the underlying assumptions of Hypothesis 6.

This lack of evidence from the data to support Hypothesis 6 was reinforced by similar cross-tabulations of social class with variables indirectly related to income and status (Variables 049, 053, 057, 058, 059, 082, 087, 088).[1] None of these was found to be significantly related to social class in more than one of the three surveys. Thus

[1] See Appendix B for full variable list.

there was little evidence to support Hypothesis 6 and the only reasonable conclusion to be drawn from the analysis of the survey data is that it is not substantiated. Analysis also showed that social class was not a significant discriminating variable in general within the first year survey and students from different class backgrounds neither possessed significantly different views of optics in general nor, with a few exceptions, in respect of particular dimensions of professionalism. Even the exceptions e.g. classification of ophthalmic optician, attitudes to helping people were found only in respect of particular year-group samples and in no case in all three samples. Where there were trends (although below the .05 level) even these were not consistent in direction, sometimes an attitude was held more strongly by middle class students, sometimes by working class ones.

Hypothesis 7 - First year ophthalmic optics students will possess a naive and idealistic conception of the ophthalmic optical profession.

This hypothesis was tested by analysing the sample's replies to questions relating to the income, status, service (helping and working with people) and independence (autonomy) dimensions of professionalism. Table 4.20 sets out the replies to Question 7(a) which asked the students to what extent they thought they would like each of a given list of consequences of being an ophthalmic optician.

The table shows that 89.2% of the sample thought they would like helping people very much or quite a lot. Similarly 88.1% thought the same about dealing with people, and 60.77% and 73.3% thought in similar terms in relation to being their own boss and being sure of earning a

good income respectively. However, doing work requiring great skill and knowledge, the status an optician enjoys and having intelligent people as colleagues were similarly rated by only 55.2%, 34.0% and 47.6% respectively.

Table 4.20

First Year Ophthalmic Optics Students - Assessment of Importance of Various Consequences of Being an Ophthalmic Optician

Consequence	Extent of Liking					
	Very Much	Quite a lot	To some extent	Only a little	Not at all	No reply
	%	%	%	%	%	%
Being able to deal directly with people	55.3	33.9	9.0	1.4	0.1	0.2
Being able to help people	49.7	38.4	9.3	2.0	0.4	0.1
Being my own boss	37.1	23.6	26.1	8.6	4.4	0.1
Being sure of earning a good income	35.6	37.7	22.4	3.3	0.8	0.1
Doing work requiring skill & knowledge	22.3	32.9	31.3	9.8	3.0	0.7
Status an optician enjoys	8.6	25.4	43.7	16.5	5.6	0.1
Having intelligent colleagues	20.3	27.3	32.1	10.9	8.5	0.8

(N = 732 in each row)

This 'league table' of preferences was confirmed by the replies to the supplementary question (7(b)) which asked the students which one they thought they would like best. The replies are contained in Table 4.21.

Table 4.21

First Year Ophthalmic Optics Students

Best Liked Consequence of Being an Ophthalmic Optician

Most Preferred Consequence	%
Being able to help people	30.1
Being able to deal directly with people	22.4
Being my own boss	15.8
Being able to earn a good income	11.5
Doing work requiring great skill and knowledge	9.7
Having intelligent people as colleagues	2.3
Status an optician enjoys	2.1
Others/More than one/No reply	6.1
TOTAL	100.0 (N = 732)

The students were also asked if they would still have chosen ophthalmic optics if the conditions of a lower level of income, lower social prestige, less opportunity to work with people, less opportunity to be one's own boss, and less intrinsic interest in the work applied. Replies to this Question (9) are set out in Table 4.22. The order of preference in this Table further confirms Table 4.20 in that meeting people is valued more highly than level of income, independence and status. The noteworth exception is the high value placed on the intrinsic interest in the work of an ophthalmic optician. In Table 4.20 work requiring skill and knowledge was liked much less. The discrepancy

is perhaps explained by the difference in phrasing of the two questions - it is not necessary to like what one values.

Table 4.22

First Year Ophthalmic Optics Students
Reactions to Various Conditions in Professional Practice

Hypothetical Condition	Would Student still have chosen ophthalmic optics? Yes %	No %	Don't Know %	No Reply %
Less intrinsic interest in the work	8.7	60.1	30.2	1.0
Less opportunity to meet people	27.9	45.4	26.2	0.5
Lower level of income	43.0	21.3	35.0	0.7
Less opportunity to be one's own boss	47.5	29.8	22.0	0.7
Lower social prestige	64.5	13.4	21.4	0.7

(N = 732 in each row)

The final tables relative to Hypothesis 7 are concerned with the students' views of the ophthalmic optical profession. They were asked (Question 10(a)) how well a given number of phrases described the ophthalmic optical profession. The answers are set out in Table 4.23.

Again the supplementary question (10(b)) asking which of these descriptions the student thought was the best confirms the pattern of preferences in Table 4.21 which rated the first two descriptions most highly. The replies to Question 10(b) are set out in Table 4.24.

Table 4.23

First Year Ophthalmic Optics Students

Opinion of Descriptions of Ophthalmic Optics Profession

Description	Students' Opinion of Description					
	Very good %	Good %	Fair %	Poor %	Very Poor %	No Reply %
Service to community	51.5	38.9	8.0	1.0	-	0.6
Helps people	48.5	38.7	11.3	0.8	-	0.6
Secure & lucrative	16.0	36.1	38.4	7.4	1.5	0.6
High standing	8.5	39.7	42.1	8.3	0.8	0.6
Requiring harder work	1.4	9.2	30.9	45.2	12.3	1.0

(N = 732 in each row)

Table 4.24

First Year Ophthalmic Optics Students

Best Description of Ophthalmic Optical Profession

Description of Profession	%	
Service to community	58.5	
Helps people	29.0	
Secure and lucrative	8.7	
High standing	2.2	
Requiring harder work	-	
None/More than one/No reply	1.6	
TOTAL	100.0	(N = 732)

Tables 4.20 - 4.24 give an overall picture of a first year sample which in answer to three questions consistently placed helping and working with people at the top of the list of things they liked and valued about ophthalmic optics. Of the sample 52.3% cited these two things as those they thought they would like best about being an ophthalmic optician; 45.4% would not have chosen ophthalmic optics if there was less opportunity to meet people and 87.5% thought the ophthalmic optical profession could best be described in terms of helping people and service to the community.

While income was in no sense regarded as unimportant the percentage support in replies to the three income questions (mentioned above in relation to helping and working with people) were 11.5%, 21.3% and 8.7% respectively. Independence (being own boss) was also liked and valued but not to the same degree. The dimension which is consistently liked and valued very little is status. Of the sample only 2.1% considered it was the thing they would like best about being an ophthalmic optician; only 13.4% would not have still chosen ophthalmic optics if lower social prestige attached and only 2.2% thought that a profession of high standing was the best description of the ophthalmic optical profession. While the low percentage in relation to the last question could be interpreted to mean that the students not citing this as the best description (97.8% of the sample) did not think that the ophthalmic optical profession had a high status rather than not considering status important. However, the replies to this question should be taken with those to the other two questions (the replies to which are set out in Tables 4.18, 4.19, and 4.20). Together they indicate perhaps more validly the conclusion stated above i.e. that status was not greatly

liked or highly valued by this first year sample.

If great concern for helping and working with people and relative lack of concern for status are indications of naivete and idealism then the data lends some support to Hypothesis 7. However, the degree of concern for income and independence also indicate the sample's apparently greater concern with helping and working with people is balanced by a more practical valuation of these two things. Thus perhaps there is more support for the idealism part of the hypothesis than for the naivete.

Hypothesis 8 - the conception of the ophthalmic optical profession held by male students will be significantly different from that held by female students

This hypothesis was tested by cross-tabulating sex with variables in the questionnaire relating to income, status, service and independence. The variables relating to income and status are those outlined in discussion of Hypothesis 6.[1] Those relating to helping people (service) and independence are as follows:

Helping or working with people variables:

1. Importance of dealing directly with people in determining choice of ophthalmic optics (Question 3(c) - Variable 008)

2. Importance of being able to help people in determining choice of ophthalmic optics (Question 3(c) - Variable 009)

3. Extent of liking being able to deal directly with people as consequence of being an ophthalmic optician (Question 7(a) - Variable 029)

---

[1] See p.151

4. Extent of liking being able to help people as consequence of being an ophthalmic optician (Question 7(a) - Variable 030)

5. Profession of service to community as description of ophthalmic optical profession (Question 10(a) - Variable 045)

6. Profession that helps people directly as description of ophthalmic optical profession (Question 10(a) - Veriable 047)

7. Importance of warm and pleasing personality in making a good ophthalmic optician (Question 13 (a) - Variable 061)

8. Importance of ability to get along with people in making a good ophthalmic optician (Question 13 (a) - Variable 069)

9. Importance of participating in community affairs to success of ophthalmic optician (Question 14 - Variable 077)

Independence Variables:

1. Importance of being own boss in determining choice of ophthalmic optics (Question 3(c) - Variable 012)

2. Extent of liking being own boss as consequence of being an ophthalmic optician (Question 7(a) - Variable 032)

3. Would student have still chosen ophthalmic optics if there was less opportunity to be one's own boss (Question 9 - Variable 042)

Given three student surveys and 5 income variables, 6 status variables, 9 service variables and 3 independence variables, potentially there were 15, 18, 27 and 9 significantly relationships respectively for the four groups of variables. In fact the number of relationships between sex

and these groups of variables at or above the .05 level was as follows:

	Number of significant relationships with sex of student	
	Possible	Actual
Income variables	15	15
Status variables	18	6
Service (helping people) variables	27	3
Independence variables	9	9

It was expected that female students would place less value on the income, status and independence variables and greater value on the service variables.

The three significant relationships with service variables were with different variables, two in 1975 and one in 1976. There were none in 1974. Thus there was very little support for the hypothesis in respect of these variables. There was a slight tendency for female students to consider working with or helping people as more important than male students but, except for the three cases mentioned above, it did not reach the minimum accepted level to be considered significant.

The six significant relationships between sex and status variables were with three variables (010, 040 and 075).[1] In only one case (Variable 075) was the relationship significant in all three student surveys. The female students considered maintaining a restrained and dignified manner less important than did male students. This is consistent with their tendency to consider helping and working with people more important.

---

[1] See pp. 151-152

Table 4.25 shows that t-tests on the relationship between sex and the income variables revealed high levels of confidence in all cases.

Table 4.25

Levels of Confidence in Relationships between Sex and Income Variables

	Group means		Level of	Value of t
	Female (n = 294)	Male (n = 438)	Confidence	(separate variance)
VAR 013 (being able to earn a good income)	2.23[1]	1.74	.001	7.17
VAR 034 (being sure of earning a good income)	2.18	1.80	.001	5.61
VAR 039 (effect of lower level of income)	1.69	2.06	.001	- 5.64
VAR 046 (profession which is secure & lucrative)	2.52	2.35	.011	2.54
VAR 064 (ability to maximise income)	3.64	3.38	.001	3.60

Being able to earn or being sure of earning a good income was considered more important by male students and more of them than female students would not have chosen ophthalmic optics if the level of income was lower.

Table 4.26 sets out the results of similar t-tests on the relationship between sex and the independence variables.

---

[1] The higher the score the lower the value placed on income

Table 4.26

Levels of Confidence in Relationship between Sex and Independence Variables

	Group means		Level of	Value of t
	Female (n = 294)	Male (n = 438)	Confidence	(separate variance)
VAR 012 (importance of being own boss in choice of optics)	2.77[1]	2.00	.001	8.32
VAR 032 (importance of being own boss as consequence of being an optician)	2.57	1.93	.001	7.54
VAR 042 (less opportunity to be own boss)	1.62	1.82	.001	- 3.29

The male students considered being their own boss much more important in determining their choice of ophthalmic optics than female students, and they thought they would like this consequence of being an ophthalmic optician much more than female students. The male students said they would have been much less likely to have chosen ophthalmic optics if there had been less opportunity to be one's own boss. Thus the independence variables do strongly support Hypothesis 8.

Analysis of the cross-tabulation data between sex and the status, income, independence and service variables suggests that Hypothesis 8

---

[1] Scoring as for Table 4.25

is substantiated in relation to income and independence variables but little or no support in relation to status or helping people variables. Male students valued independence more highly and considered the level of income more important than did female students. There was a slight tendency for female students to consider helping people more important than did male students. There was, however, little difference between the two sexes' valuation of status variables.

D. FINAL YEAR STUDENT SURVEY - HYPOTHESES 6 to 10

Hypothesis 6 - Final year students will possess a highly developed concept of professionalism

This hypothesis was tested by analysing the replies to questions relating to income, status (prestige), service (helping and working with people), independence (autonomy), career, furthering knowledge and specialism variables. The last three groups of variables were those which were not included in the first year survey. Table 4.27 sets out the replies to Question 7(a) which asked the students to what extent they thought they would like each of a given list of consequences of being an ophthalmic opticians. This table shows that 87.8% of the sample thought they would like helping very much or quite a lot. Similarly, 87.3% thought the same about dealing with people, and 71.5% and 59.6% respectively thought the same in relation to being sure of earning a good income and being able to be their own boss. Having intelligent colleagues and doing work requiring great skill and knowledge and the status an optician enjoys were similarly rated by 57.8%, 55%

and 33.7% respectively.

Table 4.27

Final Year Ophthalmic Optics Students

Assessment of Importance of Consequences of Being an Ophthalmic Optician

Consequence	Extent of Liking					
	Very Much	Quite a lot	To some extent	Only a little	Not at all	No reply
	%	%	%	%	%	%
Helping people	60.1	27.7	10.8	0.3	0.8	0.3
Dealing with people	47.4	39.9	9.8	1.8	0.8	0.3
Being own boss	29.8	29.8	21.2	10.9	8.0	0.3
Income	33.9	37.6	23.8	3.4	1.3	-
Work of skill	17.9	37.1	31.7	8.6	3.9	0.8
Intelligent colleagues	22.0	35.8	29.0	7.0	5.7	0.5
Status of optician	9.3	24.4	48.4	13.2	4.2	0.5

(N = 732 in each row)

This 'league table' of preferences was confirmed by the replies to the supplementary question (7(b)) which asked the sample which consequence they thought they would like best. These replies are in Table 4.28. This table indicates a strong 'personal service' orientation and a relatively low rating of autonomy (being own boss). The students were also asked if they would still have chosen ophthalmic optics if the conditions of a lower level of income, lower social prestige less opportunity to be one's own boss, and less intrinsic interest in

Table 4.28

Final Year Ophthalmic Optics Students - Best Liked Consequence of Being an Ophthalmic Optician

Most Preferred Consequence	%
Helping people	36.0
Dealing with people	17.1
Income	13.7
Being own boss	12.2
Having intelligent colleagues	5.2
Doing work of great skill and knowledge	5.2
Status of optician	1.8
Others/More than one/No reply	8.8
TOTAL	100.0 (N = 386)

Table 4.29

Final Year Ophthalmic Optics Students - Reactions to Various Hypothetical Conditions in Professional Practice

	Would Student have still chosen ophthalmic optics			
	Yes	No	Don't Know	No Reply
Less intrinsically interesting work	5.7	75.2	18.1	1.1
Less opportunity to meet people	29.5	45.1	24.4	1.0
Less opportunity to be one's own boss	43.5	34.2	21.3	1.0
Lower level of income	51.0	21.3	26.9	0.8
Lower level of prestige	58.1	15.0	25.9	1.0

(N = 386 in each row)

Table 4.30

Final Year Ophthalmic Optics Students - Opinion of Descriptions Of Ophthalmic Optical Profession

	Students' Opinion of Description					
	Very Good	Good	Fair	Poor	Very Poor	No R
	%	%	%	%	%	%
Service to community	42.6	44.8	11.1	1.0	-	0.
Helps people directly	36.0	46.9	14.5	2.1	-	0.
Secure and lucrative	15.6	34.7	36.5	10.4	2.3	0.
Of high standing	3.4	26.2	52.6	15.5	1.8	0.
Requiring harder work	0.8	4.7	22.5	51.3	19.7	1.

(N = 386 in each row)

Table 4.31

Final Year Ophthalmic Optics Students - Opinion of Best Description Of Ophthalmic Optical Profession

Description	%	
Service to community	60.9	
Helps people directly	24.4	
Secure and lucrative	10.4	
Of high standing	1.0	
Requires harder work	0.2	
None/More than one/no reply	3.1	
TOTAL	100.0	(N = 386)

interest in the work applied. Replies to this question are set out in Table 4.29.

The order of preferences in Table 4.29 further confirms Table 4.27 in that meeting (or dealing or working with) people is valued more highly than independence, level of income and prestige (status). The immediate noticeable difference between the two tables is in the high value placed upon intrinsic interest in the work of an ophthalmic optician, apparently valued even more than meeting people. In Tables 4.27 and 4.28 work requiring great skill and knowledge was liked much less. As suggested in Chapter Four[1] the explanation may lie in the different phrasing of the parts of the two questions.

This last point is perhaps further illustrated in the replies to question 10(a) which asked the sample how well each of a number of phrases described the ophthalmic optical profession. The same order of preference in relation to service, helping people, income and status as in Table 4.27 - 4.29 is present but the description of the ophthalmic optical profession requiring harder work than others was rated a very good or good description by only 5.5% of the sample. The replies to this question are set out in Table 4.30.

The replies to the supplementary question (10(b)) which asked the students which phrase best described the ophthalmic optical profession which are set out in Table 4.31, further confirmed the order of preferences in Table 4.30.

Tables 4.27 - 4.31 give an overall picture of a final year sample which, in answer to three questions consistently placed helping, meeting

---

[1] See pp. 156-157

and working with people and service to the community at the top of the list of things they liked and valued about ophthalmic optics. Of the sample 53.1% cited helping and working with people as the things they thought they would like best about being an ophthalmic optician; 45.1% would not have chosen ophthalmic optics if there was less opportunity to meet people and 85.3% thought the ophthalmic optical profession could best be described in terms of helping people and service to the community. In this respect the distribution of replies of the final year sample bore a very close similarity to those of the first year sample.[1]

Questions 17 and 28 tried to assess the students' degree of career commitment. Question 17 asked for the sample's reaction to a hypothetica H's day. Mr. H was intended to personify the committed professional ophthalmic optician, often working a sixteen hour day on professional activities. Table 32 sets out the replies in full.

Reactions 1 and 2 can be seen as positive or approving ones and were shared by 72 or 18.6% of the sample. Reaction 3, approving but not necessarily wishing to emulate, was shared by 63 or 16.3%. Conversely, reactions 4 to 6 were negative or disapproving and were shared by 174 or 45.2% of the sample. It was realised after the final year surveys were completed that the reactions were not mutually exclusive and to ask respondents to tick one reaction could lead to confusion. Nevertheless, the range of replies was sufficiently wide to question the existence of great career commitment on the part of a substantial minority of the sample.

Whatever the methodological deficiencies of question 17, the range

---

[1] See Chapter Four, pp.155-158

of replies which suggests differing degrees of career commitment among the sample was confirmed by the replies to question 28. This asked the sample which thing they expected to give them most satisfaction in their life, and which thing they thought gave opticians in practice most satisfaction. The basic point of the question was to test the assumption (in e.g. Parsons, Freidson op.cit) that the professional career was the greatest source of satisfaction to opticians. Tables 4.33 and 4.34 set out the replies to the two halves of the question respectively.

Table 4.32

Final Year Ophthalmic Optics Students - Reaction to Mr. H's Day

	Date of Sample		
	1975 %	1976 %	Total %
Admiration for the full professional life Mr. H leads	10.9	17.8	14.5
A feeling of pride that I am on my way to becoming a member of a profession that includes Mr. H	3.8	4.4	4.1
Doubt that I could keep up a pace like that	17.9	14.9	16.3
A strong conviction that a man should not let his professional career interfere with his family life to such an extent	33.2	40.6	37.1
A feeling of deep regret that the demands of the profession leave ophthalmic opticians so little time for their personal life	7.6	2.0	4.7
Doubt that a man who divided himself in so many directions would do justice to any of his activities	5.4	1.5	3.4
Something else/more than one/ no reply	21.2	18.8	19.9
TOTAL	(n = 184) 100.0	(n=202) 100.0	(n=386) 100.0

Table 4.33

Final Year Ophthalmic Optics Students - Most Satisfying Thing in Life

	Date of Sample		
	1975	1976	Total
	%	%	%
Family relationships	43.5	37.1	40.2
Professional career	29.9	28.2	29.0
Leisure-time activities	13.6	17.8	15.8
Religious beliefs	2.7	5.0	3.9
Participating in community affairs	2.7	1.0	1.8
Working towards international understanding	0.5	2.0	1.3
Something else	3.8	1.5	2.6
No Reply	3.3	7.4	5.4
TOTAL	100.0 (N = 184)	100.0 (N = 202)	100.0 (N = 386)

The table shows that just less than a third thought that their career would give them most satisfaction in life but against this just over 40% thought their family and 15.8% their leisure-time activities would give them most satisfaction.

Table 4.34 shows that, irrespective of their own preferences, the students thought that opticians in practice gained most satisfaction in their lives from their professional careers, with family relationships and leisure-time activities a long way behind in second and third places, respectively. The data from Tables 4.32 to 4.34 seems to indicate that the students distinguish between the atmosphere and values of their university department and those of a professional working life.

These differences may be a problem for them in terms of living up to the 'professional ideal'. The findings do not support the assumptions made about the importance of the professional career made by Parsons, Freidson et al, which assume strong commitment to career.

Table 4.34

Final Year Ophthalmic Optics Students - Most Satisfying Thing in Life to Opticians in Practice

Source of Satisfaction	Date of Sample 1975 %	1976 %	Total %
Professional career	54.9	60.4	57.8
Family relationships	9.2	13.9	11.6
Leisure-time activities	10.9	4.9	7.8
Working towards international understanding	6.0	4.4	5.2
Participating in community affairs	2.7	3.5	3.1
Religious beliefs	0.5	-	0.3
Something else	1.1	2.5	1.8
No reply	14.7	10.4	12.4
TOTAL	100.0 (N = 184)	100.0 (N = 202)	100.0 (N = 386)

The variables relating to furthering knowledge were contained in Question 27. The students were asked to what extent they expected to continue their optical education after graduation by each of a number of methods. The replies are set out in Table 4.35.

Table 4.35

Final Year Ophthalmic Optics Students - Frequency of Continuation of Optical Education

Method of Continuation	Intended Frequency of Carrying out Activity				
	Frequently %	Occasionally %	Never %	Uncertain %	No Reply %
Reading optical journals	82.9	15.1	0.5	1.0	0.5
Attending local optical association meetings	36.8	49.7	1.8	10.4	1.3
Attending refresher courses	24.1	66.8	0.8	7.8	0.5
Reading optical textbooks	21.0	69.9	1.3	5.2	2.6
Attending conferences	10.1	56.0	8.8	23.8	1.3
Taking further optical qualifications	9.3	40.8	6.7	42.2	1.0
Research while in practice	4.1	22.0	24.9	47.2	1.8
Teaching part-time in a university department	4.1	10.1	45.6	38.1	2.1
Examining for professional bodies	2.1	8.0	47.9	40.2	1.8
Teaching full-time in a university department	1.8	2.3	74.7	18.9	2.3

(N = 386 in each row)

It is clear from the table that for the majority continuation of their optical education means reading optical journals, attending local optical association meetings, refresher courses, reading optical textbooks and attending conferences. The percentages expecting to carry out these activities frequently or occasionally were 98%, 86.5%, 90.9%,

90.9% and 66.1% respectively. Just over half (50.1%) expected to take further optical qualifications but only 26.1% and 10.1% expected to undertake research in practice and examine for professional bodies. Lastly only 14.2% expected to undertake a part-time teaching role and 4.1% a full-time one. The distribution of responses appears to indicate that for the majority furthering of knowledge is to be through receiving additional education rather than through contributing to education or knowledge. Only a small minority appear interested in the academic role which is now a possible alternative to optical practice (although 18.9% were uncertain) and a slightly larger minority in part-time teaching, examining or research while in practice.

The variables on specialisms reinforce the 'profile' brought out by the furthering knowledge variables i.e. a majority of respondents interested in optical practice per se and seeing themselves as receivers of advances in optical knowledge and a minority who wish to transmit and/or initiate this knowledge. Question 18 asked the students in which of these various specialisms in ophthalmic optics they were most interested. Table 4.36 sets out the replies.

This table shows that almost three-quarters of the sample (285 or 73.8%) said they were interested in general optical practice or contact lenses i.e. the two basic activities of optical practice. Conversely, only 44 or 11.4% were interested in the five types of specialist practice (orthoptics, paediatric, industrial and geriatric optics and subnormal vision). In addition, only 41 or 10.6% were interested in the Hospital Eye Service where practically every case is suffering from a pathological condition rather than a refractive error.

Table 4.36

Final Year Ophthalmic Optics Students - Optical Specialism Preferences

Specialism	Date of Sample 1975 %	1976 %	Total %
General optical practice	47.8	48.5	48.2
Contact lenses	28.8	22.7	25.6
Hospital Eye Service	12.0	9.4	10.6
Orthoptics	4.9	7.9	6.5
Paediatric optics	1.1	4.0	2.6
Industrial optics	1.1	1.0	1.0
Subnormal vision	-	2.0	1.0
Geriatric optics	0.5	-	0.3
Something else	3.8	3.0	3.4
No Reply	-	1.5	0.3
TOTAL	100.0 (N = 184)	100.0 (N = 202)	100.0 (N = 386)

Further confirmation comes from question 26(a) and (b) which asked the sample what type of professional activity they preferred and on what type of professional activity they expected to spend their time respectively. The replies are set out in Table 4.37.

Nearly two-thirds of the sample preferred general optical practice and over 85% expected to spend most of their working time in this way, irrespective of their preference.

Table 4.37

Final Year Ophthalmic Optics Students - Preferred and Expected Professional Activity

Activity	Preferred Activity %	Expected Activity %
General optical practice	66.5	86.8
Specialist practice	13.7	6.7
Part-time teaching	6.7	1.3
Research	4.1	0.3
Something else	5.9	2.3
No Reply	3.1	2.6
TOTAL	100.0 (N = 386)	100.0 (N = 386)

The overall picture that emerges from this necessarily extended testing of Hypothesis 6 is of a final year sample who considered helping and working with people more important than the income they could earn or the opportunity to be one's own boss although these two things were not considered unimportant. Compared with these, doing work requiring great skill and knowledge, having intelligent colleagues and the status of an optician were considered much less important. This ordering of preferences was consistent with the overall pattern of answers to questions relating to the consequences of being an ophthalmic optician they thought they would like, factors affecting their choice of ophthalmic optics and their concept of the ophthalmic optical profession. The one

exception was the great importance placed on the intrinsic interest of the work which, had it been less, would have deterred many from choosing ophthalmic optics even more than if there was less opportunity to meet people. Two things should be mentioned here. One is that for the final year sample this opinion on the interest of the work is one involving a 'hindsight' decision since few of the students would have had much direct knowledge of how interesting the work was at the outset of their degree course. Secondly, since the work involves testing the eyes of people, it inevitably means some contact with people and so the two things cannot be entirely divorced.

The variables on career commitment suggested that a wide variation in degree of career commitment existed. More students expected to find family relationships more satisfying in their lives than professional careers, but more than five times as many students thought opticians in practice gained most satisfaction from their professional careers as thought they gained most satisfaction from family relationships. The variables on furthering knowledge gave a fairly clear picture of the sample, the majority of whom saw the continuation of their optical education in terms of reading optical journals frequently, attending local optical association meetings, refresher courses and conferences occasionally together with reading optical textbooks. The majority appeared content to be recipients rather than transmitters of optical knowledge. Lastly, the variables on specialism appear to complement the conclusion regarding furthering knowledge in that nearly three-quarters of the sample expressed an interest in general optical practice or contact lenses, the two basic activities of optical practice. Only a small minority (11.4%) was interested in the various forms of specialist

practice and very few in a teaching/research role.

The data does suggest some support for Hypothesis 6 (that final year ophthalmic optics students will possess a highly developed concept of professionalism) in that service to people (helping and working with people) was considered more important than income and much more important than status. Evidence for the career commitment, furthering knowledge and specialisation dimensions of professionalism was less convincing. Wide variations in degree of career commitment appeared to exist, most of the sample seemed content to play a passive role in furthering their optical knowledge after graduation, receiving it from an active minority and most were happy to confine their professional activity to general optical practice. This suggests a group in which service is a more highly developed and widely held professional value than are those of career commitment, furthering knowledge and specialisation.

Hypothesis 7 - Final year students' values will be professionally rather than commercially orientated.

Much of the data analysed in relation to the previous hypothesis is of obvious relevance here e.g. the relative importance placed on income vis-à-vis helping and working with people. Other questions also attempted to measure the relative importance placed on these two factors e.g. Question 16 asked with which of five opinions on the relationship between income and service they most closely agreed. The replies are set out in Table 4.38.

The table brings out the marked differences among the sample in the importance attached to income and service to the public. Of the sample, 223 or 57.7% agreed with statements 1 - 3 which consider service

more important than income and 41.0% agreed with statements 4 & 5 which emphasised income more.

Table 4.38

Final Year Ophthalmic Optics Students - Opinions on Income-Service Relationship

Statement	1975 %	1976 %	Total %
Service to the public is entirely separate from any consideration of income	4.9	4.0	4.4
Although service to the public is more important, income should be high enough to enable an ophthalmic optician to live without financial worry	41.9	44.0	43.0
Income from ophthalmic optics should be high enough to enable an ophthalmic optician to live reasonably comfortably but, as service to the public is the more important consideration, it need not be as high as in other professions	8.7	11.9	10.3
Income should be distinct from considerations of service to the public, and should at least approximate to that of other professions	34.2	29.7	31.9
Income of ophthalmic opticians should be on a level with that of other professions, and be unrelated to any consideration of service to the public	9.8	8.4	9.1
No Reply	0.5	2.0	1.3
TOTAL	100.0 (N = 184)	100.0 (N = 202)	100.0 (N = 386)

A similar range was elicited by Question 25 which asked the students how much they expected to earn when they reached the age of 35. The replies are in Table 4.39.

Table 4.39

Final Year Ophthalmic Optics Students - Income Expectations at Age 35

Income Range	Date of Sample 1975 %	1976 %	Total %
£3 - 4,000	7.1	1.0	3.9
£4 - 5,000	22.8	7.4	14.8
£5 - 6,000	28.8	14.4	21.2
£6 - 7,000	18.5	26.2	22.5
£7 - 8,000	8.7	27.7	18.7
£8 - 9,000	2.7	11.9	7.5
£9 - 10,000	2.2	4.0	3.1
More than £10,000	6.5	5.4	6.0
No Reply	2.7	2.0	2.3
TOTAL	100.0 (N = 184)	100.0 (N = 202)	100.0 (N = 386)

The table shows that 298 or 77.2% of the sample expected to earn between £4 - 8,000 at the age of 35 (not allowing for inflation), only 15 or 3.9% expected to earn less than £4,000 per annum and 64 or 16.6% expected to earn more than £8,000 per annum. Cross-tabulation of the income/service relationship (Variable 089) and income expectations (Variable 106) did not reveal any relationship between the two variables.

The last variable in relation to the importance of income was Question 13(v) which asked the sample how important they thought the

ability to maximise income was in making a good ophthalmic optician. The replies follow in Table 4.40.

Table 4.40

Final Year Ophthalmic Optics Students - Importance of Ability to Maximise Income

Degree of Importance	Date of Sample 1975 %	1976 %	Total %
Very	1.1	-	0.5
Fairly	13.1	13.4	13.2
Of some	36.4	35.6	36.0
Of little	34.2	30.7	32.4
Of no	14.7	19.8	17.4
No reply	0.5	0.5	0.5
TOTAL	100.0 (N = 184)	100.0 (N = 202)	100.0 (N = 386)

The table shows that only 53 or 13.7% of the sample considered the ability to maximise income very or fairly important as against 139 or 36% who considered it of some importance and 192 or 49.8% who considered it of little or no importance. Although the last group is almost four times the size of the first, the table indicates that a small minority might be considered on this evidence to be at least potentially commercially orientated. This is consistent with the small minorities of 10-15% who in Tables 4.38 and 4.39 considered income more important than service and expected high incomes at the age of 35.

The last question relevant to Hypothesis 7 was Question 23(a) which asked the student in which type of practice situation they would least like eventually to practise. The replies are in Table 4.41.

Table 4.41

Final Year Ophthalmic Optics Students - Least Preferred Type of Practice

Type of Practice	Date of Sample 1975 %	1976 %	Total %
Public company 'multiple'	38.6	41.1	39.9
Hospital Eye Service	25.5	21.8	23.6
Peripatetic contact lens	9.8	17.3	13.7
Locum	8.7	7.9	8.3
Individual private	3.3	3.0	3.1
Group private	1.1	1.0	1.0
Elsewhere	0.5	0.5	0.5
Undecided	10.9	5.9	8.3
No Reply	1.6	1.5	1.6
TOTAL	100.0 (N = 184)	100.0 (N = 202)	100.0 (N = 386)

The table shows that public company 'multiples' practice was cited by almost 40% of the sample. The supplementary Question 23(b) asked the reasons for the choice in 23(a) and those citing multiple practice all gave as their reason the commercial pressure present. However, over a fifth of the sample (23.6%) cited the Hospital Eye Service, the

reason in most cases being that all the patients were abnormal. Also, 22% of the sample cited peripatetic contact lens practice and locum practice as their least preferred practice situation, the reason being the lack of personal contact or lack of follow-up with the patient.

The data in Tables 4.38 to 4.41 taken together with the income and service variables relating to Hypothesis 6 suggest that there is partial support for Hypothesis 7 in that the majority of the sample considered service to be more important than income, did not expect to earn more than £8,000 at the age of 35 and did not consider the ability to maximise income as important in making a good ophthalmic optician. In addition, a large minority cited the allegedly commercially orientated public company multiple practice as the situation in which they would least like eventually to practise, giving as their reason the commercial pressure present. It was not supported in so far as there were minorities of 10-15% who thought income was more important than service, expected incomes of over £8,000 at the age of 35 and considered the ability to maximise income important in making a good ophthalmic optician. The findings suggested that this group might have been at least potentially commercially rather than professionaly orientated. However, the cross-tabulation of opinion on the income-service relationship (Variable 089) with income expectations at 35 (Variable 106) did not reveal a significant relationship. There was a slight tendency only for those who expected a high income (£8,000 +) to be more likely to cite a more income-orientated opinion of the income-service relationship.

Hypothesis 8 - Final year ophthalmic optics students will possess a clear and specific concept of the optical careers they would like to pursue.

The students were first asked (Question 19) how much they had thought about the kind of career they would like to have. Table 4.42 sets out the replies.

Table 4.42

Final Year Ophthalmic Optics Students - Amount of Thought About Career

Amount of Thought	Date of Sample		
	1975	1976	Total
	%	%	%
A great deal	35.3	40.6	38.1
A fair amount	46.7	39.6	43.0
To some extent	14.1	11.4	12.7
Only a little	3.8	7.4	5.7
Not at all	-	1.0	0.5
TOTAL	100.0 (N = 184)	100.0 (N = 202)	100.0 (N = 386)

The table indicates that 313 or 81.1% of the sample had thought about their career a great deal or a fair amount, as opposed to only 24 or 6.2% who had thought about it only a little or not at all. Since a strong bias to reply in this way might be expected of the students, the next question which asked them whether they intended to practise as an ophthalmic optician (Question 20(a)) acted as a check on this. Of the sample 361 or 93.5% said they did, 4 or 1% said they did not and 20 or 5.2% did not know. Question 20(b) asked the sample if they intended to practise for the whole of their working lives. The replies

bear interesting comparison with those to Question 20(a) and cast an additional light on the dimension of career commitment discussed in Hypothesis 6. These replies are set out in Table 4.43.

Table 4.43

Final Year Ophthalmic Optics Students - Intention to Practise for Whole of Working Life

	Date of Sample		
	1975 %	1976 %	Total %
Yes	47.8	50.5	49.2
No	20.7	16.3	18.4
Don't Know	26.6	28.7	27.7
No Reply	4.9	4.5	4.7
TOTAL	100.0 (N = 184)	100.0 (N = 202)	100.0 (N = 386)

The table shows that near to the end of their degree course, 46.1% of the sample either did not intend to or did not know whether they would practise as an ophthalmic optician for the whole of their working life. Despite the high percentage of 'noes' and 'don't knows' in Table 4.43, far more students made clear, specific choices as to the type of practice situation in which they would like to spend their pre-registration year as Table 4.44 makes clear.

The students were only slightly less clear about where they most wanted eventually to practise as Table 4.45 shows.

Table 4.44

Final Year Ophthalmic Optics Students -
Choice of Pre-registration Situation

Type of Practice	Date of Sample 1975 %	1976 %	Total %
Group private	35.9	43.6	39.9
Individual private	20.6	18.3	19.4
Hospital Eye Service	18.4	18.3	18.4
Public Company 'multiple'	13.6	9.4	11.4
Elsewhere	4.4	5.9	5.2
Undecided	6.0	3.0	4.4
No Reply	1.1	1.5	1.3
TOTAL	100.0 (N = 184)	100.0 (N = 202)	100.0 (N = 386)

Table 4.45

Final Year Ophthalmic Optics Students -
Choice of Eventual Practice Situation

Type of Practice	Date of Sample 1975 %	1976 %	Total %
Group private	38.6	36.6	37.6
Individual private	31.0	40.1	35.8
Hospital Eye Service	5.4	5.4	5.4
Locum	4.9	5.4	5.2
Public company 'multiple'	2.2	0.5	1.3
Peripatetic contact lens	0.5	1.5	1.0
Elsewhere	1.5	1.5	1.5
Undecided	13.1	7.5	10.1
No reply	2.7	1.5	2.1
TOTAL	100.0 (N = 184)	100.0 (N = 202)	100.0 (N = 386)

The table shows that 10.1% were undecided but on the other hand 72.4% had decided they wanted to practise in individual or group private practice. No more than 5.4% chose any other practice situation. Finally in relation to career choice, Table 4.46 shows that the majority of students had a clear idea of what sort of area in which they would like to practise.

Table 4.46

Final Year Ophthalmic Optics Students - Choice of Area of Practice

Type of Area	Date of Sample 1975 %	1976 %	Total %
Rural area/town	51.6	52.0	51.8
Residential suburb	14.1	14.8	14.5
Large city centre	9.2	8.9	9.1
Industrial town	2.2	4.0	3.1
Working class suburb	1.6	1.5	1.6
Another area	2.2	4.4	3.4
Undecided	16.9	11.9	14.2
No Reply	2.2	2.5	2.3
TOTAL	100.0 (N = 184)	100.0 (N = 202)	100.0 (N = 386)

Although the distributions in Tables 4.44 to 4.46 have the nature of 'ideal choices' in view of the degree of uncertainty expressed in Tables 4.42 and 4.43 about careers in optics, the overall pattern is clear.

Most students would like to spend their pre-registration year in group or individual private practice, followed by practice in either of these two situations, preferably in a rural area or town, or residential suburb.

Thus Hypothesis 8 is partially supported, to the extent that most students made clear, specific choices as to the type of practice situation and area in which they would like ideally to practise. However, it should be remebered that the questionnaire method via its use of pre-set questions does 'enforce' clarity upon respondents. It is not supported in that (a) minorities of 10-15% were uncertain in relation to their choice of practice situation and (b) the substantial minority who did not know whether to practise as an ophthalmic optician for the whole of their working lives or did not know whether they would practise at all. The ideal choices above were made irrespective of this uncertainty and/or lack of commitment.

