Factors Influencing Learning in General Practice

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Declaration

This thesis is the result of my own work. The material contained in the thesis has not been presented, nor is currently being presented, either wholly or in part for any other degree or qualification.

The research work was carried out in Liverpool.

Statistical analysis of part of the work described in Chapter 4 was carried out in collaboration with Dr David Percy PhD, Department of Computational Mathematics, University of Salford. Mrs Toni Lewis carried out the 'forced card sort' with general practitioners described in Chapter 5.

Abstract.

Factors influencing learning in general practice

J G Bligh

This study seeks to set what is known about how general practice trainees learn into the wider context of the learning environment in which they work.

The general purpose of the study is to investigate factors that may influence learning in the professional context of the postgraduate setting.

More specifically, the study aims to develop an understanding of how learning both for, and in, general practice may be improved and to develop a valid and reliable research instrument reflecting important factors influencing learning in practice.

The study architecture incorporated the use of an established inventory examining factors relating to readiness for self-directed learning and an interview study with a group of general practice trainees at the end of their training. This phase of the study generated hypotheses to be tested in the second phase using newly designed questionnaires derived from the interview study. The study population was drawn from general practice trainees in the Mersey and North West regions of England for the first phase and from trainees in a wider national range of training schemes and from general practitioners working in four Family Health Service Authorities (Avon, Barking and Havering, Cumbria and Nottingham) for the second phase.

Principal components factor analysis identified six factors that may play a role in learning. These factors accounted for over a third of the total variance within each sample. The factors were consistent across both the vocational training and continuing medical education settings with internal reliability scores for the questionnaires of .76 and .64. Other influences on the process of learning were also identified. These included factors relating to the doctor eg gender, postgraduate qualifications, teaching experience and number of partners and factors related to the context of clinical practice eg the role of patients and of colleagues and peers as influences in learning. The role of active reflection on clinical activity, a need for support and guidance in learning and the negative effects of work-related stress emerged as major ingredients of a complex picture.

CHAPTER 1.

General Practice in the health service.

Introduction.

> *"The role of doctor in our society is still invested with the expectation of personal care and a commitment which transcends that of most other professional relationships" (McCormick, 1992, p154).*

This study is concerned with learning in general practice. The study concentrates on factors that may influence learning activities both in vocational training for trainee general practitioners and in continuing medical education for established principals. The study is set in the context of radical changes to the national health service, many of which have significant implications for the nature of general practice.

This first chapter describes the place of general practice in the National Health Service (NHS). It briefly reviews the history and development of modern general practice as a branch of medicine distinct from the hospital medicine practised by specialists. The contribution of undergraduate education to preparation for general practice, the role of vocational training and the evolving part played by continuing medical education are discussed later in the chapter. Chapter Two examines what we know about learning in general practice and reviews evidence describing the process and the outcome of training. A model of learning developed amongst students in higher education is introduced as a framework to focus thinking about learning and the results of a study with general practice trainees using this framework are described. Chapter Three sets out the aims and methods for the study. Chapter Four reports a survey amongst general practice trainees that examined readiness for self-directed learning using a questionnaire developed in the United States. In Chapter Five, the results of an interview study with a small sample of trainees at the end of their training are used, with evidence from the study in Chapter Four, to establish six speculative constructs reflecting factors influencing learning in general practice. Chapters Six and Seven report the results of two surveys using a questionnaire designed to test the validity of the ideas described in Chapter Five. Chapter

Eight sets out a discussion of the results of each of the studies and describes the implications of the study for medical education in general practice.

General practice in the National Health Service.

General practice occupies a crucial position as the point of first contact with the health service for almost every patient. It has become part of the British way of life to have a recognised general practitioner, whom many people still call 'my doctor'. This personal, and often lifelong relationship, is a cardinal feature of general practice in the UK and one that is highly respected by health services throughout the world (Grumbach & Fry, 1993). Recent changes to the NHS inspired by the Conservative government in the early 1990s have put tremendous pressure on general practice to redefine its role. General practitioners are now, more than ever before, responsible for the financial effects of their actions (especially in prescribing). Whilst the traditional focus of their attention - the individual patient with symptoms - remains paramount, they are also required to take into account the health and health care needs of the rest of their population (Gillam, 1992). Changes in the way the health service is managed have given greater powers to local managers and practitioners alike raising further opportunities for enhancing the scope of general practice. Yet the profession is split in its response. Many general practitioners feel bruised and hurt by what they see as change, imposed with little or no opportunity for consultation or trial. Others, sensing the chance to develop themselves and their practices, have taken up the challenge of managing their own budget for clinical services, and see the future offering real opportunities for developing quality care for patients (Marsh, 1992). Against this backdrop, medical education is also undergoing radical change. At undergraduate level in response to General Medical Council calls for major alterations to both content and method and, in the postgraduate world, as a direct response to the demands of a health service changing rapidly in an evolving world. This chapter sets the background for the study reported later in this thesis.

1.1 Central role of general practice in the national health service.

1.1.1 The frontline of the health service.

General practice is the 'frontline' of the health service (Royal College of General Practitioners, 1987) with over ninety-five percent of the population registered with a general practitioner. Ninety percent of all contacts with the National Health Service (NHS) occur in primary care (225 million consultations each year) and ninety percent of problems presented are dealt with by primary health care teams without hospital involvement. In 1990, the number of general practitioner principals in England was 25,322 (twenty percent more than in 1978). The average list size per general practitioner was the lowest for a generation at 1,999. The majority of doctors work in partnerships with five or more partners with the number of doctors choosing to work in large groups steadily increasing each year. Twenty-two percent of principals are female with 31 percent aged under 35 years. The proportion of general practitioners aged less than 44 years has increased markedly whilst the proportion aged over 44 has decreased over the last ten years. The workload of the 'average' general practitioner changed very little between 1970 and 1981 in spite of reducing list size (Fleming, 1989). The average consultation rate, excluding telephone contacts, during that period was 3.5 consultations per patient (ibid) but the 1989 General Household Survey shows a progressive increase in the number of contacts between patient and doctor over time. The proportion of children under five seeing a general practitioner has doubled within the last ten years to an average of eight consultations per child in 1987 (Pereira Gray, 1991). Overall, about 55 percent of consultations in general practice are for minor, benign and often self-limiting conditions, 30 percent for chronic disorders and 15 percent for more acute, major, and potentially life-threatening diseases (Fry, 1992). The average time spent in face to face consultation with each patient in the UK is now 8 minutes (Pereira Gray, op cit).

Less than ten percent of consultations result in a referral to hospital services, but a prescription is issued in at least 60 percent of consultations. The total cost of the NHS is about £30 billion per year, of which £5.5 billion is spent in primary care. Prescriptions written by general practitioners cost £2.1 billion in 1990 and represent 80% of the total national drugs bill.

1.1.2 History and development of general practice

From the sixteenth century, doctors who worked in hospitals traditionally became members or fellows of the Royal College of Physicians or Surgeons. Those who worked outside hospital were originally known as apothecaries but became known in the UK as general practitioners. Hospital doctors were in general more specialised than general practitioners, and charged more for their services, whilst usually doing their hospital work on a voluntary basis. Patients were seen by both general practitioners and specialists, although a referral system eventually became common practice (and was based on etiquette rather than formal rules). Despite the 1858 Medical Act enabling all doctors to have their names on the Medical Register, divisions between hospital specialist and community generalist continued, partly because only well-off students could afford the long periods of low paid hospital apprenticeship training required to become a specialist (Jarman, 1988).

The National Health Insurance Act 1911 (NHI) ensured medical care through general practitioners for about a third of the population. Before the introduction of this Act, many general practitioners worked in a combination of private practice and in a system of 'club' practice. The club system originated with friendly societies of working men providing insurance for their members through the provision of doctors offering general medical care on a capitation basis. A quarter of general practitioners received most of their income from friendly societies in this way. The 1911 Act covered all manual workers, and some others with an income below a certain limit, but dependents of those with an income above the threshold were not covered. Hospital and specialist treatment were not covered. Under the system introduced by Lloyd George with the NHI Act a state system of panel doctors was introduced with each doctor able to build up a panel list of patients for which he was paid a capitation fee. Each doctor had considerable freedom in the type of services offered and enjoyed considerable job security. The establishment of the National Health Service (NHS) in 1948 introduced universal coverage for health care and introduced certain controls over the distribution and administration of general practice but maintained the panel system - meaning that general practitioners were paid entirely by capitation fee (an additional salaried element was not, in the end, introduced). There was

strong competition between doctors for patients but no incentive once a patient was on the list to provide good services. Despite general practice being seen as the most important part of the health service at that stage, methods of improving standards were not provided. It was not until 1966 that further major changes to general practice took place as a result of very severe pressure from the profession.

In 1963, general practitioners saw themselves as the 'cinderellas' of the health service but as a result of the changes brought about by the Amendment to their terms of service in the General Practitioner's Charter of 1966, they were in a very much stronger position by the early 1970s not only in terms of financial standing but also in respect of professional standing and self-respect (Cartwright & Anderson, 1981).

One of the most significant contributions made by the Royal College of General Practitioners to the development of general practice was the leading role it played in establishing the case for, and then describing the content of, vocational training for practice (RCGP, 1972). The College identified training as crucial in improving the self-esteem of general practitioners and the quality of their service. This was especially important in the 1960's when general practice was in the doldrums with recruitment low and the morale of practitioners even lower. Reasons for this included economic disincentives related to the pool system of remuneration and professional dissatisfaction. This dissatisfaction was set in a medical context that paid tribute to the specialist and denigrated the generalist and which gave rise to an image of general practice as dealing with essentially trivial problems in an unexciting and unrewarding fashion under marked pressure of time. In the early days of the health service, Brotherston described general practice as a 'cottage industry' (Kuenssberg, 1990) and, in giving evidence to the Royal Commission on Doctors' Remuneration, Lord Moran scathingly referred to general practitioners as doctors who had fallen off the hospital training ladder (Pereira Gray, 1980). The resulting Family Doctor's Charter in 1966 improved the choice of general practice as a career by improving practice payments, encouraging the formation of groups of general practitioners, providing positive incentives to improve the quality of service and premises and attempting to foster continuing medical education by linking seniority payments to attendance at approved

courses. At the same time local authorities were encouraged to build health centres in which general practitioners would find good facilities at reasonable rents and be able to work closely with attached health visitor, midwifery and district nursing services (Jeffreys & Sachs, 1983). In the mid-1980's, in a survey of general practitioners in the West Midlands, Branthwaite and colleagues found a number of factors contributing to tension and conflict amongst doctors. These included low status in relation both to other members of the profession and to patients, insecurity, uncertainty, and the dangers of making an error. There were also feelings of isolation, loneliness and frustration with role related to perceived pressures of time, limited resources, patient demand, the trivial nature of patients problems and the apparent lack of opportunity to apply the training and skills in medical treatment they had acquired (Branthwaite *et al*, 1988).

It is difficult to escape the observation that many of the problems with the general practice of the early 1960's and 1980's are echoed in today's atmosphere. The recent major changes to the health service were introduced at a time when the Department of Health were negotiating, in acrimonious circumstances, new contractual arrangements for general practitioners (Department of Health, 1989). Many general practitioners feel that the government bullied the profession into accepting additional tasks of unproved clinical value (Noakes, 1991) within a payment structure that, whilst maintaining the independent status of general practitioners, resulted in a much greater proportion of performance related pay (dependent on achieving targets for immunisations, health promotion, minor surgery and other areas) (Harris, 1991; Hannay, 1992). Recruitment to vocational training schemes fell dramatically at this time, mainly because of uncertainty about the security of a career in general practice , and this lower rate is continued some two years later. At the same time, established principals were seeking ways of leaving general practice, some in direct response to what they saw as the political imperative, others seeing the changes as an opportunity to make a move that had been thought about for some time. A number of doctors moved into management within the new administrative structure of general practice, working as medical advisers in the new Family Health Service Authorities charged with implementing many of the contractual and service

changes, and in particular, ensuring improvement in prescribing (Walley & Bligh, 1992). This recent period of 'unprecedented change' has for many general practitioners, resulted in more work (MacAuley, 1991), more pressure, more uncertainty about the future (Irvine, 1993) and, for a smaller number, less pay (Anonymous, 1993). The principal changes brought about by the new contract emphasise increased activity in health promotion and disease prevention (requiring additional nursing staff); greater accountability to the FHSA, and the patient, for professional time and activities through the provision of practice reports, patient information leaflets, increased availability and accessibility, and greater awareness and responsibility for the use of resources (especially financial) through the use of indicative prescribing amounts and the introduction of practice fund-holding arrangements. A great fear for some has been the threat of loss of clinical autonomy as a result of the new contract, with a consequent loss of one of the family doctor's 'strengths' - that of being able to innovate and relate to patients and their needs (without being bound by restrictive rules of employment) (Bosanquet, 1991). Despite the public clamour about the requirements of the new contract being excessive and inappropriate, general practitioners responded very well to the new performance targets and it was not uncommon for over ninety percent to have achieved targets for cytology within the first six months of their imposition. Furthermore, investment in buildings and in staff increased (partly to cope with increased workload associated with health promotion activities) and investment in information technology rose rapidly (over eighty percent of the doctors responding to the GMSC confidential survey in 1991 were computerized), revolutionalising the general practitioners' ability to provide health promotion services to his practice population.

1.1.3 Job description.

What is a general practitioner expected to do? The classic job description for general practice was given by the Leeuwenhorst Group in 1972.

> "The general practitioner is a licensed medical graduate who gives personal, primary and continuing care to individuals, families, and a practice population, irrespective of age, sex and illness. It is the synthesis of these functions which is unique. He will attend his patients in his consulting room and in their home and sometimes in a clinic or a hospital. His aim is to make early diagnoses. He will include and integrate

> physical, psychological and social factors in his considerations about health and illness. This will be expressed in the care of his patients. He will make an initial decision about every problem which is presented to him as a doctor. He will undertake the continuing management of his patients with chronic, recurrent, or terminal illnesses. Prolonged contact means that he can use repeated opportunities to gather information at a pace appropriate to each patient, and build up a relationship of trust which he can use professionally. He will practise in co-operation with other colleagues, medical and non-medical. He will know how and when to intervene, through treatment, prevention, and education, to promote the health of his patients and their families. He will recognise that he also has a professional responsibility to the community." (*Royal College of General Practitioners, 1978, p1)*

There are many doctors aspiring to practice in this fashion but trends and developments in the health service have rewritten this description rather more pragmatically:

> '...the aims of general practice in future may be described as: providing specified services of good quality to individual people and families; securing hospital care, specialized community health care, and social services of good quality for patients when required; improving the health of the practice population overall; and promoting learning by teaching and research' (*Irvine, 1993*).

Starfield highlights the services a good primary care programme should provide as initial assessment, diagnosis, and management; long-term continuous comprehensive care of people and their families; health promotion for a defined local population; and coordination of specialist's and community services (Starfield, 1992). In this world, the primary care physician should be not only personal physician, philosopher and friend to his patients but also a guide through the medical jungle and a protector of the patient from inappropriate visits to the specialist, and of the specialist from inappropriate referrals of patients (Grumbach & Fry, 1993).

1.1.4 Conditions of service

General practitioners are independent contractors with the NHS. They are not salaried, as are consultants in hospitals. General practitioners provide all necessary comprehensive and continuing general medical services to their list of registered patients on a 24-hour basis. The general practitioner is also responsible for coordinating local hospital and community services on behalf of his patient. The ratio of general practitioner to the general population is 1 to 1758 (Grumbach and Fry, 1993). The NHS pays general practitioners in a variety of ways. Sixty

percent of their reimbursement arrives as capitation fees for every patient registered with the practice. There is also payment on a fee-for-service basis for night visits and specific health promotion activities eg immunization in childhood, cervical cytology and regular checks on the elderly. Practice expenses incurred in maintaining the premises and paying staff are also reimbursed, subject to a seventy percent limit for staff. General practitioners are entitled to six weeks leave each year and they receive a pension on retirement. Key characteristics of the NHS, in which general practice plays a major part, include a strict system of referral to hospital specialists, a mixture of capitation and fee-for-service payments and responsibility for a defined population within the community. Under the new contract general practitioners are subject to financial accountability for prescribed drugs and practices with more than 9,000 patients may apply for a primary care budget giving them the responsibility for paying for diagnostic tests, consultations with specialists and surgery. Any profits retained from this budget must be put back into practice improvements and not used as additional income.

1.1.5 Teamwork in general practice

General practitioners do not work alone. There has been an increasing trend for doctors to work in partnership since the Doctor's Charter of 1966. In the early 1960s more than a third of general practitioners worked alone but by the late 1980s this figure had changed so that only 1 in 10 worked alone and 42 percent worked in groups of five or more (Fry, 1992). Over the past decade there has also been an increase in the development of the primary health care team with groups of general practitioners working with nurses, midwives, health visitors, receptionists, secretaries, social workers and community psychiatric nurses from shared premises. The last five years have seen an increase in the number of directly employed 'practice' nurses to carry out educational and clinical activities related to health promotion goals.

1.1.6 Changes to the NHS 1989 - .

The Conservative government have made radical changes to the organisation and delivery of health care, intended to improve and provide greater choice of services for patients, with an emphasis on making best use of resources and integrating across primary, secondary and the

private sectors (Secretaries of State, 1989 & 1990). The hierarchical structure of the NHS remains broadly unchanged, with the Department of Health controlling fourteen regional health authorities, who in turn, administer hospitals through district health authorities. However, an essential change in managerial philosophy, inspired by Griffiths (1992) has replaced the former centrally controlled and managed service with a system of 'general management' in which the NHS Management Executive at the centre is responsible for strategy but responsibility for implementation devolved to local organisations. Primary care services came under the control of the regional health authority for the first time through ninety Family Health Service Authorities (FHSA) and primary care is being seen now as not just 'a gateway to another part of the service but a core part of an improved health service' (Morley, 1992). Self-governing trust hospitals and fund-holding general practices are not part of this hierarchy and function in large part independently. There were two essential philosophical changes in the reforms: firstly, the division of the service into 'purchasers' (eg fund-holding general practices), and 'providers' (eg hospitals directly managed by the district health authority or self-governing trust hospitals) of health care. Non-fund holding general practitioners might best be regarded as agents of the FHSA in providing primary care services (Bligh & Walley, 1992). The second major change was devolving power and responsibility to local units. Examples of the latter include the development of self-governing hospital trusts and in general practice the introduction of a fund or budget-holding scheme, the devolution of responsibility for the costs of prescribing to the general practitioner, and the introduction of medical audit. A further reform was the imposition, despite much hostility, of the new contract for general practitioners which increased their accountability to the FHSA.

A confidential survey of all general practitioners carried out by the General Medical Services Committee (GMSC) in 1992 attracted a seventy percent response (25,000 replies) (Electoral Reform Service, 1992). The survey enquired about terms and conditions of service and the attitudes of doctors to existing and possible future arrangements for working. The responses showed that nearly half of the general practitioners replying want accreditation, three-quarters wanted less night work and more pay. Night visits have increased by thirty-eight percent from

1988 to 1992 and the number of visits performed by deputising services has fallen by almost a half (Salisbury, 1993). They wanted to stay as independent practitioners but were not averse to a salaried service option for some with over half agreeing that doctors should have the choice of being salaried. Twelve percent thought that all general practitioners should be salaried. The attractions of a salaried service as perceived by the respondents included less responsibility for management and administration; better pay, more flexible working hours, removal of 24 hour responsibility and more job security. Thirty seven percent agreed strongly that the role of general practice was undervalued and forty-three percent thought that too much was expected of general practice now.