Hypothesis 9 - Female students will possess a concept of their optical career which is significantly different from that of male students

Table 4.47 sets out the cross-tabulation of sex and the amount the students had thought about the kind of career they would like to have. This table shows very little difference in the distribution of the responses of the two sexes with male students slightly more likely to have thought a great deal or a fair amount and female students only a little or not at all. However, this difference was not statistically significant.

Similar degrees of difference were found in cross-tabulations of sex with intention to practise as an ophthalmic optician and intention to practise for the whole of the student's working life. These cross-

tabulations are set out in Tables 4.48 and 4.49 respectively.

Table 4.47

Final Year Ophthalmic Optics Students -
Cross-Tabulation of Sex with Amount of Thought Given to Career

Amount of Thought	Female %	Male %	Total %
A great deal	37.1	39.0	38.1
A fair amount	42.5	43.5	43.0
To some extent	13.4	12.0	12.7
Only a little	5.9	5.5	5.7
Not at all	1.1	-	0.5
TOTAL	100.0 (N = 186)	100.0 (N = 200)	100.0 (N = 386)

Table 4.48

Final Year Ophthalmic Optics Students -
Cross-Tabulation of Sex with Intention to Practise as Ophthalmic Optician

Intention to practise	Female %	Male %	Total %
Yes	95.2	92.0	93.5
No	2.2	-	1.0
Don't Know	2.6	7.5	5.2
No Reply	-	0.5	0.3
TOTAL	100.0 (N = 186)	100.0 (N = 200)	100.0 (N = 386)

The table shows that slightly more female students than male intended to practise but at the same time only female students (4) did not. Conversely, male students were more likely to be uncertain as to whether they would practise.

Table 4.49

Final Year Ophthalmic Optics Students - Cross-Tabluation of Sex with Intention to Practise for Whole of Working Life

Intention to Practise	Female %	Male %	All Students %
Yes	48.4	50.0	49.2
No	24.2	13.0	18.4
Don't Know	24.2	31.0	27.7
No Reply	3.2	6.0	4.7
TOTAL	100.0 (N = 186)	100.0 (N = 200)	100.0 (N = 386)

The table shows firstly, almost the same percentage of female and male students stating an intention to practise for the whole of their working lives. Secondly, almost a quarter of the female students said they did not intend to do so. The reason given by almost all was in terms of interruptions due to bearing and rearing a family. Only 13% of male students did not intend to practise for the whole of their career. A variety of reasons were given for this including 'practise until I get fed up', 'until something better comes along', 'travel'. Lastly, slightly more male students than female were uncertain of their

long-term intentions. This relationship was significant at the .025 level ($x^2 = 7.86$) for the 1975 sample but not for the 1976 sample.

Overall, Tables 4.47 to 4.49 show only slight differences between the two sexes. However, the cross-tabulation relating to pre-registration and eventual registered practice situations showed more significant differences. Table 4.50 sets out the preferences of the two sexes in relation to their pre-registration practice situation.

Table 4.50

Final Year Ophthalmic Optics Students - Cross-Tabulation of Sex with Pre-Registration Year Practice Preferences

Type of Practice	Female %	Male %	Total %
Group private	38.2	41.5	39.9
Individual private	13.4	25.0	18.4
Hospital Eye Service	22.6	14.5	19.4
Public company 'multiple'	12.9	10.0	11.4
Elsewhere	4.8	3.5	4.2
Undecided	5.4	3.5	4.4
More than one	-	2.0	1.0
No Reply	2.7	-	1.3
TOTAL	100.0 (N = 186)	100.0 (N = 200)	100.0 (N = 386)

The main difference is in the numbers preferring individual private practice and the Hospital Eye Service. More male students chose the former and more female the latter.

Table 4.51 which shows the preferences in relation to eventual practice situations makes the difference between the two sexes even more

apparent.

Table 4.51

Final Year Ophthalmic Optics Students
Cross-Tabulation of Sex with Eventual Practice Situation Preferences

Type of Practice	Female %	Male %	Total %
Group private	37.6	37.5	37.6
Individual private	22.6	48.0	35.8
Hospital Eye Service	9.1	2.0	5.4
Locum	8.1	2.5	5.2
Peripatetic contact lens	0.5	1.5	1.0
Public company 'multiple'	1.6	1.0	1.3
Elsewhere	2.2	1.0	1.5
Undecided	15.6	5.0	10.1
More than one	-	1.5	0.8
No Reply	2.7	-	1.3
TOTAL	100.0 (N = 186)	100.0 (N = 200)	100.0 (N = 386)

The percentage of preferences for group private practice of the two sexes were almost identical but female students were much less likely to choose individual private practice and much more likely to choose locum practice and the Hospital Eye Service, because these types of practice could be fitted in more easily with family commitments. Female students were also much more likely to be undecided. This relationship was significant at the .001 level ($x^2 = 47.64$).

The preferences of the two sexes in respect of area of practice were very similar. There was a slight tendency for male students to

prefer city centres and industrial town practice more than female students and conversely slightly more female students were undecided.

The preceding Tables 4.47 to 4.51 indicate only modest support for Hypothesis 9. The type of practice situation preferred by female students was significantly different (at the .001 level) from that of male students i.e. Hospital Eye Service and locum practice rather than individual private practice. This difference reflected the number of female students who did not anticipate practising as an ophthalmic optician for the whole of their working lives because of interruption due to child-bearing and rearing. The difference was also reflected, although to a lesser extent, by the female students' preferences for their pre-registration year. Here again they preferred Hospital Eye Service practice rather than group and individual private practice. Thus most of the female students had a concept of their career which was significantly different from those of male students and the source of that difference was their realisation of the potential conflict between their domestic and professional roles.

Hypothesis 10 - the concept of professionalism possessed by female students will be significantly different from that possessed by male students

Apart from those differences in career orientation discussed in relation to Hypothesis 9 the main differences in the concepts of professionalism possessed by students of the two sexes were found to be those relating to income and independence (autonomy) variables i.e. findings were similar to those for the first year survey. T-tests were applied to all these variables. Table 4.52 sets out the results

of these tests in relation to the income variables.

Table 4.52

Final Year Ophthalmic Optics Students -
Levels of Confidence in Relationships between Sex and Income Variables

	Group means		Level of Confidence	Value of t (separate variance)
	Female (n = 186)	Male (n = 200)		
VAR 013 (importance of being able to earn a good income)	2.46[1]	1.82	.001	6.44
VAR 034 (importance of being sure of earning a good income)	2.11	1.90	.019	2.36
VAR 039 (effect of lower level of income)	1.51	1.98	.001	- 5.71
VAR 046 (profession which is secure and lucrative)	2.57	2.40	.088	1.71
VAR 064 (importance of ability to maximise income)	3.56	3.50	.537	0.62
VAR 106 (income expectations at age of 35)	5.52	6.53	.001	- 5.98
VAR 140 (assessment of making a good income)	3.97	4.50	.001	- 6.11

[1] The higher the scores the lower the valuation of income

The table shows that five of the seven variables were related at the .05 level or above. Specifically the results indicated that male students considered being able or being sure of earning a good income more important than did female students. More of them than female students would not have chosen ophthalmic optics if the level of income had been lower. Male students' income expectations at the age of 35 tended to be higher and they were more likely to rate themselves higher in ability to make a good income as an ophthalmic optician than female students. There was little difference between the sexes in terms of (a) their opinion of the ophthalmic optical profession as a secure and lucrative one and (b) of the importance they attached to the ability to maximise income. Similar t-tests on the five independence variables showed that all were related to sex. Table 4.53 sets out the results of these tests.

The male students considered being their own boss much more important in determining their choice of ophthalmic optics and they thought they would like this as a consequence of being an ophthalmic optician more than did female students. They were also less likely to have chosen ophthalmic optics if there had been less opportunity to be one's own boss and were more likely to rate themselves higher in terms of being ready to assume responsibility than female students. Lastly, male students were more likely to say they would do better than opticians now in practice in terms of developing their own techniques.

Thus there is support from the data for Hypothesis 10 in respect of the income, independence and career dimensions of professionalism where significant differences were found in regard to the degree of importance attached by and expectations and preferences of the two sexes.

Female students expected to have their careers interrupted by child-bearing and rearing and this was reflected in the importance they attached to income and independence. Differences were less marked in respect of the status, specialisation, service and furthering knowledge dimensions. Though the differences were not statistically significant, male students tended to consider status more important and wanted to specialise more than did female students whereas the latter considered service (helping people) more important. There appeared to be no consistent relationship between sex and the furthering knowledge variables.

Table 4.53

Final Year Ophthalmic Optics Students -
Levels of Confidence in Relationships between Sex and Independence Variables

	Group means		Level of Confidence	Value of t (separate variance)
	Female (n = 186)	Male (n = 200)		
VAR 012 (importance of being one's own boss in choice of ophthalmic optics)	3.08[1]	1.94	.001	9.30
VAR 032 (importance of being one's own boss as consequence of being ophthalmic optician)	2.76	2.01	.001	6.15
VAR 042 (effect of less opportunity to be one's own boss)	1.62	1.91	.001	- 3.64
VAR 134 (readiness to assume responsibility)	4.20	4.55	.001	- 3.39
VAR 147 (developing own techniques)	4.14	4.46	.001	- 3.51

[1] The higher the score the lower the valuation of independence.

E. COMPARISON OF FIRST AND FINAL YEAR SURVEYS

The data of the first year student survey was compared with that of the final year survey to try to discover any changes in opinion which had taken place over the period of the student's degree course which could be attributed to the process of professional socialisation. This was done by applying t-tests to each variable relating to the eight dimensions of professionalism i.e. income, helping people (service), specialisation, prestige (status), independence (autonomy), furthering knowledge, commercial v. personal service orientation, and career commitment that were directly comparable between the two surveys. Significant differences between the distribution of replies in the two surveys were found in relation to 15 variables and these will now be outlined in turn as they relate to the eight dimensions.

Income Variables

None were significantly different.

Helping People Variables

The changes of opinion are all in the same direction i.e. that final year students thought these helping people variables were slightly less important than did first year students, or in the case of Variable 045 and 047 a less good description of the ophthalmic optical profession. However, the group means indicate that most of the final year students thought these variables very or fairly important or very or good descriptions respectively.

	Group Means		Level of	Value of t
	First Year (N = 732)	Final Year (N = 386)	Confidence	(separate variance)
VAR 045 (profession of service to the community)	1.58[1]	1.70	.007	- 2.71
VAR 047 (profession which helps people directly)	1.64	1.82	.001	- 3.92
VAR 061 (importance of warm and pleasing personality)	1.38	1.55	.001	- 3.98
VAR 069 (importance of ability to get along with people)	1.32	1.41	.019	- 2.35
VAR 078 (importance of being a good conversationalist)	2.19	2.46	.001	- 4.60

Specialisation Variables

None were comparable between the two surveys.

Prestige (status) Variables

	Group Means		Level of	Value of t
	First Year (N = 732)	Final Year (N = 386)	Confidence	(separate variance)
VAR 044 (profession of high standing)	2.53[2]	2.86	.001	- 6.63
VAR 053 (classification of ophthalmic optician)	1.76	2.03	.001	- 7.71
VAR 075 (maintaining a restrained and dignified manner)	2.57	2.42	.014	2.45

[1] The higher the score the less importance placed on helping people

[2] The higher the score the less importance placed on prestige

Variables 044 and 053 refer to the student's conception of the status of the ophthalmic optical profession and the ophthalmic optician himself respectively. The t-tests indicate that final year students rated the status of both slightly lower than did first year students. The former were more likely to say that 'a profession of high standing' was an adequate description of the ophthalmic optical profession whereas the first year students were more likely to say it was a good description. Similarly final year students were more likely to describe 'ophthalmic optician' as a new rather than an old-fashioned profession.

Variable 075 refers to the student's subjective conception of how he thinks opticians should behave in practice and the t-test indicates that first year students rated maintaining a restrained and dignified manner as slightly more important than did final year students, although the level of confidence and difference in group means indicate that the difference is not a great one.

Independence Variables

None were significantly different.

Furthering knowledge Variables

	Group Means		Level of	Value of t
	First Year (N = 732)	Final Year (N = 386)	Confidence	(separate variance)
VAR 065 (importance of curiosity in making a good ophthalmic optician)	2.61[1]	2.85	.001	- 3.94
VAR 068 (importance of research ability in making a good ophthalmic optician)	3.28	3.74	.001	- 7.79

[1] The higher the score the less importance placed on furthering knowledge

In both variables final year students considered these features to be less important than did first year students, perhaps an indication of the former's realisation of the essentially practical and routine nature of the ophthalmic optician's core task of refraction. However, both groups rate these features only as of some importance at most and the degree of change by the final year is not great.

Commercial v. Personal Service Orientation

	Group Means		Level of Confidence	Value of t (separate variance)
	First Year (N = 732)	Final Year (N = 386)		
VAR 066 (importance of integrity in making a good ophthalmic optician)	1.92[1]	1.62	.001	5.99
VAR 087 (degree of similarity between ophthalmic optician-patient & shopkeeper-customer relationships)	3.35	3.75	.001	- 5.97

The test on Variable 066 indicates the final year students rate integrity slightly less important than first year students, although the mean in both cases indicates that most consider it very or fairly important i.e. the degree of change by the final year is small.

The test on Variable 087 indicates that final year students see less similarity between the two relationships - little rather than some.

The findings relative to the two variables appear on the face of it to

---

[1] The higher the score the less importance placed on personal service

be inconsistent. The first indicates a small change in the direction away from professionalism, the second away from commercialism. The solution is probably in terms of how the students construed these two questions.

Career Commitment Variables

	Group Means		Level of	Value of t
	First Year (N = 732)	Final Year (N = 386)	Confidence	(separate variance)
VAR 028 (feelings about career in optics)	2.12[1]	2.24	.039	- 2.07
VAR 062 (importance of dedication to ophthalmic optics)	1.83	2.01	.001	- 3.39

The two variables indicate some decrease in career commitment on the part of the final year students but the changes are small. The group means indicate that most of both groups of students felt that ophthalmic optics was one of several careers that could satisfy them and that dedication to ophthalmic optics was very or fairly important in making a good ophthalmic optician.

The comparison of the two surveys therefore indicates some difference in opinion between the two students groups, in particular relating to helping people and prestige variables. However, the most noticeable characteristic of these changes is their smallness. All the means related to Likert-type 5 point scales between 1 - 5 and, in no

---

[1] Low scores indicate greater importance placed on career commitment.

case was the movement greater than 0.46 along the scale.

This may indicate that the degree course does not change the students' values greatly i.e. that this aspect of professional socialisation is not very important during their degree course and perhaps occurs more during the pre-registration year and subsequent practice. Alternatively, the data for the first year survey in terms of the eight dimensions of professionalism could be taken to indicate that no 'conversion' from commercialism to professionalism is necessary, most students being already professionaly orientated. What may rather happen is a change from idealism to 'pragmatic realism' as more is learned of the actual routine tasks involved in practising optics. A third explanation could be that the questionnaire did not measure other quintessential changes in attitude.

A comparison of the first and final year samples by sex showed that the differences between male and female students in respect of autonomy (independence) variables was greater among the final year students i.e. final year female students rated this as less important than first year female students. No consistent trend was apparent when the same procedure was applied to the income variables.

F. SUMMARY OF CHAPTER

First Year Survey

The overall picture that emerges from the testing of the eight hypotheses is of a student body that is predominantly middle class, state educated, few of whom have any family connections with optics.

For a majority ophthalmic optics was not their first choice occupation and a substantial minority would ideally have liked to have studied medicine. This means in turn that their first thoughts of studying ophthalmic optics tend to be at a later age than research on medical students indicates. However, the age of definite decision for most is related to their level of attainment in GCE 'A' level examinations and thus the time-gap between their first thoughts and their definite decision to study ophthalmic optics is in most cases one to two years, a narrower time-gap than that for medical students.

Students from different class backgrounds do not appear to make significantly different judgments of the importance of income and status of an ophthalmic opticians, nor indeed do they appear to differ in the importance they attach to helping and working with people, independence and career commitment. In general, social class does not appear to be an important discriminating variable at the start of the process of professional socialisation and training, except, of course, in terms of the initial choice by Sixth Formers from different social class backgrounds to pursue a career such as optics in the first place.

Students considered helping and working with people to be very important and status much less important. To this extent they could be said to possess an idealist conception of the ophthalmic optical profession. However, they considered income and independence to be important but not as important as helping people. Thus while idealistic they could not be said to be naive.

Finally, sex appeared to be the most important discriminating variable. Female students considered income and independence to be less important than did male students, although there was little difference

between the sexes in terms of their concern for helping and working with people and status.

Final Year Survey

This student group was very similar to the first year group in terms of social class background, secondary education, lack of family connection with optics, the percentage for which optics was their first choice occupation, the number who would ideally have liked to have studied medicine and the age at which their decision to study ophthalmic optics was made.

This group considered helping and working with people more important than income and independence, although the latter were still of considerable importance. Doing work that required great skill and knowledge, having intelligent colleagues and the status of an optician were considered much less important. There was a clear and consistent pattern to these preferences and to this extent their concept of professionalism could be said to be highly developed. Similarly, the small number of students who considered income more important than other factors seemed to indicate that few were commercially orientated, at least in respects measurable by the questionnaire.

Most of the sample made clear choices as to the type of practice and area in which they would like to practise. At the same time a minority was uncertain and a somewhat larger minority was uncertain as its career commitment to optics. As with the first year sample, sex was an important, if not the most important, variable. Female students possessed a significantly different concept of career which recognised the likely effects of family commitments. This was reflected in the

lesser valuation of income and independence. There were smaller differences between the two sexes in terms of status, furthering knowledge, specialisation and service (helping people) variables.

A comparison of the data of the two student surveys revealed changes in opinion in relation to some helping people, prestige, furthering knowledge, commercial v. personal service orientation, and career commitment variables but none was of a magnitude greater than 0.5 on the 1 - 5 Likert-type scale. It is suggested that changes in attitude may be associated more with starting to practise rather than completion of the degree course.

The following chapter sets out the data relating to the social background of practising opticians.

Missing page(s) from the bound copy

CHAPTER FIVE

The Social Background of Ophthalmic Opticians

This chapter sets out the findings of this survey of practising opticians, with particular reference to the hypotheses relating to their social background. The main sample questionnaires were sent out in March 1976 and the follow-up questionnaires in May 1976. The final return rates are shown on p. 209.

Although the overall return rate of 69.9% was a gratifying one for a postal questionnaire survey, it is somewhat disappointing that the return rates for the weighted samples were lower than that for the 10% random sample, since the rationale for the inclusion of the former was to give a more representative sample. The reason for the disappointingly low return from the lecturers may have been linked to the time of year the questionnaires were sent out (April and May), when examination commitments were approaching. The refusal rate for the whole sample was 8.8% (63); most of these came at the follow-up stage. Refusal can be presumed for the 31.1% who did not reply, although on the basis of the returns, a few of these can be presumed dead, retired or gone away i.e. changed address from that in the Opticians Register.

Several comments can be made on the representativeness of the sample of the profession's members. Bennett (1977) has pointed out that the number of ophthalmic opticians on the NHS lists is a more accurate indicator of the number of active opticians than the number

FINAL RETURN RATES

Sample	Completed	Refusals	Not Practising[1]	Gone Away	Died	Incomplete	Total Returned	Total Sample	% Return
10% random	314	57	34	15	9	4	433	593	73.0
Female weighted	28	4	3	2	-	1	38	53	71.7
Unqualified weighted	3	2	-	1	1	-	7	22	31.8
Ophthalmic optics/ optometry lecturers	21	-	-	-	-	-	21	46	45.7
TOTAL	366	63	37	18	10	5	499	714	69.9

[1] This category includes 'not practising at present','retired', 'overseas', 'emigrating'.

on the GOC Register, the reason being that removal from the register makes it a criminal offence to undertake even an occasional refraction. Removal from the NHS list carries no such disability. In 1974 the number of ophthalmic opticians on the NHS list was 5,149; that on the GOC register 5,781 (excluding those practising overseas) i.e. a difference of over 600 or 10.9% However, even the NHS lists may not be entirely accurate. Since local lists overlap, it is possible for the same optician to be on two or more local lists referring to adjacent areas.

The data from the survey goes some way towards indicating how many of the returns were from retired or semi-active ophthalmic opticians (apart from those who did not complete the questionnaire, giving as their reason that they were retired), since Question 11 in Section III (Variable 149) of the questionnaire asked how many days, in an average week, the respondent spent practising ophthalmic optics. The cross-tabulation of these replies by age-group of the sample is set out in Table 5.1.

Table 5.1

Cross-Tabulation of Days in Practice with Age of Ophthalmic Optician

Days Spent Practising	Age Group 21-30 %	31-40 %	41-50 %	51-60 %	60+ %	Total %
Less than one	5.1	3.7	-	-	2.4	2.5
One	10.1	3.7	-	1.7	4.7	4.4
Two	3.8	8.5	4.8	6.9	2.4	5.2
Three	3.8	3.7	6.3	1.7	4.7	4.1
Four	6.3	8.5	6.3	6.9	16.7	9.2
Five	56.9	47.5	65.1	63.8	48.9	55.5
More than five	12.7	20.7	17.5	17.3	15.5	16.6
No Reply	1.3	3.7	-	1.7	4.7	2.5
TOTAL (n = 366)	100.0	100.0	100.0	100.0	100.0	100.0

The table indicates that 12 or 14.2% of the over 60 group practised for less than four days and therefore were at least semi-retired. However, only 2 or 2.4% of the over 60s practised for less than one day i.e. were effectively retired. Thus a comparison of Table 5.1 and the difference between the NHS and GOC figures for 1974 indicates that the sample does not over-represent the retired or semi-retired. The GOC also publish figures relating to the age of ophthalmic opticians and Table 5.2 compares this age-group structure with that of the sample.

Table 5.2

Comparison of Age-Group Structure of Sample and GOC Register 1976

Age Group	Practising Optician Sample		GOC Figures[1]	
	No.	%	No.	%
21-30	79	21.6	969	16.8
31-40	82	22.4	856	14.9
41-50	63	17.2	963	16.7
51-60	58	15.9	1161	20.2
60+	84	23.0	1807	31.4
	366	100.0	5756	100.0

The table indicates that the sample is over-representative of the under 40s, under-representative of the over 50s and fairly representative of the 41-50 age-group. This perhaps reflects the difference report by the pilot sample in the time taken to complete the questionnaire, the

[1] See Ophthalmic Optician, April 3rd 1976, p.316

older opticians taking longer.

The sample was also over-representative of female opticians. They comprised 18.9% of the sample as against 12.6% of the profession's members in December 1975.[1] This was the result of weighting the female sample plus the higher rate of returns from female opticians - see Table 5.3.

Table 5.3

Questionnaire Return Rate - By Sex

Returns	Female Opticians	Male Opticians	Total
Completed questionnaires	69	297	366
Incomplete questionnaires[2]	21	112	133
Total Sample	123	591	714
Completed questionnaire as % total sample	56.1	50.2	51.3

The returns also brought out the fact that most of the apparently unqualified in the Opticians Register were in fact qualified, but their qualifications were not listed in the Register. Of 22 returns from opticians with no qualifications listed, only 2 in answer to Question 5 Section IV listed no optical qualifications. One of these specifically mentioned he was registered under Section 3(2) of the Opticians Act 1958 i.e. via tests of competence conducted by the GOC. These returns seemed to indicate that the unqualified segment (Bucher & Strauss 1961) of the professional body is much smaller than hypothesised in Chapter One.

---

1 See Ophthalmic Optician, April 3rd 1976, p.316

2 For all reasons i.e. refusal, gone away, not practising, died.

More significantly the very small number means that any valid consideration of the concept of professionalism held by this segment of the profession is impossible. Lastly, in respect of the sample's representativeness, the returns also showed that the sample was deficient in that it did not contain any of the 72 ophthalmic opticians employed full-time in the Hospital Eye Service.[1] As with the unqualified this precluded the assessment of the concept of professionalism of a small but significant segment of the optical profession.

Table 5.4

Non-Response - By Age

Date of Registration	Non-respondents	Respondents[2]	Total Number in age-group	% response rate for age group
1970 onwards (21-30)	32	75	107	70.0
1960-1969 (31-40)	102	72	174	41.4
Initial i.e. 1960 (over 40s)	189	198	387	51.2
TOTAL	323	345	668	51.6

It was possible to some extent to analyse the non-respondents. Since the Opticians Register gives the original date of registration of

---

1 See Health and Personal Social Services Statistics for England, 1974, HMSO 1976, p.49

2 i.e. completed questionnaires

each optician[1] it was possible to divide the sample into three age-groups - those on the initial register (1960), those registering in the period 1960-69, and those from 1970 onwards. The three groups correspond fairly accurately to the over 40, 31-40 and 21-30 age-groups respectively. Table 5.4 compares the non-response rates of these three age-groups. The table excludes the 46 university lecturers. It was impossible to calculate their age-structure accurately since not all of them are in the Opticians Register. In spite of these limitations on its accuracy the table shows that the return rate from the 21-30 'graduate' optician was significantly higher than that for the two groups of older opticians. This factor will be taken into consideration when cross-tabulations involving age are discussed later in Chapter Six.

ANALYSIS OF HYPOTHESES

Hypothesis 1 - the older the group of opticians the lower their social class origins

As with the student samples, the practising optician sample was analysed according to the modified version of the Registrar-General's Social Class classification which divides Social Class III into III non-manual (middle class) and III manual (working class). Table 5.5 gives the class background of the sample, using this classification, at the time when they started to practise ophthalmic optics. There were some 58 (15.9%) unclassifiables initially because of death or

---

[1] The accuracy of calculations based on this date is lessened by the facts (a) that not all opticians register at the same age and (b) some drop out and re-register at a later age.

retirement. These were re-classified according to the father's social class at the time of the birth of the optician. In this way it was possible to classify all but 6 of the sample.

Table 5.5

Practising Opticians - By Social Class

Registrar-General's Social Class	No.	%
I	100	27.3
II	134	36.6
III non-manual	32	8.8
III manual	81	22.1
IV	9	2.5
V	4	1.1
Unclassifiable	6	1.6
TOTAL	366[1]	100.0

Thus 266 or 72.7% of the sample were from middle class backgrounds as against 94 or 25.7% from working class backgrounds. As with the student samples,[2] the vast majority of the latter were from Social Class III manual backgrounds and very few were from Classes IV and V. The re-coding of the unclassified mentioned above may have distorted the findings. The distribution may also be distorted by the fact that those with optician fathers were classified as Social Class I.

---

[1] The total includes the late arrival questionnaire not included in the computer analysis

[2] See Chapter Four, pp. 135-136

Ophthalmic opticians have, in fact, only been classified as such since 1970. In the 1930s they were classified as medical auxiliaries and Social Class III non-manual and later Social Class II. This affects the classification of opticians now aged 60+ with optician fathers. It does not change the relative numbers from middle and working class backgrounds but inflates the numbers from Class I as opposed to Class II, and in a few old opticians' cases, Class III non-manual backgrounds. Table 5.6 gives the cross-tabulation of class background with age.

Table 5.6

Cross-Tabulation of Social Class of Optician with Age-Group

	Age Group					
Social Class	21-30 %	31-40 %	41-50 %	51-60 %	60+ %	Total %
I	29.1	31.7	34.9	10.3	17.9	25.1
II	39.2	40.2	22.2	31.0	21.4	31.2
III non-manual	11.4	2.4	9.3	6.9	7.1	7.4
III manual	12.6	13.4	14.3	25.9	23.8	17.8
IV	1.3	3.7	4.8	-	-	1.9
V	1.3	-	1.6	-	1.2	0.8
Unclassifiable	5.1	8.6	12.9	25.9	28.6	15.8
TOTAL (n = 366)	100.0	100.0	100.0	100.0	100.0	100.0

The table shows that the greater the age the lower the social class backgrounds (Social Classes I, II and III non-manual) and only 15.2% from working class backgrounds (Social Classes III manual, IV and V).

Conversely, only 46.4% of the opticians over 60 came from middle class and 25% from working class backgrounds. Even in the latter group, however, almost twice as many came from middle class as came from working class backgrounds. The table also shows that the number of unclassifiables increases with age, presumably a function of memory i.e. the length of time of recall involved. Overall the relationship between social class and age was found to be significant at the .001 level ($x^2 = 59.65$) and thus the findings of the survey support Hypothesis 1 in that opticians appear to have been drawn increasingly from middle class backgrounds. Even by the 1920s and 1930s, the time by which the over 60s in the sample started to practise, opticians were more likely on this evidence to come from middle than working class backgrounds.

Hypothesis 2 - the great majority of opticians will have been educated at state schools

Table 5.7 gives the breakdown by type of school attended after the age of 11.[1] This table shows that 194 or 53% of the sample attended state schools (types 1-6) whereas 79 or 21.6% attended grant-aided schools and 68 or 18.6% attended private or public schools i.e. 147 or 40.2% attended non-state schools. The high number of opticians attending non-state schools does not support Hypothesis 2, but this is not surprising in view of the predominantly middle class nature of the sample noted in Table 5.5. The table also shows that only 30 or 8.2% of the sample attended comprehensive, elementary or secondary modern

---

[1] Not 'secondary' because 3% attended elementary schools.

schools i.e. the so-called non-selective types. This appears to indicate that optics, even thirty or forty years ago, attracted mostly individuals with a selective secondary education, a privilege enjoyed by only a minority of 20-30% of the population.

Table 5.7

Practising Opticians - By Type of School Attended after 11

Type of School	No.	%
Central	10	2.7
Comprehensive	4	1.1
Elementary	11	3.0
Local authority grammar	146	39.9
Secondary modern	15	4.1
Secondary technical	8	2.2
Direct grant grammar	79	21.6
Private (Independent)	23	6.3
Public	45	12.3
Other	4	1.1
More than one	19	5.2
No Reply	2	0.5
TOTAL	366	100.0

The distribution of educational backgrounds of the sample is made clearer by Table 5.8 which cross-tabulates type of school with the age of the optician.

Although no trend is continuous through the age-groups it is clear that the numbers from non-selective state schools has fallen as the optical educational process has raised its formal certificate requirements and, at the same time, has become full-time. Also, the number from private and public schools has fallen particularly among the young graduate opticians

(mostly in the 21-30 age-group). No explanation for this is readily apparent. Perhaps it is also related to the increase in formal certificate requirements in that the status of having attended a non-state school is no longer sufficient by itself to gain entry to an optics course. The relationship between age-group and type of school attended was not statistically significant. Tables 5.7 and 5.8 indicate that Hypothesis 2 as worded was not supported by the data in that some 40.2% of the sample had attended non-state schools, a surprisingly high figure in view of the rapid changes in ophthalmic optics in the last forty years[1] but not in view of the predominantly middle class nature of the sample as shown in Table 5.5.

Table 5.8

Cross-Tabulation of Type of School attended with Age of Optician

Age Group	Non-selective State	Selective State	Grant-aided	Public & Private	Others/ More than One
21-30	3.8	58.2	20.3	10.1	7.6
31-40	6.2	42.0	24.7	19.8	7.4
41-50	13.0	46.1	11.3	22.6	8.1
51-60	12.3	26.5	36.8	17.5	7.0
60+	8.4	47.6	17.9	23.8	2.4

Hypothesis 3 - the older the optician the greater the likelihood that he obtained his optical qualifications by part-time study

Of the sample 173 or 47.3% obtained their qualifications by full-time study, 121 or 33.1% by part-time study and 62 or 16.9% by both

---

[1] See Chapter One for full outline and discussion of these changes

types of study; there were 10 or 2.7% no replies. Table 5.9 sets out the cross-tabulation of form of study with age-group.

Table 5.9

Cross-Tabulation of Form of Study for Optical Qualifications with Age-Group

Age Group	Type of Study: Full-time %	Part-time %	Both %	No Reply %
21-30	87.3	-	12.7	-
31-40	71.9	3.7	23.2	1.2
41-50	39.7	38.1	20.6	1.6
51-60	15.5	60.3	17.3	6.9
60+	13.1	70.2	11.9	4.8
TOTAL (n = 366)	47.3	33.1	16.9	2.7

The table shows very clearly that the hypothesis is strongly supported by the data. The relationship was significant at the .001 level ($x^2 = 171.39$). The 10 opticians in the 21-30 age-group stating that they obtained their optical qualifications by both full-time and part-time study is prima facie puzzling since all will have completed a full-time diploma or degree course, but the explanation is probably in terms of their having failed an academic or professional exmaination at least once.

Hypothesis 4 - the self-recruitment rate among ophthalmic opticians will be lower than that for doctors

Table 5.10 sets out the cross-tabulation of age-group with rate of self-recruitment.

Table 5.10

Cross-Tabulation of Self-recruitment Rate of Ophthalmic Opticians with Age-Group

Age Group	Total Sample	No with Optician Father[1]	% Sample
21-30	79	12	15.2
31-40	82	22	26.8
41-50	63	20	31.7
51-60	58	7	12.1
60+	84	8	9.5
TOTAL	366	69	18.9

The overall rate of 18.9% is very close to the average of 20% found in the three surveys of medical students for the Todd Report (op.cit.) and almost exactly that (18.4%) of the survey of Birmingham medical students by Cruikshank & McManus (op.cit.) The table shows a peak in the middle with the highest rates for the 31-40 and 41-50 age-groups. This seems to confirm that a priori estimates of 'about 30%' for the diploma courses by optics lecturers of long-standing. The lower figures

[1] Including manufacturing and dispensing opticians

for the 21-30s probably reflects the wider UCCA 'pool' from which ophthalmic optics has recruited in the last decade. Perhaps the low figures for the 51-60 and 60+ age groups reflect the smaller number of full-time opticians forty to fifty years ago when these age-groups started to practise.

When analysed by sex self-recruitment showed considerable differences. Table 5.11 sets out this cross-tabulation.

Table 5.11

Self-Recruitment Rate of Ophthalmic Opticians - By Age and Sex

	Female			Male		
Age Group	Total female opticians	No with optician father	% age group	Total male opticians	No with optician father	% age group
21-30	32	1	3.1	47	11	23.4
31-40	19	3	15.8	63	16	25.4
41-50	9	2	22.2	54	16	29.6
51-60	7	1	28.6	51	5	9.8
60+	2	-	-	82	8	9.8
TOTAL	69	8	11.6	297	61	20.5

The table shows that the rate for male opticians is almost twice that for female opticians. The most significant difference is in the 21-30 age-group i.e. the graduate opticians and the period in which female students constituted 30-40% of the total entry. The table shows that the rate for male graduate opticians is almost as high as for the

next two older age-groups, whereas that for the female graduate opticians is less than a fifth of that for the 31-40 year-old female opticians. This indicates that the increasing recruitment of female opticians is decreasing the overall self-recruitment rate of the profession.

Before leaving this hypothesis it is perhaps relevant to discuss another aspect of recruitment and the social background of opticians. The coding of the main sample questionnaires demonstrated the limitations of the modified Registrar-General's Social Class classification. Many of the opticians' fathers, while not opticians, were self-employed e.g. 12 watchmakers and jewellers, 4 tailors and 2 builders - and 7 farmers or nurserymen and 3 drapers or outfitters. The former were classified as working class (Social Class III manual), the latter as middle class (Social Class III non-manual). Despite the difference along the manual - non-manual dimension, the common characteristics of self-employment may mean a great similarity in attitudes, and values towards society in general and aspirations for their children in particular. Accordingly, an extra variable was added to the coding frame, indicating whether the respondent's father was self-employed or employed. Inclusion of this variable revealed that 159 or 43.4% of the sample had self-employed fathers as against 201 or 54.9% with employed fathers (there were 6 or 1.7% no replies). This substantial minority of self-employed fathers (compared with 7.7% in the total working population in 1974)[1] may be typical of professions, especially those with a high proportion of the profession's active members in private practice. However, in the absence of any comparable statistics this can be no more than interesting speculation.

---

[1] See Annual Abstract of Statistics 1975, HMSO 1976

The overall conclusion regarding Hypothesis 4 was in effect presented earlier, namely that the data indicates no support for it, in that the self-recruitment rate for ophthalmic opticians was found to be very similar to that for British medical students (no direct comparison can be made with British doctors). However, analysis of self-recruitment by sex did indicate a decline in the rate for ophthalmic optics associated with the increasing number of female students and opticians, whereas recent surveys of medical students do not indicate any such decline. Unlike ophthalmic optics, medicine has not experienced a large increase in the numbers and proportion of female students in the early 1970s.

SUMMARY OF CHAPTER

The overall picture that emerges from the testing of the four hypotheses is of a sample of the ophthalmic optical professional body that is predominantly middle class in origin, the majority of whom were educated at state schools, although 40% were educated at non-state schools. The vast majority attended selective secondary schools, whether state or non-state. However, the older the optician the more likely he was to have obtained his optical qualifications by part-time study. The percentage of the sample with optician fathers bears close comparison with the self-recruitment rate of British medical students, although it was higher than the average figure of 18.9% for the 31-40 and 41-50 age-groups and much lower for the 21-30 female group - the latter being particularly significant as an increasing proportion of the student body and newly registered ophthalmic opticians are women.

The following chapter analyses the data of the practising optician survey in relation to four other hypotheses concerned with the opticians' concept of professionalism.

CHAPTER SIX

The Practising Opticians' Concept of Professionalism

This chapter is concerned with the remaining four hypotheses relating to the practising opticians' survey (Hypotheses 5-8). These involved the analysis of the data by age, type of practice, sex and area of practice, and concerned the relationship between the opticians' concept of professionalism and these four variables.

Hypothesis 5 - the optician's concept of professionalism will be related to his age

For the purposes of this and subsequent hypotheses professionalism was primarily assessed by analysing the replies to variables referring to eight dimensions of professionalism. These were as follows:

Income Variables:

Variable 034 - importance of being sure of earning a good income as a feature of being an ophthalmic optician

Variable 046 - 'Profession that is secure and lucrative' as a description of the ophthalmic optical profession

Variable 064 - importance of ability to maximise income as a characteristic of a good ophthalmic optician

Variable 095 - whether optician's premises has a window display

Variable 150 - number of eye-examinations carried out in an average week

Variable 197 - optician's estimate of his income from ophthalmic optics in 1974-75

Variable 198 - optician's estimate of his income compared with that of other opticians

Helping People (service) variables:

Variable 029 - importance of being able to deal directly with people as a feature of being an ophthalmic optician

Variable 030 - importance of being able to help people as a feature of being an ophthalmic optician

Variable 045 - 'Profession of service to the community' as a description of the ophthalmic optical profession

Variable 047 - 'Profession that helps people directly' as a description of the ophthalmic optical profession

Variable 061 - importance of a warm and pleasing personality as a characteristic of a good ophthalmic optician

Variable 069 - importance of ability to get along with people as a characteristic of a good ophthalmic optician

Variable 078 - importance of being a good conversationalist to the success of an ophthalmic optician

Specialisation Variables:

Variable 090 - optical specialism on which most time in fact spent

Variable 091 - optical specialism on which optician would prefer to spend most time

Variable 115 - importance of taking further optical qualifications

Variable 178 - importance of teaching in a university ophthalmic optics department

Prestige (status) Variables:

Variable 031 - importance of status an optician enjoys as a feature of being an ophthalmic optician

Variable 044 - 'Profession that has a high standing' as a description of the ophthalmic optical profession

Variable 075 - importance of maintaining a restrained and dignified manner to success of an ophthalmic optician

Variable 076 - importance of wearing conservative clothing to the success of an ophthalmic optician

Independence (autonomy) Variables:

Variable 031 - importance of being one's own boss as a feature of being an ophthalmic optician

Variable 099 - type of practice in which optician prefers to work

Variable 100 - reasons for choice in 099

Variable 126 - type of practice in which optician works at present

Furthering Knowledge Variables:

Variable 109 - importance of reading optical textbooks

Variable 110 - importance of reading optical journals

Variable 113 - importance of attending conferences

Variable 114 - importance of research activities while in practice

Variable 115 - importance of taking further optical qualifications

Variable 118 - importance of examining for professional bodies

Variable 178 - importance of teaching in university ophthalmic optics department

Variable 179 - frequency of reading optical textbooks

Variable 182 - frequency of attending refresher courses

Variable 183 - frequency of attending conferences

Variable 184 - frequency of research activities while in practice

Variable 185 - frequency of study for further optical qualifications

Variable 186 - frequency of teaching in a university ophthalmic optics department

Variable 187 - frequency of examining for a professional body

Commercial v Personal Service Orientation Variables:

Variable 087 - degree of similarity between ophthalmic optician-patient and shopkeeper-customer relationship

Variable 089 - optician's attitude to income-service relationship

Variable 150 - number of eye-examinations carried out in an average week

Career Commitment Variables:

Variable 012 - intention to practise as an ophthalmic optician for the whole of working life

Variable 028 - optician's feeling about a career in ophthalmic optics

Variable 062 - importance of dedication to ophthalmic optics

Variable 119 - first source of satisfaction in life

Variable 120 - second source of satisfaction in life

It will be noticed that some variables appear in more than one dimension e.g. Variable 178 (importance of teaching in a university ophthalmic optics department) appears in the specialisation and furthering knowledge dimensions for it is relevant to both.

These dimensions are not identical to those of Hall (1969) who identified five i.e.

A. Professional organisation as reference
B. Belief in service to the public
C. Belief in self-regulation
D. Sense of calling to the field
E. Feeling of autonomy

and Kerr, Von Glinow and Schriesheim (1977) who identified the following six dimensions:

1. Expertise
2. Autonomy
3. Commitment to the work and to the profession
4. Identification with the profession and fellow-professionals
5. Ethics - an obligation to render service without concern for self-interest
6. Collegial maintenance of standards

However, there is an obvious overlap with the eight dimensions used in my research, especially in the dimensions of autonomy (Hall and Kerr et al), commitment (Kerr et al) or calling (Hall), service (Hall) or ethics (Kerr et al). In my research these are respectively called independence, career commitment and helping people. The other dimensions were constructed to try to take account of the special nature of the ophthalmic optical profession and its recent, rapid professionalisation. Thus the income and commercial v. personal service orientation dimensions were included in view of the alleged commercial orientation of some ophthalmic opticians, to try to distinguish the degree to which different ophthalmic opticians were commercially (income) or professionally (service) orientated.

The furthering knowledge, specialisation and status dimensions were included in view of the relatively recent professionalisation of ophthalmic optics to try to discover how far ophthalmic opticians considered these dimensions important. There is an obvious overlap between specialisation and Kerr et al's expertise. The furthering dimension variables included some which Hall would have put under his 'professional organisation as reference' dimension e.g. variables 118, 187, or could have been subsumed under Kerr et al's 'identification' dimension e.g. variables 109, 110, 113, 144 and 115. Variables 118

and 187 could also be seen as relevant to Hall's 'belief in self-regulation' dimension or Kerr et al's 'collegial maintenance of standards' dimension.

In order to check if these groups of variables could form an overall measure of that dimension of professionalism, each was subjected to the co-efficient alpha test of internal reliability (Nunnally 1967 : 193). The formula for this test is:

$$kk = \frac{kr}{1 + (k - 1)r}$$

where k = number of items (in group) and

r = average correlation between items

The results of this test on the eight groups of variables were:

Variable Group	Value of co-efficient alpha
Income variables	0.654
Helping people (service) variables	0.692
Specialism variables	0.623
Prestige (status) variables	0.588
Independence (autonomy) variables	0.621
Furthering knowledge variables	0.788
Commercial v. personal service orientation variables not calculated - fewer than 4 items in group	
Career commitment variables	0.128

Nunnally states that the minimum level of acceptability using this test is 0.5 in which case the first six groups of variables are above this level. However, given the preliminary nature of the research

and the use of the questionnaire as the main research tool, it would be prudent to err on the side of caution and therefore a minimum level of 0.7 has been taken, as indicative of satisfactory internal consistency of the variables in the group. According to this criterion only the furthering knowledge variables achieve the necessary level of consistency. Consequently, the analysis and discussion of Hypothesis 5 and the other three hypotheses is confined in most cases to that of single variables and no attempt is made to form composite scales from the eight groups of professionalism variables.

In order to also check the adequacy of the list of dimensions of professionalism identified in the literature of the sociology of professions[1] the opticians were also asked what they considered to be the most important professional values in their practice as an opthalmic optician. This was an open-ended question with three supplementaries which asked them to state which they found the easiest and hardest to adhere to and the one they thought most ophthalmic opticians found most difficult. The object of the question was to elicit any other dimensions of professionalism not identified in previous studies i.e. not to take as given these previously identified dimensions.

The number of possible and actual relationships between age and variables in the eight groups is shown in the diagram on p.233.

The three income variables for which a relationship with age existed were:

Variable 064 - (importance of ability to maximise income as a characteristic of a good ophthalmic optician)
($x^2 = 28.95$, $p = 0.025$)

---

[1] See Chapter One, pp.11-13

Variable 150 - (number of eye-examinations carried out in an average week)

(x^2 = 38.07, p = 0.01)

Variable 197 - (Optician's estimated income from ophthalmic optics in 1974-75)

(x^2 = 38.52, p = 0.01)

	Relationships	
	Possible	Actual
Income	7	3
Helping people (service)	7	-
Specialisation	4	1
Prestige (status)	4	3
Independence (autonomy)	4	2
Furthering knowledge	14	4
Commercial v. personal service orientation	3	2
Career commitment	5	4

Although a significant relationship with age was found in the case of these three income variables the trend was not consistent in direction. With Variable 064 the general tendency was for older opticians to consider ability to maximise income more important than younger opticians. This seemed to indicate that the older opticians exposed to less professional socialisation by virtue of their shorter, and more likely part-time, courses of training, might be more commercially inclined. According to the more professional orientated i.e. service-orientated opticians the greater the number of eye-examinations

he was likely to carry out i.e. those who professed to consider income less important showed the greatest commercialism according to the professional optician criterion above. The probable explanation for this paradox lies in the type of practice pursued by the different age-groups. This point will be taken up in discussion of Hypothesis 6. Variable 197 tabulated with age showed that in general the older the optician the greater his income. This was true up to the age of 60, after which retirement or semi-retirement affected income.

Perhaps the most noteworthy of the other income variables was Variable 095 (whether opticians' premises had a window display). According, again, to the professional opticians, a window display is evidence of shopkeeper status and attitudes. The cross-tabulation between Variable 095 and age-group is set out in Table 6.1.

Although the relationship was not significant the table appears to indicate that the young graduate opticians are the most likely to have window displays. As with Variable 150 this may be more of a reflection of the younger opticians' practice situation than of a more commercial orientation. However, there is nothing in the table to suggest that younger opticians are more professionally-orientated than their older colleagues. In no age-group is there a majority of opticians without a window display, and on this criterion alone, the 41-50 age-group come nearest to this.

None of the helping or working with people (service) variables were found to be related to age-group. The outstanding characteristic of these questions was the similarity of the distribution of replies by age-group. In all the questions 80-90% of all age-groups considered helping people to be very or fairly important, a very good or good

description etc. If the desire to help and work with people is an indication of professionalism, the sample of opticians clearly possess this desire very strongly, with few exceptions. This may indicate that ophthalmic optics is a 'personal service' profession (Halmos 1970).

Table 6.1

Cross-Tabulation of Possession of Window Display with Age-Group

Age Group	Has Practice a window display: Yes %	No %	Some Have Some Haven't[1] %	No Reply %
21-30	63.3	27.8	3.8	5.1
31-40	51.2	36.6	6.1	6.1
41-50	47.6	47.6	4.8	-
51-60	55.2	39.7	3.4	1.7
60+	55.9	39.3	2.4	2.4
TOTAL (n = 366)	54.9	37.7	4.1	3.3

The only specialisation variable to be related to age was Variable 091 (preferred optical specialism). This was related at the $x^2 = 54.20$, $p = 0.005$ level. The data indicated that younger opticians were more likely to want to specialise in contact lens (a comparatively recent growth area), the Hospital Eye Service (mostly women, whose numbers have increased significantly in the last decade), paediatric optics and other forms of practice (including research which has increased rapidly

[1] This column refers to those opticians practising in more than one place

since optical education entered the mainstream of higher education). Conversely, older opticians were more likely to be interested in general optical practice.

Of the other specialisation variables the data relating to Variable 090 (specialism on which most time actually spent) showed that younger opticians did spend more time fitting contact lenses and in the Hospital Eye Service, and older opticians more on general optical practice. That relating to Variable 115 (importance of taking further optical qualifications) indicated a slight tendency for older opticians to consider this less important. The data relating to Variable 178 (importance of teaching in a university ophthalmic optics department) indicated no clear trend by age.

The three prestige (status) variables for which a relationship with age existed were:

Variable 031 - (importance of status an optician enjoys as a feature of being an ophthalmic optician)
(x^2 = 29.87, p = 0.025)

Variable 075 - (importance of maintaining a restrained and dignified manner to success of an ophthalmic optician)
(x^2 = 30.71, p = 0.025)

Variable 076 - (importance of wearing conservative clothing to success of an ophthalmic optician)
(x^2 = 68.68, p = 0.001)

Younger opticians were less concerned with being restrained and dignified, and wearing conservative clothing, and considered the status an optician enjoyed less important than older opticians. These findings may indicate that younger opticians are more certain of their

status, having qualified since state registration was achieved, and that the older opticians, having directly experienced the rapid changes of the last thirty years, are less certain. The data relating to Variables 075 and 076 may, however, be just as much indicative of more general social changes than the process of professionalisation. The younger opticians' views on maintaining restraint and dignity and wearing conservative clothing may simply reflect the growth in informality both in personal relationships and dress that has characterised the period since 1945.

Two independence (autonomy) variables were related to age. These were:

Variable 100 - (reasons for choice of preferred practice (Variable 099))
($x^2 = 45.22$, $p = 0.02$)

Variable 126 - (type of practice in which optician works at present)
($x^2 = 76.0$, $p = 0.001$)

The data indicated that older opticians were more likely to be in individual private or chemist-optician practice. Younger ones were more likely to be in group private practice, locum practice (almost all female opticians) and, last but not least, multiple practice. Thus the young graduate opticians were most likely to be found practising in the allegedly most commercial type of practice. A priori the greater length of professional socialisation to which they have been subject makes this at first glance a surprising finding. However, it is probably as much to do with employment opportunities and initial lack of capital and experience as professional values. Lack of capital and experience mean that a partnership or practice of their

own is usually out of the question for those who have no family connections with optics and/or independent means. The public company multiples, until recently with the additional incentive of higher salaries than in comparable positions in private practice, provide some of the necessary employment opportunities and experience for such young opticians. Young female opticians find the relatively flexible working arrangements possible in multiples and the Hospital Eye Service more compatible with their family commitments.

The data relating to Variable 100 showed that 'job satisfaction with security', the reason cited most often by opticians preferring group private practice was more likely to be cited by younger opticians. Conversely, 'independence/being responsible for all aspects', the reason most often cited by those in individual private practice was more likely to be cited by older opticians. This was a reflection of the differences between the age-groups in terms of the types of practice in which they actually worked as shown by the data for Variable 126 above.

The four furthering knowledge variables related with age-group were:

Variable 182 - (frequency of attending refresher courses)
(x^2 = 22.60, p = 0.005)

Variable 185 - (frequency of studying for further optical qualifications)
(x^2 = 18.67, p = 0.025)

Variable 186 - (frequency of teaching in a university ophthalmic optics department)
(x^2 = 18.85, p = 0.025)

Variable 187 - (frequency of examining for professional bodies)

(x^2 = 16.84, p = 0.05)

It will be noticed that significant differences only existed by age in relation to the frequency with which various activities were undertaken. There were none relating to the importance opticians of various ages attributed to these activities. The data relating to Variable 182 indicated an increase in frequency at refresher courses from 21-30 to 41-50 and a fall off after the age of 50. That relating to Variable 185 indicated that the younger the optician the more likely it was that he was studying for a further optical qualification and vice versa. The data relating to Variable 186 indicated the same trend in relation to teaching in a university ophthalmic optics department and that relating to Variable 187 revealed a similar age profile to that for Variable 182 i.e. peaking in the age-group 41-50.

There were, however, more non-related (10) than related furthering knowledge variables. In relation to the importance opticians attached to various professional activities (Variables 109, 110, 113, 114, 115, 118 and 178), there was little difference in the replies of the various age-groups, with the exception of Variable 178. Here the younger opticians considered teaching in a university department slightly more important than older opticians. This is not surprising, perhaps, in view of the former's direct experience of the institution in question. Of the variables relating to the frequency with which opticians actually had participated in these activities in the previous year there was a slight tendency for younger opticians to have read optical textbooks more frequently but there was no difference in the frequency with which opticians had attended conferences and undertaken research while in

practice by age. Finally, in relation to the furthering knowledge variables no relationship was found when a cumulative scaling procedure (Variable 109 + Variable 110 + Variable 113 + Variable 114 + Variable 115 + Variable 118 + Variable 178 = VARFUR) was applied to these variables.

Of the three commercial v. personal service orientation variables two were found to be related with age:

Variable 089 - (attitude to income-service relationship)
($x^2 = 28.91$, $p = 0.005$)

Variable 150 - (number of eye-examinations carried out in an average week)
($x^2 = 38.07$, $p = 0.01$)

In relation to Variable 089 the younger opticians tended to possess more income-orientated attitudes to the income-service relationship, although no optician was prepared to say that income was more important than any consideration of service to the public. As already noted in relation to the income variables,[1] the younger the optician the greater the number of eye-examinations he was likely to carry out in an average week (Variable 150). It is also suggested that this may be related to the practice situation of younger opticians (they are more likely to practise in public company multiples) i.e. is an extrinsic rather than an intrinsic attitude. Similarly, the younger opticians apparently more income-orientated attitude to the income-service relationship can be alternatively interpreted as concern for income equality with other professions rather than for level of income per se.[2]

---

[1] See this Chapter, p.234

[2] See Appendix A for wording of codes in Question 8, Section 2 of the questionnaire

The final dimension of professionalism which the data attempted to assess by age was that of career commitment. Four of the five variables relating to career commitment were related to age:

Variable 012 - (intention to practise as an ophthalmic optician for whole of working life)
(x^2 = 60.42, p = 0.001)

Variable 028 - (feelings about a career in ophthalmic optics)
(x^2 = 52.49, p = 0.001)

Variable 062 - (importance of dedication to ophthalmic optics)
(x^2 = 49.46, p = 0.001)

Variable 119 - (first source of satisfaction in life)
(x^2 = 31.18, p = 0.012)

The data relating to Variable 012 indicated that the older the optician the more likely he was to say that he would practise as an ophthalmic optician for the whole of his working life. Of the 60+ group only two of 2.5% said they did not think they would and even by the 41-50 age-group, only 3 or 4.8% said 'no' and 2 or 3.2% said they 'didn't know'. Conversely, 14 or 17.7% and 15 or 19% of the 21-30 age-group said 'no' and 'don't know' respectively. This need not indicate an increase in positive career commitment with age but rather a negative one, the result of the increasing comparative costs of changing career.

The data relating to Variable 028, confirmed the findings of Variable 012 to some extent. Those saying that they hadn't decided whether they intended to spend their whole career practising as an ophthalmic opticians were all in the 21-30 and 31-40 age-groups. However, between 11-21% of all age-groups said optics was the only

career that could satisfy them and between 43% and 58% said it was one of several that could satisfy them.

The data for Variable 062 showed that the older the optician the more likely he was to say that dedication was very important. The younger the optician the more likely he was to say it was fairly or of some importance. Only two opticians said it was of no importance, one in the 21-30 age-group and one in the 31-40 age-group.

Lastly, the data for Variable 119 showed that the older the optician the more likely he was to cite his professional career as the prime source of satisfaction in his life and less likely to cite family relationships. It is problematic as to whether this represents an increase in positive commitment or a process of sublimation as children grow up and leave home; indeed all these career items except Variable 062 are problematic when related to age.

From the preceding necessarily lengthy analysis of the relationship between age and eight dimensions of professionalism, it is clear that the main differences were in the areas of specialisation, prestige (status), commercial v. personal service orientation and career commitment. Younger opticians were interested and more active in areas of professional practice other than general optical practice; they were less concerned with status but considered income at least as important as service to the public, and tended to carry out more eye examinations per week. It is suggested that the latter findings may be equally validly taken as indicative of a commercial orientation and a function of a taken for granted professional status (with a high level of income as a consequence) and the practice situation in which younger opticians are more likely to work. The picture will become

clearer when the data relating to the eight dimensions are analysed by type of practice. The career commitment variables showed that commitment appeared to increase with age but it is suggested that it is problematic whether this represents an increase in active or passive commitment.

Before leaving Hypothesis 5 it is relevant to consider other variables which do not relate directly to the eight groups of variables above but which nevertheless cast further light on the relationship between age and concept of professionalism. The analysis of the replies to the open-ended question (Question 11, Section 2) on professional values (Variables 040 to 043) provided an illuminating insight into how far any professional awareness among opticians is taken-for-granted rather than consciously articulated in a comprehensive Weltanschauung. The first part of the question (Variable 040) asked the opticians what they considered to be the most important professional values in their practice as an ophthalmic optician. Of the sample 132 or 36.2% considered it to be integrity, 59 or 16.2% service to the public, 31 or 8.5% the relationship with the patient and 22 or 6% knowledge or competence. There were 36 or 10% no replies. Many opticians mentioned more than one value but the first one mentioned or the one they obviously considered most important from the context of the whole reply was taken as the one considered most important.

The second part of Question 11 (Variable 041) asked to which of these values they found it easiest to adhere. Again the same general pattern of replies was found, integrity being most often mentioned (74 or 20.2%) but the no replies rose to 136 or 37.3%. The third part of Question 11 (Variable 042) asked to which of these values they found

it hardest to adhere. Here 48 or 13.1% mentioned relationship with patients, 38 or 10.3% said all were easy, 32 or 8.8% mentioned integrity, 21 or 5.7% thoroughness, 16 or 4.4% knowledge or competence, and 13 or 3.6% dedication. There were 32 or 8.8% other replies, 3 or 0.8% don't knows and the number of no replies rose to 162 or 44.4%

Age was not found to be related to any of the first three parts of Question 11. Perhaps the most noteworthy thing from the analysis was the growing minority who found it difficult or impossible to reply to an apparently straightforward question, or lost interest and motivation in so doing. The last part of Question 11 (Variable 043) asked the opticians to which of these professional values they thought most opticians had difficulty in adhering. Again integrity was the most often mentioned (61 or 16.7%) and a similar overall pattern of replies to that for Variable 042, except that there were 46 or 12.6% don't knows and 150 or 41.1% no replies i.e. over half the sample gave no reply. This variable was found to be significantly related to age at the .025 level ($x^2 = 51.14$) Younger opticians were more likely to mention integrity, older ones service to the public and relationship with some patients. Perhaps the most important point about the open-ended question on professional values was that it did not bring out any 'new' dimensions of professionalism i.e. in addition to those already identified in the literature of the sociology of the professions.

Finally in relation to Hypothesis 5 it is relevant to mention variables other than those relating to the dimensions of professionalism and the open-ended question on professional values for they cast still more light on the hypothesis. An example is Variable 093 (optician's description of work premises). Table 6.2 sets out the cross-tabulation

of this variable with age.

Table 6.2

Cross-Tabulation of Description of Work Premises with Age

	Description of Premises					
Age-Group	Clinic	Practice	Consulting Rooms	Office	Shop	Others/more than one/no reply
21-30	3.8	64.5	3.8	1.3	5.1	21.5
31-40	7.3	63.4	6.1	2.4	1.2	19.5
41-50	3.2	52.4	15.9	3.2	4.8	20.5
51-60	-	36.2	22.4	10.4	12.1	19.0
60+	-	33.3	32.1	2.4	16.7	15.5
TOTAL	3.0	50.6	15.8	3.6	7.9	19.1 (n = 366)

The table shows that younger opticians were more likely to describe their work premises as a practice or clinic (most of the latter were university lecturers). Older opticians were more likely to describe their premises as consulting rooms, an office or a shop. Of the 29 opticians describing their premises as a shop, only six were chemist-opticians (there were 15 in all). Overall, the table appears to indicate a gradual change to the adoption of a para-medical description of the optician's premises. This relationship was related to age ($x^2 = 83.67$, $p = 0.001$).

Analysis of the data relating to Variable 147 (optician's description of service seekers) confirms this conclusion. Table 6.3 sets out the cross-tabulation of this variable with age.

Table 6.3

Cross-Tabulation of Description of Service Seekers with Age

Age-Group	Description of Service Seekers: Clients %	Customers %	Patients %	Something else/ more than one/ no reply
21-30	1.3	-	97.4	1.3
31-40	2.4	-	92.7	4.9
41-50	3.2	-	92.0	4.8
51-60	8.6	-	82.8	8.6
60+	15.5	2.4	76.2	5.9
Total	6.3	0.5	88.3	4.9 (n = 366)

Nearly 90% of the sample used the para-medical term patient irrespective of age. However, the older the optician the more likely he was to use the term client. Only two opticians, both aged over 60, used the term customer. This means that most of the chemist-opticians and opticians in multiple practice used the term patients. This relationship was related to age ($x^2 = 36.66$, $p = 0.005$).

The data relating to Variables 093 and 147 suggest a gradual adoption within the professional body of para-medical descriptions of work premises and service seekers. However, it cannot be inferred from this that opticians using such terms are necessarily service rather than income-orientated.

Summary of Results Relating to Hypothesis 5

The data suggest only partial support for the hypothesis - that the optician's concept of professionalism is related to his age - in that significant differences relating to age were found only in respect of four dimensions of professionalism i.e. specialisation, prestige (status), commercial v. personal service orientation and career commitment. It is suggested that none of the four are necessarily indicative of a fundamental distinction in terms of professional rather than commercial orientations between opticians of different ages. The greater likelihood of younger opticians being involved in types of professional practice other than general optical practice is probably a consequence of technology-based changes in recent years e.g. contact lenses and the rapid expansion of opportunities for an alternative academic career in optics. Their lower rating of the importance of prestige (status) may indicate a taken for granted professional status which older opticians do not share by virtue of very different experiences over a career of 30-40 years e.g. relations with medicine. This in turn may be related to the younger opticians' tendency to rate income as highly as service - for income and service orientations are not necessarily mutually exclusive e.g. doctors receive high incomes but few are accused of a commercial orientation to medicine, although this is perhaps changing.[1] The lower commitment of the younger opticians to their optical careers may be a function of the narrow vocational training of opticians and the rising comparative costs of changing career that comes with age.

---

[1] See, for example, "The golf-loving 9 to 5 doctors", The Guardian, July 20th 1977

There was little or no evidence of clear relationships between age and the importance attached to income, the desire to help people, for independence and to further professional knowledge i.e. the other four dimensions of professionalism. Finally, the changing descriptions of the optician's work premises and of service seekers indicate an increasingly para-medical subjective frame of reference.

Hypothesis 6 - the optician's concept of professionalism will be related to his type of practice

Because the sample did not contain any of the full-time optician employees of the Hospital Eye Service, analysis is confined to five types of practice - individual private, group private, chemist-optician, public company multiple and sometimes locum practice. There was also one peripatetic contact lens fitter but obviously no valid statistical comparisons could be made on this tiny base.

The number of possible and actual relationships between type of practice and the eight groups of professionalism variables is shown in the diagram below:

	Relationship with Type of Practice	
	Possible	Actual
Income	7	4
Helping people (service)	7	-
Specialisation	4	4
Prestige (status)	4	1
Independence (autonomy)	3	3
Furthering knowledge	14	10
Commercial v. personal service orientation	3	1
Career commitment	5	1

The four income variables for which a relationship with type of practice existed were:

Variable 095 - (possess of shop window)
(x^2 = 36.76, p = 0.001)

Variable 150 - (number of eye examinations in an average week)
(x^2 = 141.07, p = 0.001)

Variable 197 - (optician's estimated income in 1974-75)
(x^2 = 101.98, p = 0.001)

Variable 198 - (optician's estimated income compared with that of other opticians)
(x^2 = 56.98, p = 0.001)

The data relating to Variable 095 indicated that those in multiple practice were most likely to have a window display (95%); of those in group practice 60% admitted having a display, 52% in individual practice and 46% of chemist-opticians. Multiple practice also topped the list in relation to the average number of eye-examinations per week - 40.9% of multiple opticians said they carried out more than fifty per week as against 18% of opticians working in group practice and 16% in individual practice. No chemist-optician carried out more than fifty examinations per week.

However, the number of examinations carried out did not apparently correspond closely with level of income since the data relating to Variable 197 revealed that 17.3% of opticians in group practice gave their income as more than £10,000 per annum as against only 2.2% of multiple opticians and 5.2% in individual practice. Perhaps the explanation is that as employees the multiple optician's salary is not

greatly affected by the number of examinations carried out, although most multiples operate a bonus scheme linked to the number of eye-examinations, but this only increases income by between 10-20% on average.

This was reflected in the data relating to Variable 198 where fewer of the multiple opticians estimated their income to be above average compared with other opticians and conversely, those in group practice were most likely to do this. The evidence from the four variables suggests that multiple practice is most likely to have a window display and result in a large number of eye-examinations per week but even if the high incidence of examinations does indicate a more commercial orientation among multiple opticians this is not reflected in the size of their income.

As with age there were no relationships found between the helping people (service) variables and type of practice. The striking feature of the data relating to these variables was the similarity in distribution of replies by type of practice. Some 80-90% of all types of optician thought that dealing directly with and being able to help people was very or fairly important, that 'a profession of service to the community' and 'a profession that helps people directly' were very good or good descriptions of the ophthalmic optical profession, and that having a warm and pleasing personality was very or fairly important. There was a slight tendency for chemist-opticians to consider the ability to get along with people and being a good conversationalist less important than other types of optician.

In contrast, all four specialisation variables were related to type of practice:

Variable 090 - (actual optical specialism on which most time spent)
(x^2 = 201.88, p = 0.001)

Variable 091 - (preferred optical specialism)
(x^2 = 132.98, p = 0.001)

Variable 115 - (importance of taking further optical qualifications)
(x^2 = 52.39, p = 0.005)

Variable 178 - (importance of teaching in a university ophthalmic optics department
(x^2 = 76.92, p = 0.001)

In terms of actual practice, multiple opticians did not work even part-time in the Hospital Eye Service and were slightly less likely to spend time fitting contact lenses. Conversely, those in group and individual private practice were more likely to work in contact lens fitting and part-time in the Hospital Eye Service. However, the majority of all types of optician's time was spent in general optical practice. The pattern for preferred specialisms was very similar, except that both those in group and individual private practice and multiple opticians wished to spend more time on contact lens fitting. This preference was not shared by chemist-opticians. Some locum opticians (who were mostly women) expressed a preference for paediatric optics.

In relation to Variable 115 those in both types of private practice were likely to consider taking further optical qualifications more important than either those who worked in multiples or chemist-opticians. The same trend was apparent in relation to the importance attached to teaching in a university ophthalmic optics department (Variable 178).

Only one prestige variable was related to type of practice. This was Variable 076 (importance of wearing conservative clothing) ($x^2 = 26.59$, $p = 0.05$). Here the tendency was for chemist-opticians to consider this more important than opticians in any type of practice. This is to some extent related to age since the vast majority of chemist-opticians are in the older age-groups, but not entirely since not all the older opticians in other types of practice rated it as important.

All three of the independence variables were significantly related to type of practice:

Variable 032 - (importance of being one's own boss)
($x^2 = 77.69$, $p = 0.001$)

Variable 099 - (preferred type of practice)
($x^2 = 418.06$, $p = 0.001$)

Variable 100 - (reasons for choice in 099)
($x^2 = 215.62$, $p = 0.001$)

The relationship was a clear one in respect of Variable 032. Of the chemist-opticians 78.5% thought being their own boss was very or fairly important, 21.4% of some importance and none of little or no importance. Similarly, the respective figures for group and individual private practice opticians were 85.4% and 79.2%, 6.1% and 16.4%, and 8.6% and 4.4%. Conversely, the figures for locum opticians were 58.3%, 25% and 16.7% and for multiple opticians 42.8%, 16.7% and 40.4% respectively.

The data for Variable 099 showed just as clear differences. Of those in individual and group practice 69.2% and 80.5% respectively preferred to stay in the same type of practice, and most of the remainder in group practice chose individual practice and vice versa. Of the

chemist-opticians only 20% preferred to stay in that type of practice. No optician in these three types of practice preferred to work in a multiple practice. Conversely, of the multiple opticians only 41% preferred to stay there. Of the remainder 25.6% preferred group and 30.8% individual practice. It was noted in discussion of Hypothesis 5 that younger opticians were more likely to practise in multiples.

This fact, taken together with the findings relating to Variable 099 seems to indicate that:

(a) private practice is thought to be the norm by most opticians

(b) multiple practice for many is seen as a transitory phase on the way to established private practice[1]

(c) a small minority of opticians prefer multiple practice for the security of income, pensions etc., that it provides

The last point is borne out by the data relating to Variable 100 (reasons for choice of practice in 099). Assured income and adequate support services were the reasons cited by those opticians working in multiple practice who preferred it. Those preferring individual practice and chemist-opticians tended to stress their independent and responsibility to all aspects; those preferring group practice stressed coverage for illness, job satisfaction and good equipment.

Of the 14 furthering knowledge variables ten were related to type of practice:

Variable 113 - (importance of attending conferences)

($x^2 = 56.26$, $p = 0.005$)

---

[1] Of the 162 or 44.4% in the sample who said they had worked in multiples, only 36 had spent more than ten years in that practice situation

Variable 115 - (importance of taking further optical qualifications)
(x^2 = 52.39, p = 0.005)

Variable 118 - (importance of examining for professional bodies)
(x^2 = 69.65, p = 0.001)

Variable 178 - (importance of teaching in a university ophthalmic optics department)
(x^2 = 76.92, p = 0.001)

Variable 179 - (frequency of reading optical textbooks)
(x^2 = 41.59, p = 0.001)

Variable 183 - (frequency of attending conferences)
(x^2 = 74.88, p = 0.001)

Variable 184 - (frequency of research activities while in practice)
(x^2 = 90.39, p = 0.001)

Variable 185 - (frequency of study for further optical qualifications)
(x^2 = 41.84, p = 0.001)

Variable 186 - (frequency of teaching in a university ophthalmic optics department)
(x^2 = 260.03, p = 0.001)

Variable 187 - (frequency of examining for professional bodies)
(x^2 = 237.07, p = 0.001)

The trend of the relationship was consistent i.e. chemist-opticians and multiple opticians rated the various activities as less important and participated in them less frequently than opticians in private practice. This was particularly noticeable in relation to Variables 186 and 187. Only opticians in private practice said they had taught in a university ophthalmic optics department, and no multiple optician

and only one chemist-optician said they had examined (occasionally) for professional bodies. There was only one exception to this trend. Multiple opticians were almost as likely to be studying for further optical qualifications as those in private practice. This is probably related to the greater likelihood of younger opticians practising in multiples (younger opticians being more likely to be studying for further qualifications).

When the cumulative scaling procedure was applied to the furthering knowledge variables a significant relationship with type of practice was found at the .001 level ($r = -0.035$).

Only one of the commercial v. personal service orientation variables was found to be related to type of practice. This was Variable 150 (number of eye-examinations in an average week) - ($x^2 = 141.07$, $p = 0.001$). As already noted in discussion of the income variables,[1] multiple opticians were more likely to have carried out a large number of eye-examinations.

Similarly, only one of the career commitment variables was related to type of practice. This was Variable 028 (feelings about a career in ophthalmic optics) - ($x^2 = 50.79$, $p = 0.041$). The data indicated that the main differences were between opticians in chemist-optician and locum practice and those in individual and group private and multiple practice. The former were less likely to say optics was the only career that could satisfy them. Chemist-opticians were more likely to say they decided on optics without considering a career in it. The latter finding was logical enough since the replies of chemist-opticians

---

[1] See p.249

indicated that they had qualified in pharmacy before optics and therefore optics was an additional source of income to their existing career in pharmacy.

The preceding analysis of the relationship between type of practice and the eight dimensions of professionalism makes clear that the main differences were in the areas of specialisation, commercial v. personal service orientation and furthering knowledge. Opticians in private practice were more interested and active in areas of professional practice other than general optical practice, activities relating to furthering optical knowledge e.g. teaching in a university ophthalmic optics department and examining for professional bodies. In these respects chemist-opticians and multiple opticians seemed less involved, and in the case of teaching in a university ophthalmic optics department, decidedly 'on the fringe'.

Opticians in multiple practice were more likely to carry out a large number of eye-examinations and to this extent tended to score lower on the commercial v. personal serivce orientation variables than opticians in private practice. However, as pointed out in the discussion on the income variables[1] this possible greater commercial orientation is not reflected in their income level. Multiple optician incomes tended to be lower than those in private practice.

Analysis of the data relating to the open-ended question (Question 11, Section 2) on professional values showed that the professional values identified, the estimates of the easiest value for them and the most difficult for most opticians to adhere to differed

---

[1] See p.250

little by type of practice. The exception was in relation to Variable 042 (the most difficult professional value to adhere to). Here a relationship with type of practice was found ($x^2 = 48.57$, $p = 0.05$).

Multiple opticians were less likely to mention 'integrity' and more likely to mention 'relationship with some patients'. They were also less likely to mention 'thoroughness'. Lastly, in relation to Hypothesis 6, analysis of Variable 093 (description of work premises) by type of practice brought out another difference, as shown in Table 6.4.

Table 6.4

Cross-Tabulation of Description of Work Premises with Type of Practice

	Description of Premises					
Type of Practice	Clinic %	Practice %	Consulting Room %	Office %	Shop %	Others %
Group Private	1.2	60.7	9.5	3.6	3.6	21.4
Individual private	1.2	50.9	19.3	5.0	6.2	17.4
Multiple	-	51.1	24.4	-	13.3	11.1
Chemist-optician	-	40.0	6.7	-	40.0	13.4
Locum	-	75.0	8.3	-	-	16.7
TOTAL (n = 366)	0.9	53.9	16.4	3.5	7.9	17.4

The table shows that multiple and chemist-opticians were most likely to describe their work premises as 'shops' and least likely to describe then as 'practices'. At the same time, more multiple opticians described their work premises as 'consulting rooms' than did 'shops', perhaps in

the attempt to give them a more status-worthy description. A few opticians in private practice described their premises as 'shops' and the description 'office' was used only by those in this type of practice. Overall, a relationship between description of premises and type of practice was found ($x^2 = 49.03$, $p = 0.008$). There was no relationship between type of practice and description of service seekers (Variable 147).

Summary of Results Relating to Hypothesis 6

As with Hypothesis 5 the data indicate only partial support for the hypothesis. Relationships with type of practice were found in respect of the income, specialisation, independence, commercial v. personal service orientation and furthering knowledge dimensions of professionalism. In all five cases the main differences were between those in private practice (group or individual) and chemist-opticians and those in multiple practice. Multiple opticians were more likely to carry out a large number of eye-examinations but this was not reflected in their income level. Those in private practice were more likely to be interested and involved in areas of practice other than general optical practice. Similarly, they were more likely to be interested and involved in furthering knowledge activities e.g. attending conferences, taking further optical qualifications, examining for professional bodies and teaching in a university ophthalmic optics department. Multiple opticians scored differently on the commercial v. personal service orientation variables largely by virtue of tending to carry out more eye-examinations. It is suggested that this may be as much a function of division of labour in multiple practices as evidence of lack of integrity.

Locum and multiple opticians valued being their own boss less than those in individual or group private practice or chemist-opticians. Most opticians in individual and group private practice also preferred that type of practice. However, less than half of the multiple and only 20% of the chemist-opticians preferred to remain in that type of practice i.e. private practice did appear to be thought the norm by the vast majority of opticians, irrespective of their present practice situation.

There was little or no evidence of significant relationships between type of practice and helping people, prestige and career commitment dimensions. Finally, although most opticians tended to describe people who came to seek their services as patients, there was a clear difference in the description of work premises. Multiple opticians were most likely to describe their work premises as consulting rooms and, less often, shops.

Hypothesis 7 - female opticians will possess a significantly different concept of professionalism from that of male opticians, especially in relation to the income, independence and career commitment dimensions

The number of possible and actual relationships between sex of the optician and the eight groups of professionalism variables is shown on the next page.

Professionalism Dimension Variables	Relationships with sex of optician: Possible	Actual
Income	7	4
Helping people (service)	7	-
Specialisation	4	1
Prestige (status)	4	-
Independence (autonomy)	4	3
Furthering knowledge	14	1
Commercial v. personal service orientation	3	1
Career commitment	5	4

The four income variables related to sex were:

Variable 034 - (being sure of earning a good income as a feature of being an ophthalmic optician)
(x^2 = 9.84, p = 0.05)

Variable 150 - (number of eye-examinations carried out in an average week)
(x^2 = 14.28, p = 0.025)

Variable 197 - (opticians estimated income 1974-75)
(x^2 = 85.08, p = 0.001)

Variable 198 - (optician's estimated income compared with that of other opticians)
(x^2 = 10.50, p = 0.025)

The data relating to Variable 034 indicated that female opticians considered income less important than male opticians but very few of either sex regarded it as of little or no importance and it will be noticed that the

degree of significance is at the lowest level statistically acceptable. The reason for the difference is not immediately obvious but may be related to the fact that many of the women, if married (the questionnaire did not ask for the marital status of respondents) were not the main family breadwinners. In relation to Variable 150 the data indicated that male opticians tended to carry out more eye-examinations per week. However, the relationship was only at the .025 level and 36.4% of the female opticians carried out 31-50 examinations and 10.6% over 50 per week. The corresponding male figures were 50% and 18.3%.

Analysis of estimated income by sex revealed that the income of female opticians was much lower than that of male opticians. Of the former 71.7% said they earned less than £4,000 as against 20.3% of the male opticians. Conversely, only 6% of female opticians earned more than £6,000 as against 42.2% of the male opticians. Only one female optician said she earned more than £10,000 as against 23 (8.2%) of male opticians.

That most female opticians are aware of this difference is clear from their replies when asked to compare their income with that of other opticians. They were more likely to say their income was below average and less likely to say it was above average.