Many general practitioners view the new working conditions as unsatisfactory. They bear a strong sense of resentment towards the conservative government who, in their eyes, imposed the new contract upon the profession. Low morale and job dissatisfaction are common complaints amongst gatherings of doctors (mainly those who have not taken up fundholding). Specific causes for these feelings may be the increased administrative burden subsequent to a revised payment system, the seemingly pointless additional clinical tasks required by health promotion activities, and difficulties balancing the demands of professional work with family and social life (Johnson et al, 1993).

1.1.7 Stress in general practice

> *"The educated doctor, aware of the role which society imposes, will develop coping mechanisms to deal with the inevitable conflicts which the expectations of the patients will produce in his personal and professional life." (McCormick, 1992, p155)*

Stress among young practitioners, mid-career disenchantment and educational inertia are three major challenges facing those planning continuing education (Forrest et al, 1989). Stress in professional practice has come under scrutiny in recent years with general practitioners being subject to particular examination (O'Dowd, 1987; Richards, 1991; Branthwaite and Ross, 1988; Makin *et al*, 1988). Stress amongst undergraduates resulting in its own mortality and morbidity has been identified (Wolf *et al*, 1991; Sheets *et al*, 1993) and the pattern of medical education

provided for medical students called into question (GMC, 1991; Fraser, 1991). None of us like to entertain the thought that our teaching may be doing anything other than helping students learn, but we all recognise that students, like everybody else, may suffer from the pressures of everyday life and subject to stress as a direct consequence of their learning (Styles, 1993). Stress has been recognised as a major feature of the life of doctors in training posts in hospital (Firth-Cozens, 1987) where service commitments significantly interfere with educational gain. In general practice training, the year spent in teaching practices under the direct supervision of an approved trainer is supernumerary and in many regions learner-centred approaches to teaching aim to encourage greater self-reliance and independence in learning. What indicators of stress may we recognise in general practice? Cartwright in the early 1960s, just before the revolution that resulted in the 'Doctors Charter', described sources of doctor frustration as: unnecessary consultations about trivial complaints; too many patients or inadequate time to do the work properly; excessive clerical work; the amount of pay; late calls; inadequate leisure time; being tired and always on call. Enjoyment of general practice was greater for those who gained satisfaction from the range and variety of work and from personal contact with patients than it was for those who found diagnosis something they liked about their work (Cartwright, 1967). Howie and colleagues found in a survey of eighty-five general practitioners in the Lothian region, that those with a higher patient-centred orientation found their work more stressful but were helped by longer booking times for consultations (Howie et al, 1992). Johnson and colleagues in the Oxford region examined the ease of choosing and following a career in general practice and the extent of current job satisfaction amongst a sample of 796 general practitioners (Johnson et al, 1993). They found that ten percent were discontent or very discontent in their current post and that dissatisfaction levels were in general related to increased paperwork and conflicts between career and family life. Career choice was impeded by children, inflexible working hours, the availability of local jobs and by family commitments especially for women.

1.2 Undergraduate training

The first academic department of general practice was established as a teaching unit in an

Edinburgh practice in the 1950s. Since 1986 general practice has been represented as an academic discipline in all UK medical schools. The extent of curriculum time, departmental independence, funding, quality and type varies widely (Howie et al, 1986) . Career structure is now established but with such wide differentials between service and academic salaries that without special arrangements, effective integration and recruitment between these two vital elements is very difficult (Knox, 1989; Hooper et al, 1990). All departments share clinical commitment with teaching and research activities and most make extensive contributions to postgraduate and interdisciplinary teaching. Many have demonstrated leadership in the development of our understanding of the process of care and of teaching techniques and skills (Marinker, 1969; Fraser & McAvoy, 1988; Usherwood et al 1991; Jewell 1988; Neville & Sowerby, 1987; Stanley & Al-Shehri, 1992) whilst others have a commendable reputation for research (eg Morrell, 1965; Howie, 1987). The potential contribution of general practice and community-based teaching has long been recognised but gained especial prominence in the mid-1980s with the recognition that 16 of the 20 recommendations of the GMC for undergraduate education could not be achieved without the educational resources of general practice (Fraser, 1991) The core content and commonly used teaching methods of general practice departments have been described (Fraser & Preston-Whyte, 1988) and suggestions made for basing medical education in general practice (Oswald, 1989).

Students' perceptions of teaching offered by general practitioners are uniformly good (Knox, 1992). They enjoy general practice attachments and can be constructively critical about their experiences (Cooper, 1992). Students particularly like the one-to-one relationship, the range of patients seen, home visiting, contact with the primary care team and the enthusiasm of general practice teachers (Schamroth et al, 1990). Clearly, general practice departments have much to contribute to the revision of medical education demanded by the GMC and others (GMC 1991; Towle, 1992; Association of American Medical Colleges, 1984) particularly in the areas of developing critical thinking, problem-solving, interviewing and communication skills and in demonstrating a holistic approach to patient care. This is especially the case now that secondary and tertiary care hospitals no longer contain the clinical caseload required to teach

basic clinical skills. In addition, society requires more of its doctors than mere clinical acumen, and demands caring, sensitive doctors capable of responding to personal needs for care as well as cure.

1.2.1 Changes to undergraduate medical education

There is widespread feeling about the need for change in undergraduate medical education with considerable discussion about the essential elements of any such change (Towle, 1992). Criticisms of undergraduate medical education have emphasised both the narrowness and the inflexibility of the product (Anonymous, 1988) and their lack of readiness for clinical practice (Furnham, 1988). Others have gone further and suggested that a medical education may damage natural skills

> *"...the usual subject-oriented education in medical schools does not require actively practised reasoning skills as the students learn. There is concern that the traditional approaches to medical education may actually diminish the natural problem solving skills possessed by students before they enter medical school"* (Barrows et al, 1978).

Suggestions for change in the curriculum insist that the result must include doctors capable of critical thought (Fraser, 1991) and independent learning (GMC, 1991), both essential skills for coping with change (Handy, 1989). The need for doctors capable of adapting to change has long been recognised (Marinker, 1983) but the need is particularly pressing where continuing change is part of the professional environment (Irvine, 1993). Unfortunately, many doctors feel inadequately prepared to cope as a result of their undergraduate and continuing medical education (Anonymous, 1992).

The GMC has identified aims for basic medical education (GMC, 1991). These are

- for the student to acquire an understanding of health and disease, and of the prevention and management of the latter, in the context of the whole individual in his or her place in the family and in society.
- to develop an attitude to learning that is based on curiosity and the exploration of knowledge rather than on its passive acquisition
- the introduction of a substantial element of problem-based learning

- ensuring students have clinical contact with patients and analysis of their problems throughout the five years of the course
- ensuring students gain an understanding of the scientific method; the ability to evaluate evidence; to understand how knowledge is acquired and an understanding of research.

Identifiable problems with current undergraduate teaching aggregate into five themes:

- curriculum (overcrowding, the use of teacher-centred (didactic) teaching methods and assessment systems that emphasise factual recall)
- structure (separation of pre-clinical and clinical subjects, delayed patient contact, emphasis on secondary and tertiary care settings for teaching)
- balance of material (curative/preventive; behavioral/biomedical; economics, politics, ethics)
- interpersonal skills (communication; empathy).
- Process (education versus training (Calman & Downie, 1988))

The principles upon which improvement will be based have been identified by Towle after extensive discussion with teachers, administrators and students (Towle, op cit). These principles are reduction in factual knowledge, active learning methods, clearly defined subject matter, the development of general competencies (eg problem-solving, communication), integration within the curriculum, early clinical contact, balancing community and hospital teaching, involving wider aspects of health care in the syllabus and using methods of assessment and teaching that support the broad aims of the changes. The implementation of these principles will require the definition of the core knowledge, skills and attitudes which undergraduates need, integration of clinical and preclinical disciplines, the introduction of self-directed learning and the development of teaching and learning resources (including teacher training). General practice will have a large part to play in this new form of medical education. This part will not only include providing space and opportunities for learning in the community but also active participation in teaching and assessment. Postgraduate training will also need to respond to these changes. The recognition that much clinical learning may best be done in the postgraduate rather than the undergraduate setting means that a balance between service

and educational activity must be struck and that teaching must acquire a higher value amongst the skills of the clinician (Hooper et al, 1990).

1.3 Vocational training for general practice.

> *'The family physician's role is a difficult one. If it is to be sustained and developed the general practitioner must become the most educated, the most comprehensively educated, of all the doctors in the health service' (Hill, 1969).*

1.3.1 History and development of vocational training

Vocational training for general practice started in the 1960s, developed rapidly during the 1970s and became compulsory in 1979 following (as so much change in general practice has since) an Act of Parliament in 1976.

It had long been known that general practice was a branch of medicine with educational requirements of its own with one of the aims of a proposed College of General Practitioners in 1844 being to provide for the future education of the specialty. In the 1940s, the post of assistant in practice was acknowledged as a period of preparation in many practices (Horder & Swift, 1979) with undergraduate training recognised by the British Medical Association as insufficient preparation for unsupervised practice.

It was the College's evidence to the Royal Commission on Medical Education between 1965 and 1968 that resulted in the recommendation for a three year period of general professional training for general practice (in the original Report a further period of two years higher professional training was envisaged but this has yet to be introduced). The Commission considered general practice as a speciality in its own right by virtue of its unique and essential contribution to medical care and indicated that this status would be confirmed by the provision of organised professional training, so putting it on a similar footing to other specialities. This wish was not realised until the National Health Service Vocational Training Act came into force in 1980 making vocational training compulsory before entry to unsupervised practice. The regulations require that

> *'...a doctor who wishes to become a principal in the NHS with all the responsibilities which this appointment implies, must first master those*

essential subjects which cannot be learned as a medical student and in the pre-registration year' (Editorial, 1980).

The prescribed period of training is three years, two of which are spent in approved hospital posts, leaving only one year in general practice. This year is under the educational and professional supervision of a general practice principal who has undergone special training in appropriate educational matters and who has premises and records that meet determined standards . The Royal Commission on Medical Education recommended a five year period of training - three years of general professional training and two years of professional training in general practice (Royal Commission, 1968). These two years did not appear for two reasons: a single trainee year had been in operation for some time leading up to the introduction of vocational training so it was convenient to continue with the existing arrangements and it would be considerably more expensive to extend training (Hasler, 1989). The number of trainees rose steadily over the 1970s and 1980s with over 2000 in the general practice year by the mid-eighties. Two-fifths of trainees are female and general practice was one of the most popular career choices of medical students, often with over fifty applicants for each place on vocational training schemes (Hasler, 1989).

There is general dissatisfaction with the balance of training experience offered by this three year period but little evidence of its effects. In Michigan, Schwenk and his colleagues studied log diaries completed by doctors taking part in a three year family medicine training programme (Schwenk, 1987). They found the influence of family practice teaching staff was minimal compared with that of other specialists, with out-patient teaching the predominant learning opportunity. The authors were particularly concerned about the type and appropriate nature of the educational influences experienced by doctors in training for family practice and emphasised the need for adequate opportunities for role-modelling and teaching by specialists of family practice. This is particularly important in the light of McGlynn's study of how residents learned from experience whilst caring for patients (McGlynn et al, 1978). The authors demonstrated that a major element in learning was feedback provided by specialists and supervisors. Gjerde and Coble (1982) and Wolverton and Bosworth (1985) identified the ability

to provide constructive feedback as an essential skill for effective family practice teachers. The mutually agreed report system (MARS) (Tibbott et al, 1990) and learner-centred feedback (Marwick, 1991; Ashton and Bligh, 1993) are examples of attempts to structure such teaching techniques in practice.

1.3.2 Aims and content of training

One of the principal aims for vocational training in the eyes of the RCGP in its evidence to the Royal Commission on Medical Education was the elimination of poor standards of care (RCGP, 1977). The educational foundations of general practice were laid in the 1950s by the then College of General Practitioners and with the publication of the Future General Practitioner in 1972 (RCGP, 1972) an essential core of teaching objectives (and of teaching methods) was made explicit. These objectives divided the curriculum for training into the knowledge, skills and attitudes required of doctors practising unsupervised in general practice and represented a major step forward for the profession in its attempt to define its place in medicine. This publication was followed over the next few years by a succession of papers and Reports often describing innovative approaches to one-to-one teaching (RCA), small group teaching, and to assessment that have been successfully integrated into the teaching skills of todays trainer and which have played a major part in the development of teaching for general practice throughout the world. More specific aims for training include the development of doctors able to integrate the psychological and social dimensions of a person's problems with the physical or clinical aspect; the preparation of young doctors for independent practice as established principals capable of managing their practices as businesses; developing independent learning skills, critical thinking and developing communication skills (Pereira Gray, 1979).

1.3.3 Trainers

Vocational training for general practice is mostly carried out by general practitioners in training practices in which, by definition, there is a considerable service commitment. This setting gives rise to two specific difficulties that have a bearing on the teaching context. Trainers have a primary obligation to their patients not only to provide general medical services but also to protect them from errors made by doctors and others in training. A heavy service load can

often lead to difficulties providing for protected teaching and supervisory time. The second problem is the very short period of training in teaching skills and theory required by regulation before appointment to training status, resulting in the belief held by many trainers that medical education is largely a matter of common sense and that, provided the trainer is an experienced general practitioner and the trainee a sensible doctor, effective education will inevitably result. In the early days of training, trainers were appointed by local medical committees but in 1973 the responsibility for this was moved to regional general practice subcommittees who developed criteria for appointment which included attendance at teaching courses and peer review of the trainers practice and records. The emphasis in appointing an individual doctor as a trainer included assuring that the whole practice was committed to the training ideal. There were 2,788 approved trainers in 1988. In addition to the teaching carried out in training practices by trainers, all regions offer a release course (usually a half day) where groups of trainees come together for 'classroom' activities. The release courses are staffed and run by experienced trainers, known as course organisers, who usually make use of small group and experiential activities to provide the core of their teaching. In some regions, these release courses include doctors pursuing training for a career in general practice but who are undergoing the hospital part of their experience. This division of the training year into 'apprentice' and classroom activities brings with it both advantages and disadvantages for the trainee. On the plus side, there are opportunities to meet peers and to compare experiences, to discuss cases and issues in a larger group and to relate to other general practice teachers. On the negative side, the release course is often seen as separate from the experience of the practice and integration between trainer and course organiser is weak, so that different agendas for, and approaches to, training may be followed. In addition, trainees may be working for the MRCGP examination and this third dimension to individual learning may not be acknowledged on some courses.

1.3.4 Benefits of vocational training

The introduction of vocational training brought with it a number of benefits for the profession. These included the development of an organisational framework for training, clearer definition

of the responsibilities and content of general practice, realisation of the value of small group learning and of the many innovative teaching methods introduced by trainers and course organisers, experience of teaching for trainers and the provision of a model of general professional training (Editorial, 1985).

The RCGP has made it clear over recent years (RCGP, 1985) that the current three year period of training is insufficient and that a further two years of lightly supervised (higher) training, analogous to the training of senior registrars in the hospital service would be ideal. Successful completion of the three year general professional training stage would be marked by gaining the Diploma of Membership of the RCGP. There has been considerable opposition to this view point from within the profession but the atmosphere has changed recently in response to the new emphases of the post-reform health service and there is increasing recognition of the need for a professionally regulated demonstration of minimum standards before becoming fully established as a principal. The Joint Committee on Training in General Practice (JCPT) have insisted that regions develop summative assessment programmes for implementation by 1994 to replace the existing, and meaningless, certification of satisfactory completion of training that serves to demonstrate only a very bare minimum achievement. Of seven thousand applications for such a certificate in 1984, 0.2% failed to obtain one - a process that Bahrami sees as 'rubber-stamping' (Bahrami, 1986) and one seen by many as not reflecting the true status or training needs of a number of trainees with key clinical areas of geriatrics, psychiatry and general medicine experienced by a minority (Styles, 1991). Recent plans for the introduction of a summative assessment programme to replace the certificate of completion will come into force in 1994. The new arrangements will place greater stress on demonstration of knowledge, problem-solving skills, clinical skills and the ability to critically assess an aspect of practice (JCPT, 1992).

It is fair to say that despite the considerable efforts and resources that have been expended on training since its inception, there remains an element of confusion and disagreement about what should be taught, how it should be taught and assessed, and which priorities should guide medical teachers (Pereira Gray, 1982). This is especially the case in the light of the changes

to the health service discussed above.

1.3.5 The experience of training

Studies of the effects of training are few. Early approaches concentrated on comparing trainees with established practitioners and suggested that a period of training accelerated the acquisition of key facts and skills (Howie & Dingwall Fordyce, 1976; Murray et al, 1978; Richardson, 1977). Others have indicated that long term outcomes are difficult to measure, and point to the training period providing an opportunity to become familiar with the working environment of general practice rather than a specific period of professional development. The need for further training periods, often referred to as higher professional training, suggests that major gaps remain to be filled for many doctors (Pietroni, 1992).

Amongst hospital posts in vocational training, obstetrics and gynaecology, A&E /general surgery and paediatrics are the most popular, with geriatrics and psychiatry less popular. The popularity of general medicine fell between 1985 and 1990 prompting calls for a wider and more flexible selection of hospital experience before completion of training. This is especially important in the light of the need for training to reflect the current clinical and health care organisation changes within the health service. The general practitioner of the future will need to be a general physician and provide a broad range of services to the elderly and the mentally ill (Styles, 1991; Dowrick, 1992). There are serious concerns about the quality of training offered to junior hospital doctors and these concerns can be extended to include general practice trainees. Prominent amongst these concerns have been lack of teaching and thinking time, absence of a teaching programme or objectives, lack of feedback on progress and failure to link hospital experience to an intended career in general practice (Styles, 1990b; Kearley, 1990; Crawley, 1990).

1.3.6 What do trainees think of the training they receive?

Early reports from trainees described clinical workload and showed that trainees in general see more acute and less chronic cases than their trainers (Carney, 1979; Stubbings and Gower, 1979), raising the need for accurate logging of caseload and active searching out of cases

offering experience of the continuity of care possible in general practice (Adam & Oswald, 1985). Trainees also see less of the elderly, have wide variations in workload and are less involved in the management of 'complicated' cases eg terminal care (O'Flanagan, 1977; Caine et al 1885). In terms of teaching, trainees prefer learning from their own clinical experience, from mutual assessment with their trainer and by preparing formal presentations. They find small group discussion and case analysis the most helpful teaching techniques at the release course (Thornham, 1980). They recognise their relationship with their trainer as of 'immense' importance especially as a source of motivation (Stott, 1979). This view was reinforced by Freemen and others in a study of the influence of trainers on trainees (Freemen et al, 1982). This study compared two groups of trainees on the basis of their scores on MCQ and MEQ tests with characteristics of their trainers. Those trainees who scored best in the test situation had trainers with more teaching experience who spent more time planning tutorials and encouraged the trainee to build a personal list of patients. These trainers took a wider range of journals than those in the other group (with trainees who scored least well) and were better able to name recent articles. They also tended to cover more psychological and social topics and were more likely to be members of the Royal College of General Practitioners.

As a group, trainees complain about inadequate protected time for teaching (Cyna, 1987), poor cover when on-call, lack of experience of audit, involvement in small group work, lack of feedback about educational and professional progress (Cyna, 1987; Hasler, 1978) and the quality of hospital teaching (Ronalds *et al*, 1981; Kearley, 1990).