The data relating to these four variables seems to indicate that only that for Variable 034 could be taken as illustrative of a different income orientation between the sexes. Even so, it may not connote a difference in terms of professional rather than commercial orientation but rather one based on need and family responsibility. The other three related variables are perhaps more a sign of the differing employment patterns of the two sexes, than of different income-

orientations. This conclusion is supported by analysis of the days spent practising ophthalmic optics by sex as set out in Table 6.5

Table 6.5

Cross-Tabulation of Days Spent Practising Ophthalmic Optics with Sex of Optician

Number of Days	Female %	Male %	Total %
Less than one	4.4	2.0	2.5
One	10.1	3.0	4.4
Two	17.4	2.4	5.2
Three	8.7	3.0	4.1
Four	11.6	8.7	9.3
Five	37.7	59.6	55.3
More than five	7.2	18.9	16.7
No Reply	2.9	2.4	2.5
TOTAL	100.0 (N = 69)	100.0 (N = 297)	100.0 (N = 366)

The table shows that 28 or 40.6% of the female opticians practised for three days or less as against 31 or 10.4% of the male opticians. Conversely, only 31 or 44.9% of the female opticians practised for five days or more as against 233 or 78.5% of the males. This difference was significant ($x^2 = 46.27$, $p = 0.001$) and is clearly related to the age structure, marital status and therefore family responsibilities of the female opticians - 73.9% of them were under 40, as opposed to 37.2% of

the male opticians.

None of the helping people variables were related to sex. The data indicated very little difference between the sexes. The vast majority of both sexes thought helping people, having a warm and pleasing personality, being able to get along with people and being a good conversationalist as important or very important. Similarly, most opticians, irrespective of sex, thought 'a profession which helps people directly' was a very good or good description of the ophthalmic optical profession.

The one specialisation variable related to sex was Variable 091 (preferred optical specialism) ($x^2 = 27.02$, $p = 0.001$). Over 70% of opticians of both sexes preferred generaly optical practice. Female opticians were less likely to prefer contact lens fitting and more likely to prefer Hospital Eye Service practice and paediatric optics. The explanation for the contact lens preference is not immediately apparent but that for the Hospital Eye Service may owe more to the ease with which it is possible to work part-time than an interest in pathological conditions of the eye i.e. it may be related to what is convenient, given the family responsibilities of most. The interest in paediatric optics may reflect the fact of having children of their own.

This pattern of preferences was reflected in the data for Variable 090 which showed that female opticians were more likely to be practising in the Hospital Eye Service, although the percentage of opticians of both sexes in general optical practice and contact lens fitting was very similar. There was a tendency for female opticians to consider taking further optical qualifications less important and a

similar tendency existed in relation to teaching in a university ophthalmic optics department.

None of the prestige variables was related to sex. There was a slight tendency for male opticians to consider the status of an optician more important. Also, male opticians were less likely to consider 'profession of high standing' as a very good or good description of the ophthalmic optical profession. Lastly, there was no clear relationship between sex and the importance of maintaining a restrained and dignified manner or wearing conservative clothing.

The three independence variables related to sex were:

Variable 032 - (importance of being one's own boss as a feature of being an ophthalmic optician)
($x^2 = 13.83$, $p = 0.01$)

Variable 099 - (preferred type of practice)
($x^2 = 28.85$, $p = 0.001$)

Variable 126 - (present type of practice)
($x^2 = 34.73$, $p = 0.001$)

The data relating to Variable 032 indicated that female opticians were less likely to consider being their own boss as important - although 56.7% of them considered it very or fairly important, as against 78.1% of the male opticians. This was reflected in the preferences as to type of practice. Female opticians were less likely to prefer individual or group private practice, or multiple practice. There were no female opticians who preferred chemist-optician practice. Conversely, female opticians were more likely to prefer Hospital Eye Service and locum practice. Further confirmation was given by the data referring to the

optician's present type of practice (Variable 126). This cross-tabulation is set out in Table 6.6.

Table 6.6

Cross-Tabulation of Present Type of Practice with Sex of Optician

Type of Practice	Sex of Optician: Female %	Male %	Total %
Chemist-optician	-	5.1	4.1
Group private	18.8	23.9	22.9
Individual private	34.8	46.5	44.3
Locum	11.6	1.3	3.3
Multiple	13.0	12.1	12.3
Others	10.2	7.4	7.9
No Reply	11.6	3.7	5.2
TOTAL	100.0 (N = 69)	100.0 (N = 297)	100.0 (N = 366)

The table shows that the main difference is in locum practice, although there were in fact fewer female opticians in private practice (group and individual) and no female chemist-opticians. The percentage in multiple practice is almost the same for the two sexes. Unfortunately, the sample did not contain any full-time Hospital Eye Service opticians, so the greater female preference for this type of practice cannot be confirmed by the data.

Only one of the furthering knowledge variables was related to sex. This was:

Variable 109 - (importance of reading optical textbooks)

($x^2 = 10.07$, $p = 0.05$)

Female opticians were less likely to consider this activity as important as males. However, the trend was not consistent throughout the scale of importance and this may have been a spurious relationship in view of (a) it being at the lowest level of significance and (b) that it was the only variable of fourteen furthering knowledge ones to be related to sex.

Of the other thirteen, most showed no clear trend. Where one existed it tended to be that male opticians both considered the particular professional activity more important and participated in it more frequently. There were two exceptions to this. Female opticians were slightly more likely to have read optical textbooks frequently and studied for further optical qualifications. The cumulative scaling procedure did not reveal a relationship between sex and the furthering knowledge variables.

One of the commercial v. personal service orientation variables was related to sex. This was:

Variable 150 - (number of eye-examinations carried out in an average week)

($x^2 = 14.28$, $p = 0.025$)

The date revealed that female opticians tended to carry out fewer eye-examinations. This was not unexpected and obviously related to the time

spent practising ophthalmic optics (see Table 6.5) rather than to any difference in orientation towards service as opposed to income.

The four career commitment variables related to sex were:

Variable 012 - (intention to practise for whole of working life)
(x^2 = 21.58, p = 0.001)

Variable 062 - (importance of dedication to ophthalmic optics)
(x^2 = 14.72, p = 0.01)

Variable 119 - (first source of satisfaction in life)
(x^2 = 18.31, p = 0.025)

Variable 120 - (second source of satisfaction in life)
(x^2 = 15.41, p = 0.025)

The data relating to Variable 012 showed that female opticians were less likely to say they intended to practise as an ophthalmic optician for the whole of their working lives. Of the female opticians 62.3% said that did as against 85.6% of the male opticians. Conversely, 20.3% of the female and 5.8% of the male opticians said they did not intend to so practise. Also, 17.4% and 8.6% respectively of female and male opticians said they did not know. This difference was confirmed by the data relating to Variable 062 which indicated that female opticians tended to consider dedication to ophthalmic optics less important than male opticians. That related to Variables 119 and 120 confirmed this difference in career commitment. The cross-tabulation between source of satisfaction in life and sex is set out in Table 6.7. The table shows that female opticians were more likely to cite family relationships as the principal source of satisfaction in life, although it should be noted that more male opticians cited family relationships

than did professional career. Analysis of the data relating to Variable 120 showed that 59.7% of female opticians and 38.7% of male opticians cited professional career and 10.4% and 18.4% respectively cited family relationships as their second source of satisfaction in life.

Table 6.7

Cross-Tabulation of First Source of Satisfaction in Life with Sex of Opticians

Source of Satisfaction	Female %	Male %	Total %
Professional career	18.9	30.0	27.9
Family relationships	68.1	39.1	44.6
Leisure	5.8	11.1	10.1
Participating in community affairs	-	1.3	1.1
Religious beliefs	1.4	5.8	4.9
Others	2.9	1.3	1.6
No Reply	2.9	11.4	9.8
TOTAL	100.0 (N = 69)	100.0 (N = 297)	100.0 (N = 366)

In addition to the analysis of the variables relating to the eight dimensions of professionalism, that relating to the open-ended question on professional values (Variables 040 to 043) revealed relationships with sex of the optician. The first part of this question (the most

important professional values) was related to sex ($x^2 = 21.00$, $p = 0.05$). Female opticians were more likely to cite service to the public and male opticians relationship with the patient and knowledge or competence. However, integrity was the value most often cited by opticians of both sexes (46.8% of the female and 45.6% of the male opticians).

The other part of the question related to sex was the third (most difficult professional value) - ($x^2 = 18.32$, $p = 0.025$). Both sexes were equally likely to mention the most cited value, 'relationship with some patients', but female opticians more often mentioned 'thoroughness' and 'dedication' - probably reflecting their lower rating of the latter in Variable 062 (importance of dedication to ophthalmic optics). Male opticians were more likely to mention 'integrity'. No clear pattern emerged from the analysis of the other two parts of the question - the easiest professional value (Variable 041) and the most difficult value for most opticians (Variable 043).

Lastly, in relation to Hypothesis 7, the analysis of description of premises did not reveal a relationship with sex of optician but male opticians were slightly more likely to call their premises 'consulting rooms', 'office' or 'shop' while female opticians were more likely to use the term 'practice'. This is probably related to the different age profiles of the two sexes in the sample - the female opticians being younger. A similar difference was found in relation to the description of service seekers. Male opticians were more likely to use the terms 'client' and 'customer' and female opticians 'patient'. However, this relationship was not related to sex of the optician.

Summary of Results Relating to Hypothesis 7

This hypothesis was strongly supported by the data relating to the independence and career commitment variables but not by the income variable data. The main differences between the concepts of professionalism of opticians of the two sexes related to the specialisation, independence and career commitment variables. Female opticians preferred and actually worked in types of practice where they could work part-time and so reconcile work hours with family responsibilities. This meant more locum and Hospital Eye Service work and less individual and group private practice than for male opticians. At least half the female opticians worked part-time i.e. less than five days per week. This affected the importance they attached to the independence and career commitment variables. The consistent theme running through their replies in these areas was the relative value they placed on family and professional roles. For most the former clearly came first. This is consistent with the findings of Kelsall, Jones & Poole (1972) in their sample of female graduates.

There was little or no difference in the replies of the two sexes regarding the income, helping people, prestige, furthering knowledge and commercial v. personal service orientation variables. There were differences relating to four income variables but these were as much a function of the type and amount of professional practice of female opticians as any indication of a lower valuation of income per se.

Finally, female opticians, perhaps because of their younger age profile were slightly more likely to employ the para-medical terminology of 'practice' and 'patient' when referring to their work premises and

the people who come to seek their services.

Hypothesis 8 - the optician's concept of professionalism will be related to the type of area in which he practises

The number of possible and actual relationships with type of area of practice is set out below:

	Number of Relationships With Area of Practice	
	Possible	Actual
Income	7	1
Helping People	7	1
Specialisation	4	-
Prestige	4	-
Independence	4	-
Furthering Knowledge	14	4
Commercial v. personal service orientation	3	1
Career commitment	5	-

The figures show that, in contrast to age, type of practice and sex, very few relationships existed between type of area of practice and the groups of variables relating to the eight dimensions of professionalism. The overwhelming characteristic of the data was the similarity of distribution of replies from opticians in areas of practice different by social class and position on the urban-rural continuum. Comment will therefore be confined to those few relationships which existed. The number of eye-examinations conducted in an average week was related to area of practice ($x^2 = 62.41$, $p = 0.013$). The data indicated, somewhat

surprisingly, that opticians in city centre, residential and working class suburbs i.e. the most urbanised areas, were less likely to state that they carried out more than fifty eye-examinations per week than those in industrial, smaller, county and country towns. No explanation is immediately apparent for this difference.

The helping people variable which was related to area of practice was:

Variable 061 - (importance of having a warm and pleasing personality)
(x^2 = 33.18, p = 0.015)

The data showed that overall all opticians rated this characteristic very highly but that those in city centre practice were more likely to rate it as fairly rather than very important, compared with opticians in all other types of area. This may indicate more passing trade and therefore less need to build up a personal relationship.

The four furthering knowledge variables which were related to area of practice were:

Variable 183 - (frequency of attending conferences)
(x^2 = 29.02, p = 0.023)

Variable 185 - (frequency of study for further optical qualifications)
(x^2 = 30.07, p = 0.017)

Variable 186 - (frequency of teaching in a university ophthalmic optics department)
(x^2 = 37.91, p = 0.001)

Variable 187 - (frequency of examining for professional bodies)
(x^2 = 30.43, p = 0.015)

The data showed that opticians in most urban types of practice (city centre, industrial town, residential suburb) were more likely to have attended conferences than those in more rural practices (smaller, county and country towns). The immediately obvious explanation is that most conferences are held in large, urban centres and attendance is a function of proximity.

The opticians most likely to be studying for further optical qualifications were those in large city centres. Least likely were those practising in smaller and country towns, and working class suburbs. Those practising in residential suburbs came somewhere in between. Thus the pattern cut across class areas and the urban-rural continuum. The explanation is not obvious but might lie with psychological rather than sociological factors, e.g. temperament, personal preferences.

The data relating to Variable 186 showed that all the opticians who has taught in a university ophthalmic optics department practised in urban areas - the most likely were those practising in city centres. In the light of the data relating to Variable 185 it cannot be assumed that all the best qualified opticians are in urban practice so presumably this relationship is also at least in part a function of proximity, universities being found in large cities. Lastly, all but three of the opticians who had examined for professional bodies in the previous year practised in urban areas, and were most likely to practise in city centres and residential suburbs. The cross-tabulation of examining for professional bodies with teaching in a university ophthalmic optics department further confirmed the domination of these activities by those in urban practice. Of those who examined frequently, 94.7% also taught frequently in a university department. Of those who examined occasionally,

14.3% taught occasionally and none frequently in a university department. Lastly, of those who never examined, 96% never taught in a university department. Overall, a relationship was found between examining for professional bodies and teaching in a university ophthalmic optics department ($x^2 = 228.35$, $p = 0.001$). However, the application of a cumulative scaling procedure to the furthering knowledge variables revealed no relationship by area of practice.

The commercial v. personal service orientation variable that was related to area of practice was Variable 087 (similarity between ophthalmic optician - patient and shopkeeper-customer relationship) - ($x^2 = 47.05$, $p = 0.041$). The data showed that overall only 32 or 8.7% of the sample thought the relationship was very or fairly similar. Only opticians in city centre or residential suburb practice thought the relationship was very similar - 6.8% of the former and 5% of the latter. This may indicate a less personal and more commercial relationship between some opticians and their patients in such areas, but the level of significance is not sufficiently high to warrant the drawing of anything but the most tentative conclusions.

Analysis of the data relating to the open-ended questions on professional values (Variables 040-043) revealed no relationship by area of practice. No clear tendencies were indicated in any of the four variables, except that city centre opticians were rather more likely to think that adherence to integrity was the most difficult professional value for most opticians.

Lastly, in relation to Hypothesis 8, the data relating to description of work premises showed that urban premises were more likely to be described as a 'shop', and this was most likely in the case of opticians

practising in working class areas. Also, those in urban areas were less likely to describe their premises as 'practices', those in city centres being the least likely. The description 'consulting room' was slightly more likely to be used by opticians in urban areas but no clear trends were apparent in the use of the term 'office'. Overall, however, a relationship between description of work premises and area of practice was found ($x^2 = 96.49$, $p = 0.001$).

Summary of Results Relating to Hypothesis 8

Analysis of the data showed little or no support for the hypothesis. None of the eight groups of variables was related to area of practice. There was some evidence that opticians in urban practice were more likely to participate in attending conferences, studying for further optical qualifications, examining for professional bodies and teaching in a university ophthalmic optics department. In the case of at least two of these activities it is suggested that this may be a function of proximity rather than an indication of a greater value per se placed on furthering professional knowledge. These differences apart from the overall characteristic of the data relating to this hypothesis was the similarity of the replies from opticians in different area of practice.

COMPARISON OF FIRST AND FINAL YEAR STUDENT SURVEYS AND PRACTISING OPTICIAN SURVEY

Finally, the data from the practising optician survey was compared with that of the student surveys (first and final years together) to try to discover any changes of opinion which had taken place by virtue of starting to practise, and age and qualification differences. As with the comparison of the two student surveys in Chapter Four[1] this was done by applying t-tests to each variable relating to the eight dimensions of professionalism i.e. income, helping people (service), specialisation, prestige (status), independence (autonomy), furthering knowledge, commercial v. personal service orientation and career commitment, that were directly comparable in the student and practising optician survey. Significant differences between the distribution of replies in the student and practising optician surveys were found in relation to fourteen variables. These will now be outlined in turn as they relate to the eight dimensions.

Income Variables:

	Group Means		Level of Confidence	Value of t (separate variance)
	All Students (n = 1118)	Practising Opticians (n = 365)		
VAR 034 (importance of being sure of earning a good income)	1.97[2]	2.14	.001	- 3.30
VAR 064 (importance of ability to maximise income)	3.50	3.24	.001	4.54

[1] See p.198

[2] The higher the mean the lower the importance attached to income

The test for Variable 034 indicates that the students considered earning a good income more important than the practising opticians but the latter considered the ability to maximise income more important than did the students. The difference may be that only the practising opticians had actually experiences the ability, within limits, to earn the level of income they chose. However, the group means indicate that most students and most practising opticians thought that earning a good income was very or fairly important and the ability to maximise income was of some or of little importance.

Helping People (Service) Variables:

	Group Means		Level of Confidence	Value of t (separate variance)
	All Students (n = 1118)	Practising Opticians (n = 365)		
VAR 029 (being able to deal directly with people)	1.66[1]	1.47	.001	4.01
VAR 030 (being able to help people)	1.55	1.30	.001	7.13
VAR 047 (profession that helps people directly)	1.70	1.51	.001	4.70
VAR 061 (importance of warm and pleasing personality)	1.44	1.67	.001	- 5.23
VAR 078 (importance of being a good conversationalist)	2.28	2.71	.001	- 6.93

[1] The higher the mean the lower the importance attached to helping people.

The tests for Variables 029, 030 and 047 indicate that the student thought dealing with and helping people were less important than did practising opticians and that 'a profession which helps people directly' was a better description of the ophthalmic optical profession. However, the practising opticians thought that a warm and pleasing personality and being a good conversationalist were less important than did the students. On the face of it the change of opinion is inconsistent but it may be that practising opticians, on the basis of their experience, considered that helping people was more important but that having a warm personality and being a good conversationalist were not so important ways of achieving this as the students thought. Practising opticians may feel that their skill does more to help people than the warmth of their personality and/or their skill as a conversationalist.

Specialisation Variables:

None of these was found to be different at the lowest acceptable level of confidence.

Prestige (status) Variables:

	Group Means		Level of Confidence	Value of t (separate variance)
	All Students (n = 1118)	Practising Opticians (n = 365)		
VAR 031 (importance of status an optician enjoys)	2.82[1]	3.05	.001	- 3.85
VAR 053 (classification of ophthalmic optician)	1.85	2.10	.001	- 6.29
VAR 057 (estimate of prestige awarded by other professions)	2.80	2.50	.001	7.45

[1] The higher the mean the lower the importance attached to status

The practising opticians were less concerned with the status they enjoyed than the students thought they would be. The students were more likely to classify 'ophthalmic optician' as an old-established profession than were practising opticians. The students were more likely to say that other professions awarded ophthalmic optics less prestige than it merited. The consensus of the three variables seems to be that practising opticians gave more pragmatic and less idealistic opinions on the importance of status to them subjectively and the status they thought ophthalmic opticians as individuals and ophthalmic optics as a profession has. However, the group means indicate a difference of opinion of 0.35 at the most on the 1 - 5 scale of each variable.

Independence (autonomy) Variables:

	Group Means		Level of Confidence	Value of t (separate variance)
	All Students (n = 1118)	Practising Opticians (n = 365)		
VAR 032 (importance of being own boss)	2.25[1]	1.96	.001	4.25

The practising opticians considered being their own boss more important than did the students. This may reflect the sexual difference between the two samples. Of the student sample, 43% were female as opposed to only 18.9% of the practising optician sample. Analysis of the independence variables in both surveys showed that females valued independence less than males. Thus the greater percentage of females in the student sample accounts for the lower rating of independence shown

---

[1] The higher the mean the lower the importance attached to independence

by the t-test.

Furthering Knowledge Variables:

None of these was found to be different at the lowest acceptable level of confidence.

Commercial v. personal service orientation Variables:

	Group Means: All Students (n = 1118)	Group Means: Practising Opticians (n = 365)	Level of Confidence	Value of t (separate variance)
VAR 066 (importance of integrity in making a good ophthalmic optician)	1.82[1]	1.30	.001	12.83
VAR 087 (similarity between ophthalmic optician-patient and shopkeeper-customer relationship)	3.49	3.79	.001	- 4.96

The practising opticians considered integrity more important than did the students and thought there was less similarity between the ophthalmic optician-patient and shopkeeper-customer relationship.

Career Commitment Variables:

	Group Means: All Students (n = 1118)	Group Means: Practising Opticians (n = 365)	Level of Confidence	Value of t (separate variance)
VAR 028 (feelings about career in opthalmic optics)	2.16[1]	2.50	.001	- 5.01

[1] The higher the mean the lower the importance attached to integrity or career commitment

The test indicates less career commitment among the practising opticians in terms of the degree of satisfaction an optics career would give them (compared with the satisfaction the students thought it would give them).

The main differences in the opinions of the student and practising optician samples appear to be in the helping people, prestige and commercial v. personal orientation dimensions and the change of opinion appears to indicate that practising opticians consider helping people and integrity more important and status less important than do students. However, it should be noted that the changes of opinion were not great in terms of movement along the five point Likert-type scale; in no case was it greater than 0.50.

Comparison of Final Year Student and Practising Opticians Surveys

Some of the variables which were in the final year student survey but not in the first year student one could be similarly compared by means of t-tests with identical variables in the practising optician survey (Variables 089, 091, 099, 100, 102, 103, 109-115, and 118). Of these fourteen variables significant differences in distribution of replies were found in respect of eight of them, which related to the furthering knowledge dimension of professionalism.

The changes of opinion are consistently in the same direction i.e. practising opticians consider these furthering knowledge activities to be less important than final year students. This perhaps reflects the academic nature of the student world and the more pragmatic one of the practising opticians.

	Group Means			
	Final Year Students (n = 386)	Practising Opticians (n = 365)	Level of Confidence	Value of t (separate variance)
VAR 109 (importance of reading optical textbooks)	1.90[1]	2.38	.001	- 7.40
VAR 110 (importance of reading optical journals)	1.19	2.03	.001	- 14.96
VAR 111 (importance of attending local optical association meetings)	1.85	2.86	.001	- 12.81
VAR 112 (importance of attending refresher courses)	1.92	2.08	.017	- 2.40
VAR 113 (importance of attending conferences)	2.46	3.44	.001	- 12.20
VAR 114 (importance of research while in practice)	3.17	3.83	.001	- 8.52
VAR 115 (importance of taking further optical qualifications)	2.82	3.68	.001	- 10.02
VAR 118 (importance of examining for professional bodies)	3.28	4.01	.001	- 9.30

[1] The higher the mean the less importance placed on the means of furthering knowledge

Thus the comparison of the student and practising optician surveys indicates some evidence that practising opticians consider helping people and integrity more important and status and furthering knowledge less important than do students. However, the difference in group means seems to indicate that any changes in opinion are restricted to small movements along the five point scale.

SUMMARY OF CHAPTER

Hypotheses 5-8 analysed the survey data by age-group, type of practice, sex and area of practice respectively via eight scales relating to dimensions of professionalism. Younger opticians were more likely to be interested and involved in areas of practice other than general optical practice and less likely to be as concerned with status as older opticians. They scored lower on the commercial v. personal service orientation variables but it is suggested that this may be function of their greater likelihood to work in multiple practice. Older opticians seemed to have more career commitment, but this may have been of a passive rather than an active nature in view of the lack of relationships of age with furthering knowledge and independence, and the findings relating to the specialisation dimension.

Multiple opticians were more likely to carry out large numbers of eye-examinations but this did not appear to be reflected in their income level. Those in private practice were more likely to be interested and involved in areas of practice other than general optical practice, and furthering knowledge activities, e.g. attending conferences, taking further optical qualifications, examining for professional bodies

and teaching in university ophthalmic optics departments. Multiple opticians placed less value on their independence and scored lower on the commercial v. personal service orientation variables largely by virtue of carrying out more eye-examinations, from which, as mentioned above, they did not appear to benefit greatly in terms of income.

Female opticians were much more likely to work in types of practice where they could work part-time i.e. the Hospital Eye Service, multiples and locum practice. Accordingly, they were less concerned with being their own boss and scored lower on the career commitment variables. Most female opticians clearly put family before professional career. This could mean significant changes in the practice of ophthalmic optics over the next thirty to forty years if the proportion of women in the professional body continues to rise, which is highly probable as a result of the consequences of the implementation of the Sex Discrimination Act 1975.

There were few differences related to areas of practice. Those that existed appeared to be more a function of proximity of practice to the activity concerned e.g. attending conferences, than of the area of practice itself. Finally, two 'negative' points require mention. First, the low rate of return from the university lecturers meant that it was of doubtful statistical validity to compare their replies with those of the remainder of the sample. This meant that it was not possible to test the hypothesis that they would score higher on the eight dimensional scales i.e. be the most professionally orientated opticians in the practising optician sample. Secondly, the analysis of the data relating to the open-ended question on professional values did not reveal any other values than those already identified in the

literature of the sociology of the professions.

Comparison of identical variables in the student and practising optician surveys revealed small changes of opinion in relation particularly to helping people, commercial v. personal service orientation, status and furthering knowledge dimensions of professionalism. Practising opticians considered helping people more important and status and furthering knowledge less important than did students.

The following chapter sets out the main findings of and conclusions from the study of the development of the ophthalmic optical profession (Chapter Two) and the questionnaire surveys of the student and practising optician samples (Chapters Four, Five and Six), followed by discussion of these findings in terms of the theoretical concepts outlined in Chapter One and suggestions for further research.

CHAPTER SEVEN

Conclusions/Discussion

This chapter falls into two main parts. The first summarises the findings from the chapter on the development of the ophthalmic optical profession (Chapter Two) and the three empirical surveys (Chapters Four, Five and Six) together with the conclusions drawn from a comparison of the three surveys. The second part relates these conclusions to the theoretical concepts of 'profession', 'professionalisation', and 'professionalism' outlined and discussed in the introduction, plus associated concepts, discusses them in terms of the methodological limitations of the empirical work and makes suggestions for further research in the field.

The main findings from an analysis of the development of the ophthalmic optical profession were:

1. that the occupation's leaders have, since the end of the nineteenth century, possessed the desire to achieve the state registration of opticians, have progressively raised the standards of training and education of opticians and involved them in status-enhancing activities, in particular participation in state-organised optical welfare schemes.

2. that a gradual unification of the various bodies representing segments of the profession has occurred. This process is related to the first finding. The five bodies that exist[1] are less rivals than complementary but with discrete functions. The process is not yet complete as is evidenced by the discussions started in 1976 to establish a common examination system via a new College of Optics i.e. a further rationalisation

---

[1] The General Optical Council, the British Optical Association, the Scottish Association of Optics, the Spectacle Makers Company and the Association of Optical Practitioners.

of the three existing qualifying associations - the British Optical Association, the Scottish Association of Optics and the Spectacle Makers Company.

3. that state registration had been achieved despite a long and bitter struggle with the medical profession. This was made possible by the fourth development, namely

4. the involvement of ophthalmic optics in state-organised optical welfare schemes, from the Approved Society-administered scheme of 1923 through the Ophthalmic Benefit Approved Committee scheme of 1937 to the comprehensive Supplementary Ophthalmic Service scheme under the NHS in 1948.

These findings clarify several features in the process of professionalisation of ophthalmic optics. Firstly, the profession was able to achieve state registration and an agreed line of demarcation with medicine via what Mok (1977) has called the 'sponsorship' of the state at a critical stage in its process of professionalisation. The ophthalmic opticians constructed their own professional reality as far as they could in terms of raising the standards of optical education and training but more important they continued to provide a service which the medical profession had promised in 1927 but never actually provided adequately, and in so doing earned the gratitude of the state and governments of both main parties. Without this 'sponsorship' it is very doubtful whether their achievements by themselves would have been sufficient to overcome the still considerable opposition of the medical profession at the time of registration (1957-58). This illustrates the critical role of power in determining whose construction of reality dominates in a given situation.

The idea of sponsorship also helps to explain why ophthalmic optics, unlike most of the so-called para-medical occupations, has not had to accept the formally subordinate position in relation to medicine which

characterises the seven 'professions supplementary to medicine'.[1] The position of ophthalmic optics is more akin to that of dentistry as a 'limited' profession i.e. to the eyes, although the controlling body of the latter (the British Dental Council) has a majority of dentists and fewer medical representatives than the General Optical Council. The fact that ophthalmic optics achieved less favourable terms in respect of the membership of its registering association illustrates that the process of professionalisation is one of 'negotiation'. All such processes are unique in terms of the changing strength of opposing groups, the length of time involved, changing social attitudes in general and the opportunities for status enhancement (or diminution) given by fortuitous events which occur independent of the actions of the aspiring occupation. Thus while ophthalmic optics has achieved a position of considerable autonomy vis-a-vis the medical profession, it has been achieved only by accepting the prevailing clinical, scientific view of medicine. According to Jamous and Peloille (1970) French bacteriologists fought a similar battle against the elite 'caste' of university hospital doctors, whose aim was

> "more to preserve its acquired positions and privileges and perpetuate its own identity than to open up and share in the new stock of scientific knowledge which was to be progressively built up outside itself."
> (Jackson 1970 : 131)

New chairs in medicine were created but the clinical ones remained the most numerous and the elite ones.

In a similar way ophthalmic optics in Britain has gained grudging medical acceptance of its standards of education by incorporating substantial amounts of clinical material e.g. relating to the science of optics and diseases of the eye, into the structure of ophthalmic optics courses.

---

[1] Physiotherapy, occupational therapy, dietetics, remedial gymnastics, medical laboratory technology, chiropody and orthoptics

There is a feeling among some opticians that this is not altogether necessary and that opticians are now 'over-educated'. This feeling has clearly not been shared by the officers of the optical association or by the optical academics. For the latter the progressive raising of the standards of optical training and education are reflected in the rise in status of ophthalmic optics in academic circles. For the former the incorporation of additional but not particularly necessary courses of training are part of the process of building up professional exclusiveness and mystique - compare Gyarmati (1975).

The constant 'negotiation' involved in professionalisation also brings out the limitations of Wilensky's 'typical sequence' of professionalisation among the established professions of medicine and law. His five stages were doing the work full-time, determining standards of work and establishing training schools, promoting an effective occupational association, gaining legal protection of the monopoly of skills and establishment of a code of ethics. This sequence lacks precision in its terminology and flexibility in accounting for the unique process of professionalisation of any particular occupation. The introduction has already mentioned[1] that in the case of ophthalmic optics legal protection (1961) came after the code of ethics (1936). The example, however, raises the issue of precision. What exactly is meant by the establishment of a code of ethics? That of 1936 in optics was only binding on opticians who were involved in the Ophthalmic Benefit Approved Committee Scheme. Similarly, what is the criterion of 'effectiveness' in an 'effective' occupational association?

A further discrepancy between the experience of ophthalmic optics

---

[1] See Chapter One, p.15

and Wilensky's sequence relates to the first stage of professionalisation - doing the work full-time. During the present century a significant minority of opticians have practised optics jointly with a semi-profession i.e. pharmacy. In December 1976 chemist-opticians were still 9.8% of all ophthalmic opticians in the Opticians Register and there were also at least two jeweller-opticians. The vast majority of the chemist-opticians qualified first in pharmacy.

Wilensky's sequence is also deficient in the role it ascribes to the state. He seems to envisage a laissez-faire state which responds to the stimuli of pressure from aspiring occupations and grants them a legal monopoly of the practice of particular skills. The sequence does not consider the role of a state involved in what Johnson (1972) calls 'third party control' i.e. a situation where initiatives come from the state itself to ensure minimum standards of service and care in a given field, and where the profession in question is, in effect, given a guaranteed clientele.[1] The sequence does not cater for this situation, increasingly common in the twentieth century British context nor, in consequence, the related idea of state sponsorship put forward by Mok (1977). The basic deficiency seems to be that Wilensky's sequence views the process from the perspective of the aspiring occupation and therefore neglects factors relating to the wider social environment which can inhibit or accelerate the professionalisation of a particular occupation.

Findings of Students Surveys

The main findings were:

---

[1] e.g. eye-tests for 'L' drivers and as part of school medical examinations

1. Most students came from middle class backgrounds (80.1%)[1]

2. Most students were educated at state schools (72.0%)

3. Few students had any family connections with optics (8.0%)

4. Most students did not choose ophthalmic optics as their first choice occupation (85.5%) and many (31.8%) would ideally have liked to have studied medicine.[2]

5. Most students considered helping and working with people more important than income or independence, although the latter two were still of considerable importance. Few appeared to be commercially orientated, at least overtly, but it should be remembered that there may be a social desirability factor operative in the questionnaire replies.

6. Sex was the most important discriminating variable. Female students considered income and independence less important than did male students. Final year female students possessed a significantly different concept of their careers which recognised the likely effects of family commitments.

7. Most final year students made clear choices as to the type of practice and area in which they would like to practise. However, a minority was uncertain and a larger minority were uncertain as to their career commitment to optics. This suggests that low commitment to optics carries through training.

8. Final year students considered integrity, ability to think in an organised way, recognition of one's limitations, maintaining an air of confidence and a detached manner more important than first year students.

9. Final year students rated the status of the ophthalmic optical profession and individual ophthalmic opticians

---

[1] Percentage figures refer to the first and final year surveys combined i.e. all students

[2] See Table 4.10 for full range of choices

lower than did first year students. This may be related to a growing familiarity with the limits of optical knowledge.

10. Final year students thought there was less similarity between the ophthalmic optician-patient and shopkeeper-customer relationships than first year students.

Findings of Practising Optician Survey

1. The older the optician the lower his social class origins. Even so, a majority of opticians was of middle class origins in all but the oldest age-group. Of the total sample 72.7% were of middle class origins.

2. Just over half the sample attended state schools (53%) but a substantial minority (40.2%) attended non-state schools. Only 10% attended non-selective schools, state or non-state.

3. The older the optician the more likely he was to have obtained his optical qualifications by part-time study.

4. Just less than a fifth of the opticians (18.9%) had optician fathers. However, female opticians, a steadily increasing proportion of registered opticians, are far less likely to come from such backgrounds.

5. Young opticians were more likely to be interested in areas of practice other than general optical practice.

6. Older opticians appear to have more career commitment but it may be of a passive kind.

7. Multiple practice for most opticians appears to be a transitional type of practice; most eventually move into group or individual private practice.[1]

8. Any commercial pressure present in multiple practice does not seem to benefit the opticians since most report incomes lower

---

[1] See Chapter Six, p.253

than for those in private practice. This may in part account for conclusion 7.

9. Most female opticians clearly put family before professional career.

10. Accordingly, female opticians were much more likely to work in types of practice where they could work part-time, e.g. the Hospital Eye Service, multiples and locum practice.

11. The para-medical terms 'practice' and 'patient' are used by most opticians to describe their work premises and the people who come to seek their services respectively.

12. Comparison of identical variables in the student and practising optician surveys revealed only small changes of opinion in relation to the helping people, integrity, status and furthering knowledge dimensions of professionalism. Practising opticians considered helping people and integrity more important, and status and furthering knowledge less important than did students.

These findings can now be discussed in relation to the theoretical concepts discussed in the introduction.

Profession

Ophthalmic optics appears to possess all five of the professional 'traits' identified by Carr-Saunders & Wilson:

1. A skill (examining eyes) based on theoretical knowledge (of optics, the science dealing with the phenomena of light and vision).

2. Prolonged and specialised training and education (three-year degree course in ophthalmic optics plus one year's pre-registration training).

3. Concern for competence and honour of practitioners (standards of professional examinations and discipline determined by three

qualifying associations, the British Optical Association, The Spectacle Makers Company and the Scottish Association of Opticians).

4. Existence of a professional association (the three in 3 plus the registering association, the General Optical Council).

5. Adherence to a code of ethics and fixed remuneration for professional services by fee or salary. (Each of the three qualifying associations in 3 above has its code of ethics and remuneration of private practice ophthalmic opticians is by fee and that of public company practice opticians by salary).

Also, at least five of Millerson's six 'principles' can be applied to ophthalmic optics:

1. Optics is a higher-grade, non-manual occupation possessing a practical technique based on a substantial theoretical foundation.

2. Optics became a state-registered profession via the Opticians Act 1958 after deliberate action by ophthalmic opticians.

3. Their professional status is a dynamic quality reflecting social and economic changes. Clearly professional standards in terms of education and training have risen since state registration, but it is suggested in Chapter Two[1] that the rapid inflation of the last five years and the consequent effect on income levels has touched optics in common with other professions. This may lead to a greater concern with income and therefore can be seen as a de-professionalising factor.

4. A well-defined area of study and concern exists and is applied to give a definite service (eye care). Competence is demonstrated by performance (of eye examinations) and by standardised examinations (of the three qualifying associations)

5. The need for a professional code of ethics depends on the nature of the work involved. That of optics is very similar to those of dentistry and medicine.

The only one about which any doubt remains is:

---

[1] See Chapter Two, p.99

6. The aspiring occupation must be subjectively and objectively recognised as a profession. The surveys show that most opticians see themselves as members of a profession. Whether the public so regard them is problematic but the evidence of Walker's (1976) small survey suggests that most do.

Similarly, the functionalist approach has its relevance. Ophthalmic optics can be seen as an occupation whose professionalisation was sponsored by the state because it provided a needed service.

However, it is not the intention here to be drawn into what Hughes called the false question of 'Is the occupation a profession?' i.e. the sterile pursuit of a comprehensive definition of a profession - sterile because as Foote (1953) said there is little point in constructing static definitions of a profession to describe the dynamic process of occupational change.

Professionalisation

Critiques of the work of Hickson & Thomas and Wilensky have been made in the introduction and earlier in this chapter respectively. The more elaborate paradigm of Harries-Jenkins (1970) although clearly an advance over the work of Wilensky, also suffers from the fact that it implicitly views the process from the perspective of the occupation in question. But professionalisation, as Elliott (1972) and Johnson (1972) point out, takes place within a particular social context. The analysis of the ophthalmic optical profession shows that its professionalisation is a process of 'negotiation' with groups whose activities and interests impinge directly and/or indirectly on those of the occupation. In the most general way such considerations may

be subsumed under the spatio-temporal dimension sub-element of Harries-Jenkins' Contextual Element. According to him this is concerned with:

> "the variations which occur in space and time ... Historical considerations readily demonstrate that, since professionalisation is a dynamic process, the viable criteria of the process, the nature of occupational groups, may display varying characteristics over time."
>
> (Jackson 1970 : 67)

It has already been mentioned that ophthalmic optics has had to accept the clinical, scientific view of medicine in order to achieve a line of demarcation with medicine. In a more general sense, the leaders of the ophthalmic opticians, along with those of other professionalising occupations in the twentieth century, have taken the 'ideal type' professions as a model. This was apparent in the case of ophthalmic optics as early as 1896 (Stoneman 1896 : 6-8). Such occupations are 'second generation' professions. The model, however, for these occupations has been of limited use in a situation where third party 'mediation' of the state (Johnson 1972) has replaced the domination by the professional of the professional-client relationship which he calls professionalism i.e. the social context within which the aspiring occupations of this century are trying to professionalise is progressively more different from that in which the 'ideal type' professions professionalised. Just as important, the development of third party control has meant that the models themselves have changed. A case can be made for some de-professionalisation (Haug 1973) of the medical profession because of its involvement in the National Health Insurance scheme of 1911 and the NHS of 1948. Certainly, one underlying reason for the bitter, protracted dispute

between Mrs. Castle[1] and the junior hospital doctors in 1974-76 was the control of these doctors' hours and conditions of work by hospital administrators. Oppenheimer (1973) has even argued that professions are threatened by proletarianisation, which follows work in bureaucratic structures, and a declining relative economic position due to state pressures which keep incomes down and promote oversupply of professionals.[2]

Harries-Jenkins' first sub-element of his Activity Element is the goals of the occupation group. He rightly says that the external observer should be careful not to accept the occupation's evaluation of its work. The same caution applies also to the goal of professionalisation itself, or rather the reasons given for it by the occupation's spokesmen. The latter usually try to rationalise this in terms of the protection of the public against the incompetent practitioner. However, Johnson (1975) quoting a conclusion of the Monopolies Commission Report (1970) regarding restrictive practices, says there has been too little questioning of the extent to which professional rhetoric about community service and altruism may be but a legitimation for professional privilege. Parry & Parry (1976), in a study of the British medical profession, see professionalisation as an exercise in collective social mobility. Similarly, Bankowsky & Mungham (1976) have argued that solicitors in Britain have used the legal aid and duty solicitor schemes to further the interest of the profession.

Thus an adequate analysis of professionalisation has to look for the reason behind the reason[3] given for pursuing the aim of professionalisation.

---

1 Secretary of State for Social Services 1974-76

2 See A. B. Shrank: How Many Medical Graduates is Enough? The Times, October 4th, 1977 : 18

3 See e.g. the final sentence of the letter quoted in Chapter Two,p.101

The leaders of the ophthalmic opticians stressed the need to provide adequate eye care for all the public but behind this altruistic motive (whether genuine or not) also lay the need to protect and further their economic interests in the face of competition from dispensing opticians and ophthalmic medical practitioners on the one hand and quacks on the other. Their process of professionalisation can be seen as an exercise in collective social mobility in the Parrys' terms.[1]

Harries-Jenkins' paradigm would be more useful if it were elaborated still further e.g. by the addition of sub-elements to the Contextual Element:

(a) actions of competing groups and their attitudes to the aspiring occupation e.g. those of other occupations in the market for the services the occupation offers, the public

(b) events occurring independent of the actions of the occupation's members, directly or indirectly affecting the occupation e.g. war, new legislation.

(c) economic and cultural changes affecting the market for the occupation's services e.g. the effect of government expenditure cuts in 1976 on the employment of architects.

Alternatively, these could be included as a seventh element, perhaps the Environmental Element. The analysis of the ophthalmic optical profession has demonstrated the importance to their process of professionalisation of the conflict with medicine, the effect of the two world wars, the development by the state of ophthalmic welfare services and the growing significance of the cosmetic element in the nature of contemporary eye care.

As such the amended paradigm would give more weight to the

---

[1] See e.g. the chart by G. H. Giles on p.18 of Chapter One

constraints within which an aspiring occupation has to 'negotiate', and place the process of professionalisation firmly within its societal context.

Professionalism

The work of Johnson (1975) based on Carchedi (1975), and Parry & Parry (1976) tries to relate professions to the social structure in terms of a dichotomous model which distinguishes between imperatively co-ordinated association and independent free association i.e. bureaucratic state control and colleague control.

Johnson says that professionalism, involving colleague control of work activities, can only arise where ideological and political processes sustaining indetermination coincide with the requirements of capital i.e. where core work activities fulfil the global function of capital with respect to control and surveillance, including the specialised function of reproduction of labour power. The concept of indetermination is taken from Jamous & Peloille (1970) and means those aspects of the professional organisation of knowledge which function as barriers to external authority e.g. mystique, sources of legitimation.

Parry & Parry criticise Johnson for reducing indeterminacy to participation in authority but agree with the basic distinction between imperatively coordinated association and free association. The data from this thesis suggest that this dichotomous model is too simple to account for the complexity of the professional reality of ophthalmic optics. Firstly, the professionalisation of ophthalmic optics has taken place within the bureaucratic umbrella of state health schemes

but the imperatively co-ordinated association implied has affected the patient more than the practitioner. Participation in these schemes has not limited the clinical freedom of the ophthalmic optician, nor the predominance of private practice. In respect to the latter, ophthalmic opticians can claim to have been less afffected than the ideal-type medical profession.[1] Therefore it is important to establish the form and extent of control in the case of a particular profession, for the experience of ophthalmic optics suggest that these may vary widely. Secondly, it is difficult to ascribe to the ophthalmic optical profession any surveillance and control function. This may well be the case with professions like accountancy and law with their obvious role in the maintenance of any socio-economic status quo, capitalist or socialist, but what can and does ophthalmic optics control, and for what reasons? Eye care is needed irrespective of the nature of the socio-economic system and may be related more meaningfully to the need for literacy in an increasingly technological industrial society and the importance of 'cosmetic' considerations among those using spectacles.[2] The professionalisation of ophthalmic optics may be seen as an exercise in collective social mobility similar to that of medicine as described by the Parrys (1976), and as such the growth of indeterminacy is primarily for the benefit of the professionalising occupation rather than to serve any control function for the maintenance of a capitalist society.

Professionalisation has raised the status of ophthalmic optics and to that extent ophthalmic opticians can be said to have vested

---

1 See Typology on p.313

2 e.g. the role of mass media 'stars' and 'personalities' in making spectacles fashionable apart from any instrumental need for them.

interest in the maintenance of the status quo but it is still difficult to see any control function in the examining of eyes. Indeed it may be that the state has allowed considerable control to be exercised by the profession itself within the overall structure of the NHS because it performs no essential control function. Unlike law or accountancy the profession is not concerned with the conditions of social or economic relationships. Medicine may be controlled by the state for a number of reasons including its high cost,[1] compared with optics and because it tries to treat the whole person whereas the role of the optician is relatively narrow i.e. confined to the eyes. As such medicine may have more social impact than optics.

At the level of analysis of the social-psychological characteristics of the practitioner Freidson (1970) associates professionalism with commitment to three sets of attitudes, values and orientations - to the professional ideals of knowledge and science, to the concrete life-career of the profession and to the character of professional work. In relation to the first set, the data from the empirical survey of practising opticians suggests that while most of them consider competence in refraction (examining eyes) to be important, at the same time most were content to be the recipients rather than the initiators of advances in optical knowledge. This is consistent with the thoughts of Ben-David (1964), Mok (1969, 1971) and Freidson (1970), who all distinguish, although using different terms, between the creators and reproducers of knowledge within professions. Mok (1971) says that no actual profession is likely to be composed entirely of people whose work is represented by only one of these professional roles. Kairat (1969) has pointed out that in a developed

---

1 See The Guardian, April 20th 1978 : 2 for report of request to doctors and patients to cut out 'unnecessary' costly prescriptions

society with a complex knowledge system, professionalisation will almost always lead to the partition of individual professions into two sub-systems, one of which deals with the development of knowledge and theory, one with application of knowledge and praxis. The rapid expansion of the university ophthalmic optics departments in the last decade represents the institutionalisation of the first sub-system within the ophthalmic optical profession.

Commitment to the life-career of an ophthalmic optician grew with age but in many cases seemed to be of a passive kind, the result of the increasing comparative costs of changing career, rather than growth in positive commitment. The nature of an ophthalmic optician's professional career is more fully discussed below under the heading of 'professional' career'. By commitment to the character of professional work Freidson meant a particular pride in the special nature of the work. Here the data showed some confusion among the sample as to the precise nature of the professional role of opticians. Confusion centred around the question of whether helping individuals to choose frames was professional or not i.e. an activity which is part of the dispensing of the optical appliance. The sample was asked to grade a number of activities as either professional, partly professional, could be thought to be professional, not really professional and not professional. Of the sample, 95.1% thought examining eyes was professional. The figures for fitting contact lenses and advising on suitable lenses were 81.1% and 72.1% respectively. Conversely, only 15.1% thought that helping the patient to choose frames was professional; another 38.1% thought it was partly professional, 24.1% said it could be thought to be professional, 14.2% said it was not really professional and 4.1% said it was not professional.[1]

---

[1] See Table C.5 in Appendix C for full range of replies

This reflects the longstanding ambivalence among ophthalmic opticians as to their role. As the figures show there is almost universal acceptance of refraction (examining eyes) as part, if not the core, of the role. Only older opticians thought that contact lens fitting was other than professional. The dispensing role is on the one hand acknowledged by most to be that giving rise to potential or actual commercialism i.e. the 'selling of glasses'. On the other, the level of fees for refractions under the NHS is insufficient to maintain an acceptable level of income. As mentioned in Chapter Two[1] the inflation of recent years has meant that opticians have been pressured to maintain their income from the dispensing side of their role. This economic pressure, however, has not been confined to ophthalmic optics. Solicitors have recently complained that professional standards have been lowered by practitioners taking on too much work because of the pressure of economic circumstances. (Law Society Gazette, Vol.74, No.6, 1977 : 145) A minority of ophthalmic opticians have always felt that the two halves of their role should be separated and dispensing carried out only by dispensing opticians. This feeling has been expressed by the informally-based Optical Practitioners Standing Committee which is anti-multiple and feels that the remuneration of an ophthalmic optician should be derived solely from fees charged for his professional knowledge and services. The members in no way accept the concept that the ophthalmic optician 'sells glasses'. It is clear from the data that not all their colleagues share this opinion and in terms of Freidson's third set of attitudes, values and orientations there does not seem to be agreement as to the 'special nature of the work', or perhaps over what are and should be the legitimate boundaries of the ophthalmic optician's work.

---

[1] See p.101

A further, but minor comment by comparison, can be made about Johnson's view that there is inherent tension in the professional-client relationship based on the latter's inability to judge the service given. The sample of practising opticians were asked to assess the attitude of most people who came to seek their services; 53.1% said 'trust' and 24.1% 'friendliness' as against only 7.4% who said 'caution' and 0.6% 'suspicion'. The figures, of course, only give the opticians' opinions of the patients' attitudes and the former could be mistaken. Alternatively where tension does exist, it may be felt more by the patient. The data are insufficient to answer these questions conclusively but they are sufficient to question the universality of tension implicit in Johnson's use of the term 'inherent'. Tension does exist according to the opticians but only among a minority of patients.

Professional Career

There have been several definitions of professional career (Hughes 1958, 1959, Wilensky 1964, Slocum 1966, Taylor 1968). The consensus of these is that a career embodies two basic elements - an upward movement of the individual through clearly defined stratified stages within the profession and the establishment of professional norms, expectations and life styles. The latter as mentioned above in discussion of Friedson's three sets of attitudes, values and orientations is closely related to professionalism. Certain consequences flow from these two elements. A career necessarily involves a long-term commitment to the occupation. According to Gross (1958), Orzack (1959), Greenwood (1962), R. & R. Rapaport (1965) and Taylor (1968)

work becomes the central focus of life.

In relating the findings of this thesis to these two elements in turn, it is clear that the number of clearly defined stratified stages within the ophthalmic optical profession is very few. The diagram below (p.308) sets out the main career paths open to today's graduate optician in Britain. The diagram does not attempt exhaustive coverage of the various 'hybrid' careers which would result from changing from one type of practice to another. Its basic aim is to show that, at the most, an ophthalmic optician is likely to pass through five stages, and even then one of the transitions (Multiple employee - group practice employee) can be seen as a lateral rather than an upward movement. At the other extreme some ophthalmic opticians' careers can be confined to two stages i.e. pre-registration student to individual practitioner. Even if the optician enters multiple or group practice the final stage of that particular career path (manager or senior partner) could be reached less than half way through. There seem to be few steps and many soon reach a plateau i.e. optical careers resemble library steps more than an extending ladder. The analogy can clearly cover careers in other professions, the majority of whose members are still in private practice e.g. dentistry, the solicitor's branch of the legal profession, or even G.P.s in the medical profession, although only a third of that profession as a whole is now in private practice.

It is also possible to comment on the long-term occupational commitment alleged to be a necessary concomitant of a professional career. The data included evidence to support this in so far as 75% of the student sample (first and final year together) definitely decided

to study ophthalmic optics by the age of eighteen. Of the final year students 93.5% said they intended to practise but only 49.2% said they thought they would practise for the whole of their working lives; 18.4% said they did not and 27.7% were undecided. However, while 80.3% of the practising opticians said they intended to practise for the whole of their working lives this may have been passive rather than active commitment for only 19.1% possessed further professional qualifications.

This phenomenon is also reflected in the extent to which the career of ophthalmic opticians appears to provide a 'central life interest'[1] for them. Of the sample 28% said their professional career gave them most satisfaction in life but 44.4% said it was family relationships and 10.1% leisure activities. The older the optician the more likely he was to say his career gave him most satisfaction. Further, when asked to react to statements about a hypothetical Mr. H's sixteen hour day, 68.8% said they believed that a man should not let his professional career interfere with family life to such an extent. These findings can be interpreted to mean that opticians are less professionally orientated than Freidson's ideal-typical doctor is assumed to be. Orzack (1959) thought that occupations evolving into professions have the highest work commitment, higher than established ones and presumably much higher than non-professions. Marginal professions had to create an image of professionalism. He also suspected that those in independent practice were more work-oriented. In Orzack's terms, the findings could be interpreted to mean that ophthalmic optics has passed through the marginal stage. Alternatively, it could be that Freidson,

---

[1] A concept developed by Dubin (1956) in relation to manual workers and applied to professionals by Orzack (1959)

Gross et al., have overestimated the commitment of professionals and that similar results would be found in other professions, including the 'ideal type' medical and legal ones.[1] The concept of 'central life interest' itself might be the result of unwary sociologists accepting a profession's definition of the situation uncritically. Alternatively, it may be that the concept of 'central life interest' is an ethnocentric one which has more relevance to the behaviour of professionals in the United States than that of their British counterparts. Only a comparative study of British and American professionals could test this proposition but Child and MacMillan (1972) did find that American business executives typically worked much longer hours than their British counterparts and the latter drew a much sharper line between work and home life. Nevertheless, the data do suggest that the vast majority of the ophthalmic opticians in the sample do share what Morse & Weiss (1955 : 198) describe as the typical middle class view of work i.e. that it means having a purpose, gaining a sense of accomplishment and the ability to express oneself.

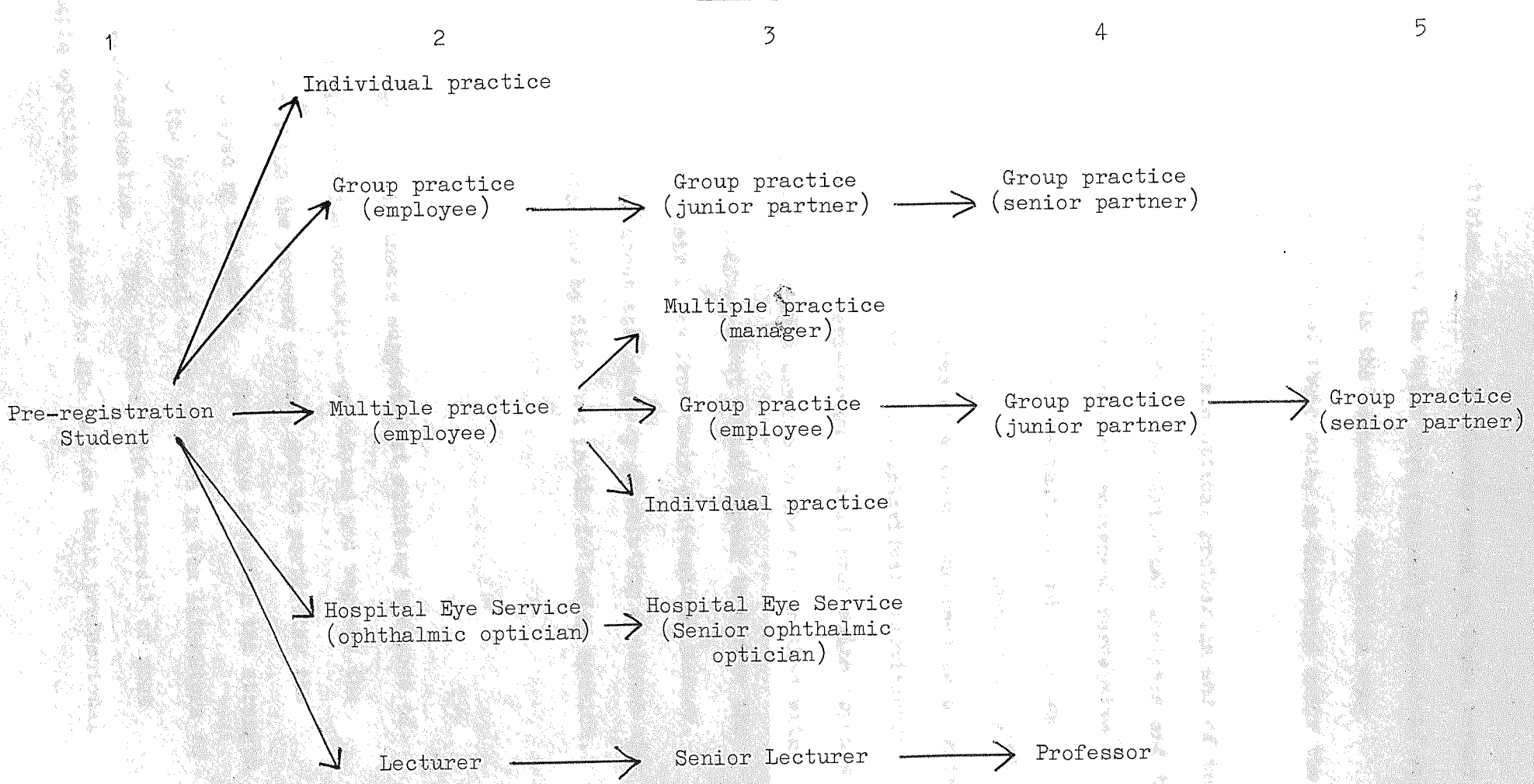
Professional Identity

This concept has already been obliquely referred to in discussion of the nature of the ophthalmic optician's professional role under the heading of professionalism. A phenomenon of relevance here already mentioned in discussion of Hypotheses 5-8 in Chapter Six is the open-ended question on professional values. Some 21.1% of the sample could not or did not say what were the most important professional values in their practice as an ophthalmic optician. The non-response rate rose to 37.3% and 44.4% respectively when they were asked what were the easiest and hardest values to which to adhere. Does this imply an uncertainty about their professional

---

[1] See e.g. D. Leigh: "The Golf-Loving 9 to 5 Doctors": The Guardian, July 20th, 1977 : 15)

MAIN CAREER PATHS OF CONTEMPORARY OPHTHALMIC OPTICIANS



values or simply that opticians do not consciously think in these terms? Secondly, of those who did reply, the value most frequently mentioned was 'integrity'. This perhaps reflects the commercial temptation they associate with the dispensing part of their role, as discussed under the heading of professionalism.

The overall picture of the ophthalmic optical profession and of the individual practitioner which emerges from the historical analysis and the questionnaire surveys is of an occupation which possessed perceptive leaders throughout its process of professionalisation, and which was 'lucky' in the sense that its construction of a professional reality dovetailed sufficiently with the desires of a state concerned to provide increasingly comprehensive health care. The individual practitioner within this state-registered and semi-bureaucratised profession appears to be concerned more with providing a service to the public than with advancing professional knowledge. Most do not appear to derive the greatest satisfaction in their lives from their professional career. This picture raises doubts about the adequacy of existing analyses of professions and these will now be discussed in the following section.

Further Discussion

The findings of this thesis suggest that existing analyses of professionalisation are too occupation-orientated and neglect the social context in which the process occurs, and in particular the increasing role played by the state. They also question the strength of commitment to the professional career assumed in the literature to be part of professionalism. The 'central life interest' of most of the sample opticians was found to lie outside their professional

career. This may be associated with the comparatively recent development of professionalism within the profession and for some, the 'failed doctor' syndrome.[1] Further, the nature of the optician's career does not seem to fit the picture of upward movement through a considerable number of hierarchical stages.

Overall, the findings may illustrate that ophthalmic opticians are not fully professionally orientated to the degree that the ideal-type professions are assumed to be, but this is perhaps not surprising in view of their rapid and recent professionalisation compared with the ideal-type medical profession. An alternative, and perhaps more sociologically meaningful and rewarding interpretation, may be that different occupations professionalise in different ways to different extents in different social contexts and practice situations. It may be that all different 'professions' share is a high degree of autonomy achieved after deliberate action by the occupation's leaders. Such a view implies that not all professionalising occupations are moving towards the ideal-type medical and legal professions (which are themselves still developing and changing). A further implication of such a view is that some occupations will never reach the ideal-typical level, even if they are striving towards it, given fundamental differences in such variables as the historical period in which they professionalised (compare Elliott's concepts of status and occupational professions), the nature of their role and the service they provide, the consequent professional - client relationship and the associated career structure.

The typology set out on p. 313 tries to identify some of these

---

[1] See Chapter Four, pp.143-4 for the number of students who would ideally liked to have studied medicine.

differences and similarities between professions in terms of the patterns and contexts of their professionalisation processes. It shows that a commercial element and the failure to monopolise the services within its area of competence are not unique features of the ophthalmic optical profession. One or both are possible within most of the professions listed. It may even be that the alleged commercialism of opticians is in part the result of the successful projection throughout British society of the 'rival' medical view of opticians and that intrinsically the commercial potentialities of ophthalmic optics are little different from those of other professions.

The typology also shows that while there are similarities between the four types (ideal-type, technological, industrial-commercial and para-medical) in terms of the commercial or illegal potentialities in the professional role, there are more differences that similarities e.g. in the percentages of female practitioners and of practitioners in private practice, the monopolisation of practice in the area of knowledge, in the existence of state or local authority organised services in the field and their impact on the profession. In respect of the last there is an important difference between services organised locally and nationally. The state usually allows far more autonomy of action to the professionals. In higher education in Britain this is exemplified in the comparative positions of the universities and polytechnics. Within the professions the Legal Aid Scheme, which is virtually administered by the Law Society, stands at one extreme of this autonomy-control continuum, and the borough architect's department at the other, where the department is part of the council hierarchy and the architect

an employee. There are also important differences within types e.g. compare the greater autonomy of 'ideal type' solicitors vis-a-vis the Legal Aid Scheme with that of 'ideal type' doctors and the NHS. Another example is that 'para-medical' dentists' actions within the NHS are subject to scrutiny and review by a Dental Estimates Board whose function it is to check on any 'unnecessary' expensive dental treatment. There is no parallel body for the 'para-medical' ophthalmic opticians.

These differences may be attributable in part to the date at which the occupation professionalised (especially to the point of barring the unqualified), and in the case of the percentage of female practitioners, to differences in ascribed sex roles e.g. to welfare in contrast to industry or technology, but overall they reinforce the point that the process of professionalisation of a particular occupation is unique in terms of its historical, social, political, economic and cultural contexts. Lastly, the difference also reflect the success with which the occupation's leaders were able to 'negotiate' within these contexts. If the traits identified by Flexner, Carr-Saunders & Wilson et al., were added the number of differences would be even greater but the main point of this typology is to stress the importance of previously neglected variables. Like all typologies this one is by definition ideal-typical. Of equal significance to the inter-professional differences are the intra-professional variables of the age and sex distributions of a profession's members, the different careers available, and the subjective perspectives of the practitioners. Thus to be able to present a 'typical' picture of the medical profession may be misleading when it is applied to a woman doctor i.e. within this profession which had apparently great autonomy, high prestige and career commitment, there

SIMILARITIES AND DIFFERENCES IN PROCESSES OF PROFESSIONALISATION

Type of Profession	Date of effective bar to Unqualified	% in private practice	% female practitioners	Monopoly of Practice in area of knowledge[1]	Number of Specialisms within Profession	State or local authority services in field	Impact on Profession	Commercial/immoral/ illegal possibilities in professional role
Law - solicitor's branch (ideal type)	1729	86 (1977)[2]	5.2 (1975)[3]	NO - banks, estate agents	Few outside large city centre practices	Legal Aid Scheme	Slight - provides only small part of income for most practitioners	Embezzlement of clients' funds
Medicine (ideal type)	1858	33 (1977)[4]	ca.20 (1977)[5]	YES - except for osteopathy	More than 40	NHS	Considerable - $\frac{1}{2}$ work in NHS hospitals, most of remainder in NHS practice	Profit-orientated abortion clinics, 'cosmetic' operations
Civil Engineering (technological)	1878?	16 (1977)[6]	Less than 1	YES ?	Few	Local Authority Engineers Department	Considerable? Many employed by them?	?
Accountancy (industrial-commercial)	1880 (Chartered Accountants)	28 (1977)[7] (Chartered)	Less than 1 (Chartered)	NO - unqualified especially in small firms	Few	Local Authority Finance Departments	Slight - only small number employed by them?	Embezzlement - effect of computerisation of large firms' accounts
Dentistry (para-medical)	1921	78 (1977)[8]	8 (1964)[9]	YES - except for orthodontrists	Few	NHS	Considerable - vast majority in NHS practice	'Cosmetic' gold fillings, tooth capping.
Architecture (technological)	1938	25 (1960)[10]	4 (1964)[9]	NO - draughtsmen, builders	Few outside large city centre practices?	Local Authority Architects Departments	Considerable - majority employed by them?	Bulson !
Ophthalmic Optics (para-medical)	1961	ca.80 (1977)[11]	14 (1976)[12]	NO - dispensing opticians and ophthalmic medical practitioners	Few	NHS	Important - vest majority practise in NHS but ability to dispense uncontrolled 'hybrid' appliance enables income maintenance	Dispensing of 'unnecessary' optical appliances

[1] As defined by the profession itself.

[2] Law Society Annual Report 1976

[3] Open University D101 Summer School Notes, 1976, Table 21 : 28

[4] A.B. Shrank : How Many Medical Graduates is Enough? The Times, October 4th, 1977 : 18

[5] On Register - not all practise

[6] New Civil Engineer, February 24th, 1977 : 47

[7] Accountancy Age, July 1977 : 8

[8] From figures supplied by Librarian of British Dental Council

[9] The Jobs Women Get, The Observer, October 4th, 1964

[10] Royal Commission on Doctors' and Dentists' Remuneration, Cmd. 939, 1960

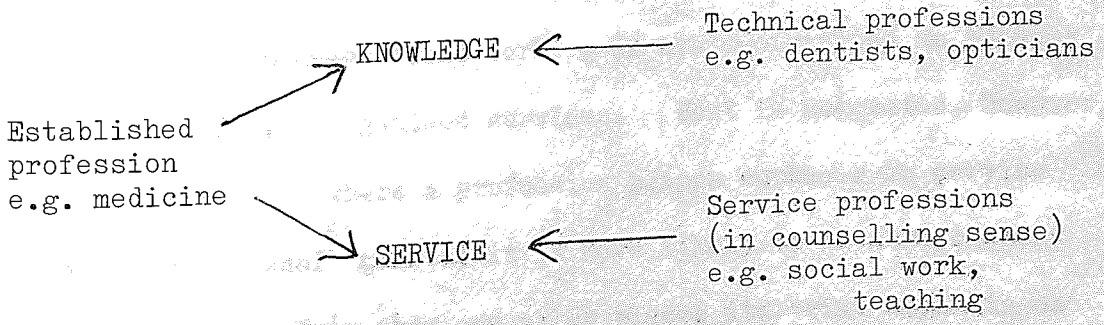
[11] Author's estimate from General Optical Council figures

[12] From GOC figures

will be segments enjoying less autonomy (hospital doctors), lower prestige (doctors running private abortion clinics?) and displaying lower career commitment (some women doctors?)

The typology is one way of expressing the differences between various state registered professions and draws attention to an aspect of the sociology of the professions that was not considered at the outset of this research. This was the uncritical acceptance of the assumption of a professional continuum ranging from the one extreme of an occupation which had not commenced its process of professionalisation to the 'ideal type' professions of law and medicine at the other. What the author now realises is that the idea of such a professional continuum is itself problematic and too simplistic.

The study of the ophthalmic optical profession has also brought out the two important emphases of 'knowledge' and 'service' and the relatively greater importance of the latter to most individual ophthalmic opticians. It may be that these two emphases give rise to two continua which are of differential importance in various 'professions'. The model below tries to express these different relationships.



In the established professions the two emphases of knowledge and service are of equal importance. In the technical professions knowledge is more important than service, in the service professions the opposite is the case. The notion of service here is in the sense of counselling (Halmos 1970), or treating the 'whole person'. Indeterminacy (Jamous & Peloille 1970) exists in the established professions because they do this. The model does not imply that the relative importance of the two emphases cannot change within a profession. In teaching both counselling (particularly in large comprehensive schools) and the movement towards an all graduate profession[1] are developments of the last decade and it remains to be seen which is the more significant. An all graduate profession and more subject orientation could move teaching towards greater emphasis on knowledge. Counselling means a movement towards the service emphasis - treating the 'whole child'.

The crucial variable both in this model and in the preceding typology may be the relationship of a profession with the state (and its attendant bureaucracy). This develops the idea of state mediation suggested by Johnson (1972). The state has guaranteed a clientele to doctors, dentists and opticians in Britain. In general, it has given more autonomy to professionals working in state-organised as opposed to local authority - organised services. What is suggested, however, in the model is that where a profession places emphasis on service (counselling the whole person) it is more likely to be more closely controlled by the state than one which places its prime emphasis on

---

[1] In sociological terms teaching is a semi-profession but the example illustrates one relationship between knowledge and service in an occupation

knowledge or technical competence. Both the technical and the service emphases can be distinguished in the concept of the Welfare State. In macro-sociological terms the technical and service professions can be seen as two forms of semi-profession, the technical professions being less controlled. In the model the state itself is seen as problematic. It is important to establish who are the key decision-makers and reality constructors at any given time i.e. who form the 'dominant coalition'? (Child 1972a).

The model may not answer all the questions relating to changes in occupations' level of autonomy but it is valuable in focussing on the macro-sociological parameters within which occupations, be they 'professions', 'semi-professions' or 'non-professions', have to negotiate in a twentieth century British context where active mediation by the state takes place. Whether this model is ethnocentric is also problematic. The present research does not allow the drawing of any conclusions on this point. Whether the model is capable of empirical validation is a matter for further research, which is discussed in the next section.

Applied to the ophthalmic optician this model may have paradoxical consequences. Although the survey data showed that most of the practising opticians stressed service to the public, the latter may see them as a technical profession i.e. as suppliers of instrumental optical appliances. The nearest the ophthalmic optician may be able to get to the service or counselling role (and so, like the established professions, stress both knowledge and service equally) is via a discussion with the patient of the cosmetic or fashion element in the dispensing of optical appliances. The paradox is that this may increase

accusations of commercialism and, in turn, lead to greater control by the state i.e. a different relationship involving less autonomy for the profession.

Suggestions for Further Research

This section is divided into two parts. The first relates to work on occupations in general, the second to further research on opticians in particular. The findings of the historical analysis of the development of the ophthalmic optical profession and of the surveys of student and practising ophthalmic opticians and the subsequent discussion make it clear that adequate studies of occupations in the future must be much more wide ranging. Leaving aside the early non-sociological work in the field (S. & B. Webb 1917, Carr-Saunders & Wilson 1933) existing sociological literature is deficient in one or more respects. Parsons (1939, 1951, 1968) is necessarily structural-functionalist in his approach as are other American writers (Caplow 1954, Barber 1963). Work which is more adequately theoretically orientated (Johnson 1972, Elliott 1972) lacks a firm empirical base.

Recent work which focuses on occupations in general fails to adequately discuss the role of the state. Hall (1969 : 370-382) includes a chapter on 'Occupations and the Political System' but this is concerned only with the nature and extent of participation by various occupational groups as office seekers and members of political movements. Krause (1971 : 351-3) raises the question of how the power of the state and the power elite of society intertwines with or differs from the

power of organised occupational groups. He suggests an inverse relationship between state power and occupational group power but goes no farther. Perhaps the most valuable point he makes, however, is to argue that there is a need to combine the sociology of occupations with such fields as political sociology and the sociology of knowledge.

> "A political sociology which does not treat the political action of occupational groups is risking irrelevance, whereas an apolitical sociology of occupations and professions misses what has always been a major dimension of these groups' actions."
>
> (Krause 1971 : 353)

Thus an adequate approach to the sociology of occupations must discuss the role of the state and also adhere to Durkheim's precept that while empiricism without theory is sterile, so equally is theory without accompanying empirical work. Such a scheme for the analysis of occupations might be as follows:

Theoretical Approach

The complementary use of the functionalist, social action and social phenomenological approaches. The functionalist approach would emphasise the degree to which an occupation's activities are of functional value to different groups in society. The social action approach would elicit the means and ends available to and used by the occupation's leaders and members, and the role played by power in determining whose construction of reality dominates in a given situation and time. It would also take account of the changing strength of groups both within the occupation and those negotiating directly with the occupation in question. The social phenomenological approach emphasises the way in

which the occupation's members construct their realities around their everyday lives, within the parameters of choice set by decision-makers both within the occupation and by other groups in society. Choices are also limited by the success with which occupational decision-makers can articulate claims for the functionality of their occupation and the 'necessary' conditions for its performance such as independence of professional judgment. Such a theoretical approach would give equal emphasis to the objective and subjective dimensions of occupational reality.

Within this theoretical framework the main areas of investigation might include:

1. Structural Element

   (a) Specialisation - the nature of the occupation's activities

   (b) Centralisation - the nature of the locus of authority in regard to the occupation and existing sanctions on members

   (c) Standardisation - the degree of control over non-occupational behaviour

2. Contextual Element

   (a) the changing nature of the occupational group over time

   (b) the size of the occupational group - expanding, static, contracting.

   (c) the resources of the occupational group

   (d) group relationships within the occupation

3. Activity Element

   (a) the goals of the occupational group or groups

   (b) the role of individual members in occupational change

4. Educational Element

   (a) the nature of the occupational intelligence requirements

   (b) the basis and nature of any area of knowledge to which the occupation lays claim

(c) the nature of any institutionalised educational process

(d) the length of training

(e) the cost of training

5. Ideological Element

(a) assumptions about the degree of personality involvement

(b) the nature and degree of occupational identity

(c) the nature and degree of occupational culture

(d) the status of the occupation in society

(e) subjective status perceptions of the occupation's members

(f) perceptions of the occupation held by sections of the 'public' e.g. by class, sex, age, education

(g) socialisation and/or initiation processes of the occupation

6. Behaviourial Element

(a) codes of occupational conduct, formal and informal

(b) procedures for evaluation of merit of occupational behaviour by peers, employers, the state, customers, clients, patients, etc.

7. Environmental Element

(a) actions of competing occupations and groups and their attitude to the occupation

(b) events occurring independent of the actions of the occupation's members which affect the occupation in any way, especially the actions of the state.

(c) economic and cultural changes affecting the market for the occupation's product or services.

Due acknowledgement is given to Harries-Jenkins (1970) for the base of this scheme is his, but this modified and extended version tries to give equal weight to the objective and subjective dimensions of changing occupational reality and to avoid taking the occupation's own projection of reality for granted, while putting his 'elements' into a theoretical framework. As such the scheme might be applied to any occupation and

provide the basis for constructing more refined typologies of occupations.

Further Research on the Optical Profession

For reasons outlined in Chapter Three[1] it was felt that the survey-type approach was justified in the preliminary analysis of a virgin area within the sociology of the professions, the results of which are set out in this thesis. The approach, however, has both methodological and, in consequence, theoretical limitations. As stated in the introduction, the underlying theoretical approaches were those of social pheomenology and social action. In the empirical work, the social action approach was applied to the analysis of the historical development of ophthalmic optics and the social phenomenological approach underlay the questionnaire surveys of students and practising opticians.

Together they can claim to be the basis of a fuller understanding of group behaviour than structural-functionalism, but phenomenology perhaps suffers particularly from the danger that the sociologist might impose his meanings on to actors in the social situation under investigation. Despite the conscious attempt to avoid this in the structuring of questions in the surveys, it is still problematic whether the typifications outlined in the conclusions above are those of the opticians and students or the author's interpretations of these typifications.

---

[1] See Chapter Three, p.106

For similar reasons, not all the questions raised in the introduction were satisfactorily answered, in particular the possibility of a commercial orientation among some respondents. The suspicion is that use of questionnaires may have elicited socially desirable answers which did not accurately reflect the actual values and conduct of opticians. Clearly, another survey based on the interviewing technique rather than that of the questionnaire would reduce but not entirely remove this suspicion and result in a fuller understanding of opticians' perspectives. Any interviewing programme would need to be stratified (rather than, as this survey, random) according to the variables of sex, age, type of practice, which were found to be the bases of significant differences in concepts of professionalism in the survey reported in Chapter Six. The validity of the findings would be enhanced if it was confined to a particular geographical area of the country, in an effort to obtain a total coverage of opticians in that area. The phenomenon of non-response which inevitably occurs with a questionnaire survey, however well it is 'explained', always leaves the niggling suspicion that the non-respondents were different in some vital sociological respect e.g. were the opticians who did not respond more commercially orientated? The interviewing of all of a stratified sample within a given area would remove this suspicion.

Also this research has concentrated on the opticians themselves. A more complete understanding of the profession would result, as mentioned in the Introduction,[1] from consideration of the perception of the profession possessed by the public. Millerson (1964) says that a profession must be subjectively and objectively recognised as such.

---

[1] See Chapter One, p.37

Newspaper and magazine articles and television programme items on opticians suggest that most people expect to be 'sold glasses' when they visit opticians, yet Walker (1976) found that 68% of his small sample classified 'optician'[1] as a new profession and 7% as an old-established profession i.e. a total of 75%. This apparent inconsistency needs to be further investigated.

The research reported in this thesis relates entirely to ophthalmic optics. Further research would need to investigate dispensing opticians, who are sometimes employed by ophthalmic opticians (and occasionally vice versa) and their relationship to ophthalmic opticians and ophthalmic medical practitioners.

The initial emphasis of the research was on the professional values of ophthalmic opticians but during the course of the research this changed and the eventual focus was on the macro-sociological context of ophthalmic optics. Accordingly, further research would also benefit from a comparative, cross-cultural dimension. European opticians are, with the exception of those in Eire, still at the master craftsman, shopkeeper stage of development and the British optical bodies, like those of other professions, are most worried about the possibility of professional personnel from the other EEC countries being able to practise in Britain under Articles 52-58 of the Treaty of Rome. On the other hand, opticians in Eire and optometrists in Canada and the United States have gone farther than their British counterparts in terms of practising in non-shop premises and abolishing window displays. British opticians are therefore in an intermediate position and it is important to understand the macro-sociological factors underlying these differences.

[1] His classification did not distinguish between ophthalmic and dispensing opticians.

Important among these are the relationships between opticians and optometrists and the medical profession. One reason for American optometrists being able to practise in apparently more professional premises may be that there was and is less economic competition between the two professions since there are few general medical practitioners, most doctors in America being specialists. The reasons for this are not entirely clear, but it is thought to be related to the high cost of medical training; becoming a specialist enables doctors to pay back quickly the loans they almost inevitably require to complete their training.

Equally important is the relationship of opticians or optometrists to the state. In the American context, the profession has to negotiate with both federal and state governments, which have been less active 'mediators' (Johnson 1972) in comparison with the central government in Britain. This relationship with the state may be the key variable in the understanding of professions in the late twentieth century industrial society context. Finally, however, this has to be considered in the light of Johnson's warning that the concept of 'profession' may be but an Anglo-Saxon construct which has little relevance in, for example, socialist industrial societies let alone pre-industrial ones (Fores & Glover 1978).