Kelly and Murray carried out a retrospective analysis, using a postal questionnaire, of the experience and opinions of nine hundred and seventy four vocationally trained doctors in the west of Scotland between 1968 and 1987 (Kelly & Murray, 1991). Ninety-four percent said they had enjoyed their training period but when asked to give a rating to the training they had received nearly half the doctors felt that certain aspects had been poorly covered or omitted (especially practice finance and management). Fifty-eight percent rated their training as very good or excellent, and twelve percent as poor or very poor. Doctors trained after 1979 were less likely to have a poor opinion of their training. The survey was limited to what may be

described as structural and content elements of training, and though it does explore commonly used teaching and assessment techniques, it does not dwell on 'process' characteristics of training. Another study carried out in the same region, identified videotaped consultations as the most commonly used assessment method with over four-fifths of trainees exposed to between two and six assessment methods (videotapes, rating scales, sitting-in, topic books etc) per year (Campbell & Murray, 1990). Despite the MRCGP examination being seen by the RCGP as a summative assessment of training, over half of the trainees and nearly half of the trainers in this survey in Scotland did not feel that the examination was a valid form of assessment - a view shared by many course organisers and trainers (Fairclough *et al* 1988).

1.3.7 Future developments

Vocational training was regarded as 'an expensive gamble' when it was first introduced with valid and convincing evidence of its efficiency difficult to find (Horder et al, 1986). It is now becoming accepted as a success in that 'able applicants are recruited', strong relationships have been established with specialists and because the development of primary care has been substantially influenced for the good by training (Hasler, 1989; Johnson *et al*, 1993). Developments for the future in vocational training reflect the changes to the health service as a whole. The emphasis in clinical training advised by Styles (1991) towards developing general physicians and the continued growth of ability in communication skills reflect the needs and demands of patients. Teaching practices and release courses will be expected to be accountable for their teaching and to publish their curriculum indicating the scope and range of teaching available (Samuel, 1991). Summative assessment to mark the successful completion of vocational training is being introduced over the next two years. This assessment will include elements of factual recall, skills testing and clinical application, as well as elements relating to project work and peer review. Concerns that any examination influences the way in which trainees learn, to the extent that clinical and practice based activities may take second place to preparation for the examination, have especially focused on the MRCGP and have influenced the development of this new assessment programme. It is intended that whilst the final result will have professional significance beyond that of the present system, the process

of training will also be enhanced by having a clear end-point. The issue of principal concern to many trainers and course organisers has been the difficulty in identifying a system of feedback to trainees about their progress through the training period. Mechanisms for providing this essential element in learning have been introduced sporadically (Metcalfe *et al*, 1988; Sackin *et al*, 1990) but are not comprehensive and do not include the hospital component of training.

Other areas for development include the introduction of shared learning with other health care workers, the broadening of the syllabus to take into account the demands of the new health service for public health, management and health economic skills and the strengthening of individual learning skills. Hospital training needs the input of general practice trainers and course organisers and release courses related to vocational choice must become commonplace (Styles, 1990b).

1.4 Continuing professional education for general practice.

> *'What we need is a system of education which equips the learners for the changing task of medicine, which can provide for their evolving career needs, and which enables them at once to create and assimilate the hidden curriculum - the ethos of general practice'* (Boland, 1991).

1.4.1 History and development

Continuing medical education has become an enshrined tradition in general practice (Wood, 1988) since the days of the assistant in a practice learning as an apprentice before becoming a full partner (Horder & Swift, 1979). It is also one of the central educational challenges faced by general practice (Pereira Gray, 1988) because of the great difficulties faced in meeting the needs of doctors, educators, government, administrators and patients alike.

In the early days of the health service t here was no formal structure for continuing education. In the 1960s, Postgraduate Deans became responsible through regional postgraduate education committees (linking health authorities and universities) and district based tutors for organizing programmes for general practitioners at (newly built) postgraduate centres attached to local hospitals. In the late 1960s, experienced general practitioners were appointed to the

postgraduate dean's staff as regional advisers in general practice to advise on both vocational training and on continuing education. In the event, the very considerable task of developing vocational training schemes in hospital and general practices took precedence and continuing education failed to receive the attention it deserved (Wood, 1988).

Continuing education has long been associated with remuneration, at first through links with seniority payments and now, after a fallow period in the late 1970s when these links were withdrawn and attendance at meetings fell, with the postgraduate education allowance. This circumstance has induced in the minds of general practitioners the perception that education should be rewarded in financial terms and that anything that does not come with such reward will take a low place on the list of priorities - especially when it competes for scarce time with professional commitments and family life. Despite the majority of general practitioners accepting that keeping up-to-date is a professional responsibility (Knox, 1971; Forrest et al, 1989; Varnam, 1990), continuing education has been regarded not as a central plank of professional development - as in-service training is seen in say, teaching, but as light entertainment or an optional extra (Schofield, 1987). A number of reasons have been put forward to account for this. Prominent amongst these must be that nobody has clearly defined responsibility for developing continuing education with the result that the content and methods are at the hands of fortune and that the pharmaceutical industry have very successfully established a strong grip on both provision and content through their marketing activities (Hayes et al, 1990). In Branthwaite's study in the West Midlands, 82% of practice-based meetings were drug company sponsored (Branthwaite *et al*, 1988). In other studies carried out in South Wales, 90% of respondents to questionnaires about continuing education said that drug companys supplied the main content of the educational meetings held in their practices. A majority described the content of these meetings as unsatisfactory (Owen et al, 1989; Hayes et al, 1990).

Other reasons include most educational activities taking place either at lunchtime or in the evenings and at weekends and are not seen as a legitimate part of the working day in general practice (Forrest *et al*, 1989); that sound educational principles are not applied (Kiceniuk, 1993); that meetings do not meet the educational needs of general practitioners (Al-Shehri *et*

al a & b, 1993) and that general practitioners are not uniform either in their need for continuing education or for educational method (Branthwaite *et al*, 1988).

1.4.2 Purpose of continuing education

Continuing education is a means of influencing the behaviour of doctors and of encouraging more effective clinical performance (Branthwaite & Ross, 1988; Boland, 1991). With the new national health service emphasising accountability and value for money, postgraduate medical education in general practice, both for vocational training and for established principals, is required to address a new agenda. This agenda includes encouraging clinicians trained in a traditional perspective of focusing all of their attentions onto individual patients, to turn their clinical gaze (Armstrong, 1993) more widely to embrace the communities they serve. Like doctors throughout the health service, general practitioners are required to '...increasingly look up from their microscopes and the chests they are percussing...' (Smith, 1987). Irvine (1993) describes one aspect of this role for general practice as the 'capacity to improve the health of its registered population through a wide range of interventions using its ability to describe, analyze and assess the health status of people on a regular basis'. To achieve this 'public health function' vocational training and continuing education need to include epidemiological elements to allow general practitioners of the future to make use of the new opportunities for teamwork and for improving and assuring quality of service that such skills make possible. Another aspect of this new role is the need for doctors to consider the economic costs and consequences of their actions (Walley & Edwards, 1993) - not an activity that rests easy on the shoulders of either doctor or health economist (Mooney, 1989). The potential conflicts that are enveloped in this dual need to, on the one hand act as an advocate for the patient, and on the other restrict use of community resources have been likened to the need for a doctor with two heads (Abrams, 1993).

> *'To the Hippocratic physician, nothing and no one was more important than his patient; this has always been a guiding principle of clinical medicine. Other patients, future patients, and the rest of mankind have been secondary considerations when a doctors is making decisions at the bedside of the sick.*

That day too is past.' (Nuland, 1988)

1.4.3 Common patterns of continuing education in general practice

The common pattern of educational activity in continuing medical education for general practitioners is a lecture given at a local postgraduate centre (Berrington & Varnam, 1987) - despite the evidence showing that the use of the lecture format to transmit knowledge does not necessarily improve performance (MacWhinney, 1966; Beard & Hartley, 1984). Only occasionally does the presentation meet the standard set by McManus for whom the lecture should be both inspirational and enjoyable:

> *'...it should be a vehicle for the telling of tales of scientific adventure and clinical endeavour, providing pleasure and entertainment on each retelling. It should motivate both young and old to return to their books, computer terminals, laboratories, and patients with renewed energy, purpose, direction, and interest; and may also renew dreams and aspirations.'* (McManus, 1991)

The gathering is usually sponsored by the pharmaceutical industry who provide lunch or an evening meal (occasionally breakfast) and display their products with a representative on hand to discuss their merits - a relationship that has bothered many over the years (Wall & Houghton, 1989). Very often the subject of the lecture is closely allied to the product range on display and is usually delivered by a hospital consultant. Under Section 63 arrangements (educational activities funded by the Department of Health under Section 63 of the 1968 Health Services and Public Health Act) the programme of activities was arranged by the postgraduate centre tutor (almost always a hospital consultant with an interest in, but without special training in, educational matters). Payment of the seniority allowance was conditional on a minimum of twelve hours attendance at section 63 meetings. Attendance at such lecture programmes was generally poor and fell off even further once Section 63 fees were withdrawn (Wood & Byrne, 1980). This study used interviews to explore attitudes towards attending meetings and found regular attendance to be related to a desire to escape from the practice, a need to meet hospital staff, the need to refresh memories and to learn something new and to boost personal confidence about clinical management. High attenders tended to have been qualified between

ten and thirty years, to have been working in practices with five or more principals and were more likely to hold additional appointments or to be trainers, characteristics echoed by high attenders at meetings held under the new postgraduate education allowance regulations in the 1990s (Murray et al, 1992). A study in the early 1970's in the Grampian region of Scotland found that only 18 percent of doctors thought lunchtime lectures acceptable as a regular source of education, with a distinct preference expressed for longer, intensive courses (Durno & Gill, 1974) - a finding echoed by Acheson (Acheson, 1974). The programmes very rarely took into account the educational or professional needs of the audience and usually reflected the availability and reputation of speaker and the generosity of the sponsor. In 1979, Reedy, in the North-East of England found that lectures and symposia were highly regarded as educational methods but that clinical attachments were also seen as useful means of keeping up to date. Younger doctors tended to favour group discussion rather than lectures. High attenders at postgraduate meetings in this study were more likely to be from large practices, to hold additional appointments, to be trainers or tutors and to be between 10 and 20 years qualified. Concern over the failure of general practitioners to attend these meetings lead to stereotyping with non-attenders often cast as 'poorer' clinicians (MacWhinney, 1989 p 359). However, non-attenders in Wood and Byrne's study were more likely to be female, UK graduates, singlehanded with small list sizes and either very young or very old. Branthwaite (Branthwaite et al, 1988) identified other reasons including a 'significant minority' of doctors who were reluctant to attend meetings because of their perceived lack of self-confidence especially when confronted by hospital specialists teaching in the traditional medical school style. Certain doctors experience a sense of isolation in practice that may keep them away from postgraduate educational and medico-social activities - this may be particularly true of Asian general practitioners (Murfin & Hungin, 1993). Pickup (Pickup et al, 1983 a & b) suggested non-attendance may be related less to dissatisfaction with existing provision than to involvement in competing educational activities and Murray identifies geographical and social reasons for non-attendance (Murray et al, 1991). In the north-east of Scotland, Shirriffs (1989) used a questionnaire study to find out how general practitioners managed their continuing education.

In his sample of 227 doctors, 143 spent between one and three hours each week on educational activity. The respondents identified time, work pressure and family or social demands as the greatest barriers to participation. Obtaining locum cover was a problem for rural doctors.

The general practitioners' perception of their role was found to be an influence on learning in the Branthwaite study (op cit). They identified a polarization in attitudes towards keeping up to date, defined by a perceived hi-tech role on the one hand and a perceived low-tech role on the other. In the hi-tech role, general practitioners who believed in the clinical, scientific aspects of medicine and that they were effectively involved in medical treatment, believed more strongly that keeping up to date was important. In the low-tech role, doctors were influenced by feelings of isolation, low status, insecurity and occupational frustrations to believe that theirs was essentially a job to do with making diagnoses, appropriate referral and caring for patients as people. These aspects of the job then did not, in the view of this group of doctors, require highly specialized, advanced or up-to-date knowledge because successful practice required personal skills and qualities not easily taught in the traditional lecture format.

Lewis and Bolden (1989) examined reasons for poor attendance at postgraduate general practice meetings by comparing the learning styles of both participants and organisers. They postulated that one reason for poor attendance may be the 'traditional diet of lectures put on by hospital consultants with a strong theoretical bias' and little relevance to practical general practice. They found a statistically significant difference between responses to the Learning Styles Inventory (a questionnaire developed from the theoretical basis of Kolb's learning cycle (Kolb, 1984)) of hospital tutors and GP trainers on the one hand and non-trainer principals and trainees on the other. In support of their hypothesis they found the tutors and trainers scored more highly on the 'Theorist' style and to a lesser extent on the 'Pragmatist' and 'Reflector' styles. Trainees and non-trainer principals were predominantly reflector/pragmatists.

1.4.4 Principles for effective continuing education

Harden (Harden & Laidlaw, 1992) has put forward a number of principles for the development of effective continuing medical education that take into account the individual needs of doctors

for clinically relevant education that is provided in a convenient, meaningful and accessible fashion, which encourages participants to tackle the material in a critical and questioning way and which provides feedback about progress in a positive manner.

1.4.5 Postgraduate Education Allowance

Changes to the general practitioner contract in 1990 (Dept of Health, 1989), introducing the postgraduate education allowance, (PGEA), were intended to give general practitioners more say over the type and content of educational activity. The changes reflected awareness that the existing system was unlikely to improve general practitioners performance and allowed Regional Advisers in General Practice to influence the educational value of a proposed meeting through the granting of accreditation - enabling participants to claim appropriate fees. The new contract imposed a rigid set of criteria including a minimum of five days training per year. This training is to be gained by attending meetings or courses within three categories: health promotion and disease prevention, disease management and service management. The changes, though far from complete, have injected new life into postgraduate teachers (Difford & Hughes, 1992) and have lead to the emergence of a range of teaching techniques hitherto confined to vocational training eg small group work, discussion sessions and case analysis (Sackin, 1990). Distance learning programmes have also been produced to encourage doctors to make a more systematic use of reading - their preferred learning method (Varnam, 1990; Stanley *et al*, 1993).

1.4.6 Aims for continuing medical education

Aims for continuing education in general practice have been suggested by a number of authors (Savage, 1991). In 1980, a working party of the European Leeuwenhorst Group put forward the concept of the doctor identifying his own learning needs and sharing his experiences with his peers as part of an individual educational process (Leeuwenhorst European Working Party, 1980). The Royal College of General Practitioners responded to this challenge and others presented by the need for improvements in standards and quality in continuing education in a

number of ways, one of the most important of which was the notion of individual performance review (RCGP, 1985). This concern was extended in the light of government proposals to discuss developments in primary care to include the encouragement of performance review within practices, the establishment of higher professional training for general practice and the stimulation of discussion about standards between consultants and general practitioners (RCGP, 1987). Methods of continuing education emerging from this period include peer review by practice visiting (RCGP, 1985) and the development of practice audit (Stevens, 1977; Waters et al, 1983; Irvine, Russell & Hutchison, 1986). Savage puts forward a possible agenda for continuing education of general practitioners designed to help them adapt to the uncertainties of professional life by learning throughout life (Savage, 1991 op cit). He suggests general practitioners need skills in assessing priorities and making compromises in order to cope with the conflicting demands of patients, family, professional interests and the effective use of limited resources and skills in interpersonal behaviour and to understand themselves in order to avoid the risks of overwork, depression, addiction or personal or health problems. He sees the acquisition and mastery of these skills as part of personal development but indicates that many doctors may have difficulty admitting to learning needs in these areas and calls for personal learning 'portfolios' that may encourage individuals to reflect on their work and to discuss problems with mentors and peer groups. He also highlights, in considering some of the uncertainties of a general practitioners professional work, the notion that knowledge is 'provisional'. He recognises that this idea is threatening for many general practitioners who, by training, are inclined to view knowledge as 'unassailable or unchanging'. This concept is of some importance when we come to consider the way in which trainees expect medical teachers to behave and the effects that unexpected teaching methods have on them.

1.4.7 Shared learning

Shared or multidisciplinary learning is also beginning to take a more prominent place in continuing education with not only hospital consultants working in collaboration with general practitioners to develop, for example, protocols for shared care (Grol, 1993) but also other

professionals working in primary care, for example, practice nurses, health visitors and social workers (Adelaide Medical Centre, 1991; Seamark et al, 1993). For many, effective teamwork is central to the delivery of high quality primary care (Hayden, 1992; Jarman & Cumberledge, 1987; DHSS, 1986)

1.4.8 Professional development

The professional development of general practitioners is a key issue for quality of care in the health service and responsibility for the provision of appropriate circumstances and activities rests with both the profession and the government (Kilpatrick, 1993). Continuing medical education is the cornerstone of professional development in medical practice. Programmes of continuing education have developed in an *ad hoc* fashion over the last 25 years. Recent changes add administrative layers rather than clear responsibility and provision still lies with a monopoly supplier despite the construction of a 'competitive market' (Al-Shehri, 1992). For some, the time has come for radical change - changes that would in essence achieve two things: firstly, afford resources for providers of educational activities rather than rewards for participation and secondly, recognise that along with a central core of clinical knowledge and skills that require updating and upgrading in response to the inevitable advances in medicine (Tosteson, 1981; Dunn, Hamilton and Harden, 1985), there is a need for individual professional development. Such programmes would prepare the doctor to take on not only some of the wider professional activities required of modern general practitioners (Boaden, 1992) but also to develop as an individual able to adapt to and live in a changing professional world (Richards, 1990).

1.4.9 Evaluation of continuing education

Evaluation of continuing education leaves much to be desired (Horder et al, 1986) and is, for some, the key to future developments (Al-Shehri et al, 1993b). Testing for knowledge before and after participation in a programme usually shows that participants learn facts (Manning & DeBakey, 1992) but is not usually carried out. Organisers of educational events confine their evaluation not to educational gain but rather to the 'housekeeping' detail such as comfort, food,

sound levels and headcount (Murray et al 1993). Since the prime purpose of continuing education is to improve the performance of doctors and hence to improve the quality of patient care, neither of these two approaches produce sufficient evidence for evaluation. Kirkpatrick suggests a hierarchy of approaches to evaluation that are based on adult learning principles and which puts the impact of a programme on the community at its apex (Kirkpatrick, 1967). This may be an appropriate approach for use in continuing education where the needs of doctors should be considered along with those of educational administrators and government (as funders of education) (Al-Shehri et al, 1993b). Kirkpatrick suggests that the lowest level of evaluation is the ascertainment of participant satisfaction. The second level is related to the actual learning that has taken place and requires the evaluator to collect data on knowledge and skills acquired. The third level is concerned with the transference of behaviours learned during the programme to real life and the final level estimates the broad impact of the programme on the wider community.

At the third level, Davis and colleagues at McMaster University reviewed fifty randomized controlled trials of continuing education to assess the impact of different educational activities on both doctor performance and health care outcomes (Davis et al, 1992). The fifty cases were drawn from a sample of seven hundred and seventy seven studies carried out between 1975 and 1991 on the basis of meeting the following criteria: they were randomized controlled trials; they used educational programmes or activities; they included half or more of the possible doctor population in the study population; they carried out follow-up assessments on at least seventy-five percent of participants and they made objective assessments of either doctor performance or of health care outcomes. Of the fifty studies meeting these criteria, forty-three studied doctor performance (general practitioners, family physicians or internists) and eighteen health care outcomes. Doctor performance was examined across general clinical management, use of investigations, prescribing practice, counselling strategies or preventive care and health care outcome focused on indicators such as smoking cessation, control of hypertension and functional status of patients. Eight studies demonstrated positive health care gain in a least one major measure and the majority of the doctor performance studies showed positive results

either in resource utilization, counselling strategies or preventive medicine. The authors conclude that whilst there is evidence of effectiveness for some methods of continuing education (notably those using practice-based enabling or reinforcing strategies), there is a significant need for appropriate studies of both existing teaching methods and of innovative ones. In their view, education is an activity that affects doctor performance through persuasion rather than through rewards or penalties. They classify possible educational strategies for continuing education into four groups: predisposing, such as those that communicate information only; enabling, those that disseminate guidelines and protocols for practice; reinforcing, those that provide feedback and reminders; and multi-potential which included record review, the use of local opinion leaders and academic experts.

In an earlier study by the same team, Sibley and colleagues examined the question 'does continuing education affect the quality of clinical care?' by randomly allocating 16 Ontario family physicians to receive or not receive packages of educational material. Despite objective tests demonstrating that the study physicians learned from the packages there was little overall effect on quality of care. Where the topics covered were of relatively great interest to doctors, the control group showed as much improvement as the study group. The authors concluded that wanting continuing education about an interesting subject was as good as getting it; that continuing education works even when it is not particularly wanted, and that its effects do not extend beyond the topics covered (Sibley et al, 1982).

1.4.10 Future developments

Continuing education for general practice needs to evolve to meet the demands of the new health service and to respond to the needs and wants of individual practitioners. Of the three parts of the continuous curriculum of medical education, continuing education for established clinicians is the least developed and, in the UK, the least resourced. There are five major areas that merit further investigation and development. These are:

- Practice-based and distance learning
- Shared or multidisciplinary learning (Jones, 1986; Evans, 1991)
- Computer-assisted learning

• Independent learning

• Continuing education for professional development

It remains to be seen whether existing organisational and administrative structures can cope with the demands that growth in these areas will entail not least because historical funding arrangements linking education to salary are too inflexible to support innovation. A move towards funding the provision of continuing education rather than the consumption of it would be welcomed by many (Bogle, personal communication).

Summary

This chapter has described general practice as an evolving discipline within a changing health service. There are two recognisable themes. The first is a spectrum, at one end of which is the picture of the general practitioner as a resentful prisoner of circumstance feeling pressurised by aspects of professional life, whilst at the other, are the doctor and the primary care team grasping the opportunities and challenges of the new contract and moving forward with them. These images have been described previously as the emergence of two different forms of practice identified as innovative and traditional by a variety of authors (Bosanquet and Leese, 1988; Allery et al, 1991). The role of the general practitioner is widening to encompass not just the central tasks of 'understanding illness and understanding people' (MacWhinney, 1989 p 72) but now to include understanding the community in which they live and work.

The second theme is that medical education must respond to the challenges and opportunities for the future. We know that teaching in general practice is more developed than teaching in hospital and that general practice teachers have much to offer the health service in terms of skills and understanding (Allen et al, 1993). Whilst we know a lot about the structure of general practice education, we are still ignorant of much of the process and even more so of the outcome (Pereira Gray, 1979 p3). We know there are different types of general practitioner - are there also different types of learning within general practice and might these differences be relevant to the training and continuing education of doctors?

CHAPTER 2.

Learning for General Practice.

"Learning how to be a doctor and being one are obviously different things" (Miller, 1961)

Introduction

Chapter One described the current position of general practice in the National Health Service as the context in which postgraduate learning takes place. Chapter Two focuses on learning in general practice and draws on a model of learning in higher education to establish a framework for discussion. What we know about how trainees learn is described against this background and the need for further study considered.

2.1 Learning for General Practice.

This section reviews what we know about how trainees learn as a starting point for this discussion about learning in general practice.

Intuitively, many general practice teachers have recognised that effective learning both for and in general practice calls for different learning skills to those required for successful hospital-oriented learning (Scottish Council for Postgraduate Medical Education, 1991). These skills will include those necessary for successful independent learning (Savage, 1991; Boland, 1991), for acquiring appropriate interactive and interpersonal skills (Neighbour, 1987; Pendleton et al, 1984), and for problem-solving in a complex and changing environment.

Medical students, conversely, acquire rote-learning, note-taking, strategic skills for examination success and structured inductive logic to succeed in traditional medical schools (Newble and Clarke, 1986). This difference in skills is reflected by differences in the expectations of teachers and learners during both vocational training for general practice (Bligh, 1989a) and in continuing medical education (Lewis and Bolden, 1989). Such differences may account for the widely held view that continuing medical education is not as effective as it could be (Boland,

1991).

2.2 General practice trainees

Little is known about the process of learning amongst trainees in general practice. Much of the literature is based on observations made when training was voluntary (Royal College of General Practitioners, 1972; Freeman and Byrne, 1976; Byrne and Long, 1975). More recently aspects of teaching input (Cormack et al, 1981), needs assessment (Clemens, 1980; Williams, 1984; Bligh J, 1988), curriculum content (e.g. Freeling, 1983), formative and summative assessment (Stanley I M, 1986; Sackin et al, 1988; Walker J, 1983) and learning outcome (Belton A, 1986) have been described. Trainees have written about the content of their work (Carney T A, 1979; Stubbings and Gowers, 1979) and about the context of their learning (Cyna and Przyslo, 1987; Charlewood and Airlie, 1986). However, Stott's analysis of his own experience as a learner in general practice (1979) has not been followed by descriptions from other trainees. Differences between trainees have been recognised in terms of their learning strategies (RCGP, 1972), preferred teaching methods (Byrne and Long, 1976) and prior learning experiences (Stott, 1979). The use of memorising as the principal learning technique amongst both undergraduates and postgraduates has long been recognised (RCGP, 1985).

Six studies merit special attention here because they look closely at the process or outcome of learning in general practice.

Howie and Dingwall-Fordyce (1976), before the introduction of compulsory training, used simulated consultations to demonstrate that doctors undergoing three years of vocationally-oriented training (including two years in hospital) more closely matched the behaviours of experienced general practitioners than those on a one year programme of training.

Grol and colleagues (1985) used extensive questionnaire instruments with trainees in The Netherlands both before and after their training year. They found strong to very strong shifts in attitudes towards those of established practitioners. These shifts were especially marked in respect of the role of the general practitioner compared to the specialist, risk-taking in

diagnosis, fear of making mistakes, feelings of professional competence and understanding of the practical application of technology to investigation of problems. Beliefs about the doctor-patient relationship, a central plank of general practice teaching, either did not change or changed in an unintended direction with trainees becoming less interested in being open with patients and with always taking all their problems seriously.

Freeman and Byrne (1976), in a study designed to develop understanding of assessment and assessment instruments for general practice training, described features of trainees as learners. These included the psychometric finding that trainees as a group were stronger diagrammatically than verbally, but were better at describing their ideas verbally rather than in writing. They tended to adopt a 'convergent' approach to problem-solving typical of a science-based education (p70). They also showed that the experience of training (one year in practice) reduced tendencies towards rigidity, authoritarianism and cynicism in those with high pre-training scores.

Richardson (1977) using multiple choice (MCQ) and modified essay questions (MEQ) showed that even six months of general practice training could result in significant gains in factual recall and awareness of social and emotional factors in illness. Murray (1978), using similar instruments demonstrated that trainees scored better than established principals at both factual recall and problem-solving ability. However, neither of these authors extended their investigations to assess the practical application of this learning to clinical practice. Whewell (1988), recognising that diagnostic accuracy depends on the nature of the doctor-patient relationship as much as factual knowledge, demonstrated that both skills (eg detecting verbal and non-verbal cues; asking open questions about emotional state) and attitude (eg avoiding emotional issues in the consultation; emotional exhaustion and withdrawal on the part of the doctor) were crucial to effective detection of psychological dysfunction. Such skills and attitudes were improved in this study not by factual, didactic, teaching but by group discussion and analysis.

These studies demonstrate that whilst much attention has been given to the question 'how do trainees learn?', the focus of attention has been on group performance and general responses

rather than on individual learning. A consequence of this research has been the development of teaching methods that emphasise the role of group discussion in postgraduate training for general practice. Whilst such methods have a significant part to play in teaching, they have, perhaps, assumed undue prominence, often at the cost of more traditional approaches.

Additionally, observation of trainees on the release course and in training practices has suggested that there is a wide range of both motivation towards learning about general practice, and of difficulties with studying. Informal enquiries suggest that these difficulties include integrating learning on the release course with that of the training practice and with the MRCGP examination, and in the organisation of time for study (Coles, personal communication).

2.3 Background and framework for the present study

> *'...all learners are different and have different learning capacities. Thus each individual should be learning within a programme designed specifically for him. Equally, each learner will respond better...to some methods of teaching and not respond well, if at all, to others.' (Byrne and Long, 1975)*

This section sets out the background to the present study and describes a model of learning that may be used to develop our understanding of general practice learning.

There is evidence from studies amongst students in higher education, and amongst adult learners, that there are recognizable patterns, or 'styles' of learning (Marton & Saljo, 1976 a). There are also a series of underlying factors influencing the style that an individual uses to learn in any given situation (Pask, 1976). The choice of learning style is related to the outcome of the learning process, with certain styles predicting greater or lesser success depending on the context (Marton, 1975 & 1983). Teaching environment and methodologies influence choice of style (Ramsden, 1979), but, above all, the type of assessment employed by the teacher or institution has a fundamental effect on the style of learning adopted by both students and adults (Marton & Saljo, 1976b; Ramsden, 1991). This effect can be seen amongst medical students (Newble & Jaeger, 1983) and evidence suggests that in medical education, the commonly

chosen styles are neither those that lead to critical thought nor those that encourage independent learning (Newble & Entwistle, 1986; Coles, 1985; Bligh, 1989). This is particularly true of the undergraduate environment where a fixed menu of what has become known as 'traditional' teaching has encouraged generations of doctors towards passivity and dependence on 'experts' (Fleming, 1991). It is here that proposed changes to the institutional curriculum are primarily addressed. In the postgraduate world where, especially in general practice, no recognisable formal curriculum for continuing medical education exists, doctors find themselves with a clearly perceived need to maintain and supplement their clinical knowledge and skills (Forrest et al, 1989; Savage, 1991) but are ill-equipped by their undergraduate and junior professional experiences to satisfy their needs in what is a chaotic and unstructured learning environment (Branthwaite et al, 1987). This sensation of discomfort is made more acute by professional pressures exerted by a government requiring rapid adaptive responses and by (inevitable) personal (and professional) developmental tensions to acquire new skills to enhance both job satisfaction and personal esteem (Makin et al, 1988; Richards, 1991).

2.3.1 A model of student learning.

Studies of student learning, address learning primarily as a technique or as an intrinsic feature of an individual's behaviour, and take into account both previous experience and cognitive considerations. They tend to ignore other factors (such as family, social and professional influences) which may be of some importance in postgraduate medical (and other) settings. It can be postulated that factors such as the effect of other learners, the impact of the learners own professional and family commitments, preferences for a particular way of learning, perceptions of professional responsibility or levels of personal stress may have an influence on the process and quality of learning. Adapting to the atmosphere, clinical circumstances and learning methodologies used in general practice may be seen as a period of transition from the relatively stable and dependent world of hospital training (often merely an extension of the undergraduate milieu) into one expecting greater self-reliance and independence (Stott, 1979; Illife, 1992). Transitions from familiar to unfamiliar methods of teaching may be accompanied

by affective changes (Kahn et al, 1987) that may in turn reinforce co-existent feelings of uncertainty in a new and challenging work environment. These affective changes have been likened to those of a sense of loss and can be expected to bring with them levels of personal stress that may interfere with learning.

2.3.2 The Lancaster Approaches to Study Inventory.

My interest in the question 'how do medical learners vary?' stems from experiences I had as a trainer and as a course organiser for the vocational training scheme in Mersey and was partly addressed in another study submitted for the degree of Master of Medical Education at the University of Dundee in 1989. That study used a questionnaire developed by Entwistle and Ramsden (the Lancaster Approaches to Studying Inventory, LASI) (1983) to examine approaches to learning amongst students in higher education. The LASI has been applied to medical students in a range of countries (and subject to a variety of curricular approaches) and to school children. These studies have confirmed the proposal that students can be differentiated, on the results of the responses to the questionnaire, into one of three 'approaches' to learning: Meaning, Reproducing or Strategic. In fact, respondents score in each domain and it is possible to describe an individual's score both within each domain and as a composite 'picture' and to compare such scores with control groups. In this context, an 'approach to learning' is an amalgam of motivation towards learning and learning style. The general research approach producing these ideas is called '*phenomenography*' by its proponents (notably, a group based at the University of Gothenburg around the work of Ference Marton and others). This research approach takes the learner's view of learning in trying to understand how students learn. However, many of the concepts relating to student study skills were developed during the 1950s and 1960s when interest in determining factors associated with successful learning was beginning to evolve. The Study Skills and Habits (SSHA) questionnaire is an early example of an inventory that gained widespread use, not only as a tool for predicting academic success, but also (and probably more usefully) as a diagnostic tool for students with study difficulties.

2.3.3 Approaches to Learning

This model of teaching and learning has been chosen because it shows how students learn in ways which are partly attributable to their preferred learning style and partly to the context in which their learning takes place. The model is derived from research in educational psychology (Marton & Saljo, 1976 et seq; Pask, 1976) and from research carried out in the everyday learning environment of higher education (Entwistle & Ramsden, 1983). The model identifies three basic approaches to learning, each being an important factor in determining both the quality and the quantity of learning. The model brings together factors relating to the teacher, the learner and the characteristics of the learning environment, Figure 1, and forms a foundation upon which later argument in this present research will be built.

Review.

In Sweden, Marton and colleagues (Marton and Saljo, 1976) were able to classify students into deep or surface processors, based on qualitative differences in how the students understood ideas and principles underlying articles they were asked to read. Marton found a direct relationship between the level of processing and subsequent understanding. Deep processors intended to understand the meaning of what they were reading from the outset, whilst surface processors set out to identify and memorize facts and ideas that they thought they may be asked about at the end of the experiment. Those adopting the deep process achieved a better understanding of the material and better recall of the facts than those adopting the surface approach. Svensson (1977) showed that the deep approach was related to better examination results. Biggs (1978; 1979) and Entwistle and Ramsden (1983) were able, using factor analysis techniques, to identify approaches to learning that closely resembled these two levels and also demonstrated the presence of a third approach that combined elements of the other two. An approach to learning combines motivation towards learning (for example, intrinsic or extrinsic) with characteristic learning styles. The approaches were known as Meaning (approximating to the Deep level described by Marton), Reproducing (approximating to the surface level of processing described) and Achieving.

2.3.4 Learning styles

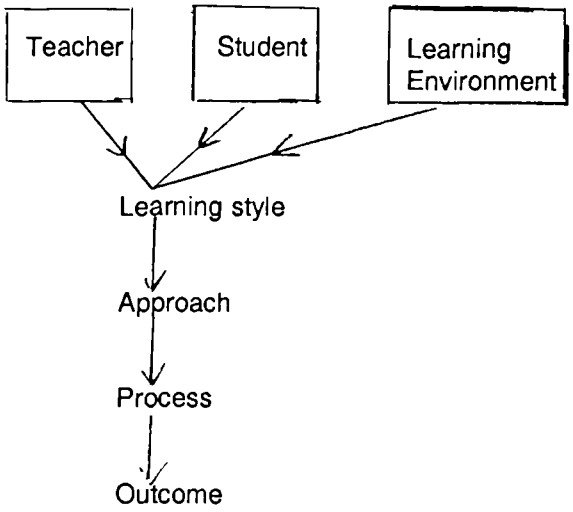
A 'learning style' is a learner's way of accomplishing a learning task (Pask, 1976). It is a relatively consistent preference for certain strategies and processes of learning. In the Comprehension style, the learner adopts a broad focus with the initial concern being for the outlines of ideas and their interconnections with other ideas and previous knowledge; use of analogies and attempting to give the material personal meaning are characteristic of this style, which is more common amongst arts students than scientists. In the Operation learning style, the learner relies on a logical step-wise approach with cautious use of evidence to support generalizations; attention to factual and procedural detail and the use of rote learning (especially when under pressure of time) characterize this style (Biggs, 1979). This style is more common amongst science students. Ramsden (1984) suggests that formal teaching methods, limited choice of topics, clear learning goals and vocational relevance are associated with operation learning. Each of these styles has an associated learning strategy (the actual behaviour a learner adopts to achieve a learning task): for the comprehension style, the strategy is known as holist and for the operation style, the corresponding strategy is called serialist. A glossary defining these, and other related terms, is included in the Appendix.

Individual students possess relatively stable approaches to study in general, but choose their study method according to their perception of the task (Laurillard, 1979). Ramsden (1979) has demonstrated that it is the students' perception of teaching and departmental characteristics that leads them to adopt different study strategies. Assessment methods were the principal component of teaching that influenced choice an effect recognised amongst medical students (Newble & Jaeger, 1983) and amongst general practice trainees (Tombleson, 1993).

Effects of the learning environment include the nature of the subject, curriculum content, learning materials, workload and study skills support. Curriculum content influences learning in at least three important ways: the perception of relevance; the amount of factual knowledge required and the methods used for assessment. Assessment is the element with the most profound effect not only on the knowledge and skills acquired by students but also on choice of learning approach - and hence the outcome of learning.

Studies of students in higher education in a wide variety of institutions using the Lancaster Approaches to Study Inventory (ASI) resulted in the identification of the Meaning, Reproducing and Achieving approaches to learning (Entwistle & Ramsden, 1983). Subsequent work with Australian medical students (Newble & Clarke, 1986) has confirmed the importance of the Meaning approach, in which personal interest in the subject matter acts as a motivating force, and in which the learner uses a deep level of processing across a variety of learning circumstances.

Figure 2.1. A model of student learning.



(from Newble & Entwistle, 1986).

2.4 Medical student learning

The ASI has been used to examine learning amongst medical students in both Australia (Newble and Clarke, 1986) and Europe (Coles, 1985). These studies suggested that medical schools adopting a "traditional" approach to teaching tended to exert an inhibitory influence on the development of a Meaning approach to learning and encouraged the use of reproductive learning techniques. Medical schools with a "problem-based" curriculum, with their emphasis on the learner, appear to encourage more meaningful learning.

2.5 Approaches to learning amongst trainees

An investigation using the LASI with a sample of general practice trainees (Bligh, 1989 a&b) has supported the general concept of measurable differences between trainees as learners and provided some support for the construct validity of the components of the instrument devised by Entwistle and colleagues, but it raised questions about whether these differences were the whole picture. The results of this study are set out below because they help to enrich our picture of learning in general practice.

Factor analysis of the responses of 76 trainees (in the Mersey and Grampian regions) to the Lancaster Approaches to Study Inventory (LASI) (Bligh, 1989a) indicated certain combinations of motivation, learning style, strategy and intentions concerning learning amongst trainees, (Fig 2.2 p58) These features were relatable to groups of students in higher education and to course organiser colleagues (Bligh, 1989b). Significant differences were found between these groups in scores on the Meaning Approach with course organiser/trainers scoring more highly than either trainees of students in higher education.

2.5.1 Three new approaches.

This section describes the factors identified in the LASI study with trainees in some detail. The description provides a useful link with the work described later in this thesis.

The first approach, called Academic, consists of items from the original Meaning scale of the ASI. It includes an element of intrinsic interest in the subject matter "*I find academic subjects so interesting I should like to continue with them after the course*", and some evidence of active attempts to incorporate knowledge and personal experience. Items from both the operation and comprehension learning styles' subscales can be found, but the operation style predominates:

"*When I'm reading an article or research report, I generally examine the evidence carefully to decide whether the conclusion is justified*"

"*I think it is important to look at problems rationally and logically without intuitive jumps*"

"*I find it better to start straight away with the details of a new topic and build up an overall*

picture in that way"

There is some evidence for the presence of a versatile approach to learning combining the comprehension and operation styles and an intention to relate newly learned material to personal experience..