APPENDIX A

SAMPLE COPIES OF LETTERS OF INTRODUCTION

AND QUESTIONNAIRE

First Year Survey

Letter of Introduction

And Questionnaire

THE UNIVERSITY
OF ASTON
MANAGEMENT CENTRE

Research Unit

Aston University

October 1974

Dear Ophthalmic Optics Student

The following questionnaire is part of a study of the ophthalmic optical profession. It refers specifically to the types of persons who choose to study ophthalmic optics and the reasons for their choice. Your help in completing the questionnaire will aid this study considerably.

Please bear the following points in mind in relation to the questionnaire:

1. Your individual identity is NOT asked for. The information you give will be treated with the utmost confidentiality and will be seen by no one but myself.

2. It is NOT a test; there are no 'right' or 'wrong' answers. The questions seek some factual information and your views on a number of matters.

3. Please be frank and honest. Where an opinion is asked for, it is your actual opinion that is required, not what you think it should be 'in public'. Therefore please complete the questionnaire by yourself without consulting your friends.

4. Read every question carefully before answering. Please answer every question as fully as the instructions require.

When you have completed the questionnaire, you will experience a great feeling of virtue and have my sincere thanks for your co-operation.

Yours sincerely

A G Fielding

1. How old were you when you first thought of studying ophthalmic optics? _____

2. How old were you when you definitely decided to study ophthalmic optics? _____

3. (a) Before definitely deciding on ophthalmic optics did you seriously consider any other occupation(s) or profession(s)?

Yes _____

No _____

If YES, which occupation(s) or profession(s)?

_____

(b) Which factor(s) determined your eventual choice of ophthalmic optics?

_____

_____

(c) How important was each of the following factors in determining your eventual choice of ophthalmic optics?

Please answer for EACH factor

	Very important	Fairly important	Of some importance	Of little importance	Of no importance
Dealing directly with people	___	___	___	___	___
Being able to help people	___	___	___	___	___
The status of an optician	___	___	___	___	___
Work involving great skill and knowledge	___	___	___	___	___
Being my own boss	___	___	___	___	___
Being able to earn a good income	___	___	___	___	___
Being unable to enter my first choice occupation i.e._____	___	___	___	___	___
Other factors (please specify)					
_____	___	___	___	___	___
_____	___	___	___	___	___
_____	___	___	___	___	___

4. If you could choose to study ANY subject now, what would you choose? _____

5. (a) How influential was each of the following in making your decision to study ophthalmic optics? Please answer for EACH

	Very influential	Fairly influential	Of some influence	Of little influence	Of no influence
i. Your mother	___	___	___	___	___
ii. Your father	___	___	___	___	___
iii. Other relatives	___	___	___	___	___
iv. Friends not in optics	___	___	___	___	___
v. Opticians you know personally	___	___	___	___	___
vi. Opticians you have heard or read about	___	___	___	___	___
vii. Ophthalmic optics students you know	___	___	___	___	___
viii. Schoolteachers	___	___	___	___	___
ix. Books, films, pamphlets (give titles)					
_____	___	___	___	___	___
_____	___	___	___	___	___
x. Other influences (please specify)					
_____	___	___	___	___	___
_____	___	___	___	___	___

(b) Which of these influences was the MOST important in determining your decision to study ophthalmic optics?

Give the number from 5(a) _____

6. Which one of the following statements BEST describes the way you feel about a career in ophthalmic optics? Tick ONE

It's the only career that could really satisfy me ___

It's one of several careers which I could find equally satisfying ___

It's satisfying but I could have found others more satisfying ___

It's a career I decided upon without considering whether I would find it satisfying ___

I haven't really thought about a career in ophthalmic optics yet ___

7. (a) To what extent do you think you will like the following consequences of being an ophthalmic optician? Please answer for EACH

	Very much	Quite a lot	To some extent	Only a little	Not at all
i. Being able to deal directly with people	___	___	___	___	___
ii. Being able to help people	___	___	___	___	___
iii. The status an optician enjoys	___	___	___	___	___
iv. Being my own boss	___	___	___	___	___
v. Doing work that requires great skill and knowledge	___	___	___	___	___
vi. Being sure of earning a good income	___	___	___	___	___
vii. Having intelligent people as colleagues	___	___	___	___	___
viii. Other things (please specify)					
_____	___	___	___	___	___
_____	___	___	___	___	___

(b) Which ONE of the things in 7(a) do you think you will like BEST?

Give the number from 7(a) _____

8. The essential task of the doctor is to heal, of the lawyer to serve justice. In similar terms, how would you describe the essential task of the ophthalmic optician?

_____

_____

9. Would you have still chosen ophthalmic optics if the following conditions applied? Please answer one for EACH

	Yes	No	Don't know
A lower level of income	___	___	___
Lower social prestige	___	___	___
Less opportunity to meet people	___	___	___
Less opportunity to be one's own boss	___	___	___
Less intrinsic interest in the work	___	___	___

10. (a) In your opinion, how well does each of the following phrases describe the ophthalmic optical profession? Please answer for EACH

	A very good description	A good description	A fair description	A poor description	A very poor description
i. A profession which has high standing	___	___	___	___	___
ii. A profession of service to the community	___	___	___	___	___
iii. A profession which is secure and lucrative	___	___	___	___	___
iv. A profession which helps people directly	___	___	___	___	___
v. A profession requiring harder work than others	___	___	___	___	___

(b) In your opinion, which ONE of the phrases above BEST describes the ophthalmic optical profession?

Give the number from 10(a) _____

11. How would you classify the following occupations? Tick the appropriate column for EACH occupation

	An old established profession	A new professional occupation	Developing into a professional occupation	Not a professional occupation at present	Unlikely to become a professional occupation
Doctor	___	___	___	___	___
Dental surgeon	___	___	___	___	___
Engineer	___	___	___	___	___
Ophthalmic optician	___	___	___	___	___
Schoolteacher	___	___	___	___	___
Social worker	___	___	___	___	___
Solicitor	___	___	___	___	___

12. In your opinion, how much prestige do the following groups award the ophthalmic optical profession? Tick the appropriate column for each group.

	More than it merits	As much as it merits	Not as much as it merits	Don't know
Other professionals	___	___	___	___
The community at large	___	___	___	___
Those to whom the ophthalmic optician gives his/her services	___	___	___	___

13. (a) In your opinion, how important is each of the following characteristics in making a good ophthalmic optician? Tick the appropriate column for each characteristic

	Very important	Fairly important	Of some importance	Of little importance	Of no importance
i. Good appearance	___	___	___	___	___
ii. Warm and pleasing personality	___	___	___	___	___
iii. Dedication to ophthalmic optics	___	___	___	___	___
iv. High intelligence	___	___	___	___	___
v. Ability to maximise income	___	___	___	___	___
vi. Scientific curiosity	___	___	___	___	___
vii. Integrity	___	___	___	___	___
viii. Ability to think in an organised way	___	___	___	___	___
ix. Research ability	___	___	___	___	___
x. Ability to get along with people	___	___	___	___	___
xi. Recognition of one's limitations	___	___	___	___	___
xii. Getting real enjoyment out of ophthalmic optics	___	___	___	___	___
xiii. Other characteristics (please specify)					
_____	___	___	___	___	___
_____	___	___	___	___	___

(b) In your opinion, which TWO of these characteristics are most important in making a good ophthalmic optician?

Give the relevant numbers from 13(a) _____ and _____

(c) In your opinion, which TWO of these are more important to ophthalmic optics than to other professions?

Give the relevant numbers from 13(a) _____ and _____

14. How important is each of the following types of social behaviour to the success of an ophthalmic optician? Tick the appropriate column for each type.

	Very important	Fairly important	Of some importance	Of little importance	Of no importance
Maintaining a restrained and dignified manner	___	___	___	___	___
Wearing conservative clothing	___	___	___	___	___
Participating in community affairs	___	___	___	___	___
Being a good conversationalist	___	___	___	___	___
Maintaining an air of confidence (even when he/she is not feeling confident)	___	___	___	___	___
Maintaining a detached attitude to those to whom you give a service	___	___	___	___	___

15. In your opinion, how closely does each of the relationships below approximate to that between an ophthalmic optician and the person who comes to seek his/her services? (Compare the relationship rather than the occupation)

	A close similarity	Fairly similar	To some extent similar	Little similarity	Not similar at all
Parent and child	___	___	___	___	___
Doctor and patient	___	___	___	___	___
Lawyer and client	___	___	___	___	___
Teacher and pupil	___	___	___	___	___
Marriage counsellor and client	___	___	___	___	___
Office manager and clerk	___	___	___	___	___
Shopkeeper and customer	___	___	___	___	___
Dentist and patient	___	___	___	___	___

FINAL YEAR SURVEY

Letter of Introduction

and Questionnaire

The first six pages of the final year questionnaire were identical to those in the first year one. The background items pages were also identical but came after the extra questions in the final year questionnaire and were re-numbered

Thus the sample copy of the final year questionnaire on the next page starts, after the letter of introduction, at page 335 to avoid unnecessary repetition.

THE UNIVERSITY
OF ASTON
MANAGEMENT CENTRE

Research Unit

Aston University

March 1976

Dear Ophthalmic Optics Student

The following questionnaire is part of a study of the ophthalmic optical profession. It refers specifically to the types of persons who choose to study ophthalmic optics, the reasons for their choice, and the sorts of careers in optics they envisage. Your help in completing this questionnaire will aid this study considerably.

Please bear the following points in mind in relation to the questionnaire:

1. Your individual identity is NOT asked for. The information you give will be treated with the utmost confidentiality and will be seen by no one but myself.

2. It is NOT a test; there are no 'right' or 'wrong' answers. The questions seek some factual information and your views on a number of matters.

3. Please be frank and honest. Where an opinion is asked for, it is your actual opinion that is required, not what you think it should be 'in public'. Therefore, please complete the questionnaire by yourself without consulting your friends.

4. Read every question carefully before answering. Please answer every question as fully as the instructions require.

When you have completed the questionnaire, you will experience a great feeling of virtue and have my sincere thanks for your co-operation.

Yours sincerely

A G Fielding

16. Below are several statements which reflect differing opinions about the relationship of income and service. With which of the statements do you most CLOSELY agree? Tick ONE.

(1) Service to the public is entirely separate from any consideration of income ___

(2) Although service to the public is more important, income should be high enough to enable an ophthalmic optician to live without financial worry ___

(3) Income from ophthalmic optics should be high enough to enable an ophthalmic optician to live reasonably comfortably but, as service to the public is the more important consideration, it need not be as high as in other professions ___

(4) Income should be distinct from considerations of service to the public, and should at least approximate to that of other professions ___

(5) Income of ophthalmic opticians should be on a level with that of other professions, and be unrelated to any consideration of service to the public ___

17. Mr H is in his middle 40s and has had a successful career in optical practice. In the morning he sees his patients at his town practice; in the afternoon he visits factories to practise industrial optics; most evenings he spends some time working on papers for ophthalmic journals and meetings. All in all, he often works a sixteen hour day. What is your reaction to Mr H's day? Please tick ONE

Admiration for the full professional life Mr H leads ___

Doubt that I could keep up a pace like that ___

A strong conviction that a man should not let his professional career interfere with his family life to such an extent ___

Doubt that a man who divided himself in so many directions would do justice to any of his activities ___

A feeling of pride that I am on my way to becoming a member of a profession that includes people like Mr H ___

A feeling of deep regret that the demands of the profession leave ophthalmic opticians so little time for their personal life ___

Another reaction (please specify):

_____

_____ ___

18. (a) The various specialisms within ophthalmic optics provide different opportunities and correspond with different interests and talents among opticians. In which ONE of the following are you MOST interested?

Contact lenses ___

General optical practice ___

Geriatric optics ___

Hospital eye service ___

Industrial optics ___

Orthoptics ___

Paediatric optics ___

Subnormal vision ___

Another specialism (please specify):

_____ ___

(b) Which of the following statements comes nearest to describing the reason for your choice in 18(a)? Tick the relevant statement

(1) A field where one can establish one's own hours of work ___

(2) A field in which patients are highly appreciative of what is done for them ___

(3) A field where refraction problems are especially complex ___

(4) A field where relationships with colleagues in the same specialism are particularly rewarding ___

(5) A field where one is assured of a good income ___

(6) A field which represents opportunities for knowing patients well ___

(7) A field which has high prestige within the profession ___

(8) A field which offers good career opportunities ___

(9) A field in which there are good opportunities to conduct studies of one's own ___

(10) None of these ___

My reasons are: _____

_____

19. How much have you thought about the kind of career you would like to have? Tick ONE

A great deal ___

A fair amount ___

To some extent ___

Only a little ___

Not at all ___

20. (a) Do you intend to practise as an ophthalmic optician?

Yes ___

No ___

Don't know ___

(b) If YES, do you think you will practise as an ophthalmic optician for the whole of your working life?

Yes ___

No ___

Don't know ___

(c) If NO, what do you intend to do after completing your degree, and why?

_____

_____

IF YOU HAVE ANSWERED 'NO' TO QUESTION 20(a), GO STRAIGHT TO QUESTION 27

21. (a) In what sort of practice situation would you MOST like to spend your pre-registration year?

Tick ONE

- Group private practice ___
- Hospital eye service ___
- Individual private practice ___
- Public company 'multiple' practice ___
- Elsewhere (please specify)

_____ ___

- Undecided ___

If UNDECIDED, go straight to question 22

(b) Which of the following factors is the MOST important reason for your choice in 21(a)? Tick ONE

(1) Gives superior opportunities for dealing with a wide range of patients ___

(2) Means that colleague support and advice is available if necessary ___

(3) Salaries and conditions are better ___

(4) Complexity of refraction problems ___

(5) Convenient practice/branch near my home ___

(6) The choice would enhance my chances of successfully completing my Part II professional examination ___

(7) Opportunity to practise additional techniques, e.g., contact lenses, tonometry ___

(8) Well-equipped type of practice containing, for example, slit lamps, sophisticated visual field equipment, etc. ___

(9) Might provide good opportunities for the future, e.g. partnership ___

(10) Another reason (please specify)

_____ ___

22. (a) In which of the following situations would you MOST like eventually to practise? Tick ONE

Group private practice ___

Hospital eye service ___

Individual private practice ___

Locum practice ___

Peripatetic contact lens fitting ___

Public company 'multiple' practice ___

Elsewhere (please specify)

_____ ___

Undecided ___

If UNDECIDED, go straight on to 23

(b) What do you see as the advantage of the type of practice you have chosen in 22(a)? Tick as MANY AS APPLY

(1) The status it affords ___

(2) The degree of independence ___

(3) The level of income possible ___

(4) The interesting clientele ___

(5) Other advantages (please specify)

_____ ___

(c) Which ONE of these do you consider the MOST important?

Give the relevant number from 22(b) _____

23. (a) In which type of practice situation would you LEAST like eventually to practise? Tick ONE

Group private practice ___

Hospital eye service ___

Individual private practice ___

Locum practice ___

Peripatetic contact lens fitting ___

Public company 'multiple' practice ___

Elsewhere (please specify)

_____ ___

Undecided ___

If UNDECIDED, go straight on to 24

(b) What do you see as the disadvantages of the type of practice you have chosen in 23(a)? Tick as MANY AS APPLY

(1) The lack of status it affords ___

(2) The routine nature of the work ___

(3) The fact that one is not one's own boss ___

(4) The lack of variety of patients ___

(5) The commercial pressure present ___

(6) The low income ___

(7) Other disadvantages (please specify)

_____ ___

(c) Which ONE of these do you consider the MOST important?

Give the number from 23(b) _____

24. In what sort of area would you MOST like to practise when established? Tick ONE

In a large city centre ___

In an industrial town ___

In a rural area or town ___

In a residential suburb ___

In a working class area ___

In another area (please specify)

_____ ___

Undecided ___

25. How much do you expect to earn as an established ophthalmic optician when you are 35? Tick the appropriate category.

ASSUME PRESENT SALARY LEVELS - i.e., DON'T ALLOW FOR INFLATION

Less than £2,000 p.a. ___

£2,000 - 2,999 p.a. ___

£3,000 - 3,999 p.a. ___

£4,000 - 4,999 p.a. ___

£5,000 - 5,999 p.a. ___

£6,000 - 6,999 p.a. ___

£7,000 - 7,999 p.a. ___

£8,000 - 8,999 p.a. ___

£9,000 - 9,999 p.a. ___

More than £10,000 p.a. ___

26. (a) When you are registered and practising as an ophthalmic optician, on what type of professional activity would you PREFER to spend most of your working time? Tick ONE

General optical practice ___

Part-time teaching ___

Research ___

Specialist practice ___

Something else (please specify)

_____ ___

(b) Irrespective of your choice in 26(a), on what type of professional activity do you EXPECT to spend most of your working time?

General optical practice ___

Part-time teaching ___

Research ___

Specialist practice ___

Something else (please specify)

_____ ___

27. In the years after you have completed your degree, to what extent do you expect to continue your optical education by each of the following methods? Tick the appropriate column for each.

		Frequently	Occasionally	Never	Uncertain
(1)	Reading optical textbooks	___	___	___	___
(2)	Reading optical journals	___	___	___	___
(3)	Attending local optical association meetings	___	___	___	___
(4)	Attending refresher courses	___	___	___	___
(5)	Attending conferences	___	___	___	___
(6)	Research activities while in practice	___	___	___	___
(7)	Taking further optical qualifications	___	___	___	___
(8)	Teaching part-time in a university ophthalmic optics department	___	___	___	___
(9)	Teaching full-time in a university ophthalmic optics department	___	___	___	___
(10)	Examining for professional bodies	___	___	___	___

28. What TWO things in the list below

(i) do you expect will give YOU the most satisfaction in your life?
(ii) give OPTICIANS IN PRACTICE the most satisfaction in their lives?

Please tick ONE item in each column.	Most satisfying to you	Next most satisfying to you	Most satisfying to opticians	Next most satisfying to opticians
Working towards international understanding	___	___	___	___
Leisure-time activities	___	___	___	___
Professional career	___	___	___	___
Participating in community affairs	___	___	___	___
Family relationships	___	___	___	___
Religious beliefs	___	___	___	___
Something else (please specify) _____	___	___	___	___

29. Compared with other students in your year, how do you think you stand in each of the following respects? (Assign yourself 1 to 7 points for each item according to the scoring system set out below.)

1 = very far below average
2 = considerably below average
3 = somewhat below average
4 = about average
5 = somewhat above average
6 = considerably above average
7 = very far above average

		Score
(1)	Ability to memorise details	___
(2)	Ability to cope with theoretical problems	___
(3)	Ability to cope with practical problems	___
(4)	Interest in politics and world affairs	___
(5)	Interest in patients' optical problems	___
(6)	Manual dexterity (with tools, equipment, etc)	___
(7)	Desire to help people	___
(8)	Knowledge of optical science	___
(9)	Ability to remain relaxed, rather than over-tense and nervous, about your work	___
(10)	Getting the most out of your degree course	___
(11)	Ability to get along with departmental staff	___
(12)	Readiness to assume responsibility	___
(13)	Ability to get good marks or grades	___
(14)	Ability to concentrate on your studies to the exclusion of everything when necessary	___
(15)	Interest in professional matters	___

30. Compared with ophthalmic opticians now practising, how well do you expect to do in the following respects when you start to practise? (Assign yourself 1 to 7 points according to the scoring system set out below.)

1 = very far below average
2 = considerably below average
3 = somewhat below average
4 = about average
5 = somewhat above average
6 = considerably above average
7 = very far above average

		Score
(1)	Advancing optical knowledge	____
(2)	Inspiring confidence in your patients	____
(3)	Making a good income	____
(4)	Keeping abreast of new developments in ophthalmic optics	____
(5)	Helping to further raise the professional standards of ophthalmic optics	____
(6)	Providing equally good care for all your patients	____
(7)	Willingness to try new optical techniques	____
(8)	Participating in national optical organisations	____
(9)	Recognising your own limitations as an ophthalmic optician	____
(10)	Developing your own techniques	____
(11)	Ability to remain sufficiently detached from patients to be able to perform your professional tasks	____
(12)	Getting along with receptionists and other optical personnel	____
(13)	Willingness to have your private life interrupted by patients' needs	____
(14)	Respecting the dignity of patients as individuals	____
(15)	Being considerate of your patients' economic means	____

BACKGROUND ITEMS

This information will be used to compare your answers with those of others

1. What is your sex?

Female ___

Male ___

2. In what year were you born? _____

3. (a) In what sort of area did you grow up?
Please tick the appropriate category(ies)

Inner city ___

Urban ___

Suburban ___

Country town ___

Rural ___

Other (please specify)

_____

(b) In which of the following regions and/or countries did you receive your education after the age of 11?
Please tick the appropriate category(ies)

Northern ___

Yorkshire and Humberside ___

North West ___

East Midlands ___

West Midlands ___

London & South East ___

South West ___

East Anglia ___

Wales ___

Scotland ___

Northern Ireland ___

Outside the United Kingdom
(please say where) _____

4. What type(s) of school did you attend after the age of 11?
Please tick the relevant type(s)

State:

Central ___

Comprehensive ___

Direct grant grammar ___

Local authority grammar ___

Secondary modern ___

Secondary technical ___

Non-state:

Private (independent) ___

Public ___

Other (please specify)

_____ ___

5. Before commencing your ophthalmic optics degree course, did you work in or start training for any other occupation(s) or profession(s)?

Yes ___

No ___

If YES, which occupation(s) or profession(s)

_____

6. Could you give the following information relating to your father's occupation (i) when you were born, (ii) when you started your degree course? If your father is not alive or is retired, please give the information relating to his last occupation.

		When you were born	When you started your degree course
(a)	in which industry or occupation did/does he work?	_____	_____
(b)	can you describe the actual job he did/does? e.g. owner of a small grocer's shop, managing director of an engineering works employing 250 people, 'bus driver.	_____	_____
(c)	what position or title did/does he hold? e.g. chargehand, director, foreman, labourer, manager, salesman, self-employed professional, skilled tradesman	_____	_____

7. (a) What is your religion and/or denomination? _____

(b) Do you consider yourself to be a practising member of your faith?

THANK YOU FOR YOUR HELP AND CO-OPERATION

PRACTISING OPTICIANS SURVEY

Letters of Introduction

and Questionnaire

THE UNIVERSITY
OF ASTON
MANAGEMENT CENTRE

March 1976

Aston University

MAIN SAMPLE LETTER OF INTRODUCTION

Dear

The purpose of this letter is to ask for your help and participation in a survey of the practice of ophthalmic optics. I believe this survey which seeks to study the values and behaviour of practising ophthalmic opticians, will be of interest and importance to the profession and, for this reason, I have already received a great deal of help from leading members of the professional associations.

I am not an optician but I am only too aware that over the years many individuals and groups outside the ophthalmic optical profession have made misleading, prejudiced or simply untrue allegations as to the nature of the professional values and behaviour of ophthalmic opticians. These have usually lacked any sympathetic understanding of the practice of ophthalmic optics. The results of this research may go some way towards discounting these allegations.

The survey of practising ophthalmic opticians in which I am asking you to participate follows on from one of ophthalmic optics students which was carried out in October 1974. You may have seen some of the results reported in the November 29th 1975 issue of the 'Ophthalmic Optician'.

Thus while I am reluctant to send a questionnaire to anyone these days, for they are all too common and I fully realise how valuable the time of an ophthalmic optician is, I believe the project is worthwhile and I am sending the enclosed questionnaire in the hope that you too will think it is worthwhile and agree to complete it.

I should like to reassure you on one important point. Since I am interested only in the information you give me, the questionnaire does not ask you to state your name and address. However, even this 'anonymous' information will be treated with the utmost confidentiality and will be seen by no one but myself. Your name has been selected at random from the Opticians' Register 1975 and the number on the return envelope is for coding purposes only. Thus your answers will not be traced back to you individually.

The greater the number of opticians who take part in the survey, the greater the validity of the findings. I hope, therefore, that you can find time to complete the questionnaire and return it to me, at your earliest convenience, in the prepaid envelope provided. I recognise that it looks long but you should be able to complete it in less than an hour. Opticians who completed a pilot survey timed themselves for me.

May I thank you in anticipation of your help and co-operation in making this research project a success.

With all good wishes
Yours sincerely

A G Fielding

The following passage referring to the practising opticians' survey appeared on the AOP (Association of Optical Practitioners) page (457) of the "Ophthalmic Optician" for May 15th, 1976:

Aston University

Content has been removed for copyright reasons

THE UNIVERSITY
OF ASTON
MANAGEMENT CENTRE

Research Unit

April 1976

FOLLOW - UP LETTER

Towards the end of March I took the liberty of sending you a questionnaire about the practice of ophthalmic optics. In the accompanying letter I explained that I was undertaking research into the professional values and behaviour of ophthalmic opticians, with the support of leading members of the professional associations. Unfortunately, I have not as yet received a reply from you. The fault may be mine; you may not have received my original letter and in this case I am sending you another copy of the questionnaire which I hope you can find time to complete. Alternatively, you may well have been too busy to reply and, if so, perhaps you can now more easily spare the hour it will take you to complete the questionnaire.

Whatever the reason, may I ask you to find the time. I believe the research programme is worthwhile for the findings will provide the profession with valuable information which will help in planning its further development, and obviously the more opticians who take part in the research the greater the validity of the findings.

If, however, you do not wish to participate, could you please return the questionnaire in the pre-paid envelope and I will not trouble you again.

If you have returned the questionnaire within the last few days, please ignore this letter.

May I thank you for the time and consideration you have given me.

Yours sincerely

Alan G Fielding

THE UNIVERSITY
OF ASTON
MANAGEMENT CENTRE

April 1976

LETTER OF INTRODUCTION

TO OPHTHALMIC OPTICS LECTURERS

Dear Ophthalmic Optics Lecturer

The purpose of this letter is to ask for your help and participation in a survey of the practice of ophthalmic optics. Many of you have already met me via my survey of ophthalmic optics students* and, indeed, in view of the considerable help I have already received, it is with some embarrassment that I impose a further burden on you.

The reason I have managed to suppress my embarrassment is that with only some 40-50 ophthalmic optics lecturers, the 10 per cent random sample of the Opticians Register I have used for my practising opticians' survey would give me only 4-5 lecturers which precludes any valid statistical conclusions regarding this small but significant group.

Thus I have sent all lecturers in the six departments in Great Britain a questionnaire in the hope that you can spare the hour it will take you to complete it. Although you may find some questions in Section Three difficult to answer, I have not prepared a separate questionnaire for lecturers since I am interested primarily in the professional values and behaviour of practising ophthalmic opticians.

My thanks in anticipation of receiving your completed questionnaire.

With best wishes

Yours sincerely

Alan Fielding

* See 'Ophthalmic Optician', 29 November 1975, for interim report on student survey.

THE PRACTICE OF OPHTHALMIC OPTICS

Research Unit
The University of Aston Management Centre
Birmingham

THE PRACTICE OF OPHTHALMIC OPTICS

This questionnaire is divided into FOUR sections. At the beginning of each you will find an explanation of its purpose. Please answer each question as requested. If the categories in any question do not cover your situation or opinion, please indicate as necessary.

Section One

The questions in this section are concerned with your reasons for choosing to become an ophthalmic optician.

1. Approximately how old were you when you first thought of becoming an ophthalmic optician? _____

2. Approximately how old were you when you definitely decided to become an ophthalmic optician? _____

3.1 Before definitely deciding on ophthalmic optics, did you seriously consider any other occupation(s) or profession(s)?

Yes ___

No ___

If YES, which occupation(s) or profession(s)?

_____

_____

3.2 Which factor(s) determined your eventual choice of ophthalmic optics?

_____

_____

4. Did any particular person or persons influence your decision to become an ophthalmic optician?

Yes ___

No ___

If YES, which person or persons?

_____

5.1 Looking back on things, if you had the choice again, would you still have chosen to become an ophthalmic optician?

(Please tick ONE)

Definitely ___

Probably ___

Not sure ___

Probably not ___

Definitely not ___

5.2 If you have answered NOT SURE, PROBABLY NOT, or DEFINITELY NOT, what do you now think you would have chosen?

_____

_____

6.1 How important are the following features to you as an ophthalmic optician? Please answer for EACH feature and tick the appropriate category.

	Very important	Fairly important	Of some importance	Of little importance	Of no importance
6.1.1 Being able to deal directly with people	___	___	___	___	___
6.1.2 Being able to help people	___	___	___	___	___
6.1.3 The status an optician enjoys	___	___	___	___	___
6.1.4 Being my own boss	___	___	___	___	___
6.1.5 Doing work that requires great skill and knowledge	___	___	___	___	___
6.1.6 Being sure of earning a good income	___	___	___	___	___
6.1.7 Having intelligent people as colleagues	___	___	___	___	___
6.1.8 Other things (please specify) _____	___	___	___	___	___

6.2 Which ONE of the features in 6.1 is MOST important to you?

Please give the number from 6.1 _____

7. Which ONE of the following statements BEST describes the way you feel about your career in ophthalmic optics? Please tick ONE.

7.1 It's the only career that could really satisfy me ___

7.2 It's one of several careers which I could have found equally satisfying ___

7.3 It's satisfying but I could have found others more satisfying ___

7.4 It's a career I decided upon without considering whether I would find it satisfying ___

7.5 I haven't really decided whether I intend to spend my whole career practising as an ophthalmic optician ___

7.6 I don't really find it satisfying as a career ___

8.1 Under what circumstances would you cease to practise?

_____

_____

8.2 Do you think you will practise as an ophthalmic optician for the whole of your working life?

Yes ___

No ___

Don't know ___

8.3 If NO, what do you think you will do instead?

_____

Section Two

The purpose of the questions in this section is to understand your view of the ophthalmic optical profession.

1. The essential task of the doctor is to heal, of the lawyer to serve justice. In similar terms, how would you describe the essential task of the ophthalmic optician?

_____

_____

2.1 In your opinion, how well does each of the following phrases describe the ophthalmic optical profession?

Please answer for EACH phrase and tick appropriately.

	A very good description	A good description	A just about adequate description	A poor description	A very poor description
2.1.1 A profession which has high standing	___	___	___	___	___
2.1.2 A profession of service to the community	___	___	___	___	___
2.1.3 A profession which is secure and lucrative	___	___	___	___	___
2.1.4 A profession which helps people directly	___	___	___	___	___
2.1.5 A profession requiring					

2.2 In your opinion, which of the phrases above BEST describes the ophthalmic optical profession?

Please give the number from 2.1 _____

3.1 How would you classify the following occupations?

Please tick the appropriate column for each occupation.

	An old established profession	A new professional occupation	Developing into a professional occupation	Not a professional occupation at present	Unlikely to become a professional occupation
Doctor	___	___	___	___	___
Dental surgeon	___	___	___	___	___
Engineer	___	___	___	___	___
Ophthalmic optician	___	___	___	___	___
Schoolteacher	___	___	___	___	___
Social worker	___	___	___	___	___
Solicitor	___	___	___	___	___

3.2 How would you rate these occupations in terms of their value to society?

Please tick the appropriate column for EACH occupation.

	Essential	Of great value	Of some value	Of little value	Of no value
Doctor	___	___	___	___	___
Dental surgeon	___	___	___	___	___
Engineer	___	___	___	___	___
Ophthalmic optician	___	___	___	___	___
Schoolteacher	___	___	___	___	___
Social worker	___	___	___	___	___
Solicitor	___	___	___	___	___

4.1 In your opinion, how important is each of the following characteristics in making a good ophthalmic optician?

Please tick the appropriate column for each characteristic.

	Very important	Fairly important	Of some importance	Of little importance	Of no importance
4.1.1 Good appearance	___	___	___	___	___
4.1.2 Warm and pleasing personality	___	___	___	___	___
4.1.3 Dedication to ophthalmic optics	___	___	___	___	___
4.1.4 High intelligence	___	___	___	___	___
4.1.5 Ability to maximise income	___	___	___	___	___
4.1.6 Scientific curiosity	___	___	___	___	___
4.1.7 Integrity	___	___	___	___	___
4.1.8 Ability to think in an organised way	___	___	___	___	___
4.1.9 Research ability	___	___	___	___	___
4.1.10 Ability to get along with people	___	___	___	___	___
4.1.11 Recognition of one's limitations	___	___	___	___	___
4.1.12 Getting real enjoyment out of ophthalmic optics	___	___	___	___	___
4.1.13 Other characteristics (please specify)					
_____	___	___	___	___	___

4.2 Which ONE of these characteristics do you think is MOST important in making a good ophthalmic optician?

Please give number from 4.1 _____

4.3 Could you give the reason(s) for your choice in 4.2.

_____

_____

5. In your opinion, how important is each of the following types of social behaviour to the success of an ophthalmic optician?

Please tick the appropriate column for each type.

	Very important	Quite a lot important	Moderately important	Slightly important	Not important
Maintaining a restrained and dignified manner	___	___	___	___	___
Wearing conservative clothing	___	___	___	___	___
Participating in community affairs	___	___	___	___	___
Being a good conversationalist	___	___	___	___	___
Maintaining an air of confidence (even when he/she is not feeling confident)	___	___	___	___	___
Maintaining a detached attitude to those to whom you give a service	___	___	___	___	___

6. In your opinion, how much prestige do the following groups award the ophthalmic optical profession?

Please tick the appropriate column for each group.

	More than it merits	As much as it merits	Not as much as it merits	Don't know
Other professionals	___	___	___	___
The community at large	___	___	___	___
Those to whom the ophthalmic optician gives his/her services	___	___	___	___

7. In your opinion, how closely does each of the relationships below approximate to that between an ophthalmic optician and the person who comes to seek his/her services? (Compare the relationship rather than the occupation)

Please answer for each relationship.

	A close similarity	Fairly similar	To some extent similar	Little similarity	Not similar at all
Parent and child	___	___	___	___	___
Doctor and patient	___	___	___	___	___
Lawyer and client	___	___	___	___	___
Teacher and pupil	___	___	___	___	___
Marriage counsellor and client	___	___	___	___	___
Office manager and clerk	___	___	___	___	___
Shopkeeper and customer	___	___	___	___	___
Dentist and patient	___	___	___	___	___

8. Below are several statements which reflect opinions about the relationship between income and service. Which of the statements is CLOSEST to your own attitude? Please tick ONE statement.

8.1 Service to the public is more important than any consideration of income ___

8.2 Although service to the public is more important, income should be high enough to enable an ophthalmic optician to live without financial worry ___

8.3 Income from ophthalmic optics should be high enough to enable an ophthalmic optician to live reasonably comfortably but, as service to the public is the more important consideration, it need not be as high as in other professions ___

8.4 Income should be distinct from any consideration of service to the public, and should at least approximate to that of other professions ___

8.5 Income is more important than any consideration of service to the public ___

9. Mr H is in his middle 40s and has had a successful career in optical practice. He spends the morning at his town practice; in the afternoon he practises at a local hospital clinic; most evenings he spends some time working on papers for ophthalmic journals and meetings. All in all, he often works close on a sixteen hour day.

Do you agree with the following statements about Mr H's day?

Please answer for EACH statement.

		Yes	No	Don't know
9.1	I have a great admiration for the full professional life Mr H leads	___	___	___
9.2	I doubt that I could keep up a pace like that	___	___	___
9.3	I strongly believe that a man should not let his professional career interfere with his family life to such an extent	___	___	___
9.4	I doubt that a man who divided himself in so many directions would do justice to any of his activities	___	___	___
9.5	I feel proud that I am a member of a profession that includes people like Mr H	___	___	___
9.6	I feel deeply regretful that the demands of the profession leave some ophthalmic opticians so little time for their personal life	___	___	___

10. Which TWO of the possible sources of satisfaction listed below do you find satisfying in your life? Please tick ONE item in each column.

	Most satisfying	Next most satisfying
Working towards international understanding	___	___
Leisure-time activities	___	___
Professional career	___	___
Participating in community affairs	___	___
Family relationships	___	___
Religious beliefs	___	___
Something else (please specify) _____	___	___

11.1 What do you consider to be the most important professional values in your practice as an ophthalmic optician?

_____

_____

11.2 Which of these values you have mentioned in 11.1 have you found easiest to adhere to, and why?

_____

_____

11.3 Which of these values have you found most difficult to adhere to, and why?

_____

_____

11.4 Which of these professional values do you think MOST ophthalmic opticians have most difficulty in adhering to?

_____

_____

Section Three

The questions in this section are concerned with the nature and location of your work as an ophthalmic optician.

1.1 The various specialisms within opthalmic optics provide different opportunities and correspond with different interests and talents among opticians. On which TWO of the following would you PREFER to spend most of your working time? Please tick ONE item in each column.

	First preference	Second preference
Contact lenses	___	___
General optical practice	___	___
Geriatric optics	___	___
Hospital Eye Service	___	___
Industrial optics	___	___
Orthoptics	___	___
Paediatric optics	___	___
Subnormal vision	___	___
Another specialism (please specify)		
_____	___	___

1.2 Irrespective of your choice in 1.1, on which TWO do you IN FACT spend most of your working time?

Please tick ONE item in each column.

	Most time spent	Next most time spent
Contact lenses	___	___
General optical practice	___	___
Geriatric optics	___	___
Hospital Eye Service	___	___
Industrial optics	___	___
Orthoptics	___	___
Paediatric optics	___	___
Subnormal vision	___	___
Another specialism (please specify) _____	___	___

2. In how many different premises do you carry on your work as an ophthalmic optician?

Please state number _____

3. How do you describe the premises where you carry on your work as an ophthalmic optician?

Please tick the appropriate category or categories.

Clinic ___
Consulting rooms ___
Office ___
Practice ___
Shop ___
Surgery ___
Another description (please specify) _____

4. Do you open your premises on Saturdays? Yes ___ No ___

5. Do(es) your premises have a window display? Yes ___ No ___

6.1 In which of the following types of practice have you worked?

Please tick the appropriate categories and indicate the number of years' experience		Number of years
As chemist optician	___	_____
Group private practice	___	_____
Hospital Eye Service	___	_____
Individual private practice	___	_____
Locum practice	___	_____
Peripatetic contact lens fitting	___	_____
Multiple practice	___	_____
Elsewhere(please specify) _____	___	_____

6.2 In which type of practice do you work at present?

_____

If GROUP PRACTICE, how many partners have you? _____

6.3 In which type of practice would you prefer to work?

_____

6.4 Could you give the reasons for your choice in 6.3?

_____

_____

7.1 In which type of practice would you LEAST like to work?

_____

7.2 Could you give the reason(s) for your choice in 7.1?

_____

_____

_____

8.1 In which of the following geographical locations have you practised?

Please tick the appropriate categories and indicate the approximate years - for example, 1969-72.

		Years
a large city centre	___	_____
an industrial town	___	_____
a smaller town	___	_____
a county town	___	_____
a country town	___	_____
a residential suburb	___	_____
a working class suburb	___	_____

Elsewhere (please specify)

_____ ___ _____

8.2 In which of these locations do you at present practise?

_____

8.3 In which of these locations would you prefer to practise?

_____

8.4 Could you give the reasons for your choice in 8.3?

_____

_____

9. How do you describe the people who come to seek your services as an ophthalmic optician? Please tick the appropriate category.

As clients	___
As customers	___
As patients	___

As something else (please specify)

_____ ___

10. In general, what would you say was the attitude towards you of MOST people who come to seek your services as an ophthalmic optician?

Please tick the appropriate category.

caution ___

friendliness ___

suspicion ___

trust ___

Another attitude (please specify) _____ ___

11. In an average week, how many days do you spend practising ophthalmic optics?

Please tick the appropriate number of days.

less than one ___

one ___

two ___

three ___

four ___

five ___

more than five ___

12. In an average week, how many eye examinations do you carry out? Please tick the appropriate range of numbers.

0-5 ___

6-10 ___

11-20 ___

21-30 ___

31-50 ___

more than 50 ___

13.1 In an average week, how many hours do you spend on the following activities? Please indicate the number of hours for each activity.

	0-5	6-10	11-20	21-30	More than 30
Examining eyes	___	___	___	___	___
Contact lens fitting	___	___	___	___	___
Helping individuals to choose frames	___	___	___	___	___
Advising individuals on suitable lenses	___	___	___	___	___
Making minor repairs and/or adjustments	___	___	___	___	___
NHS administration	___	___	___	___	___
Other administration	___	___	___	___	___
Other activities (please specify)					
_____	___	___	___	___	___

13.2 How would you assess these activities according to the scale below? Please answer for EACH activity.

	Professional	Partially professional	Could be thought to be professional	Not really professional	Not professional
Examining eyes	___	___	___	___	___
Contact lens fitting	___	___	___	___	___
Helping individuals to choose frames	___	___	___	___	___
Advising individuals on suitable lenses	___	___	___	___	___
Making minor repairs and/or adjustments	___	___	___	___	___
NHS administration	___	___	___	___	___
Other administration	___	___	___	___	___
Other activities (please specify)					
_____	___	___	___	___	___

14.1 How important do you consider the following activities to be for success in your work as an ophthalmic optician?

Please answer for EACH activity.

	Very important	Quite a lot important	Moderately important	Slightly important	Not important
14.1.1 Reading optical textbooks	___	___	___	___	___
14.1.2 Reading optical journals	___	___	___	___	___
14.1.3 Attending local optical association meetings	___	___	___	___	___
14.1.4 Attending refresher courses	___	___	___	___	___
14.1.5 Attending conferences	___	___	___	___	___
14.1.6 Research activities while in practice	___	___	___	___	___
14.1.7 Taking further optical qualifications	___	___	___	___	___
14.1.8 Teaching in a university ophthalmic optics department	___	___	___	___	___
14.1.9 Examining for professional bodies	___	___	___	___	___

14.2 Within the last year, how often have you undertaken these activities?

Please answer for EACH activity.

	Frequently/ throughout the year	Occasionally	Not at all
14.2.1 Read optical textbooks	___	___	___
14.2.2 Read optical journals	___	___	___
14.2.3 Attended local optical association meetings	___	___	___
14.2.4 Attended refresher course	___	___	___
14.2.5 Attended conferences	___	___	___
14.2.6 Research activities while in practice	___	___	___
14.2.7 Studied for further optical qualifications	___	___	___
14.2.8 Taught in a university ophthalmic optics department	___	___	___
14.2.9 Examined for professional bodies	___	___	___

Section Four

PERSONAL CHARACTERISTICS

The information asked for in this section will be used ONLY to compare your answers with those of other ophthalmic opticians.

1. What is your sex?

Female _____

Male _____

2. In which of the following age-groups are you? Please tick the appropriate age-group.

21 - 30 ___

31 - 40 ___

41 - 50 ___

51 - 60 ___

over 60 ___

3.1 In which of the following areas did you grow up? Please tick the appropriate area or areas.

Inner city ___

Urban ___

Suburban ___

Country town ___

Rural ___

Other (please specify) _____ ___

3.2 In which of the following regions and/or countries did you receive your education after the age of 11?

Northern ___

Yorkshire and Humberside ___

North West ___

East Midlands ___

West Midlands ___

London and South East ___

South West ___

East Anglia ___

Wales ___

Scotland ___

Northern Ireland ___

Outside the United Kingdom (please say where)

_____ ___

4. Which type(s) of school did you attend after the age of 11? Please tick the relevant type(s).

Central	___
Comprehensive	___
Direct grant grammar	___
Elementary	___
Local authority grammar	___
Secondary modern	___
Secondary technical	___
Private	___
Public	___
Other(s) (please specify) _____	___

5. Could you give the following information about the ophthalmic optical qualifications (professional and academic) which you hold?

Please tick column 1 if the qualification listed is held and the other columns as appropriate.

	Held	Length of course	Obtained by full-time study	Obtained by part-time study
FBOA (including older qualifications absorbed e.g. D.Opt.)	___	_____	___	___
FSAO	___	_____	___	___
FSMC	___	_____	___	___
CL Cert(BOA)	___	_____	___	___
CL Cert(SMC)	___	_____	___	___
DCLP	___	_____	___	___
D Orth	___	_____	___	___
FBOA; HD	___	_____	___	___
SMHD or FSMC (Hons)	___	_____	___	___
SMSA	___	_____	___	___
Bachelor's degree	___	_____	___	___
Master's degree	___	_____	___	___
Doctorate (PhD, OD)	___	_____	___	___
Other(s) (please specify) _____	___	_____	___	___

6.1 Before becoming an ophthalmic optician, did you work in any other occupation(s) or profession(s)?

Yes ___

No ___

6.2 If YES, which occupation(s) or profession(s) were these?

_____

7.1 Do you hold any qualifications relating to occupations or professions other than ophthalmic optics?

Yes ___

No ___

7.2 If YES, which other occupations or professions are these?

_____

_____

8. Could you give the following information relating to your father's occupation (1) when you were born, (2) when you started to practise ophthalmic optics. If your father is not alive or retired, please give the information relating to his last occupation.

	When you were born	When you started to practise ophthalmic optics
8.1 In which industry or occupation does/did he work?	_____	_____
8.2 Can you describe the actual job he does/did, e.g. owner of a small grocer's shop, managing director of an engineering works employing 250, 'bus driver, etc.	_____	_____
	_____	_____
	_____	_____
8.3 What position or title does/ did he hold, e.g. chargehand, director, foreman, labourer, manager, salesman, self-employed professional, skilled tradesman	_____	_____

9.1 Into which of the following ranges did your income from ophthalmic optics fall in the financial year 1974-75?

Please tick the appropriate range of income.

Less than £2,000 ___

£2,000 - £3,999 ___

£4,000 - £5,999 ___

£6,000 - £7,999 ___

£8,000 - £9,999 ___

more than £10,000 ___

9.2 How would you estimate your income compared with that of other ophthalmic opticians?

Please tick the appropriate category.

above average ___

about average ___

below average ___

don't know ___

10. Do you hold any of the following elected or appointed positions?

Please tick the appropriate categories.

Optical association official ___

Drama, art or music society official ___

Justice of the Peace ___

Political party official ___

Sporting club official ___

Voluntary welfare organisation official ___

Other positions (please specify)

_____ ___

11.1 What is your religion and/or denomination?

_____

11.2 Do you consider yourself to be a practising member of your faith?

_____

12. The remainder of this space is left for you to add any further information you think is relevant to this study or to comment upon the research programme in which you have participated.

THANK YOU VERY MUCH FOR YOUR HELP AND CO-OPERATION.

MAY I EMPHASISE AGAIN THE CONFIDENTIALITY OF THE INFORMATION CONTAINED HERE.

APPENDIX B

CODING FRAMES

First Year Student Survey

Variable No.	Question No.	Subject Matter		Questionnaire Page No
001	-	Centre No.		1
		Aston	1	
		Bradford	2	
		UWIST (Cardiff)	3	
		City	4	
		Glasgow College of Technology	5	
		UMIST (Manchester)	6	
002	-	Research No.		1
		October 1974	1	
		October 1975	2	
		October 1976	3	
003	1	Age of first thoughts of studying ophthalmic optics		1
		Less than 16	1	
		16	2	
		17	3	
		18	4	
		19	5	
		20	6	
		More than 20	7	
004	2	Age of definite decision to study ophthalmic optics		1
		Less than 17	1	
		17	2	
		18	3	
		19	4	
		20	5	
		More than 20	6	
005	3(a)	Were other occupations/professions considered		1
		Yes	1	
		No	2	

Variable No.	Question No.	Subject Matter		Questionnaire Page No.
006	3(a)	If YES, which:		1
		Medicine	1	
		Dentistry	2	
		Pharmacy	3	
		Other health occupations/ professions	4	
		Scientific occupations/ professions	5	
		Others	6	
		More than one considered	7	
007	3(b)	Factors determining eventual choice of ophthalmic optics:		1
		Grades not good enough for medicine/dentistry/pharmacy	01	
		Contact with helping people	02	
		Interesting/variety of course/ like subjects	03	
		Length of course	04	
		Related to medicine	05	
		Definite vocation/career/ guaranteed job	06	
		Opportunity to work for oneself	07	
		Well-paid	08	
		Better opportunities for women	09	
		Interesting/pleasant compared with medicine/dentistry	10	
		Influence of family/friends	11	
		Family occupation	12	
		Rejected first choice - other than medicine etc.	13	
		Other	14	
		Mixed Response	15	
		None specifically	16	
008	3(c)	Importance of dealing directly with people:		1
		Very important	1	
		Fairly important	2	
		Of some importance	3	
		Of little importance	4	
		Of no importance	5	

Variable No.	Question No.	Subject Matter	Questionnaire Page No.
009	3(c)	Importance of being able to help people: Codes as for 008	1
010	3(c)	Importance of status of an optician: Codes as for 008	1
011	3(c)	Importance of work involving great skill and knowledge: Codes as for 008	1
012	3(c)	Importance of being my own boss: Codes as for 008	1
013	3(c)	Importance of being able to earn a good income: Codes as for 008	1
014	3(c)	Importance of being unable to enter my first choice occupation: Codes as for 008	1
015	3(c)	Importance of other factors: Codes as for 008	1
016	4	Ideal choice of subject to study: Ophthalmic optics 1 Medicine 2 Other health occupations/ professions 3 Other professions 4 Scientific occupations/ professions 5 Personal interest choices 6 More than one choice 7 Don't Know 8	2

Variable No.	Question No.	Subject Matter	Questionnaire Page No.
017	5(a)	Influence of mother in deciding to study ophthalmic optics:	2
		Very influential 1 Fairly influential 2 Of some influence 3 Of little influence 4 Of no influence 5	
018	5(a)	Influence of father:	2
		Codes as for 017	
019	5(a)	Influence of other relatives:	2
		Codes as for 017	
020	5(a)	Influence of friends not in optics:	2
		Codes as for 017	
021	5(a)	Influence of opticians you know personally:	2
		Codes as for 017	
022	5(a)	Influence of opticians you have heard or read about:	2
		Codes as for 017	
023	5(a)	Influence of ophthalmic optics students you know:	2
		Codes as for 017	
024	5(a)	Influence of schoolteachers:	
		Codes as for 017	
025	5(a)	Influence of books, films, pamphlets etc:	2
		Codes as for 017	
026	5(a)	Other influences:	2
		Codes as for 017	

Variable No.	Question No.	Subject Matter	Questionnaire Page No.
027	5(b)	Most important influence in deciding to study ophthalmic optics:	2
		Mother 01 Father 02 Other relatives 03 Friends not in optics 04 Opticians you know personally 05 Opticians you have heard or read about 06 Ophthalmic optics students you know 07 Schoolteachers 08 Books, films, pamphlets etc 09 Other influences 10 More than one 11	
028	6	Statement best describing feelings about career in ophthalmic optics:	3
		Only career that could really satisfy me 1 One of several careers that I could find equally satisfying 2 Satisfying but I could have found others more satisfying 3 Decided upon without considering whether I would find it satisfying 4 Haven't really thought about a career in optics yet 5 None of them 6	
029	7(a)	How much will you like being able to deal directly with people:	3
		Very much 1 Quite a lot 2 To some extent 3 Only a little 4 Not at all 5	
030	7(a)	How much will you like being able to help people:	3
		Codes as for 029	

Variable No.	Question No.	Subject Matter	Questionnaire Page No.
031	7(a)	How much will you like the status an optician enjoys: Codes as for 029	3
032	7(a)	How much will you like being your own boss: Codes as for 029	3
033	7(a)	How much will you like doing work that requires great skill and knowledge: Codes as for 029	3
034	7(a)	How much will you like being sure of earning a good income: Codes as for 029	3
035	7(a)	How much will you like having intelligent people as colleagues: Codes as for 029	3
036	7(a)	How much will you like other factors: Codes as for 029	3
037	7(b)	Which of these things will you like best: Being able to deal directly with people 1 Being able to help people 2 The status an optician enjoys 3 Being my own boss 4 Doing work requiring great skill and knowledge 5 Being sure of earning a good income 6 Having intelligent people as colleagues 7 Other factors 8 More than one 9	3

Variable No.	Question No.	Subject Matter		Questionnaire Page No.
038	8	Essential task of ophthalmic optician:		3
		Rectify/correct abnormalities	01	
		Relieve discomfort/suffering/ make more comfortable	02	
		Help see as well as possible	03	
		Safeguard/care for eyes	04	
		Know when to refer/correct without surgery	05	
		Appreciate world around us/ leader fuller life	06	
		Public service	07	
		Doctor treats body/optician eyes	08	
		Test eyes - fit spectacles	09	
		Others	10	
		Mixed response	11	
039	9	Would still have chosen ophthalmic optics if there was a lower level of income:		4
		Yes	1	
		No	2	
		Don't Know	3	
040	9	Would you still have chosen ophthalmic optics if it enjoyed lower prestige:		4
		Codes as for 039		
041	9	Would you still have chosen ophthalmic optics if there was less opportunity to meet people:		4
		Codes as for 039		
042	9	Would you still have chosen ophthalmic optics if there was less opportunity to be one's own boss		4
		Codes as for 039		
043	9	Would you still have chosen ophthalmic optics if there was less intrinsic interest in the work:		4
		Codes as for 039		

Variable No.	Question No.	Subject Matter	Questionnaire Page No
044	10(a)	Opinion of statement describing ophthalmic optical profession - profession of high standing: A very good description 1 A good description 2 A fair description 3 A poor description 4 A very poor description 5	4
045	10(a)	Opinion of statement - profession of service to the community: Codes as for 044	4
046	10(a)	Opinion of statement - profession which is secure and lucrative: Codes as for 044	4
047	10(a)	Opinion of statement - profession which helps people directly: Codes as for 044	4
048	10(a)	Opinion of statement - profession requiring harder work than others: Codes as for 044	4
049	10(b)	Which phase best describes the ophthalmic optical profession: A profession which has high standing 1 A profession of service to the community 2 A profession which is secure and lucrative 3 A profession which helps people directly 4 A profession requiring harder work than others 5 None 6 More than one 7	4

Variable No.	Question No.	Subject Matter	Questionnaire Page No.
050	11	Classification of doctor:	4
		An old-established profession 1 A new profession 2 Developing into a profession 3 Not a profession at present 4 Unlikely to become a profession 5	
051	11	Classification of dental surgeon:	4
		Codes as for 050	
052	11	Classification of engineer:	4
		Codes as for 050	
053	11	Classification of ophthalmic optician:	4
		Codes as for 050	
054	11	Classification of schoolteacher:	4
		Codes as for 050	
055	11	Classification of social worker:	4
		Codes as for 050	
056	11	Classification of solicitor:	4
		Codes as for 050	
057	12	Amount of prestige other professionals award ophthalmic optical profession:	5
		More than it merits 1 As much as it merits 2 Less than it merits 3 Don't Know 4	
058	12	Amount of prestige community at large awards ophthalmic optical profession:	5
		Codes as for 057	

Variable No.	Question No.	Subject Matter	Questionnaire Page No.
059	12	Amount of prestige patients award ophthalmic optical profession:	5
		Codes as for 057	
060	13(a)	Importance of good appearance in making a good ophthalmic optician	5
		Very important 1 Fairly important 2 Of some importance 3 Of little importance 4 Of no importance 5	
061	13(a)	Importance of warm and pleasing personality in making a good ophthalmic optician:	5
		Codes as for 060	
062	13(a)	Importance of dedication to ophthalmic optics in making a good ophthalmic optician:	5
		Codes as for 060	
063	13(a)	Importance of high intelligence in making a good ophthalmic optician:	5
		Codes as for 060	
064	13(a)	Importance of ability to maximise income in making a good ophthalmic optician:	5
		Codes as for 060	
065	13(a)	Importance of scientific curiosity in making a good ophthalmic optician:	5
		Codes as for 060	
066	13(a)	Importance of integrity in making a good ophthalmic optician:	5
		Codes as for 060	

Variable No.	Question No.	Subject Matter	Questionnaire Page No.
067	13(a)	Importance of ability to think in an organised way in making a good ophthalmic optician:	5
		Codes as for 060	
068	13(a)	Importance of research ability in making a good ophthalmic optician:	5
		Codes as for 060	
069	13(a)	Importance of ability to get along with people in making a good ophthalmic optician:	5
		Codes as for 060	
070	13(a)	Importance of recognition of one's limitations in making a good ophthalmic optician:	5
		Codes as for 060	
071	13(a)	Importance of getting real enjoyment out of ophthalmic optics in making a good ophthalmic optician:	5
		Codes as for 060	
072	13(a)	Importance of other characteristics in making a good ophthalmic optician:	5
		Codes as for 060	
073	13(b)	Which two characteristics are most important in making a good ophthalmic optician:	5

060 & 061	01	061 & 062	13	062 & 063	24
060 & 062	02	061 & 063	14	062 & 064	25
060 & 063	03	061 & 064	15	062 & 065	26
060 & 064	04	061 & 065	16	062 & 066	27
060 & 065	05	061 & 066	17	062 & 067	28
060 & 066	06	061 & 067	18	062 & 068	29
060 & 067	07	061 & 068	19	062 & 069	30
060 & 068	08	061 & 069	20	062 & 070	31
060 & 069	09	061 & 070	21	062 & 071	32
060 & 070	10	061 & 071	22	062 & 072	33
060 & 071	11	061 & 072	23		
060 & 072	12				

Variable No.	Question No.	Subject Matter	Questionnaire Page No.

063 & 064	34	064 & 065	43	065 & 066	51		
063 & 065	35	064 & 066	44	065 & 067	52		
063 & 066	36	064 & 067	45	065 & 068	53		
063 & 067	37	064 & 068	46	065 & 069	54		
063 & 068	38	064 & 069	47	065 & 070	55		
063 & 069	39	064 & 070	48	065 & 071	56		
063 & 070	40	064 & 071	49	065 & 072	57		
063 & 071	41	064 & 072	50				
063 & 072	42						
066 & 067	58	067 & 068	64	068 & 069	69		
066 & 068	59	067 & 069	65	068 & 070	70		
066 & 069	60	067 & 070	66	068 & 071	71		
066 & 070	61	067 & 071	67	068 & 072	72		
066 & 071	62	067 & 072	68				
066 & 072	63						
069 & 070	73	070 & 071	76	071 & 072	78		
069 & 071	74	070 & 072	77				
069 & 072	75						

074 13(c) Which two characteristics are more important to ophthalmic optics than to other professions: 5

Codes as for 073

075 14 Importance of maintaining a restrained and dignified manner to success of an ophthalmic optician: 6

Very important	1
Fairly important	2
Of some importance	3
Of little importance	4
Of no importance	5

076 14 Importance of wearing conservative clothing to success of an ophthalmic optician: 6

Codes as for 075

077 14 Importance of participating in community affairs to success of ophthalmic optician: 6

Codes as for 075

Variable No.	Question No.	Subject Matter	Questionnaire Page No.
078	14	Importance of being a good conversationalist to success of an ophthalmic optician: Codes as for 075	6
079	14	Importance of maintaining an air of confidence to success of an ophthalmic optician: Codes as for 075	6
080	14	Importance of maintaining a detached attitude to success of an ophthalmic optician: Codes as for 075	6
081	15	Similarity between parent-child and ophthalmic optician-patient relationships: A close similarity 1 Fairly similar 2 To some extent similar 3 Little similarity 4 Not at all similar 5	6
082	15	Similarity between doctor-patient and ophthalmic optician-patient relationships: Codes as for 081	6
083	15	Similarity between lawyer-client and ophthalmic optician-patient relationships: Codes as for 081	6
084	15	Similarity between teacher-pupil and ophthalmic optician-patient relationships: Codes as for 081	6

Variable No.	Question No.	Subject Matter		Questionnaire Page No.
085	15	Similarity between marriage counsellor-client and ophthalmic optician-patient relationships:		6
		Codes as for 081		
086	15	Similarity between office manager-clerk and ophthalmic optician-patient relationships:		6
		Codes as for 081		
087	15	Similarity between shopkeeper-customer and ophthalmic optician-patient relationships:		6
		Codes as for 081		
088	15	Similarity between dentist-patient and ophthalmic optician-patient relationship:		6
		Codes as for 081		
089-152	-	BLANK - No counterparts in final year student or practising optician surveys		
Background Items				
153	1	Sex of Student:		7
		Female	1	
		Male	2	
154	2	Age of Student:		7
		17	1	
		18	2	
		19	3	
		20	4	
		21-24	5	
		25-34	6	
		35+	7	

Variable No.	Question No.	Subject Matter		Questionnaire Page No.
155	3(a)	Type of area in which student grew up		7
		Inner city	1	
		Urban	2	
		Suburban	3	
		Country town	4	
		Rural	5	
		More than one area	6	
		Other areas (please specify)	7	
156	3(b)	Region or country in which student educated after the age of 11:		7
		Northern	01	
		Yorkshire & Humberside	02	
		North West	03	
		East Midlands	04	
		West Midlands	05	
		London & South East	06	
		South West	07	
		East Anglia	08	
		Wales	09	
		Scotland	10	
		Northern Ireland	11	
		Outside the United Kingdom (please say where)	12	
157	4	Type of school student attended after the age of 11:		7
		Central	01	
		Comprehensive	02	
		Direct grant grammar	03	
		Local authority grammar	04	
		Secondary modern	05	
		Secondary technical	06	
		Private (independent)	07	
		Public	08	
		Other (please specify)	09	
		More than one type	10	
158	5(a)	Before commencing ophthalmic optics degree course, did student start training for any other profession or occupation:		8
		Yes	1	
		No	2	

Variable No.	Question No.	Subject Matter	Questionnaire Page No.
159	5(b)	If YES, which occupation(s) or Profession(s):	8
		Training/worked in other health professions/occupations: 1 Science degree, pure or applied 2 Dispensing optics/ optics abroad/manufacturing optician 3 Other occupations/professions 4	
160	6(a)	Social class of student's father at time of student's birth:	8
		Social Class I* 1 Social Class II* 2 Social Class III non-manual* 3 Social Class III manual* 4 Social Class IV* 5 Social Class V* 6 Dead, retired, unemployed 7 Unclassifiable 8 (*Registrar-General's Classification)	
161	6(b)	Social class of student's father at time student commenced degree course:	8
		Codes as for 160	
162	6(c)	Social mobility of student's father:	8
		Upward within working class 1 Upward within middle class 2 Upward - working class to middle class 3 No change 4 Downward within working class 5 Downward within middle class 6 Downward - middle class to working class 7 No comparison possible (dead, retired) 8	

Variable No.	Question No.	Subject Matter		Questionnaire Page No.
163	7(a)	Student's beliefs:		8
		Church of England/Anglican/ Church of Wales/Scotland/ Ireland	01	
		Methodist/Baptist/ Congregationalist/Scottish Episcopalian/Presbyterian	02	
		Protestant	03	
		Christian	04	
		Catholic	05	
		Jewish	06	
		Agnostic	07	
		Atheist/Humanist	08	
		Non-Christian (Hindu/Muslim/ Jain/Sikh)	09	
		None/nil	10	
		Unclassifiable	11	
		Sects (Quakers, Mormons)	12	
164	7(b)	Does student consider himself to be practising member of his faith:		8
		Yes	1	
		No	2	
		Positive inclined (to some extent/sometimes/ some of it, etc.)	3	
		Negative inclined (not particularly/not really)	4	
		Don't Know/no idea/ not applicable	5	

Final Year Student Survey

Variable No.	Question No.	Subject Matter	Questionnaire Page No.
001-088		As in first year student survey	
089	16	Student's opinion of relationship between income and service:	7
		Service to the public is entirely separate from any consideration of income	1
		Although service to the public is more important, income should be high enough to enable an ophthalmic optician to live without financial worry	2
		Income from ophthalmic optics should be high enough to enable an ophthalmic optician to live reasonably comfortably but, as service to the public is the more important consideration, it need not be as high as in other professions	3
		Income should be distinct from considerations of service, and should at least approximate to that of other professions	4
		Income of ophthalmic opticians should be on a level with that of other professions, and be unrelated to any consideration of service to the public	5
090	17	Student reactions to Mr. H's day:	7
		Admiration for the full professional life Mr. H leads	1
		Doubt that I could keep up a pace like that	2
		A strong conviction that a man should not let his professional career interfer with his family life to such an extent	3
		Doubt that a man who divided himself in so many directions would do justice to any of his activities	4
		A feeling of pride that I am on my way to becoming a member of a profession that includes people like Mr. H.	5

Variable No.	Question No.	Subject Matter		Questionnaire Page No.
090 (cont.)	17	A feeling of deep regret that the demands of the profession leave ophthalmic opticians so little time for their personal life	6	
		Another reaction (please specify)	7	
091	18(a)	Optical specialism in which student interested:		8
		Contact lenses	1	
		General optical practice	2	
		Geriatric optics	3	
		Hospital Eye Service	4	
		Industrial optics	5	
		Orthoptics	6	
		Paediatric optics	7	
		Subnormal vision	8	
		Another specialism (please specify)	9	
092	18(b)	Reason for choice in 091:		8
		A field where one can establish one's hours of work:	01	
		A field in which patients are highly appreciative of what is done for them	02	
		A field where refraction problems are especially complex	03	
		A field where relationships with colleagues in the same specialism are particularly rewarding	04	
		A field where one is assured of a good income	05	
		A field which represents opportunities for knowing patients well	06	
		A field which has high prestige within the profession	07	
		A field which offers good career opportunities	08	
		A field in which there are good opportunities to conduct studies of one's own	09	
		None of these (please specify other reasons)	10	

Variable No.	Question No.	Subject Matter		Questionnaire Page No.
093	19	Amount of thought about career:		9
		A great deal	1	
		A fair amount	2	
		To some extent	3	
		Only a little	4	
		Not at all	5	
094	20(a)	Intention to practise as an ophthalmic optician:		9
		Yes	1	
		No	2	
		Don't Know	3	
095	20(b)	Intention to practise for whole of working life:		9
		Codes as for 094		
096	20(c)	If NO to 20(b) what do you intend to do after completing your degree:		9
		Have a family	1	
		Work for majority of working life	2	
		Play school or nursery work	3	
		Education and research	4	
		Medicine	5	
		Work until bored with optics then do something else/travel	6	
		Like to teach (ophthalmic optics)	7	
		Higher degree/lecture	8	
		Decide later/too early to decide/ don't know	9	
097	21(a)	Student preferences for spending pre-registration year:		10
		Group private practice	1	
		Hospital Eye Service	2	
		Individual private practice	3	
		Public company 'multiple' practice	4	
		Elsewhere (please specify)	5	
		Undecided	6	

Variable No.	Question No.	Subject Matter		Questionnaire Page No.
098	21(b)	Reasons for choice in 097:		10
		Gives superior opportunities for dealing with a wide range of patients	01	
		Means that colleague support and advice is available if necessary	02	
		Salaries and conditions are better	03	
		Complexity of refraction problems	04	
		Convenient practice/branch near my home	05	
		The choice would enhance my chances of successfully completing my Part II professional examination	06	
		Opportunity to practise additional techniques e.g. contact lenses, tonometry	07	
		Well-equipped type of practice containing e.g. slit lamps, sophisticated visual field equipment etc.	08	
		Might provide good opportunities for the future e.g. partnership	09	
		Another reason (please specify)	10	
099	22(a)	Preferences for eventual practice situation:		11
		Group private practice	1	
		Hospital Eye Service	2	
		Individual private practice	3	
		Locum practice	4	
		Peripatetic contact lens fitting	5	
		Public company 'multiple' practice	6	
		Elsewhere (please specify)	7	
		Undecided	8	
100	22(b)	Advantages of choice in 099:		11
		The status it affords	1	
		The degree of independence	2	
		The level of income possible	3	
		The interesting clientele	4	
		Other advantages (please specify)	5	

Variable No.	Question No.	Subject Matter	Questionnaire Page No.
101	22(c)	Most important advantage in 100: Codes as for 100	11
102	23(a)	Type of Practice in which student would least like to eventually practise: Codes as for 099	12
103	23(b)	Disadvantages of choice in 102 Lack of status it affords 1 The routine nature of the work 2 The fact that one is not one's own boss 3 The lack of variety of patients 4 The commercial pressure present 5 The low income 6 Other disadvantages (please specify) 7	12
104	23(c)	Most important disadvantage in 103 Codes as for 103	
105	24	Sort of area student would like to practise in when established: Large city centre 1 Industrial town 2 Rural area or town 3 Residential suburb 4 Working class area 5 Another area (please specify) 6 Undecided 7	13
106	25	Income expectations at age of 35: Less than £2,000 p.a. 01 £2,000-£3,000 p.a. 02 £3,000-£4,000 p.a. 03 £4,000-£5,000 p.a. 04 £5,000-£6,000 p.a. 05 £6,000-£7,000 p.a. 06 £7,000-£8,000 p.a. 07 £8,000-£9,000 p.a. 08 £9,000-£10,000 p.a. 09 More than £10,000 p.a. 10	13

Variable No.	Question No.	Subject Matter	Questionnaire Page No.
107	26(a)	Preferred type of professional activity: General optical practice 1 Part-time teaching 2 Research 3 Specialist practice 4 Something else (please specify) 5	14
108	26(b)	Expected type of professional activity: Codes as for 107	14
109	27(1)	Frequency of reading optical textbooks after graduation: Frequently 1 Occasionally 2 Never 3 Uncertain 4	14
110	27(2)	Frequency of reading optical journals after graduation: Codes as for 109	14
111	27(3)	Frequency of attending local optical association meetings after graduation: Codes as for 109	14
112	27(4)	Frequency of attending refresher courses after graduation: Codes as for 109	14
113	27(5)	Frequency of attending conferences after graduation: Codes as for 109	14
114	27(6)	Frequency of research activities while in practice: Codes as for 109	14

Variable No.	Question No.	Subject Matter	Questionnaire Page No.
115	27(7)	Frequency of taking further optical qualifications after graduation: Codes as for 109	14
116	27(8)	Frequency of teaching part-time in a university ophthalmic optics department: Codes as for 109	14
117	27(9)	Frequency of teaching full-time in a university ophthalmic optics department: Codes as for 109	14
118	27(10)	Frequency of examining for professional bodies: Codes as for 109	14
119	28	Most important source of satisfaction to student in his life: Working towards international understanding 1 Leisure-time activities 2 Professional career 3 Participating in community affairs 4 Family relationships 5 Religious beliefs 6 Something else (Please specify) 7	15
120	28	Next most important source of satisfaction to student in his life: Codes as for 119	15
121	28	Student's opinion of most important source of satisfaction to opticians in practice: Codes as for 119	15
122	28	Student's opinion of next most important source of satisfaction to opticians in practice: Codes as for 119	15

Variable No.	Question No.	Subject Matter	Questionnaire Page No.
123	29(1)	Student's self assessment of ability to memorise details: Very far below average 1 Considerably below average 2 Somewhat below average 3 About average 4 Somewhat above average 5 Considerably above average 6 Very far above average 7	15
124	29(2)	Student's self-assessment of ability to cope with theoretical problems: Codes as for 123	15
125	29(3)	Student's self-assessment of ability to cope with practical problems: Codes as for 123	15
126	29(4)	Student's self-assessment of interest in politics and world affairs: Codes as for 123	15
127	29(5)	Student's self-assessment of interest in patients' optical problems: Codes as for 123	15
128	29(6)	Student's self-assessment of manual dexterity: Codes as for 123	15
129	29(7)	Student's self-assessment of desire to help people: Codes as for 123	15
130	29(8)	Student's self-assessment of knowledge of optical science: Codes as for 123	15

Variable No.	Question No.	Subject Matter	Questionnaire Page No.
131	29(9)	Student's self-assessment of ability to remain relaxed, rather than over-tense and nervous, about his work:	15
		Codes as for 123	
132	29(10)	Student's self-assessment of getting the most out of his degree course:	15
		Codes as for 123	
133	29(11)	Student's self-assessment of ability to get along with departmental staff:	15
		Codes as for 123	
134	29(12)	Student's self-assessment of readiness to assume responsibility:	15
		Codes as for 123	
135	29(13)	Student's self-assessment of ability to get good marks or grades:	15
		Codes as for 123	
136	29(14)	Student's self-assessment of ability to concentrate on his studies to exclusion of everything when necessary:	15
		Codes as for 123	
137	29(15)	Student's self-assessment of interest in professional matters:	15
		Codes as for 123	
138	30(1)	Student's self-assessment of his ability, compared with opticians in practice, to advance optical knowledge:	16
		Codes as for 123	
139	30(2)	Student's self-assessment of ability to inspire confidence in patients:	16
		Codes as for 123	

Variable No.	Question No.	Subject Matter	Questionnaire Page No.
140	30(3)	Student's self-assessment of making a good income: Codes as for 123	16
141	30(4)	Student's self-assessment of keeping abreast of new developments in ophthalmic optics: Codes as for 123	16
142	30(5)	Student's self-assessment of helping to further raise the professional standards of ophthalmic optics: Codes as for 123	16
143	30(6)	Student's self-assessment of providing equally good care for all patients: Codes as for 123	16
144	30(7)	Student's self-assessment of willingness to try new optical techniques: Codes as for 123	16
145	30(8)	Student's self-assessment of participating in national optical organisations: Codes as for 123	16
146	30(9)	Student's self-assessment of recognition of limitations as an ophthalmic optician: Codes as for 123	16
147	30(10)	Student's self-assessment of developing his own techniques: Codes as for 123	16
148	30(11)	Student's self-assessment of ability to remain sufficiently detached from patients to be able to perform optical tasks: Codes as for 123	16

Variable No.	Question No.	Subject Matter	Questionnaire Page No.
149	30(12)	Student's self-assessment of ability to get along with receptionists and other optical personnel: Codes as for 123	16
150	30(13)	Student's self-assessment of willingness to have private life interrupted by patient's needs: Codes as for 123	16
151	30(14)	Student's self-assessment of respecting the dignity of patients as individuals: Codes as for 123	16
152	30(15)	Student's self-assessment of being considerate of patients' economic means:	16
153-164	Background Items 1 - 7	Questions and codes identical to those for the first year student survey	17-18

Practising Optician Survey

Variable No.	Question No.	Subject Matter	Questionnaire Page No.
001	-	Not applicable	
002	4(a)	Any particular person(s) influencing decision to become an ophthalmic optician:	1
		Yes 1 No 2	
003-007	1-3	Questions and codes as in two student surveys	
008	4(b)	If YES to 002, which persons influenced decision:	1
		Mother 01 Father 02 Other relatives 03 Friends not in optics 04 Opticians you know personally 05 Ophthalmic optics students you knew 06 School teachers 07 Books, films, pamphlets, etc. 08 Other people 09 Other influences (please specify) 10	
009	5.1	Would optician still choose ophthalmic optics:	1
		Definitely 1 Probably 2 Not sure 3 Probably not 4 Definitely not 5	
010	5.2	If NOT SURE, PROBABLY NOT or DEFINITELY NOT what would optician now have chosen:	1
		Medicine 1 Other professions/semi-professions 2 Armed Services 3 Outdoor occupations 4	

Variable No.	Question No.	Subject Matter		Questionnaire Page No.
010 (cont.)	5.2	Occupations not dealing with public	5	
		Academic subjects	6	
		Industry	7	
		Musician	8	
		Not sure/don't know	9	
011	8.1	Circumstances under which optician would cease to practise:		3
		Illness	1	
		Retirement/age/death	2	
		To have a family	3	
		Loss of independence	4	
		Loss of satisfaction	5	
		Lack of income	6	
		Financial indepndence	7	
		Others	8	
		None/cannot forsee any	9	
012	8.2	Will optician practise for whole of working life:		3
		Yes	1	
		No	2	
		Don't Know	3	
013	8.3	If NO to 8.2, what would optician do instead:		3
		Medicine	1	
		Lecturing/research	2	
		Bring up family	3	
		Other occupations/professions	4	
		Personal choices	5	
		Politics	6	
		Not sure	7	
		Others	8	
014-039	3-7 & 9	Questions and codes as in two student surveys		2-5 & 8
040	11.1	Most important professional values to optician:		9
		Service to community	01	
		Relationship with patient	02	
		Knowledge	03	
		Honesty/integrity	04	

Variable No.	Question No.	Subject Matter		Questionnaire Page No.
040 (cont.)	11.1	Devotion/dedication	05	
		Recognition of disease	06	
		Recognition of failings	07	
		Confidence in ability	08	
		Usefulness/utility	09	
		Administrative efficiency	10	
		Others	11	
		Don't understand question	12	
		Don't Know	13	
041	11.2	Easiest professional value to which to adhere:		9
		Sense of service	01	
		Relationship with patient	02	
		Knowledge/clinical competence	03	
		Honesty/integrity	04	
		Patience/sympathy/pleasant personality	05	
		Impartiality	06	
		All easy/fairly effortless	07	
		Others	08	
		Don't Know	09	
042	11.3	Most difficult professional value to which to adhere:		9
		Relationships with some patients	01	
		Integrity	02	
		Knowledge	03	
		Thoroughness	04	
		Dedication/concern/patience	05	
		All easy	06	
		Others	07	
		None	08	
		Don't Know	09	
043	11.4	Most difficult professional value for most opticians to adhere to:		9
		Service to patients/personal approach	01	
		Relationship with some patients	02	
		Knowledge/keeping up to date	03	
		Honesty/integrity	04	
		Dedication/concern	05	
		Tact/patience/tolerance	06	
		Ignorance by patients/education of patients	07	
		Recognise failings & admit mistakes	08	
		Others	09	
		Don't Know/can't say/not sure	10	

Variable No.	Question No.	Subject Matter		Questionnaire Page No.
044-088	2-6	Questions and codes as in two student surveys		3-7 9-10
089	8	Question and codes as in final year student survey		7
090	1.2	Optical specialism on which optician spends largest amount of time:		10
		Contact lenses	1	
		General optical practice	2	
		Geriatric optics	3	
		Hospital Eye Service	4	
		Industrial optics	5	
		Orthoptics	6	
		Paediatric optics	7	
		Subnormal vision	8	
		Another specialism (please specify)	9	
091	1.1	First preference optical specialism:		9
		Codes as for 090		
092	1.2	Optical specialism on which optician spends second largest amount of time:		10
		Codes as for 090		
093	3	Optician's description of work premises:		10
		Clinic	1	
		Consulting Rooms	2	
		Office	3	
		Practice	4	
		Shop	5	
		Surgery	6	
		Another description (please specify)	7	
094	4	Are premises open on Saturdays:		10
		Yes	1	
		No	2	
		Some are, some aren't	3	