"In trying to understand new ideas, I often try to relate them to real life situations to which they might apply."

The second approach, called Competitive, contained strong motivation elements:

"*My main reason for being here is that it will help me to get a better job."*

"I chose my present course mainly to give me a better chance of a really good job afterwards".

There was also an indication of the learning "pathology" globetrotting. Globetrotters are comprehension learners unable to make use of an operation style when appropriate. They may be over ready to generalize and jump to conclusions without adequate evidence. The motivational drive of this approach is related to a need to prove oneself better than others in a strongly competitive way:

"It is important for me to do things better than my friends, if I possibly can."

The third approach, Dependent, combines a preference for rote learning material, ("*When I'm reading I try to memorise important facts which may come in useful later*"), prescribed by the teacher ("*I like to be told precisely what to do in essays or in other assignments*") with motivation influenced by fear of failure and perceived pressure of work ("*The continual pressure of work assignments, deadlines and competition often makes me tense and depressed*"). This approach echoes the "pot-filling" model of traditional medical school teaching (Fleming, 1989) and includes an element of "cue-seeking" (Millar and Parlett, 1974) behaviour ("*Lecturers sometimes give indications of what is likely to come up in exams, so I look out for what may be hints*"). In other studies, fear of failure has been associated with low levels of learner independence, with the use of surface level approaches and with a preference for an operation

learning style.

This was a small study and the sample size may have influenced the outcome of the statistical analysis, but it appears that, for this group of trainees, at least, it is possible to identify certain combinations of motivation and learning style that may be useful in understanding how trainees learn. The approaches described are based on trainees' responses to questions about learning in general, so it is not possible to predict how an individual will react to a given learning task. The approaches described represent characteristics possessed in part by many trainees and further understanding may be gained from the individual application of the shortened version of the Inventory (Entwistle, 1981).

The analysis suggests that the predominant learning strategy amongst trainees is one based on operation learning Fig 2.2. . This style is similar, in its emphasis on a logical, step-wise approach to problem-solving, to the inductive model of clinical thinking taught in medical school and may present problems in the acquisition of the hypothetico-deductive model used in general practice (Fraser, 1987). There may be attention to factual and procedural detail to the extent that when under pressure, particularly of time, the trainee may rely on rote learning techniques (Newble and Entwistle, 1986). The choice of this rather restrictive style presents medical educators with immediate problems when a wider, integrated, approach to learning is required, especially when a substantial component of independent learning is required. There may be a tendency to become syllabus-bound and, for some, the intention may be to get through the course with minimum effort at the risk of superficial understanding. There is a danger that, despite learning a number of facts during training, considerable difficulty in understanding the wider issues of general practice, for example the affective component of the consultation, may be experienced (Ross and Stanley, 1985).

Both the operation and comprehension learning styles can be found and when associated with intrinsic motivation, provide evidence of a "versatile" approach (Entwistle et al, 1979). The informal teaching methods of general practice training, the need to transfer ideas and materials learned in one setting to another and to examine facts and arguments in sufficient detail to support decision in general practice indicates a need for such an approach.

Intrinsic academic interest, extrinsic and competitive drives and fear of failure appear as the principal motivating factors. Knowles (1970) refers to the concept of the "developmental task" indicating a readiness to learn, as an important, component of adult learning. Encouraging the learner to develop an interest in subject matter that is not of immediate, intrinsic interest is one of the major challenges faced by medical teachers.

Figure 2.2. Three principal factors obtained from analysis of the LASI.

	Academic	Competitive	Dependent
Style	operation/ versatile	comprehension/ globe-trotting	operation
Strategy	serialist	holist	reproducing
Motivation	intrinsic/ academic	hope for success / better job	fear of failure

2.6. Teaching in general practice

Recent trends in approaches to teaching and in choice of learning method in vocational training, particularly in Mersey region, have emphasised a 'learner-centred- approach (Rogers, 1969). As we discussed in Chapter One, recent changes to the regulations governing reimbursement of expenses involved in attending postgraduate courses and meetings have resulted in continuing medical education becoming more consumer-driven. These changes place greater emphasis than ever before on the need for self-directed learning skills. Observation suggests that such skills are not well distributed amongst either general practitioners or trainees. General practitioners are unique amongst the medical profession in their professional independence. Such independence of practice is the legacy of the days when general practice was a competitive business with income dependent on the number of patients registered with the doctor. Rather than being a spur to learning, some have recognised that such isolation may lead to low professional morale that can be an inhibiting factor in cme (Branthwaite & Ross, 1988).

2.7. Limitations to current knowledge.

"In order to help students understand, we must first understand their way of thinking about the topics with which we are concerned" (Marton, 1975).

The review of present knowledge about learning in general practice and the methods used to obtain this knowledge has indicated that much remains to be known. If such knowledge is to be useful in appropriately designing and developing the education and experience of future general practitioners than what is required is a deeper understanding of the setting in which this learning will take place. We also need to know more about the influence this setting has on learning. We need valid and reliable research methods and instruments with which to carry out this work. The use of the Lancaster approaches to studying inventory and the learning styles inventory has given us much knowledge but questions still remain, especially concerning the validity of these instruments amongst a sample of postgraduate medical learners.

The review leaves some clear indications for research. It has identified or is suggestive of certain identifiable factors or approaches to learning reflected to differing degrees in many many trainees. It has suggested that in addition to these factors there may be other extrinsic factors exerting an influence on individual trainees at different times during their training experience that may effect outcome of learning.

The LASI study showed that amongst a sample of trainees there were clearly discernible attributes related to learning. These attributes may not represent individual characteristics but may instead be part of a wider picture, possessed in part by all trainees, suggesting identifiable differences between trainees. These differences may account for different preferences for certain learning methods and may be related to success in learning. The attributes constituted complexes of previous learning experiences, expectations of learning as a trainee, motivation towards general practice as a career and preferred learning style. There were similarities between the attributes and factors identified amongst students in higher education and amongst medical students. It may, however, be simplistic to apply these labels, derived from higher education, to the world of professional or vocational learning (Stanley et al, 1993) and further more specific investigation is required amongst these groups.

It has become clear that the ideas taken from higher education accounted for only a small part of the variance within the sample and that other factors must be involved. There were also questions about the usefulness of applying a tool developed among students in higher education to trainees working in general practice. This current investigation attempts to examine other possible causes of variance in general practice learning and to widen the scope of investigation to include established practitioners.

Further, whilst features of the learning environment from which trainees emerge into general practice training may account for the approaches identified in this model, the factors do not take account of the context in which general practice takes place. We do not know then, what effects, if any, this new learning environment may have.

Vocational training for general practice is a period when young doctors undergo a process of change. During this process they acquire the behaviours, basic specialist knowledge, and language of their intended career - ' a sense of identity as a general practitioner' (Marinker, 1981). In many cases, they also enter the early phases of mature adult lifestyle with marriage and the arrival of children. Significantly, vocational training is the first experience the majority of trainees have of being solely responsible for the clinical management of their patients, and of being in a one-to-one relationship with a teacher. Vocational training is not simply about learning how to be a general practitioner, it is a complex experience involving personal as well as professional development - a time when the doctor may 'experience painful self-discovery or [need to] make difficult personal changes' (Weston & McWhinney, 1981). A successful outcome to this period is based on many factors;

> ...the extent to which individual trainees are successful in this process and the eventual outcome of the educational process depends on a complex and dynamic interrelationship of parts' (Bligh, 1989a).

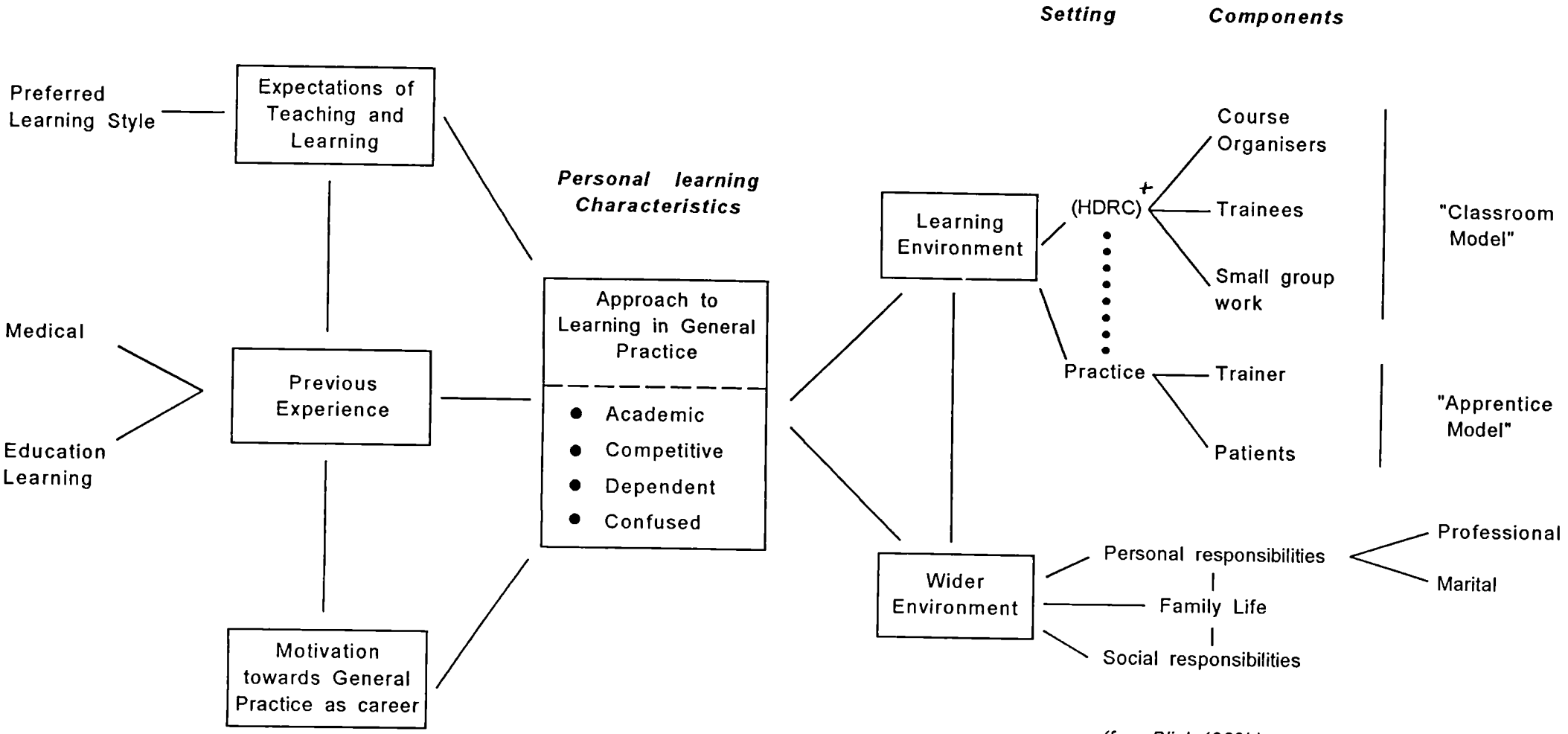
Figure 2.3 shows a model of how the major elements influencing learning in vocational training for general practice may be related. The model draws together themes from the approaches to learning model used above with aspects of the wider environment. These aspects include social, family and personal characteristics. The model suggests that the interrelationship

between each of these elements is a dynamic one with changes in one effecting how a trainee approaches learning. Expectations of teaching and learning, previous professional and personal experience and motivation towards general practice as a career play an important role in shaping general approaches to learning. However, the environment in which this learning takes place and the wider context of the doctor's professional and personal life also play a part. The study reported in this paper focuses on the right hand side of the model and examines, from the doctor's point of view, the possible role both the immediate learning setting and other factors in the wider environment may have on learning.

Summary

This section has described what is known about how trainees in general practice learn and set out the reasons for the present study. The chapter has drawn on a model of learning derived from research in higher education to establish a conceptual framework and has discussed previous work using this model in medical education and with general practice trainees. The limitations of using this approach have been highlighted and the need for further study established.

Figure 2.3. A Model Showing Possible Relationships Between Different Elements Of Trainee Learning



(from Bligh 1989b)

+ HDRC = half day release course

CHAPTER 3.

Aims, criteria and method of research.

Introduction

This section sets out the aims and describes the methods for the present study.

3.1 Purpose and aims of the study.

This study seeks to set what is known about how general practice trainees learn into the wider context of the learning environment in which they work.

The general purpose of the study is to investigate factors that may influence learning in the professional context of the postgraduate setting.

More specifically, the study aims to develop an understanding of how learning both for, and in, general practice may be improved and to develop a valid, reliable and usable research instrument reflecting important factors influencing learning in practice.

Evidence from studies amongst students in higher education and medical undergraduates is used to describe an educational focus for the study. The study also considers the needs of the National Health Service for doctors capable of adapting both to advances in medical knowledge, and to changes in society's requirements of its physicians. Previous studies have suggested that whilst there may be identifiable factors characterising general approaches to learning adopted during both vocational training and continuing medical education (Bligh, 1989; Lewis & Bolden, 1989), we know little about the influence that the context of learning may have. Such studies have made use of tools developed amongst general audiences and whose validity has not been demonstrated in a specifically medical context. It may be naive to draw substantial conclusions from such work in these circumstances. There is a need for a specific study examining learning in the professional context of general practice and therefore, for a

research instrument reflecting the needs of medical educators and medical learners alike.

3.2 Criteria for research

The current research has been planned on criteria derived from the aims of the study. These criteria are:

- that the research should be related to the experience of medical education and clinical practice;
- that it should be capable of producing a developmental picture of learning in practice;
- that it uses methods that are valid, reliable and theoretically sound;
- that the results may be used to develop our understanding of teaching and learning for general practice.

3.3 Method.

The study has been carried out in two stages. The first stage consisted of two components: (i) a questionnaire study of independent learning amongst a sample of trainees starting their general practice training year and (ii) an interview study of a small group of trainees completing their training. The trainees for the questionnaire part of this stage were based in the Mersey and North-West regions and for the interviews, were all based in Mersey region. This stage of the study has been used to generate hypotheses about factors that may influence learning in general practice.

The second stage also has two components: (i) the development and testing of a questionnaire about learning in vocational training for general practice, and (ii) the adaptation and development of this instrument for use amongst a wider audience of general practitioners in independent practice.

In the second stage of the study, the trainee sample was drawn from doctors during their general practice year in the Yorkshire, South-West Thames, West Midlands, South-Western and North-Western regions. For the second part, the general practice component, the sample was drawn from established practitioners in Cumbria, Camden & Islington, Avon and

Nottingham Family Health Service Authority areas. Pilot studies for the questionnaires were conducted locally in Mersey and with eighteen trainers in South Wales. A validation study of the findings of the second stage of the study was conducted in North Liverpool. Thus a broad range of experience and backgrounds are represented in the study. The samples also allow us the opportunity to compare responses between doctors in training and doctors in practice, lending greater interpretive value to the results. Viewed against the background of a review of the current state of general practice and of what is known about how general practitioners learn, it will be possible to set out a meaningful discussion of the implications of the results for medical education.

Table 3.1. Study population

	No in group	Sex male	female	Mean age	SD	Age range	Missing values
SDLRS †							
Trainees	216	121	95	28.7	4.00	24-44	
Trainers	142	127	15	43.1	6.02	32-61	
Nurses	109	10	91	22.5	6.93	18-54	8
LIGPI(TR) †	261	132	109	29.7	3.9	24-45	20
LIGPI(GP)	416	290	121	42.4	8.37	27-65	5

† SDLRS = self-directed learning readiness scale
† LIGPI = learning in general practice inventory

CHAPTER 4.

Factors associated with independent learning

Introduction

Self-directed learning is an important component of adult learning and one that has assumed an important place in the thinking of medical educators. This is especially true of those considering changes to existing curricula both in undergraduate training and in continuing medical education. Much learning in general practice is 'self-directed', in that no recognizable formal training plan exists and many postgraduate educational activities are *ad hoc*. Vocational training schemes aim to develop self-directed learning skills amongst their trainees to better prepare them for the needs of their future careers. It would be useful to quantify an individual's readiness for self-directed learning, not only to assist him or her in acquiring or strengthening appropriate skills where necessary, but also to determine the depth of need for such skills.

4.1 Rationale.

A great deal of learning in general practice is self-directed and is often conducted independently of others. Many trainers, course organisers and tutors reflect this recognition in their teaching (Savage, 1991) and some people believe self-directed learning should be the centre-piece of continuing education (Stanley et al, 1993). Knowles (1975) described self-directed learning in adults as a process that involves taking the initiative, with or without the help of others, diagnosing learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes. This process usually takes place not in isolation, but in association with various kinds of resources, ie teachers, mentors, and peers. There can be little doubt that self-directed learning of this nature is a crucial professional activity in medicine. However, as many medical teachers know, doctors "without .... the skills of self-directed enquiry will experience anxiety, frustration and often failure - and so will their teachers" (Knowles, ibid). The General Medical Council have highlighted the 'promotion of a capacity for self-education,

for critical thought and the evaluation of evidence' as central targets for undergraduate education in medicine (General Medical Council, 1991). They suggest that doctors should, when they graduate, have attitudes to medicine and to learning that will equip them both for their professional careers and as life-long learners. This is a view supported by Towle (1991) who recommends that students should learn to take responsibility for their learning as undergraduates and throughout their professional careers. The concept of medical school education and of vocational training being adequate preparation for professional life has become obsolete; continuing education, both formal and informal, is a necessity for everyone. Self-directed learning may be the most natural way for adults to learn, and they usually respond more favourably to classroom learning formats which allow at least a degree of the self-direction they exercise in their own learning projects (Knowles, 1970). Effective self-directed learning is vital in professional practice, and especially in general practice, as the rate of change in knowledge and skills increases.

Behaviours and abilities associated with successful self-directed learning include intelligence, independence, confidence, persistence, initiative, creativity, ability to critically evaluate one's self, patience, a desire to learn and task orientation (Long & Agyekum, 1983). Other factors such as tolerance of ambiguity, the ability to discover new approaches to problems, preference for working alone, knowledge of resources and ability to plan and carry out projects may also be included in this list. Successful professional learning depends on, amongst other things, motivation and interest in learning, technical skills in studying and problem-solving and acceptance of responsibility for one's own learning (Järvinen, 1989). Adult education models (Knowles, 1970; Marton & Saljo, 1976; Entwistle & Ramsden, 1983) however, suggest that there are rich differences in both motivation and expectation and of styles and approaches to learning amongst any potential audience. Such diversity has been recognised amongst medical undergraduates in Australia (Newble & Clarke, 1986), Indonesia (Emilia & Mulholland, 1991), British and Dutch medical students (Coles, 1985), British general practitioners (Lewis & Bolden, 1989) and general practice course organisers, trainers and trainees (Bligh, 1989a).

This chapter is concerned with how we may recognise some of the characteristics associated with independent learning amongst trainees in general practice.

4.2 Method, subjects, data analysis

4.2.1 The Self-Directed Learning Readiness Scale (SDLRS)

The SDLRS is a widely used and accepted instrument for the quantitative measurement of a learner's readiness for self-directed learning (Appendix 1). It has been used in schools and colleges (Crook, 1985; Long & Agyekum, 1983) in North America, in industry, in educational research and as the major source of data in over twenty doctoral theses (Field, 1989).

The original inventory of items (the Self-Directed Learning Readiness Scale, SDLRS) was developed in the USA by Lucy Guglielmino (1977) as part of her doctoral thesis at the University of Georgia. That research involved a three stage delphi study of fourteen experts in self-directed learning in the United States, and asked them to list important characteristics of successful self-directed learning. The working version of the questionnaire has fifty-eight items and is composed of items derived from an of analysis of the experts responses. From the results gained by administering the questionnaire to over three hundred adult learners from a variety of backgrounds, Guglielmino identified eight factors contributing to self-directed learning. These factors were openness to learning opportunities, initiative and independence in learning, love of learning, future orientation, self-concept as a learner, acceptance of responsibility for one's own learning, creativity, and ability to use basic study and problems-solving skills. The inventory is now commercially available and is used by teachers and faculty in educational institutions in the USA both as part of their assessment of individual students and during curriculum planning.

4.2.2 Aims of the study

This part of the study aims

- to validate the SDLRS for use in a UK general practice setting
- to use the SDLRS to estimate readiness for self-directed learning amongst a sample of general practice trainees.

4.2.3. Data collection and subjects.

The SDLRS inventory was administered to a reference group of general practice trainees in the North-West and Mersey regions of England over an eighteen month period in 1990/91. The trainees in Mersey were asked to complete the questionnaire at the Introductory weekend sessions held at the start of the general practice training year and the North-West trainees were sent a single postal questionnaire with a stamped return envelope whilst they were attached to their training practices. Two hundred and sixteen analyzable forms were collected. The postal questionnaire achieved a 72% response rate (80 returned from 110 distributed). Comparison groups of general practice trainers sent a single mailing and derived from a mailing list of all trainers in the West Midlands region, and qualified general and psychiatric nurses undergoing in-service training for RGN or RMN qualifications at Chester College were approached in June 1992. The comparator groups are used in the analysis to compare scores on the inventory and on individual factors and are not part of the factor analysis. The results of this part of the study are therefore, based on a range of backgrounds and experiences. This may be considered a positive feature likely to neutralize any possible effects of local environments and to reveal common features across all subjects. The Table below shows details of age and sex for each group of subjects for the SDLRS study.

Table 4.1: SDLRS study. Age and sex of subjects.

	No in group	Sex		Mean age	Standard (±) deviation	Age Range
		Male	Female			
GP trainees	216	121	95	28.7	4.00	24-44
GP trainers	142	127	15	43.1	6.02	32-61
Nurses	109	10	91	225	6.93	18-54

4.3 Analysis.

The main analysis followed well established guidelines for the development of qualitative measures in primary care (eg Norman & Streiner, 1989; Zyzanski, 1990) and was based on the reference group of trainees with the remaining groups acting as comparators. The analysis had three stages: firstly, descriptive statistics and frequency distributions were obtained for the respondents and for each item; secondly, factor analysis of the trainee responses to all the items was performed and thirdly, after data reduction by deletion of unreliable items, further factor analysis was carried out to obtain a shorter, more workable, version of the scale.

4.4 Results

Introduction

Before discussing the results of this part of the study it is important to consider possible shortcomings. The questionnaire was designed to investigate students at high school, college or graduate level in the USA who were preparing for self-directed study. It relies on self-reporting, but clearly explaining the purpose of the study ie 'to assist in the development of teaching for trainees' and ensuring confidentiality encourages respondents to be honest. The high factor loadings on related negative items suggests that trainees responding to the questionnaire understood this and were making an effort to provide definite responses. The eight factors are strongly weighted, and accounted for forty-four percent of the variance within the sample. The study sample is homogenous and of a reasonable size (Comrey, 1978) and the sex distribution closely resembles the national picture. A number of smaller studies using factor analysis have been reported using similar criteria (Feletti et al, 1983; McFarlane et al, 1989). Trainees in the sample were all at the beginning of their general practice year and may not be representative of more experienced trainees nor of established principals. Their responses to the questionnaire will more closely reflect attitudes determined by undergraduate and hospital experience. This will be useful in constructing a picture of the novice general practice learner. The questionnaire is North American in origin and some of the items may not have strong face validity in the UK eg 'I love to learn' or be misconstrued eg 'Libraries are

boring places'.

4.4.1 Construct validity.

"Constructs are psychological qualities assumed to exist in order to explain some aspect of behaviour." (Gronlund, 1985)

A construct is an abstract concept, a 'generalization from the particular' (Cohen & Mannion, 1987) that describes the relationship between words and ideas. 'Intelligence', 'Anger', 'approach to learning', 'enthusiasm for learning' and 'creativity' are all examples of constructs. Constructs are not observable, isolated dimensions of behaviour and, because they exist in the abstract, are difficult to measure. Validity is the ability of a test to measure, preferably with as much accuracy as possible, what it is supposed to measure. Construct validity is the ability of a test or measure to accurately represent the construct in question and examines the degree to which the test items measure the construct under investigation.

Factor analysis is commonly used to test for construct validity and is the main approach adopted in this study. Factor analysis is a statistical technique used to identify factors that may be used to represent relationships amongst sets of interrelated variables (Comrey, 1978) and is discussed in greater detail in another section of this work.

Eight factors accounted for 44 percent of the variance. The contribution made by each factor is shown below:

Table 4.2. SDLRS. Contribution of factors.

	eigenvalue	Pct of var	Cum pct
Factor 1	9.944	17.1	17.1
Factor 2	3.539	6.1	23.2
Factor 3	2.489	4.3	27.5
Factor 4	2.286	3.9	31.5
Factor 5	2.175	3.8	35.2
Factor 6	1.895	3.3	38.5
Factor 7	1.712	3.0	41.5
Factor 8	1.541	2.7	44.1

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .792

Bartlett test of sphericity = 4368.3809, significance = .0000

Bartlett's test may be used as indication of the appropriateness of factor analysis as an analytic technique with a given data set (Norusis, 1988). The test requires the sample to be from a multivariate normal population and a small significance level, as in this case, confirms that factor analysis is a useful approach for this study.

Similarly, the KMO statistic may be used to support or refute the use of factor analysis as a technique with a given set of data. The test is a measure of how well correlations between pairs of variables may be explained by factor analysis. Levels above 0.70 and close to 0.80 are highly desirable and in this study, the level of 0.79 means that factor analysis is an appropriate technique for use.

After varimax rotation, the resulting factor loadings for each item were examined in the factor table below:

Table 4.3. SDLRS. Factor Table.

Factor 1 (α = .84)

Q 47 Learning is fun (0.69)
Q 45 I have a strong desire to learn new things (0.62)
Q 46 The more I learn, the more exciting the world becomes (0.59)
Q 5 I love to learn (0.58)
Q 1 I'm looking forward to learning as long as I'm living (0.57)
Q 55 I learn several new things on my own each year (0.55)
Q 49 I want to learn more so that I can keep growing as a person (0.51)
Q 52 I will never be too old to learn new things (0.50)
Q 43 I enjoy discussing ideas (0.47)
Q 51 Learning how to learn is important to me (0.46)
Q 17 There are so many things I want to learn that I wish there were more hours in a day (0.45)
Q 24 The people I admire most are always learning new things (0.41)
Q 30 I have a lot of curiosity about things (0.41)

Negative items

Q 31 I'll be glad when I've finished learning (-0.60)
Q 53 Constant learning is a bore (-0.59)
Q 32 I'm not as interested in learning as some other people seem to be (-0.50)
Q 56 Learning doesn't make any difference in my life (-0.46)
Q 44 I don't like challenging learning situations (-0.41)

Factor 2 (α = .76)

Q 41 I'm happy with the way in which I investigate learning problems (0.58)

Q 4 If there is something I want to learn, I can figure out a way to learn it (0.44)
Q 10 If I discover a need for information that I don't have, I know where to get it (0.44)
Q 36 I'm good at thinking of unusual ways of doing things (0.44)
Q 38 I'm better than most people at trying to find out the things I need to know (0.43)
Q 42 I become a leader in group learning situations (0.43)
Q 27 I am capable of learning for myself almost anything I might need to know (0.42)
Q 39 I think of problems as challenges not as stop signs (0.42)
Q 34 I like to try new things, even if I'm not sure how they will turn out (0.41)
Q 57 I am an effective learner in lectures and on my own (0.41)

Negative items

Q 9 I don't work very well on my own (-0.48)
Q 12 Even if I have a great idea, I can't seem to develop a plan for getting it to work (-0.47)
Q 19 Understanding what I read is a problem for me (-0.44)

Factor 3 (α = .67)

Positive items

Q56 Learning doesn't make any difference in my life (0.56)
Q31 I'll be glad when I've finished learning (0.51)
Q53 Constant learning is a bore (0.48)
Q48 It's better to stick with the learning methods that we know will work instead of always trying new ones (0.44)
Q12 Even if I have a great idea, I can't seem to develop a plan for getting it to work (0.38)
Q44 I don't like challenging situations (0.35)
Q3 When I see something that I don't understand, I stay away from it. (0.34)

Negative items

Q55 I learn several new things on my own each year (-0.45)
Q52 I will never be too old to learn new things (-0.41)
Q1 I'm looking forward to learning as long as I'm living (-0.38)
Q47 Learning is fun (-0.37)

Factor 4 (α = .75)

Positive items

Q43. I enjoy discussing ideas (0.58)
Q42. I become a leader in group learning situations (0.52)
Q36. I'm good at thinking of unusual ways of doing things (0.48)
Q30 I have a lot of curiosity about things (0.39)
Q25 I can think of many different ways to learn about a new topic (0.38)
Q39 I think of problems as challenges not as stop signs (0.34)
Q34 I like to try new things, even if I'm not sure how they will turn out (0.33)

Negative items

Q44. I don't like challenging learning situations (-0.50)
Q7. In lectures, I expect the lecturer to tell all class members exactly what to do at all times (-0.45)

Q29 I don't like dealing with questions where there is not one right answer (-0.37)

Factor 5 (α = .65)

Q26. I try to relate what I am learning to my long term goals (0.52).
Q8. I believe that thinking about who you are, where you are and where you are going should be a major part of every persons education (0.47).
Q37. I like to think about the future (0.43).
Q10. If I discover a need for information that I don't have, I know where to get it (0.38).
Q25. I can think of many different ways to learn about a new topic (0.34).
Q34. I like to try new things, even if I'm not sure how they'll turn out (0.32).

Factor 6 (α = .65)

Q38. I'm better than most people at finding out the things I need to know (0.59)
Q11. I can learn things on my own better than most people (0.51).
Q14. Difficult study doesn't bother me if I'm interested in something (0.37).
Q36. I'm good at thinking of unusual ways of doing things (0.31)
Q13. In a learning experience, I prefer to take part in deciding what will be learned and how (0.31).
Q27. I am capable of learning for myself almost anything I might need to know (0.30).

Factor 7 (α = .69)
Q50. I am responsible for my learning - no one else is (0.66)
Q15. No one but me is truly responsible for what I learn (0.53)

Factor 8

Q21 I know when I need to learn more about something (0.42)

(Factor loadings in brackets).

Items with loadings of 0.4 or greater have been taken into account for all factors but for weaker factors items with loadings of 0.30 have been included to 'improve the flavour' of the factor.

Factor 1 is dominated by 'learning is fun' (factor loading 0.69) and 'I have a strong desire to learn new things' (0.62). There were significant negative loadings on related items: 'I'll be glad when I've finished learning' (-0.60) and 'Constant learning is a bore' (-0.59).

Factor 2 is overshadowed by 'I'm happy with the way in which I investigate learning problems' (0.58) and negative loadings on 'I don't work very well on my own' (-0.48), but also includes three equally weighted items related to problem solving: 'If there is something I want to learn, I can figure out a way to learn it' (0.44), 'If I discover a need for information that I don't have, I know where to get it' (0.44) and 'I'm good at thinking of unusual ways of doing things' (0.44).

Factor 3 is dominated by 'Learning doesn't make any difference in my life' (0.56) and 'I'll be

glad when I've finished learning (0.51) with related negative items 'I learn several new things on my own each year' (-0.45) and 'I will never be too old to learn new things' (-0.41).

Factor 4 has two predominant items, 'I enjoy discussing ideas' (0.58) and 'I become a leader in group learning situations' (0.52).

Factor 5 is dominated by 'I try to relate what I am learning to my long term goals' (0.52) and 'I believe that thinking about who you are and where you are going should be a major part of every person's education' (0.47) with 'I don't like challenging learning situations' (-0.50) and 'In lectures, I expect the lecturer to tell all class members exactly what to do at all times' (-0.45) as contributing negative items.

Factor 6 has two strong items: 'I'm better than most people at finding out the things I need to know' (0.59) and 'I can learn things on my own better than most people' (0.51).

Factor 7 has only two significant items (ie with factor loadings above 0.30); 'I am responsible for my learning - no one else is' (0.66) and 'No one but me is truly responsible for what I learn' (0.53).

Factor 8, the weakest factor, has 'I know when I need to learn more about something' (0.42) as its only strong item.

The current analysis suggests that the factors identified amongst this sample of trainees are similar to the factors identified by Guglielmino as important factors in learning.

4.4.2 Descriptive and summary statistics.

Item 16 has the largest standard deviation (1.30). The average raw (uncorrected for negative items) score for the scale is 184.8 with a standard deviation of 15.1. The average score on an item is 3.18 with a range of 1.6 to 4.3. The average of the item variance is .995 with a range of .65 to 1.7. The correlations between items range from -.48 to .579. The average correlation is .05.

4.4.3 Reliability.

The initial factor analysis revealed eight factors accounting for 75% of the variance of the sample. As a measure of the internal reliability of the inventory with this sample of trainees, Cronbach's alpha (α) was calculated for the complete scale and for each of the eight separate

subscales:

Table 4.4 SDLRS study: Factor and scale reliability scores

		α
■	Factor 1	0.84
■	Factor 2	0.76
■	Factor 3	0.67
■	Factor 4	0.75
■	Factor 5	0.65
■	Factor 6	0.65
■	Factor 7	0.69
■	Overall scale	0.76

Cronbach's alpha is a statistical technique developed from an approach to split-half reliability measures (the Kuder-Richardson formula). It can be used where there are two or more response alternatives to items on a scale. The statistic gives the average of all the split-half reliabilities of the scale in question (Cronbach, 1951) and because of its ease of use with computers can be used, as in this study, to 'fine-tune' a scale by removal of items that decrease the homogeneity of the scale (Streiner & Norman, 1989).

Internal consistency measures such as Cronbach's α are based on a single administration of a scale, as in this case. This makes them very convenient to use but care must be taken not to ignore other sources of variance in performance eg response-bias due to varying interpretations of the meaning of test items.

Alpha depends on both the length of the test (ie the number of items) and the correlation of the items on the test. Sample size may be taken into consideration when discussing reliability. If it is intended that the results of the investigation may be applied to much larger groups and to individuals then, in estimating the reliability coefficient, one is hoping that the estimate we achieve is as close as possible to the true level. A sample size of two hundred, as in this study, would result in a 95% confidence interval of $\pm$ 0.15. For scale development, and for 'fine-tuning' existing scales, as in both stages of the present study, it is useful to know how each of the items affects the reliability of the scale as a whole. Calculating Cronbach's alpha for the scale

when each of the items is removed reflects the contribution each item makes to the overall reliability of the scale. This enables the elimination of items making a negative or neutral contribution to the scale. This approach is used with the SDLRS to produce a scale with fewer items but with strong reliability.

4.4.4 Comparing groups.

The scores obtained by each of the three groups in this study on the overall scale were compared with published results from other work in the USA. In order to make these comparisons, individual scores for seventeen items on the SDLRS (3,6,7,9,12,19,20,22,23,29,31,32,35,44,48,53,56) are reversed using the formula *score = 6-Qi (where Qi is the individual score on the item),* so that the negative effects of the wording of the item are taken into account.

Table 4.5 Comparison of SDLRS scores between original study group, McMaster nursing students and USA college students, UK gp trainees, trainers and nurses.

	Mean	SD	range	
Original group *	223	26.07		(+)
McMaster nurses	222	24.9	175 - 276	(++)
US college students	228	24.4		(+++)
UK trainees	208	22	145 - 272	
UK trainers	216	24	141 - 270	
UK nurses	211	21	172 - 276	

* the original group in the USA consisted of high school seniors, college undergraduates and adults involved in continuing education courses.

(+) Guglielmino, 1977
(++) Crook, 1985
(+++) Long & Ageykum, 1983

The lower overall scores achieved by the UK sample in this study may reflect the face validity of some of the items (eg 'I love to learn', item 5; 'I think libraries are boring places', item 23;

'Learners are leaders', item 58) . It may also reflect a tendency to not use extremes of the scoring scale (ie choices 1 and 5). The choices are not conventional in that they ask the respondent to choose from expressions that put 'feelings' at the centre of the choice, for example: 1 = Almost never true of me; I hardly ever feel this way to 5 = Almost always true of me; there are very few times when I don't feel this way'. This may not be attractive to the British reserve who are used to the emotionally neutral 'strongly agree' to strongly disagree' range.

Table 4.6 Distribution of SDLRS scale and sub-scale scores between reference group (trainees) and comparator groups.

group	Factor							
	I	II	III	IV	V	VI	VII	Overall
Trainees score	67	44	24	34	22	19	8	208
SD (±)	10.1	6.3	6.0	5.6	3.6	3.4	1.7	22
range	35-90	27-59	11-46	12-49	5-29	6-28	2-10	145-272
Trainers score	72	46	22	36	22	20	8	216
SD (±)	9.8	6.5	5.9	5.4	3.3	3.6	1.4	24
range	44-90	30-64	11-38	23-50	14-30	10-30	4-10	141-270
Nurses score	69	48	24	26	23	19	8	211
SD (±)	9.3	5.9	4.8	3.4	3.1	2.9	1.7	21
range	47-89	35-66	13-34	19-38	15-30	12-28	3-10	172-276

To simplify analysis, the responses to the items of the scale have been expressed in the Frequency Table (see Appendix 2) as dichotomised variables. Responses of '1' or'2' and responses of '4' or '5' have been aggregated and shown as percentages of overall response. The Table below shows items that attracted agree/strongly agree or disagree/strongly disagree responses from sixty percent of the respondents or more.

Table 4.7 : SDLRS - items achieving > 60% responses.

Agree/strongly agree

80% +

Q14 Difficult study doesn't bother me if I am interested in something (80%)

70-79%

Q21 I know when I need to know more about something (79%)
Q37 I like to think about the future (78%)
Q54 Learning is a tool for life (78%)
Q55 I learn several new things on my own each year (77%)
Q16 I can tell whether I' learning something well or not (76%)
Q4 If there is something I want to learn I can figure out a way to learn it (74%)
Q15 No one but me is truly responsible for what I learn (72%)
Q1 I am looking forward to learning as long as I'm living (71%)
Q49 I want to learn more so that I can keep growing as a person (70%)
Q50 I am responsible for my learning no one else is (70%)

60-69%

Q8 I believe thinking about who you are, where you are and where you are going should be a major part of every person's education (65%)
Q30 I have a lot of curiosity about things (67%)
Q10 If I discover a need for information that I don't have, I know where to get it. (64%)
Q26 I try to relate what I am learning to my long term goals (61%)
Q5 I love to learn (61%)
Q39 I think of problems as challenge not as stop signs (61%)

Disagree/strongly disagree

60%+

Q56 Learning doesn't make any difference in my life (87%)
Q20 If I don't learn it's not my fault (84%)
Q31 I'll be glad when I've finished learning (75%)
Q9 I don't work very well on my own (74%)
Q7 In lectures, I expect the lecturer to tell all class members exactly what to do at all times (70%)
Q3 When I see something I don't understand I stay away from it (70%)
Q19 Understanding what I read is a problem for me (69%)
Q23 I think libraries are boring places (60%)

4.4.5 Comparing male and female responses

Male and female responses for each item, and then for each of the eight factors identified by the factor analysis, were compared using 2 tailed

independent sample t-tests. Taking $p < 0.05$ as the cut-off for significance only 6 items achieved significance.