Variable No.	Question No.	Subject Matter	Questionnaire Page No.
095	5	Do(es) premises have a shop window display: Yes 1 No 2 Some do, some don't 3	10
096	6.1	Experience as chemist-optician: Yes 1 No 2	11
097	6.1	If YES, number of years' experience: Less than 10 1 11-20 2 21-30 3 More than 30 4	11
098	6.1	Experience of group practice: Codes as for 096	11
099-100	6.3	Questions and codes as for final year student survey	
101	6.1	Number of years' experience in group practice: Codes as for 097	11
102-103	7.1&7.2	Questions and codes as for final year student survey	11
104	6.1	Experience in Hospital Eye Service: Codes as for 096	11
105	6.1	Number of years' experience in Hospital Eye Service: Codes as for 097	11
106	6.1	Experience of individual private practice: Codes as for 096	11

Variable No.	Question No.	Subject Matter	Questionnaire Page No.
107	6.1	Number of years' experience in individual private practice: Codes as for 097	11
108	6.1	Experience of locum practice: Codes as for 096	11
109-115	14	Questions and codes as for final year student survey	15
116	6.1	Number of years' experience of locum practice: Codes as for 097	11
117	6.1	Experience of peripatetic contact lens fitting: Codes as for 096	11
118	14.1.9	Importance of examining for professional bodies: Very important 1 Quite a lot 2 Moderately important 3 Slightly important 4 Not important 5	15
119-120	10.2	Questions and codes as for final year student survey	8
121	6.1	Number of years' experience of peripatetic contact lens fitting: Codes as for 097	11
122	6.1	Experience of multiple practice Codes as for 096	11
123	6.1	Number of years' experience of multiple practice: Codes as for 097	11

Variable No.	Question No.	Subject Matter	Questionnaire Page No.
124	6.1	Experience elsewhere: Codes as for 096	11
125	6.1	Number of years' experience elsewhere: Codes as for 097	11
126	6.2	Type of practice optician at present in: Group private practice 1 Hospital Eye Service 2 Individual private practice 3 Locum practice 4 Peripatetic contact lens fitting 5 Public company 'multiple' practice 6 Elsewhere (please specify) 7	11
127	6.2.1	If GROUP practice, how many partners: One 1 Two 2 Three 3 Four 4 Five 5 Six 6 More than six 7	11
128	8.1	Experience in large city centre practice: Yes 1 No 2	12
129	8.1	Number of years' experience in large city centre: Less than 10 years 1 11-20 2 21-30 3 More than 30 years 4	12
130	8.1	Experience in industrial town practice: Codes as for 128	12
131	8.1	Number of years' experience in industrial town practice: Codes as for 129	12

Variable No.	Question No.	Subject Matter	Questionnaire Page No.
132	8.1	Experience of smaller town practice: Codes as for 128	12
133	8.1	Number of years' experience in small town practice: Codes as for 129	12
134	8.1	Experience of county town practice: Codes as for 128	12
135	8.1	Number of years' experience in county town practice: Codes as for 129	12
136	8.1	Experience of country town practice: Codes as for 128	12
137	8.1	Number of years' experience of country town practice: Codes as for 129	12
138	8.1	Experience of residential suburb practice: Codes as for 128	12
139	8.1	Number of years' experience of residential suburb practice: Codes as for 129	12
140	8.1	Experience of working class suburb practice: Codes as for 128	12
141	8.1	Number of years' experience in working class suburb practice: Codes as for 129	12

Variable No.	Question No.	Subject Matter		Questionnaire Page No.
142	8.1	Experience of practice elsewhere:		12
		Codes as for 128		
143	8.1	Number of years' experience elsewhere:		12
		Codes as for 129		
144	8.2	Type of area optician practises in at present:		12
		Large city centre	1	
		Industrial town	2	
		Smaller town	3	
		County town	4	
		Country town	5	
		Residential suburb	6	
		Working class suburb	7	
		Elsewhere	8	
145	8.3	Type of area in which optician would prefer to practise:		12
		Codes as for 144		
146	8.4	Reasons for choice in 145:		12
		Wider cross-section of patients	1	
		Pleasant clientele/get to know better/community atmosphere	2	
		Slower pace of life/pleasant life/fresh air	3	
		People straightforward and honest/appreciate efforts	4	
		More variety/potential for growth	5	
		Area I know/home town/happy where I am/Never worked anywhere else	6	
		Others	7	
		Don't Know	8	
147	9	Description of service seekers:		12
		Clients	1	
		Customers	2	
		Patients	3	
		Something else (please specify)	4	

Variable No.	Question No.	Subject Matter		Questionnaire Page No.
148	10	Attitude of service seekers:		13
		Caution	1	
		Friendliness	2	
		Suspicion	3	
		Trust	4	
		Another attitude (please specify)	5	
149	11	Number of days/week spent practising ophthalmic optics:		13
		Less than one	1	
		One	2	
		Two	3	
		Three	4	
		Four	5	
		Five	6	
		More than five	7	
150	12	Number of eye-examinations carried out by optician in an average week:		13
		0-5	1	
		6-10	2	
		11-20	3	
		21-30	4	
		31-50	5	
		More than 50	6	
151	13.1	Number of hours/week spent examining eyes:		14
		0-5	1	
		6-10	2	
		11-20	3	
		21-30	4	
		More than 30	5	
152	13.1	Number of hours/week spent fitting contact lenses:		14
		Codes as for 151		
153-164	1-8	Questions and codes as for two student surveys		16-18

Variable No.	Question No.	Subject Matter	Questionnaire Page No.
165	13.1	Number of hours spent advising on suitable lenses: Codes as for 151	14
166	13.1	Number of hours spent making minor repairs and adjustments: Codes as for 151	14
167	13.1	Number of hours spent on NHS administration: Codes as for 151	14
168	13.1	Number of hours spent on other administration: Codes as for 151	14
169	13.1	Number of hours spent on other activities: Codes as for 151	14
170	13.2	Is examining eyes a professional activity: Professional 1 Partially professional 2 Could be thought to be professional 3 Not really professional 4 Not professional 5	14
171	13.2	Is contact lens fitting professional: Codes as for 170	14
172	13.2	Is helping individuals to choose frames professional: Codes as for 170	14
173	13.2	Is advising individuals on suitable lenses professional: Codes as for 170	14

Variable No.	Question No.	Subject Matter	Questionnaire Page No.
174	13.2	Is making minor repairs and adjustments professional: Codes as for 170	14
175	13.2	Is NHS administration professional: Codes as for 170	14
176	13.2	Is other administration professional: Codes as for 170	14
177	13.2	Are other activities professional: Codes as for 170	14
178	14.1.8	How important is teaching in a university ophthalmic optics department: Very important 1 Quite a lot 2 Moderately important 3 Slightly important 4 Not important 5	15
179	14.2.1	How often in past year had optician read optical textbooks: Frequently/throughout the year 1 Occasionally 2 Not at all 3	15
180	14.2.2	How often in past year had optician read optical journals: Codes as for 179	15
181	14.2.3	How often in past year had optician attended local optical association meetings: Codes as for 179	15
182	14.2.4	How often in past year had optician attended refresher courses: Codes as for 179	15

Variable No.	Question No.	Subject Matter	Questionnaire Page No.
183	14.2.5	How often in past year had optician attended conferences: Codes as for 179	15
184	14.2.6	How often in past year had optician undertaken research activities while in practice: Codes as for 179	15
185	14.2.7	How often in past year had optician studied for further optical qualifications: Codes as for 179	15
186	14.2.8	How often has optician in past year taught in a university ophthalmic optics department: Codes as for 179	15
187	14.2.9	How often in past year had optician examined for professional bodies: Codes as for 179	15
188	2	Age-group of optician: 21-30 1 31-40 2 41-50 3 51-60 4 60+ 5	16
189	5	Does optician possess initial professional qualifications: Yes 1 No 2	17
190	5	Does optician possess further professional qualifications: Codes as for 189	17

Variable No.	Question No.	Subject Matter	Questionnaire Page No.
191	5	Does optician possess initial academic qualifications:	17
		Codes as for 189	
192	5	Does optician possess further academic qualifications:	17
		Codes as for 189	
193	5	Does optician possess other qualifications:	17
		Codes as for 189	
194	5	Nature of study for qualifications:	17
		Full-time 1 Part-time 2 Both 3	
195	6.1	Did optician work in other occupation(s)/ profession(s) before becoming an optician:	18
		Yes 1 No 2	
196	6.2	If YES to 6.1, which occupation(s) or profession(s):	18
		Pharmacy 1 Other professions/semi-professions 2 Others 3 Dispensing optics/army optics 4	
197	9.1	Income from ophthalmic optics 1974-75:	19
		Less than £2,000 p.a. 1 £2,000-£3,999 p.a. 2 £4,000-£5,999 p.a. 3 £6,000-£7,999 p.a. 4 £8,000-£9,999 p.a. 5 More than £10,000 p.a. 6	

Variable No.	Question No.	Subject Matter	Questionnaire Page No.
198	9.2	Income compared with other ophthalmic opticians:	19
		Above average 1 About average 2 Below average 3 Don't Know 4	
199	10	Is optician an optical association official:	19
		Yes 1 No 2	
200	10	Is optician a drama, art, music or sporting club official:	19
		Codes as for 199	
201	10	Is optician a Justice of the Peace or voluntary welfare organisation official:	19
		Codes as for 199	
202	10	Is optician a political party official:	19
		Codes as for 199	
203	10	Does optician hold any other positions:	19
		Codes as for 199	
204	8	Was optician's father self-employed either at time of optician's birth or when he started to practise ophthalmic optics:	18
		Self-employed father 1 Employed father 2	

APPENDIX C

ADDITIONAL PRIMARY ANALYSIS TABLES

Table C.1

First Year Student Survey - Detailed Breakdown of Samples

Centre	Date of Sample	Total Entry	Total Sample	Sample as % of entry
Aston University	1974	57	51	89.4
	1975	51	51	100.0
	1976	50	49	98.0
Bradford University	1974	34	32	94.1
	1975	33	33	100.0
	1976	32	32	100.0
Cardiff (UWIST)	1974	30	30	100.0
	1975	30	24	80.0
	1976	29	29	100.0
City University	1974	69	66	95.6
	1975	69	63	91.3
	1976	70	51	72,8
Glasgow College of Technology	1974	48	41	85.4
	1975	46	41	91.3
	1976	47	44	93.6
Manchester (UMIST)	1974	30	27	90.0
	1975	35	34	97.1
	1976	36	36	100.0
TOTALS	1974	268	247	91.4
	1975	262	246	94.3
	1976	264	241	91.3
OVERALL TOTAL		794	732	91.9

Table C.2

Final Year Student Survey - Detailed Breakdown of Samples

Centre	Date of Sample	Total Entry	Total Sample	Sample as % of entry
Aston University	1975	40	34	85.0
	1976	58	50	86.2
Bradford University	1975	23	23	100.0
	1976	31	26	83.9
Cardiff (UWIST)	1975	19	19	100.0
	1976	27	27	100.0
City University	1975	67	52	77.6
	1976	68	52	76.4
Glasgow College of Technology	1975	28	28	100.0
	1976	30	26	86.7
Manchester (UMIST)	1975	28	28	100.0
	1976	28	23	82.1
TOTALS	1975	205	184	89.8
	1976	242	204	83.5
OVERALL TOTAL		447	388	86.4

Table C.3

First Year Student Survey - Detailed Breakdown of Self-Recruitment

Centre	Date of Sample	Students with optician father: Total Sample	Number	% Total Sample
Aston University	1974	51	5	9.8
	1975	51	4	7.8
	1976	49	4	8.2
Bradford University	1974	32	2	6.2
	1975	33	1	3.0
	1976	32	1	3.1
Cardiff (UWIST)	1974	30	2	6.7
	1975	24	-	-
	1976	29	3	10.3
City University	1974	66	10	15.1
	1975	63	2	3.2
	1976	51	5	9.8
Glasgow College of Technology	1974	41	2	4.9
	1975	41	4	9.8
	1976	44	1	2.3
Manchester (UMIST)	1974	27	1	3.7
	1975	34	3	8.8
	1976	36	2	5.5
TOTALS	1974	247	21	8.9
	1975	246	14	5.7
	1976	241	16	6.7
OVERALL TOTAL		732	51	7.0

Table C.4

Final Year Student Survey - Detailed Breakdown of Self-Recruitment

Centre	Date of Sample	Students with optician father: Total Sample	Number	% Total Sample
Aston University	1975	34	2	5.9
	1976	50	2	4.0
Bradford University	1975	23	3	13.4
	1976	26	2	7.7
Cardiff (UWIST)	1975	19	3	15.8
	1976	27	2	7.4
City University	1975	52	7	13.5
	1976	52	9	17.3
Glasgow College of Technology	1975	28	6	21.4
	1976	26	3	11.5
Manchester (UMIST)	1975	28	-	-
	1976	23	-	-
TOTALS	1975	184	21	11.4
	1976	204	18	9.3
OVERALL TOTAL		388	39	10.1

Table C.5

Practising Optician Survey

Rating of Various Activities on Professional - Non-professional Scale

Activity	Professional	Partly Professional	Could be thought to be Professional	Not Really Professional	Not Professional	No Reply
	%	%	%	%	%	%
Examining Eyes	95.1	1.1	1.1	-	-	2.7
Contact Lens Fitting	81.1	4.1	1.9	0.3	-	12.6
Helping to choose frames	15.1	38.1	24.1	14.2	4.1	4.4
Advising on suitable lenses	72.0	18.4	4.6	1.1	-	3.8
Minor Repairs and ajustments	13.0	27.3	24.7	20.8	10.4	3.8
NHS Administration	5.2	6.0	10.4	34.5	38.6	5.2
Other Administration	3.6	6.0	10.1	28.0	41.9	10.4

Number = 366 in each row

Further Analysis of Practising Optician Survey Data

The data was also analysed by social class and nature of optical qualifications (graduate and non-graduate). Like area of practice these were not, in general, sources of many important differences in terms of concepts of professionalism. There were, nevertheless, some that are worthy of mention and comment. Social class and classification of ophthalmic optician (Variable 053) were related ($x^2 = 9.53$, $p = 0.048$). The data showed that middle class opticians were more likely to say that ophthalmic optics was an old-established or new profession; working lcass opticians were more likely to say that it was developing into a profession, although 64.4% of them said that it was an old-established or new profession.

Social class was also related to degree of similarity between ophthalmic optician-patient and shopkeeper-customer relationships ($x^2 = 13.62$, $p = 0.008$). Working class opticians were more likely (14.9% as opposed to 6.5% of the middle class opticians) to say that the relationships were fairly close or very closely similar. A third relationship was between social class and description of service seekers ($x^2 = 13.10$, $p = 0.01$). Working class opticians were more likely to use the terms 'client' and 'customer' and less likely to use the term 'patient'. Only two opticians in fact used the term 'customer'; both were working class in origin. Data relating to other variables also indicated that middle class opticians were more likely to attend local optical association meetings ($x^2 = 16.14$, $p = 0.001$), attend conferences ($x^2 = 8.39$, $p = 0.015$), have studied full-time for their optical qualifications ($x^2 = 13.38$, $p = 0.001$) and be an optical association

official ($x^2 = 7.32$, $p = 0.006$).

These relationships appear to indicate that working class opticians are less likely to be members of the active minority of the professional body who attend meetings and conferences and are officials of local associations. This relative lack of participation perhaps explains in part why working class opticians are less likely to use the para-medical description of 'patient' and to consider that ophthalmic optics is a profession. However, the analysis of the data by social class did nothing to suggest that the increasingly middle class origins of the professional body will result in fundamentally different conceptions of professionalism within it. There was certainly no indication of a greater financial or commercial i.e. income orientation among those with lower class origins.

The vast majority of the graduates in the sample were in the 21-30 age-group as Table C.6 shows:

Table C.6

Cross-Tabulation of Graduate Status with Age-Group

Age-Group	Graduates %	Non-Graduates %	No Reply %
21-30	88.6	11.4	-
31-40	15.9	82.0	1.2
41-50	3.2	96.8	-
51-60	1.7	96.6	1.7
60+	-	100.0	-
Total (n = 366)	23.5 (n = 86)	76.0 (n = 278)	0.5 (n = 2)

The initial assumption underlying this analysis was that graduates might score higher on the groups of professionalism variables since they had been exposed to a longer period of professional socialisation during their degree courses than most older opticians. The data in fact revealed very few such differences. The few that existed, however, were not always consistent with the initial assumption. Variable 049 (best description of ophthalmic optical profession) was related to graduate status ($x^2 = 21.62$, $p = 0.001$). The data indicated that graduate opticians were more likely to say that a 'profession which is secure and lucrative' was the best description and less likely to say that it was a 'profession of service to the community'; it was of almost equal likelihood, compared with non-graduate opticians that they would say it was a 'profession that helps people'. The data seem to indicate that the graduates were more income-orientated. Similar findings came from analysis of Variable 089 (feelings on income-service relationship) which was related to graduate status ($x^2 = 9.21$, $p = 0.026$).

The graduate opticians were more likely to say that income should be distinct from service and should approximate to that of other professions. They were less likely to say that income should be sufficient to allow an optician to live comfortably but service was more important. These findings may indicate a taken for granted professional status among graduate opticians, and therefore professional level income expectations rather than a commercial

Two of the career commitment variables were found to be related to graduate status. These were Variable 028 (feelings about a career in ophthalmic optics - $x^2 = 36.79$, $p = 0.001$) and Variable 119 (first source of satisfaction in life - $x^2 = 19.17$, $p = 0.007$). The data relating to

Variable 028 showed that graduates were more likely to say that optics was the only career or one of several careers that could satisfy them, and less likely to say that they could have found others more satisfying or chose it without considering whether they would find it satisfying. This is consistent with the initial assumption. However, the data from Variable 119 showed that graduates were more likely to cite their family or leisure and less likely to site their professional career as the prime source of satisfaction in their lives, which appears to indicate less career commitment on their part. This is probably as much a function of age as of graduate status, for the relationship between first source of satisfaction and age showed that the older the optician the more likely he was to cite career as the prime source of satisfaction in life.

Lastly, graduate status was related to description of work premises ($x^2 = 25.10$, $p = 0.001$). Graduates were less likely to use the terms 'consulting room', 'office' and 'shop' and more likely to use the term 'practice'. However, three, two and two graduates respectively did use these terms; this may be an indication of the type of practice graduates were more likely to work in i.e. an objective recognition of the term their older colleagues use than of the term they might use to describe their own practice. Thus graduate status was related to some important differences in terms of concepts of professionalism, but it was difficult to distinguish between the consequences of graduate status and age. The latter in the end might be the more important discriminating variable.

APPENDIX D

COPY OF ARTICLE PUBLISHED IN 'OPHTHALMIC OPTICIAN'

The following article was published in the November 29th, 1975 issue of the 'Ophthalmic Optician' : 1059-1063 and contains data relating to the social background of the sample of first year ophthalmic optics students who started their degree courses in October 1974

SOCIAL FACTORS AND THE RECRUITMENT OF OPHTHALMIC OPTICS STUDENTS

by

Alan G. Fielding

Aston University

Content has been removed for copyright reasons

APPENDIX E

STATISTICS OF THE PROFESSION

SECTION A

Statistics of Opticians etc.

Table E.1

Number of Ophthalmic Opticians - UK (1961-76)

Year	No. of Ophthalmic Opticians on GOC Register

Source: GOC statistics; all refer to the end of the year

Table E.2

Age Structure of Ophthalmic Opticians - UK (1976)

Source: Ophthalmic Optician, April 2nd 1977, p.277

Table E.3

Recruitment to Ophthalmic Optics - By Sex - UK (1965-76)

Year	Women Students	All Students	Women as % all Students

Source: Ophthalmic Optician, April 3rd 1976

Table E.4

Sub-Groups in Ophthalmic Optics - UK (1975)

Sub-Group	Number	% Total ophthalmic opticians

HMSO 1976, p.49

[1] Including M.Sc., Ph.D, some of whom have no first degrees

Table E.5

Women in Profession - UK (1965-76)

Year	Female Opticians as % total ophthalmic opticians

Table E.6

Age Structure of Chemist Opticians - UK (1976)

Date of Birth	Number of chemist-opticians	% total ophthalmic opticians in age group

Source: Ophthalmic Optician, April 2nd 1977, p.277

Table E.7

Bodies Corporate in Ophthalmic Optics 1975

Aston University

Content has been removed for copyright reasons

Source: Opticians Register 1975

SECTION B

Statistics of Optical Associations

Table E.8

British Optical Association Membership (1895-1975)

Sources: BOA Handbook 1960, p.24 and International Optical Yearbook 1976, p.94

SECTION C

Joint Committee of Qualified Opticians &
National Health Service Statistics

Table E.9

Number of J.C.Q.O. Opticians (1931-40)

Figures relate to end of year

From 1923-32 Official Register of Ophthalmic Opticians
From 1933 onwards Official Register of Optical Practitioners

Source: Annual Registers of J.C.Q.O.

Table E.10

NHS Statistics of Sight Tests and Glass Prescribed and Supplied 1948-1975

Year	No. of sight tests	No of glasses prescribed	Prescriptions as % tests	No of glasses supplied & paid for	Glasses supplied as % tests

* six months only
** sight tests paid for
*** England only - Welsh statistics in separate Reports

Sources: Ministry of Health/DHSS Annual Reports 1948-71: Health & Personal Social Services Statistics for England 1972

Table E.11

NHS - Cost of Supplementary*/General Ophthalmic Service

1948-1975

Year	Gross Cost	Cost less Charges	Charges as % gross cost

General Ophthalmic Service

**After 1971 information in columns 3 & 4 not given

Sources: As for Table E.10

Table E.12

NHS - Personnel of Supplementary/General Ophthalmic Service

1949-1975

Year	No. of ophthalmic medical practitioners	No. of ophthalmic opticians	No. of dispensing opticians

Source: as for Table E.10

Table E.13

NHS - Disciplinary Decisions by Minister or Tribunals

1949-1974

Year	General Medical Service	General Dental Service	Pharmaceutical Service	Supplementary/ General Ophthalmic Service

Source: As for Table E.10

BIBLIOGRAPHY and REFERENCES

Books, Articles and Theses

1. Abel-Smith B. (1960) A History of the Nursing Profession. London Heinemann

2. Bankowski Z. & Mungham G. (1976) Images of Law. London. Routledge & Kegan Paul

3. Barber B. (1963) "Some Problems in the Sociology of Professions" Daedalus. 92, 4, pp. 669-678

4. Baster A.S.J. (1935) Advertising Re-Considered : A Confession of Misgiving. London. P.S. King

5. Bateman A.S. (1965) "The Emperor's New Clothes, or the Grand Design That Wasn't" Ophthalmic Optician. July 24th, pp. 787-8

6. Ben-David J. (1964) "Professions in the Class System of Present Day Societies" Current Sociology 12, pp.247-330

7. Bennett A.G. (1977) "Student Intake in the Opthalmic Optical Profession" Ophthalmic Optician. February 5th, pp. 79-84

8. Berger P. & Luckmann T. (1967) The Social Construction of Reality London, Allen Lane

9. Brown G. (1970) "Selection Procedures in Ophthalmic Optics" Unpublished Report, University of Aston, April

10. Bucher R. & Strauss A. (1961) "Professions in Process" American Journal of Sociology LXVI (January), pp. 325-334

11. Caplow T. (1954) The Sociology of Work. New York, McGraw-Hill

12. Carchedi G. (1975) "On the Economic Identification of the New Middle Class" Economy & Society 4, 1., pp. 1-86

13. Carr-Saunders A. (1955) Metropolitan Conditions & Traditional Professional Relations : in R.M. Fisher ed. The Metropolis in Modern Life. New York, Doubleday

14. Carr-Saunders A. & Wilson P. (1933) The Professions. Oxford, O.U.P.

15. Champness R. (1968) Short History of the Worshipful Company of Spectacle Makers. London, Apothecaries Hall

16. Child J. (1972a) "Organisational Structure, Environment and Performance : The Role of Strategic Choice" Sociology. Vol. 6, No. 1 (January) pp.1-22

17. Child J. & MacMillan B. (1972b) "Managerial Leisure in British & American Contexts" Journal of Management Studies, Vol. 9, pp.182-195

18. Cicourel A. & Kitsuse J. (1963) The Educational Decision-Makers. New York, Bobs-Merrill

19. Cohen P.S. (1968) Modern Social Theory. London, Heinemann

20. Cornwell F.R. (1946) Ophthalmic Optics as a Career. London, Vawser & Wiles

21. Corwin R.G. (1961) "Professional Employees : A Study of Conflict in Nursing Roles" American Journal of Sociology. Vol. LXVI, 6 (May) pp.604-615

22. Cotgrove F. & Box S. (1970) Science, Industry & Society London, Allen & Unwin

23. Coxon A.P.M. (1965) A Sociological Study of the Selection & Recruitment of Anglican Ordinands. Unpublished Ph.D Thesis, University of Leeds

24. Cruikshank K. & McManus C. (1976) "Getting into Medicine" New Society. January 15th pp.112-113

25. Denzin N.K. & Mettlin C.J. (1968) "Incomplete Professionalisation : The Case of Pharmacy" Social Forces (March), pp.375-381

26. Dubin R. (1956) "Industrial Workers' Worlds" Social Problems 3 (January) pp.131-142

27. Eckstein L. (1959) The English Health Services. Cambridge, Mass., Harvard U.P.

28. Elliott P. (1972) The Sociology of the Professions. London, Macmillan

29. Etzioni A. (1965) Modern Organisations. New York, Random House

30. Etzioni A. ed. (1969) The Semi-Professions & Their Organisation Glencoe, Illinois, Free Press

31 Fielding A.G. (1975) "Social Factors and the Recruitment of Ophthalmic Optics Students" Ophthalmic Optician, November 29th, pp.1059-1063

32 Flexner A. (1915) "Is Social Work a Profession?" Proceedings of National Conference of Charities and Corrections Chicago, Hildman Publishing

33. Flick C.S. (1961) "History of Optical Legislation" Ophthalmic Optician. June 3rd, pp.679-684

34. Foote N.N. (1953) "Professionalisation of Labor in Detroit" American Journal of Sociology. Vol.LVIII, 4 (January) pp.371-380

35. Fores M. & Glover I. (1978) The British Disease : Professionalism Times Higher Education Supplement. February 24th : 15

36. Freeman H.E., Levine S. & Reader L.G. (1963) Handbook of Medical Sociology. New Jersey. Prentice Hall

37. Freidson E. (1963) The Hospital in Modern Society. Glencoe, Illinois, Free Press

38. Freidson E. (1968) Para-Medical Personnel : in Encyclopaedia of the Social Sciences. New York. Macmillan Vol.10 pp.114-120

39. Freidson E. (1970) Professional Dominance. New York Atherton Press

40. Freidson E. ed. (1971) The Professions and their Prospects. Beverley Hill, Claifornia, Sage

41. Giles G.H. (1962) "The Development of the Ophthalmic Services" Journal of the Royal Society of Health, 4 pp.217-222

42. Gray P.G. (1951) "Who Wears Spectacles?" Lancet, September 2nd pp.537-8

43. Greenwood E. (1957) "Attributes of a Profession" Social Work, 2 (July), pp.45-55

44. Gross E. (1958) Work & Society. New York, Thomas Cromwell

45. Gyarmati G.K. (1975) The Doctrine of the Professions : Basis of a Power Structure. International Social Science Journal. Vol.XXVII, No.4, pp.629-654

46. Hall R.H. (1968) "Professionalisation & Bureaucratization" American Sociological Review, 33, (February) pp.92-104

47. Hall R.H. (1969) Occupations and the Social Structure. New Jersey, Prentice Hall

48. Halmos P. (1970) The Personal Service Society. London, Constable

49. Halmos P. ed. (1973) Professionalisation & Social Change. Sociological Review Monograph, No.20 (December), Keele

50 Harries-Jenkins C. (1970) Professions in Organisations : in Jackson J.A. ed. Professions & Professionalisation. Cambridge, Cambridge U.P., pp.53-107

51. Hastings A. & Hinings C.R. (1970) "Role Relations & Value Adaptations - A Study of Professional Accountants in Industry" : Sociology 4, 3 (September) pp.353-366

52. Haug M.R. (1973) De-professionalisation - An Alternative Hypothesis for the Future : in Halmost (1973) pp.195-211

53. Havighurst R.J. (1973) Optometry : Education for the Profession. Washington D.C., National Commission on Accrediting.

54. Hickson D.J. & Thomas M.W. (1969) "Professionalisation in Britain - A Preliminary Measurement" : Sociology (January) pp.37-53

55. Hughes E.C. (1958) Men and their Work. Glencoe, Free Press

56. Hughes E.C. (1959) The Study of Occupation : In Merton R.K. et al Sociology Today. New York, Basic Books

57. Hughes E.C. (1963) Professions : in Barber B. (1963) pp.655-668

58. Ibbs B.S. (1955) "Opticians in the Square Mile" : Optician, December 23rd, pp.584-588

59. Jackson J.A. ed. (1970) Professions & Professionalisation. Cambridge, Cambridge U.P.

60. Jamous H. & Peliolle B. (1970) Changes in the French University-Hospital System : in Jackson J.A. ed. 1970, pp.111-152

61. Jarvis P. (1975) "The Parish Ministry as a Semi-Profession" : Sociological Review, Vol.23, 4 (November) pp.911-922

62. Jesser C.J. (1968) "Social Participation of Professionals in Rural Areas" : Sociological Quarterly, 9 (summer) pp.248-260

63. Johnson M.L. (1971a) "Comparison of Social Characteristics and Academic Achievement of Medical Students and Unsuccessful Medical School Applicants" British Journal of Medical Education. (December), pp.260-263

64. Johnson M.L. (1971b) "Non-Academic Factors in Medical School Selection - A Report on Rejected Applicants" : British Journal of Medical Education (December) pp.264-268

65. Johnson T.J. (1972) Professions & Power. London, British Sociological Association/Macmillan

66. Johnson T.J. (1973a) Professions : in Hurd G. Human Societies. London, Routledge & Kegan Paul.

67. Johnson T.J. (1973b) Imperialism & The Professions, in Halmos P. ed. (1973) pp.281-309

68. Johnson T.J. (1975) Professions and the Class Structure : British Sociological Association Conference Paper

69. Kahan M., Butler D. & Stokes D. (1966) "On the Analytical Division of Social Class" : British Journal of Sociology. Vol.17, 2 (June) pp.122-132

70. Kairat H. (1969) 'Professions' oder 'Freie Berufe'? - Professionales Handelm in Sozialen Kontext. Berlin, Duncker & Humblot.

71. Kelsall R.K. (1954) Self-Recruitment in Four Professions : in Glass D.V. ed. Social Mobility in Britain. London, Routledge & Kegan Paul.

72. Kelsall R.K. (1957) Applicants for Admission to University : Committee of Vice-Chancellors & Principals

73. Kelsall R.K., Jones A. & Poole A. (1972) Graduates - the Sociology of an Elite. London, Methuen

74. Kerr S., Von Glinow M.A. & Shriesheim J. (1977) "Issues in the Study of 'Professionals' in Organisations" : Organisational Behaviour & Human Performance, 18, pp.329-345

75. King H.C. (1955) "Social Ophthalmics" : Optician, April 22nd,pp.343-345

76. Kleingartner A. (1967) Professionalism & Salaried Workers' Organisations. University of Wisconsin Industrial Relations Research Unit

77. Krause E. (1971) The Sociology of Occupations. Boston, Little Brown & Co.

78. Lewis R. & Maude A. (1952) Professional People. London, Phoenix House

79. Lieberman M. (1956) Education as a Profession. New Jersey. Prentice Hall

80. Lindsey A. (1962) Socialised Medicine in England & Wales. Berkeley, University of California Press

81. Lyons C. (1975) "The George Giles Story" : Ophthalmic Optician, October 4th, pp.859-875

82. McCormack T.H. (1956) "The Druggists' Dilemma - Problems of a Marginal Occupation" : American Journal of Sociology (January) pp.308-315

83. Martin H.W. & Katz F.E. (1961) "The Professional School as a Molder of Motivations" : Journal of Health & Human Behaviour (Summer) pp. 106-112

84. Merton R.K., Reader G. & Kendall P.L. eds. (1957) The Student Physician. Cambridge, Mass., Harvard U.P.

85. Millerson G. (1964) The Qualifying Associations. London, Routledge & Kegan Paul

86. Mok A.L. (1969) "Alte und neue Professionen" : Kolner Zeitschrift fur Soziologie und Sozialpsychologie, 21, pp.770-781

87. Mok A.L. (1971) Professional Innovation in Post-Industrial Society : in Freidson ed. (1971) pp. 105-116

88. Mok A.L. (1977) Occupation Formation and Class Formation : Seminar Paper, (March) University of Aston

89. Morris J.W. (1941) Education & Examinations : in The Optician 1891-1941 April, London, The Hatton Press, pp. 27-30

90. Morse & Weiss (1955) The Function and Meaning of Work and the Job" American Sociological Review, Vol. 20, pp.191-198

91. Nunnally J.C. (1967) Psychometric Theory. New York, McGraw-Hill

92. Olesen V. & Whittaker E.W. (1970) Critical Notes on Sociological Studies of Professional Socialisation : in Jackson J.A. ed. (1970) pp. 181-221

93. Oppenheim A.N. (1966) Questionnaire Design & Attitude Measurement London, Heinemann

94. Oppenheimer M. (1973) The Proletarianization of the Professional in Halmos ed. (1973) pp. 213-227

95. Orzack L.H. & Uglum J.R. (1958) "Sociological Perspectives on the Profession of Optometry" : American Journal of Optometry (August) pp. 407-424

96. Orzack L.H. (1959) "Work as a 'Central Life Interest' of Professionals" Social Problems, 7, 2 (Fall) pp. 125-132

97. Orzack L.H. (1971) "Professionalisation & Prestige Deficits" Sociological Focus 4, 3 (Spring) pp. 63-71

98. Parry N. & J. (1976) The Rise of the Medical Profession - A Study in Collective Mobility. London, Croom Helm Ltd

99. Parsons T. (1939) "Professions and the Social Structure" : Social Forces 17, 4, (May) pp. 457-467

100. Parsons T. (1951) The Social System. Glencoe, Illinois, Free Press

101. Parsons T. (1968) The Professions : in Encyclopedia of the Social Sciences, Vol. 2, New York, Macmillan, pp.536-546

102. Political and Economic Planning (1937) Report on the British Health Services (December)

103. Rapaport R. & R. (1965) "Work and Family in Contemporary Society" : American Sociological Review, Vol. 30, No. 3, pp. 381-394

104. Rex J. (1962) Key Problems in Sociological Theory. London, Routledge & Kegan Paul

105. Rogoff N. (1957) The Decision to Study Medicine : in Merton, Reader & Kendall eds. (1957) pp. 109-129

106. Silverman D. (1968) Theories of Organisations. London, Heinemann

107. Slocum W.L. (1966) Occupational Careers. Chicago, Alldine Publishing Co.

108. Stanton J.R. (1963) The Ophthalmic Optical Profession. London, British Optical Association

109. Stoneman A.S. (1896) "The Future of Opticians as Refractionists" : Dioptric & Ophthalmometric Review (April) pp. 6-8

110. Strauss G. (1963) "Professionalism & Occupational Associations" : Industrial Relations 2, (May) pp. 7-31

111. Stubbs C. (1972) Some Subjective Aspects of the Problem of Professionalisation : Postgraduate Seminar Paper, April, University of Leeds.

112. Sutcliffe J.H. (1896) "The Formation of the British Optical Association" : Dioptric & Ophthalmometric Review (April) pp. 3-6

113. Taylor G. & Ayres N. (1969) Born and Bred Unequal. London, Longmans

114. Taylor L. (1968) Occupational Sociology. New York, Oxford U.P.

115. Toren N. (1969) Social Work as a Semi-Profession : in Etzioni A. ed. (1969)

116. Toren N. (1972) Social Work - the Case of a Semi-Profession. Beverley Hills, California, Sage

117. Turner C. & Hodge M.N. (1970) Occupations & Professions : in Jackson J.A. ed. (1970) pp. 19-50

118. Vollmer H.M. & Mills D.L. eds. (1966) Professionalisation. Englewood Cliffs, New Jersey, Prentice-Hall

119. Walker D.S. (1976) The Professionalisation of Marketing : Unpublished Ph.D Thesis, November, University of Aston

120. Webb S. & B. (1917) Special Supplement on Professional Associations : New Statesman, Vol. 9, April 21st & 28th, Nos. 211 & 212, pp. 1-48

121. Wilensky H. (1961) "Orderly Careers & Social Participation : American Sociological Review 26, (August) pp. 521-539

122. Wilensky H. (1964) "The Professionalisation of Everyone?" : American Journal of Sociology 70, 2 (September) pp. 137-158

Government Publications (in chronological order)

123. Report of Royal Commission on National Health Insurance 1926, Cmd. 2596.

124. Report of Departmental Committee on Optical Practitioners (Registration) Bill 1927, Cmd. 2999

125. Report on Social Insurance & Allied Services (Beveridge Committee) 1942, Cmd. 6404

126. Report on Social Insurance & Allied Services (Beveridge Committee) - Appendix G (Memoranda from Organisations) 1942, Cmd. 6405

127. Ministry of Health : A National Health Service (1944 White Paper) 1944, Cmd. 6502

128. Ministry of Health : Report of Working Party on Average Time Taken to Test Sight by Ophthalmic Medical Practitioners Penman Committee, HMSO 1949

129. Ministry of Health : Report of Working Party on Average Time Taken to Test Sight by Ophthalmic Opticians (Penman Committee) HMSO 1950

130. Report of Interdepartmental Committee on the Statutory Registration of Opticians (Crook Committee) Cmd. 8531, 1952

131. Report of Committee of Enquiry into the Cost of the NHS in England & Wales (Guillebaud Committee) Cmd. 9663, 1956

132. Report of Royal Commission on Doctor's & Dentists' Remuneration 1957-60, Cmd. 939, 1960

133. Report of Committee for Higher Education : Higher Education (Robbins Report), Appendix 1, Cmd. 2154-1, 1963

134. Report of Royal Commission on Medical Education 1965-68 Todd Report) Cmd. 3569, 1968

135. National Health Service : Handbook for Ophthalmic Medical Practitioners, Ophthalmic Opticians and Dispensing Opticians (revised to July 1969)

136. Monopolies Commission : Report on Professional Services, Cmds. 4663 and 4663-1, 1970

137. Price Commission : Report No. 20 : Prices of Private Spectacles and Contact Lenses : HMSO September 1976

138. Annual Reports of Ministry of Health 1948-68

139. Annual Reports of Department of Health & Social Security 1969-71

140. Health & Personal Social Services Statistics for England : HMSO annually - 1972 onwards

141. Hansard, May 13th 1927, columns 805-850

142. Annual Abstract of Statistics 1975, HMSO 1976

Newspapers, Journals etc. (in chronological order)

The Guardian — November 11th, 1976; July 20th, 1977; April 20th, 1978

The Law Society Gazette — Vol.74, No.6, February 16th, 1977

The Optician — April 2nd 1891; August 13th 1891; 1891-1941, April 1941; April 22nd 1955; June 15th 1955; December 23rd 1955

The Ophthalmic Optician — April 8th 1961; June 3rd 1961; February 10th 1962; March 24th 1962; May 18th 1963; July 24th 1965; August 14th 1965; October 16th 1965; December 25th 1965; June 24th 1967; June 8th 1968; November 30th 1968; December 14th 1968; March 21st 1970; December 9th 1972; March 31st 1973; April 28th 1973; September 1st 1973; November 11th 1973; April 13th 1974; November 16th 1974; October 4th 1975; April 3rd 1976; April 2nd 1977

The Times — October 4th 1977