Table 4.8 t-tests for individual items on SDLRS comparing male with female responses.

		mean	SD	t	p
Q8. I believe that thinking about who you are, where you are and where you are going should be a major part of every persons' education.	M	3.52	1.25	-2.62	.009
	F	3.93	1.01	-2.68	
Q9. I don't work very well on my own.	M	1.74	.918	-3.51	.001
	F	2.23	1.12	-3.43	
Q36. I'm good at thinking of unusual ways of doing things	M	2.81	.904	3.18	.002
	F	2.42	.918	3.18	
Q38. I'm better than most people at trying to find out the things I need to know	M	3.18	.866	3.81	.000
	F	2.72	.881	3.80	
Q41. I'm happy with the way in which I investigate learning problems	M	3.17	.863	2.63	.009
	F	2.87	.789	2.66	
Q42. I become a leader in group learning situations	M	2.78	1.05	3.26	.001
	F	2.32	.983	3.29	

n = 216 (male 121, female 95) for all items.

This analysis shows that there is a statistically significant difference between the responses of male and female trainees (at the $p<0.05$ level) for six items on the SDLRS inventory. These items are 8, 9, 36, 38, 41 and 42.

Table 4.9 t-tests for the eight factor solution.

Factor	sex	n	mean	s	t	p
1	m	121	33.74	7.04	0.18	.857
	f	94	33.57	6.57		
2	m	121	24.85	4.21	2.96	.003
	f	95	23.18	4.00		
3	m	121	8.82	3.15	1.63	.104
	f	95	8.15	2.79		

4	m	121	9.56	2.43	2.17	.031
	f	95	8.85	2.34		
5	m	121	21.53	3.83	-0.12	.904
	f	95	21.59	3.45		
6	m	121	24.12	3.92	2.93	.004
	f	95	22.60	3.59		
7	m	121	34.27	5.23	0.62	.537
	f	95	33.85	4.57		
8	m	121	14.75	2.43	1.43	.155
	f	95	14.26	2.66		

This analysis shows that there is a statistically significant difference (at the $p<0.05$ level) between males and females in their scores for three factors: factor 2, factor 4 and factor 6. A linear regression model [1] was used to determine the influence of age on these differences.

Factor 1 showed a significant effect for age but not for sex at the 5% level:

Factor 1	μ	α	β	R^2
estimate	56.243	0.3875	-1.032	0.022
standard error	5.029	0.1794	1.443	
p-value	.000	.032	.475	

At the 5% level, age is significant but sex is not.

An analysis of the three factor solution showed a statistically significant difference, for sex, for only one factor, Factor 2 (scores greater for males).

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1. Model for simultaneous linear regression of age and sex for SDLRS factor scores:

$$y_i=\mu+ \alpha w_i + \beta x_i + \varepsilon_i$$

where y_i is the factor score, w_i is the age, x_i is the sex and ϵ_i is a residual error for subject *i*.

Table 4.10 Three factor model: difference between sexes.

Factor	n	mean	SD	t	p	
1	m	121	46.88	8.47	-0.33	0.742
	f	95	47.25	7.74		
2	m	121	32.17	5.57	3.61	0.00 **
	f	95	29.39	5.67		
3	m	121	14.57	2.75	-1.67	0.096
	f	95	15.16	2.31		

Applying the linear regression model form above to examine the influence of age, Factor 1 showed scores positively correlated with age:

Factor 1	μ	α	β	R^2
estimate	38.898	0.338	-0.803	0.029
standard error	3.763	-.1342	1.080	
p-value	.000	.013	.458	

4.4.6. Further analysis of the SDLRS
Introduction.

Inspection of the results indicated that a number of items could be removed to improve the reliability result. The new reliability coefficient after this removal was α = 0.86. Streiner and Norman (1989) argue for levels above 0.75 and preferably for levels above 0.85, especially for test that will be used to make decisions about people.

Further factor analysis of this new scale of 34 items was carried out and principal components analysis identified ten factors with eigenvalues greater than one. These factors accounted for 21%, 8%, 6%, 5%, 5%, 4%, 4%, 3% 3% and 3% respectively of the total variance. Using the five percent guideline (Cattell, 1966) five factors would be appropriate for rotation. The Scree plot however, suggested three important factors. Thus depending on the criteria used between three and ten factors may be deemed suitable for rotation. Trial rotations of three, five and ten factors were compared. The correlations between scale items and rotated factors for each of the three trial rotations are shown in the Appendix.

The clearest information about the dimensions of the new scale was given by the three factor solution. These factors accounted for 35% of the total variance (a proportion deemed acceptable in other studies (Pascoe cited in Cockburn, 1989)). The three factors were rotated to simple structure using oblique rotation (δ set to zero by default) to maximize the weightings obtained. An oblique rotation results in factors that are correlated with one another and in this situation where the underlying processes may be expected to be overlapping to a degree appears more appropriate than orthogonal rotation that results in factors that are independent of each other. This second analysis resulted in the factor pattern shown below. Communality estimates are shown in the right hand column. Reliability scores for each sub-scale are shown. The reliability figure for Factor three increases to .51 with the deletion of Q48 so for the final scale and sub-scale structure this item has been omitted. The factor analysis deleted a further eight items leaving 24 in the table above with an overall value for Cronbach's α for the scale of 0.82.

Table 4.11 SDLRS: Factor structure after oblique rotation.

Factor One		**Factor Two**		**Factor Three**	
α = .82		α = .73		α = .49 (.51)	
Item	Factor loading	Item	Factor loading	Item	Factor loading
Q45	.77	Q41	.61	Q50	.71
Q47	.70	Q38	.59	Q15	.58
Q46	.69	Q36	.55	Q21	.47
Q49	.64	Q27	.55	Q8	.42
Q5	.61	Q10	.55	Q48	.40
Q51	.59	Q42	.53		
Q1	.59	Q39	.50		
Q43	.57	Q13	.49		
Q52	.55	Q14	.47		
Q17	.52	Q4	.46		
Q24	.52				
Q30	.51				
Q55	.41				

4.4.6.1 A shortened version of the SDLRS - the S-SDLRS.

This final scale of 28 items has a good internal reliability score (Cronbach's alpha 0.82) and the three sub-scales represent two constructs easily identified from the initial scale. The third sub-scale, factor three, represents a new clustering of items and is discussed below. Mean scores and standard deviation for the scale and subscales derived from the original database are given in Table 4.12 along with scores for the comparator groups of trainers and nurses in training. These scores may be used to compare an individuals score with a normative group. Individual scores may be transformed to Standard scores and then may be used to accurately compare the individuals' score with the reference group. Standard scores are based on the standard deviation of scores from the trainee group. The Table below shows a sample of standard scores . Such transformed scores may be displayed as bar charts to add impact and to aid their use in a one-to-one setting.

Table 4.12 SDLRS: Short self-directed learning readiness scale (S-SDLRS) - Standard scores.

	Mean scores and standard deviations		
	Trainees	Trainers	Nurses
I	48 (7.6)	51 (7.2)	49 (11.8)
II	33 (5.2)	36 (4.9)	33 (6.4)
III	18 (2.9)	18 (2.2)	19 (3.6)

The itemised structure of the shortened scale is given below:

Table 4.13 The shortened SDLRS inventory.

S-SDLRS Factor One.

Item number (from original inventory)

45. I have a strong desire to learn new things. (.77)
47. Learning is fun. (.70)
46. The more I learn, the more exciting the world becomes. (.69)

49. I want to learn more so that I can keep growing as a person. (.64)
5. I love to learn. (.61)
1. I'm looking forward to learning as long as I'm living (.59)
51. Learning how to learn is important to me. (.59)
43. I enjoy discussing ideas (.57)
52. I will never be too old to learn new things. (.55)
17. There are so many things I want to learn that I wish that there were more hours in a day. (.52)
24. The people I admire most are always learning new things. (.52)
30. I have a lot of curiosity about things. (.51)
55. I learn several new things on my own each year. (.41)

S-SDLRS Factor Two.

41. I'm happy with the way I investigate problems. (.61)
38. I'm better than most people are at trying to find out the things I need to know. (.59)
36. I'm good at thinking of unusual ways to do things. (.55)
27. I am capable of learning for myself almost anything I might need to know. (.55)
10. If I discover a need for information that I don't have , I know where to go to get it. (.55)
42. I become a leader in group learning situations. (.53)
39. I think of problems as challenges not as stop signs (.50)
13. In a learning experience, I prefer to take part in deciding what will be learned and how. (.49)
14. Difficult study doesn't bother me if I'm interested in something. (.47)
4. If there is something I want to learn I can figure out a way to learn it (.46)

S-SDLRS Factor Three

50. I am responsible for my learning - no one else is. (.71)
15. No one but me is truly responsible for what I learn. (.58)
21. I know when I need to learn more about something. (.47)
8. I believe that thinking about who you are, where you are, and where you are going should be a major part of every person's education. (.42)

4.5. Interpretation of results: the SDLRS factors.

Summary

This section discusses the results of the analysis of the SDLRS inventory and comments on the findings in the light of other studies. The results suggest that whilst the SDLRS is a useful instrument with which to examine learning in general practice, it is a better reflection of attitudes to learning in general rather than to either self-directed learning or to learning in a vocational sense. Some of the items may lack face validity for general use in the UK setting and the inventory as a whole may be too long for routine use. A shorter version, measuring three factors has been produced. This short questionnaire addresses some of these problems, but questions about the influence of external factors on learning and about a doctors attitudes and responses to the context of learning in general practice still remain.

Introduction.

Guglielmino identified eight factors associated with successful self-directed learning by using the Self-Directed Learning Readiness Scale. She named the eight factors as:

- openness to learning opportunities
- self-concept as a learner;
- initiative and independence in learning
- informal acceptance of responsibility for one's own learning;
- love of learning
- creativity;
- future orientation
- ability to use basic study and problem-solving skills.

Examination of the frequency table (Appendix and Table 4.4) suggests that trainees have very positive views about their ability as learners (Q14) and that they see learning playing an important part in their own personal as well as professional development. They are positive about their study skills and accept responsibility for their own learning. They are curious, determined and experienced learners with a tendency to want less didactic leadership than they receive from teachers. They are a group of demonstrably successful learners, having achieved

professional status, but over half of them admit to difficulties with planning study (Q12).

Construct validity.

The construct validity of the results is increased by their similarity to features found in other studies with the questionnaire (Guglielmino, 1977). The first four factors are reasonably strong, and are similar to those found by others (Field, 1989) but one must be wary about conclusions drawn from the weaker four that comprise fewer items. Nevertheless, it is still possible to make tentative suggestions about the eight factor solution.

4.5.1 Interpreting the factors

Factor One is dominated by enjoyment and enthusiasm for learning and the desire to learn new things. This factor includes items indicating intention to continue learning over a lifetime and of using learning to enhance personal growth. There is an indication of interest in the skills of learning and of an intellectual responsibility towards one's own learning. Strong self-motivation and independence, the influence of role modelling in learning and the attraction of sources of knowledge are also components of this factor. The factor suggests distinct intrinsic interest in what is being learned and is similar to the 'meaning' orientation to study described by Entwistle and Ramsden (1983). It also bears a close resemblance to the 'academic' approach to learning described amongst trainees (Bligh, 1989b) and to the first factor described by Guglielmino: 'openness to learning opportunities'. Field (1989) identified a similar factor which he called Love of and/or enthusiasm for learning.

Factor Two is characterised by a positive self-concept as a learner; of being able to organise time for learning and of being aware of learning needs and resources. The factor indicates independence as a learner and satisfaction with problem-solving and reading skills as well as a willingness to consider difficult study in areas of interest. There is also confidence at working well on one's own and the ability and discipline to initiate, plan and complete projects. Such self-confidence is an important ingredient of any successful style (De Bono,1991). Marton (1976) demonstrated that an individual with a poor self-concept as an effective learner is more likely to adopt reproducing or 'surface' approaches to studying, decreasing his or her chances of understanding the material being studied. Martin and Jones (1984) suggest that such

individuals may also be more susceptible to failure when under pressure. The factor relates closely to Guglielminos second factor: 'self-concept as an effective learner', and to Fields second factor 'Initiative and independence in learning'.

Factor Three is similar to the 'reproducing' orientation of Entwistle and Ramsden (1983) and portrays learners as passive receivers of information who perceive education as mere transmission of knowledge. Such individuals have low interest in learning and may be 'syllabus bound' in that they prefer clear instructions, deadlines and defined courses. They tend to restrict reading to the defined syllabus and tasks and read very little beyond what is required to complete assignments. Vu and Galofre (1983) observed amongst American medical students that there was a 'tendency towards analytic rather than independent learning and that... in general, they did not have well planned study systems or search beyond what they are expected to do'. Other items suggest difficulty with planning and completing projects and reluctance to engage in difficult learning issues or problems. Fear of failure or extrinsic interest in qualifications may be the principal motivating factors here. Just as with Fields analysis (1989) the items loading strongly on this factor are negative ones.

Factor Four is characterised by enjoyment of verbal discussion suggesting a willingness to accept and to learn from criticism. There is a positive self-concept as a problem-solver and as a leader. There is clear satisfaction with the use of basic study skills and a belief in the exploratory nature of education. This factor may resemble Guglielminos 'creativity' construct.

Factor Five indicates a thoughtful approach to learning in which new ideas are related to existing knowledge and concepts and integrated to achieve personal meaning. This factor closely resembles Guglielmino's 'future orientation'.

Factor Six is strongly dominated by a positive self-concept as an effective and independent learner. There is a desire to be involved in planning learning activities and willingness to tackle difficult issues if they are of personal interest. The factor resembles the 'achieving' approach described by Entwistle and Ramsden (1983).

Factor Seven is a clear acceptance of responsibility for one's own learning and is similar to Fields factor four (1989).

Factor Eight may indicate awareness of learning need but is the most difficult to interpret with only one item achieving a reasonable item loading. This is an important area because as both Knox (1976) and Anthoney (1986) have pointed out some medical students may have difficulties recognising cognitive weakness and as a result they may tend to use memorising inappropriately rather than asking themselves questions about new material.

4.5.2 The shorter Self-Directed Learning Readiness Scale (S-SDLRS)

Introduction

This section discusses the three major factors identified by the second factor analysis of the SDLRS items and describes their possible use in one-to-one teaching in general practice.

4.5.3 Interpreting the factors.

Factor I reflects a creative, forward looking individual who is intrinsically interested in learning for its own sake. Those who score highly on this factor are enthusiastic and committed to learning; they may undertake a number of learning activities on their own behalf each year and are keen to question, examine and talk about issues that concern them. Their role-models often include other successful learners. This factor may be named 'Enthusiasm for Learning'.

Factor II deals with technical aspects of learning. People who score well in this area are likely to be strongly self-motivated individuals with good basic study skills and problem-solving ability. They are likely to be positive and assertive learners who want to be involved with learning at all stages including planning. They are leaders in group work and respond to challenges in a positive manner. They are prepared to make that little bit of extra effort to learn difficult things and tend to be successful self-learners. This factor may be named 'Confidence as a learner'.

Factor III indicates the degree to which individuals take responsibility for their own learning. Those who score highly here are good at identifying their learning needs and regard learning as a process that includes relating new material to one's own needs and wants. They are concerned that education should encourage people to think deeply about themselves and about the directions in which they are developing as people. There is however a tendency amongst

this group to conservatism especially in choice of learning method preferring to use tried and trusted methods rather than experimenting with new or alternative methods. This factor may be named 'Responsibility for Learning'.

Displaying an individual's standardised scores for each factor as a bar chart helps interpretation. Figure 1 in the Appendix shows the charts obtained for five trainees from the original data set. A tentative interpretation of these pictures may be as follows:

Trainee 1 clearly has little enthusiasm for learning and although he accepts some responsibility for his own learning and has a reasonable belief in his learning skills is not motivated to learn. This may be a reflection of problems internal to the trainee (eg his interest in general practice as a career) but may also reflect his interpretation of the kind of learning he is asked to do. Careful one-to-one counselling would help to identify the problem(s) here and assist the trainer in developing a learning plan for this trainee.

Trainee 2 is very enthusiastic about learning and has well developed learning skills, but she likes to adopt a passive or dependent approach to learning and would tend to be critical of learning situations where she found herself without sufficient direction from others.

Trainee 3 although he is enthusiastic about learning and accepts responsibility for his own learning, he doers not believe strongly in his ability to learn effectively. Such a trainee may benefit from study skills advice and discussion aimed at enhancing his self-esteem.

Trainee 4 is in considerable trouble. He scores well below his peers on all three factors suggesting someone with difficulties that may extend beyond simply learning. Although this picture may merely reflect a cynical or sceptical person, it may also reveal somebody who is in need of urgent 'educational' treatment to unravel the issues.

Trainee 5 appears the perfect trainee - well motivated, strong self-belief as a learner and accepting responsibility for his or her own learning. As with all these examples this information cannot be taken into consideration in isolation and other observations must be included before judgements can be made.

4.6. Discussion.

4.6.1 The SDLRS.

These factors reflect how trainees perceive themselves as learners and suggest that this view is of being competent and successful learners and problem solvers, for whom learning is strongly related to personal achievement and improvement. Within this broad view, there are possibly smaller subsets including one that suggests that for some trainees learning is not an attractive experience and may be associated with learning difficulties. The factors represent a spectrum of attitudes to learning amongst trainees and are positive indicators for medical teachers considering the introduction of independent learning activities to the curriculum. They portray trainees as generally committed, enthusiastic and successful learners with well developed basic study and problem-solving skills. There are indications that a variety of teaching methods, including small group activity as well as traditional didactic input, will be acceptable to trainees as learners but that, for some, clear guidance and help with adjustment to unfamiliar learning styles, especially if these involve independent learning, will be necessary. It is possible that rather than giving an indication of how prepared trainees are for self-directed learning, the factors reflect attitudes to learning in general. Whilst it is possible to make connections in abstract terms between the characteristics suggested by the factors and effective independent learning, it has not been possible in this study, nor has it been directly confirmed in other studies (Field, 1989; Crook, 1985; Long & Agyekum, 1983) that there is a clear link between scores on the SDLRS and success in 'self-directed' learning.

The popularity of the SDLRS is a measure of its success but there have been doubts raised about the interpretation of the results obtained from its use. These doubts mostly focus on the construct 'readiness for self-directed learning' and challenge the idea of its' existence as a multifactorial construct. Field (1989; 1990) has gone further and raised doubts, not only about the construct, but also about the usefulness of the instrument because of concerns over the use of negatively phrased questions, difficulties replicating the original eight factor structure and concerns about the methodology used in the initial development work. These views have attracted considerable criticism (Long, 1989; Guglielmino, 1989; McCune, 1989) but they do

raise important questions about interpreting the factor structure of the inventory.

Bonham (1991) has considered the construct validity of the SDLRS by determining what low scores on the inventory may mean. She was concerned, like Field (1989), with whether the scale was measuring readiness for self-directed learning' or something else. She examined each item, Guglielmino's own definition and factor structure and the definitions of other users of the scale and concluded that there were two possible opposites to the readiness for self-directed learning construct. The first is a preference for being directed in learning ie having someone else plan your learning for you. The second, a dislike, avoidance or lack of motivation for any form of learning.

So, a person with low SDLRS scores is not motivated to learn either in self-directed ways or in other-directed ways. Bonham suggests that high SDLRS scores rather than indicating a preference, or readiness, for self-directedness, indicate a positive attitude to learning regardless of context or the amount of control that the individual learner has. She suggests, in the light of these findings, that the scale should be known as the Learning Readiness Scale. Items that highlight these two views of what a low score may mean include "In a learning experience I prefer to take part in deciding what will be learned and how", "If there is something I want to learn, I can figure out a way to learn it", and "I know what I want to learn". Low scores on these items would reflect a negative view and imply the need, or wish, for a guide or teacher to help in the process of learning. On the other hand, low scores on "I love to learn", "I'm looking forward to learning as long as I'm living", "I don't have any problems with basic study skills", and high scores on "I'll be glad when I've finished learning", and "Learning doesn't make any difference in my life" would suggest lack of interest in learning altogether.

4.6.2 Gender difference

The sample size in the current study enables comparisons between the responses of male and female trainees. Observation and experience suggest that there are differences between the genders in terms of their learning - but what is the empiric evidence? Gledhill found differences between male and female medical students in South Africa using the Lancaster Approaches to Studying Inventory (Gledhill & Van De Merwe, 1989). They suggested that women students

were likely to take their studies more seriously than men and to put more effort into them. They also found that women were less concerned with status and with the rewards of a medical education. This view is measured by the Extrinsic Motivation dimension of the Lancaster Inventory. In Indonesia, Emilia and Mulholland (1991) found amongst a sample of 33 women from 90 students that the only statistical difference between the sexes was on this Extrinsic Motivation dimension ($p < 0.005$), adding support to the findings of Gledhill. In terms of study patterns, their results suggested (the sample was forty-one women students from a class of 176) that women were either overcautious in their reliance on detail or tended to concentrate less on detail and logical analysis. They tended to relate new information to knowledge acquired in other parts of the course and appeared less dependent on staff to define their learning tasks for them. Coles (1988) found in a longitudinal study of medical students learning styles, again using the Lancaster Inventory, that females may be more immune to the effects of a didactic curriculum than males. The analysis of the SDLRS data from the present study supports much of these findings. The analysis, at item level, suggests that females are more likely to consider their learning as an integral part of their own personal development (Q8) but are

- less likely than males to feel confident working on their own (Q9)
- less likely than males to be conservative about learning methods (Q36)
- likely to have less self-confidence than males in their learning skills (Q38 & Q41) except when in a group situation when they may be more likely to be comfortable with a leadership role (Q42).

At factor level, females score less strongly than males on Factor 2 'self-concept as an effective learner'; Factor 4 'creativity' and Factor 6 which suggests a positive self-concept as an independent learner. Of the factors comprising the shorter inventory, only Factor 2 'Confidence as a Learner' demonstrates a difference with males scoring more strongly.

Further analysis by gender.

In view of the effect of gender on some of the factors identified in this part of the study, a

separate factor analysis was carried out for both males and females. The results are shown below.

Table 4.14. SDLRS Male factor analysis: contribution of factors.

Factor	eigenvalue	% var	cum var
1	10.34	17.8	17.8
2	3.79	6.5	24.4
3	3.28	5.7	30.0
4	2.71	4.7	34.7
5	2.25	3.9	38.6
6	2.21	3.8	42.4
7	1.97	3.4	45.8
8	1.71	3.0	48.8

Eight factors accounted for 49 percent of the variance within the male sample. The factor table is shown in the appendix below. It is possible to identify three factors (accounting for 30 percent of the variance within the sample) for which an interpretation can be given. The items structure for each is shown below:

Factor I

Q45 I have a strong desire to learn new things (.75)
Q47 Learning is fun (.64)
Q24 The people I admire most are always learning new things (.61)
Q49 I want to learn more so that I can keep growing as a person (.60)
Q5 I love to learn (.57)
Q30 I have a lot of curiosity about things (.56)
Q31 I'll be glad when I've finished learning (-.56)
Q39 I think of problems as challenges not as stop signs (.56)
Q28 I really enjoy tracking down the answer to a question (.55)
Q25 I can think of many different ways to learn about a new topic (.55)
Q43 I enjoy discussing ideas (.54)
Q46 The more I learn, the more exciting the world becomes (.54)
Q54 Learning is a tool for life (.53)
Q13 In a learning experience, I prefer to take part in deciding what will be learned and how (.49)
Q14 Difficult study doesn't bother me if I'm interested in something (.49)
Q18 If there is something I have decided to learn, I can find time for it, no matter how busy I am (.49)

Factor 2

Q21 I know when I need to learn more about something (.59)
Q53 Constant learning is a bore (.59)
Q48 It's better to stick with the learning methods we know will work instead of always trying new ones (.53)
Q50 I am responsible for my learning - no one else is (.49)
Q56 Learning doesn't make any difference in my life (.48)
Q32 I'm not as interested in learning as some other people seem to be (.40)
Q33 I don't have any problem with basic study skills (.37)

Factor 3

Q12 Even if I have a great idea, I can't seem to develop a plan for making it work (.64)
Q51 Learning how to learn is important to me (.56)
Q9 I don't work very well on my own (.50)
Q3 When I see something I don't understand, I stay away from it (.40)

Factor 1 is dominated by Q 45 '*I have a strong desire to learn*' (.75). Q 47 '*Learning is fun*' (.64), Q 24 '*The people I admire most are always learning new things*' (.61) and Q 49 ' *I want to learn more so that I can keep growing as a person*' (.60) also contribute strongly to this factor. This factor may be named 'desire to learn' and relates learning for personal growth with the recognition of successful learners as role-models.

Factor 2 has both Q 21 '*I know when I need to learn more about something*' (.59) and Q 53 '*Constant learning is a bore*' (.59) as its strongest items. Q 48 '*It's better to stick with the learning methods you know will work instead of always trying new ones*' (.53), Q 50 '*I am responsible for my learning no one else is*' (.49) and Q 56 '*Learning doesn't make any difference in my life*' (.48) contribute to this factor suggesting a complacent, pragmatic and conservative learner. This factor may be named 'complacency towards learning'.

In Factor 3, Q12 '*Even if I have a great idea, I can't seem to develop a plan for making it work*' (.64), Q51 '*Learning how to learn is important to me*' (.56) and Q 9 '*I don't work very well on my own*' (.50) contribute strongly. Q 3 ' *When I see something that I don't understand, I stay away from it*' (.40) adds to the image of this factor suggesting a disorganised, inefficient learner. The factor may be named 'learning problems'.

For the female sample, the following results were obtained.

Table 4.15. SDLRS. Female analysis: contributions of factors.

Factor	eigenvalue	% var	cum var
1	9.81	16.9	16.9
2	3.93	6.8	23.7
3	2.87	5.0	28.7
4	2.66	4.6	33.3
5	2.25	3.9	37.1
6	2.10	3.6	40.8
7	1.95	3.4	44.2
8	1.93	3.3	47.5

Eight factors accounted for 47 percent of the variance in the sample. The factor table is shown in the appendix below. It is possible to describe four factors (accounting for 33 percent of the sample variance) from this table:

Factor 1

Q39 I think of problems as challenges, not as stop signs (.68)
Q45 I have a strong desire to learn new things (.65)
Q28 I really enjoy tracking down the answer to a question (.63)
Q1 I'm looking forward to learning as long as I'm living (.61)
Q25 I can think of many different ways to learn about a new topic (.59)
Q43 I enjoy discussing ideas (.56)
Q52 I will never be too old to learn new things (.55)
Q44 I don't like challenging learning situations (-.54)
Q5 I love to learn (.51)
Q49 I want to learn more so that I can keep growing as a person (.50)
Q32 I'm not as interested in learning as some other people seem to be (-.50)

Factor 2

Q33 I don't have any problem with basic study skills (.47)
Q34 I like to try new things, even if I'm not sure how they'll turn out (.40)
Q18 If there is something I have decided to learn, I can find time for it, no matter how busy I am (.37)
Q12 Even if I have a great idea, I can't seem to develop a plan for making it work (-.32)

Factor 3

Q56 Learning doesn't make any difference in my life (-.50)
Q40 I can make myself do what I think I should (.48)
Q50 I am responsible for my learning - no one else is (.42)

Factor 4

Q6 It takes me a while to get started on new projects (.47)
Q23 I think libraries are boring places (.46)
Q16 I can tell whether I'm learning something well or not (.33)

Factor 1 has Q39 *'I think of problems as challenges not as stop signs'* (.68) as its strongest item. Q 45 *'I have a strong desire to learn new things'* (.65), Q 28 *'I really enjoy tracking down the answer to a question'* (.63), Q1 *'I'm looking forward to learning as long as I'm living'* (.61) and Q 25 *'I can think of many different ways to learn about a new topic'* (.59) also load strongly on this factor. The factor suggests enjoyment of learning, determination and resourcefulness and an intention to use learning as part of personal development. The factor may be named 'Determination to learn'.

Factor 2 conveys an image of a positive self-belief as a learner, with *'I don't have any problem with basic study skills'* as the strongest item (Q33 0.47). The items, taken as a whole, suggest confidence and determination. The factor may be named 'Confidence in learning'.

Factor 3 has *'Learning doesn't make any difference in my life'* (Q56, -0.50) as its highest loading item. This is a negatively phrased item and when seen in the context of the other two items in the Factor suggests that this factor may be reflect belief in learning and acceptance of responsibility for one's own learning. The factor may be named 'belief in the importance of learning for oneself'.

Factor 4 has Q6 *'It takes me a while to get started on new projects'* (.47) as its' strongest item with Q 23 *'I think libraries are boring places'* (.46) supporting a view of the factor as one indicating 'reticence to engage with learning' as a possible name for the factor. Q 16 *'I can tell whether I'm learning something or not'* (.33) is a weak item that is difficult to interpret in this context.

The three factors from the male analysis and the four factors isolated by the factor analysis of the female responses to the SDLRS are shown in the table below.

Table 4.16 SDLRS: Factor names by sex.

Male	Female
I: Desire to Learn	I: Determination to learn
II: Complacency towards Learning	II: Confidence in learning

The effect of age.

The effect of age on the factors is interesting. Increasing age has a significant effect on only one factor, Enjoyment and Enthusiasm for Learning. This suggests that other influences, associated with personal maturity, and possibly the integration of experience, may play a part in an individual's approach to learning. These influences require further investigation, especially in the light of Vermunt and Rijswijk's (1988) finding amongst Open University students in Holland that increasing age may be associated with increasing desire for external direction and a reproducing (or dependent) learning style.

Conclusion.

This section has examined characteristics of independent learning amongst general practice trainees. The instrument used for data collection was based on a model of adult learning developed in the USA through research amongst non-vocational learners. It proved useful in identifying themes that make an important contribution to our understanding of trainee learning, although there are some reservations about its use in the original 58 item form. The questionnaire concentrates on the learner's own perspective of learning and overlooks both content and context. It focuses on personal characteristics and does not relate these to the influences of time, experience, teaching method or career preferences, for example. The study sample represents trainees at the start of their general practice training period, so it is not possible to discuss the influence of experience and changing contexts of practice.

However, this part of the study suggests that the SDLRS is a useful instrument with which to explore trainee learning, although the instrument is more a measure of readiness for learning in general than it is of readiness for 'self-directed' learning. Further analysis of the data is required to explore levels of independent learning between trainees at different stages of their training and amongst established general practitioners in differing learning contexts.

CHAPTER 5.

An Interview Study

> *'Semi-structured interviews are guided, concentrated, focused, and open-ended communications events that are created by both the interviewer and the interviewee and occur outside the stream of everyday life'* (Crabtree and Miller, p16)

Introduction.

This section describes an interview survey carried out with a small sample of general practice trainees as they completed their training in the Summer of 1992. The interviews were recorded on audio tape and the transcriptions analyzed for recurrent themes and issues. The results of the survey are used with concepts derived from model of approaches to learning, the literature review and the survey of factors involved in 'readiness for learning' to develop hypotheses for the present research.

5.1 The purposes of the interview survey were

- to discuss impressions of vocational training with experienced trainees
- to identify, from the trainees' perspective, important themes or issues with relevance to learning.
- to devise questionnaire items from the themes identified.

The interviews focused on how the trainee went about learning and on possible influences on this learning during the training year.

5.2 Method

Interviews were conducted over May, June and July of 1992 with fifteen trainees (eight female, seven male; age range 26-29) at the end of the general practice component of their training period. Seven trainees were interviewed at their training practice, the remainder were

interviewed in the offices of the Regional Adviser in General Practice at the University of Liverpool. All the interviewees were volunteers having been asked if they would like to participate in a research study looking at the way trainees learned in general practice. The trainees were selected at random from those nearing the end of their training and were contacted by telephone either by the researcher (JB) or by an administrative assistant at the University. Travel expenses were paid as necessary. All the interviews were recorded on audiotape and subsequently transcribed (see Appendix). The interviews lasted between 25 and 40 minutes.

The interviews followed the same general format. After opening welcoming remarks, the interviewer introduced himself as an experienced general practitioner and medical teacher working at the University who was engaged on a research project examining differences between general practice trainees in the ways that they went about learning. The purpose of the interview was described uniformly as being to discuss aspects of how the interviewee felt and went about learning during the general practice year so that a questionnaire could be developed for wider application. It was explained that previous investigations had used theories based on research amongst people on higher education and that there was now a need to develop theories more appropriate to medical education in general and to general practice in particular. The trainees were all assured that the interviews were confidential, that they would not be identified personally with any part of the interview and their comments and remarks would not be used in any way as an assessment of either themselves or of their trainers or course organisers. This point, in the event, proved to be an important concern for many of the trainees, who despite carefully worded invitations to participate, feared that the interviews were being conducted by university personnel working within the management structure of general practice training as part of an assessment programme.

5.2.1 Interview framework

The interviews were based on a focused but semi-structured format (Coles and Mountford, 1988) and followed the framework shown here.

[1]. a description of how the interviewee went about learning as a medical student

seeking out differences between acquisition of facts and the learning of skills and behaviours.

[2]. consideration of learning now as a trainee in general practice and comparison between current learning and that as a medical student/junior hospital doctor. At this stage the interviewees were asked to define the term 'learning'.

[3]. discussion of examples of good and bad learning experiences and of good and poor trainees as the interviewees classified them, if identified, and of other influences of learning as a trainee. Recall of how learning has progressed or changed over the training year. Discussion of examples of learning in action for example preparing for the diploma examination of the Royal College of General Practitioners (MRCGP) or, where appropriate, of learning activities outside medicine eg language or hobby learning.

[4]. discussion of how learning may continue in the future as an established general practitioner in independent practice and of how that may differ form current or previous practice.

5.3 Analysis

The transcripts of the interviews were read and re-read a number of times and emerging themes recorded. The focus of attention during these readings was, in the first instance, on the chronological development of responses to learning activities/opportunities but with little emphasis on the detail of day-to-day events or particular courses. However, greater concentration was placed on comments from the interviewee describing their own experiences in terms of concerns, issues or feelings. These two levels of analysis have been described by Coles and Mountford (1988) as the difference between topographical and topological descriptions, where topographical analysis is a description of events as they happened and topological analysis examines the 'concerns and issues raised and the relationships between them'. It is the issues raised by the latter analysis that are of greater interest in this investigation although it is valuable to consider the interpretation of some of the data against

a chronological background.

5.3.1.Themes emerging from trainee interviews

A large number of separate and recurring issues were identified whilst reading the transcripts. These are listed in Tables 5.1 and 5.2.

Table 5.1

Interview study: issues.

- Discipline as a learner:
  need for goals, direction, leadership, skills, help
- Learning from and with others:
  social interaction, role of peers, partners, small groups
- Comfort in group work
  importance of discussion, exploring ideas, revealing self as doctor
- Linking new material with existing knowledge
  patients as focus for learning; stimulators and source of material
  problem-based discussion with trainer & at release course;
- Patients as source of anxiety and perplexity
- Decreasing importance of rote learning
- Learning as personal fulfillment, personal experience; personal growth
- Importance of role models/contempories as teachers
- Place of trainees/peers as support/counsellors/co-learners
- Need for extrinsic motivation for learning:
  eg MRCGP & as source of structure for learning
- Talking through probelms with colleagues, partners, spouse
- Role of family/clash of priorities
- Sharing difficult cases/decisions
- Role of practice team in learning/sharing/supporting
- Importance of learning climate/environment
- Stress/vulnerability to trainer and to patients
- Adult/child status as learner/pupil and trainee/doctor
- Self-awareness/openness/exploring/interest in subject matter/flexibility
- Awareness of others
- Career intention as motivator for learning
- Relationship with trainer/patient/family
- Organic vs psychological vs holistic approaches to practice
- Professional confidence <--->uncertainty

Table 5.2

Interview study: Issues

- Honesty
- Communication:
  embarrassment at use of advisers ie asking for help
- Skimming through reading
- Sharing ideas and experience
- Enjoying reading; learning from discussion
- Clinical meetings as motivators
- Formal vs informal learning
- Lectures vs group learning / receiving vs thinking
- Adult responsibility/acceptance of /part of team
  frustrated/'junior'/no impact/no sense of team/acceptance

These individual issues have been aggregated into six 'themes':

Theme 1
Sense of team
Role of peers as support
Comfortable expressing feelings
Self-awareness
Confidence
Sense of responsibility

Theme 2
Isolation
Stress
Tension
Self-conscious
Anxious

Theme 3
Learning as a technique
Waiting to receive information
dependent learning
Learning difficulties

Theme 4
Learning as a personal value
Role of reflection
Enjoyment of learning
Organisation
Self-confidence in learning
Competitive

Theme 5

Independent learner
Learning for personal growth
Self-critical
Internal motivation
Responsible for own learning

Theme 6

Patients as people
Doctor - patient relationship
Self-esteem
Extrinsic motivation

5.3.2 Questionnaire statements

Questionnaire statements have been composed for each theme. The statements reflect the issues comprising the general theme and are mostly derived from words used by trainees in the interviews. A number of the statements are taken from the SDLRS or the LASI questionnaires where there is close similarity between the issue being examined and the statement.

Theme 1.

- Being able to discuss problems in my work as a doctor with others is an important part of my own development
- When I'm working in the practice I usually feel very much part of the team.
- As a trainee, I feel rather detached from the day to day activity of the practice
- I usually quite readily admit when I don't know something.
- I find it easy to discuss the problems I have as a doctor.
- Talking to other doctors about how I look after patients makes me feel uncomfortable.
- Listening to the way other doctors work is a great way of learning for me.
- I feel comfortable expressing my feelings in group work.
- I think it's important to share difficult experiences with other people
- A good trainee is someone who is prepared to explore issues that arise in the consultation
- Self-awareness is an important characteristic in a trainee.
- I'm good at taking responsibility for decisions about a patients management
- Working in groups or teams is the best way to learn.
- I learn much more in groups than on my own.

Theme 2

- I find I am thinking about my work and the problems I encounter most of the time.
- The idea of being a fully established principal in general practice makes me feel nervous.
- Trainees are vulnerable.
- I find discussing how I manage cases embarrassing
- I find being the trainee in the practice very frustrating.
- I find getting personal feedback about how I am doing as a doctor very threatening
- I find the unstructured atmosphere of learning in general practice difficult to cope with.
- The feeling of isolation I experience in general practice makes me depressed.
- I think general practice is a very stressful job.
- When I look back I wonder why I ever became a GP.
- One-to-one teaching can be quite intimidating.
- Talking the problems I see in practice helps to reduce the stress they cause in me.
- I prefer learning on my own to working in groups.

Theme 3.

- When I'm learning something I prefer to be told exactly what to do and when.

- I don't find myself referring to books very often anymore.
- I'm good at knowing when I need to find out more about something
- Since I left medical school my learning seems to have lost its sense of direction.
- I find I learn better when I have a definite target to aim for.
- When it comes to reading journals, I'm not very disciplined.
- I would usually recognise when I don't know something about a particular field of practice.
- Teachers in general practice should give more direction about what and how to learn.
- I prefer to have a clear set of guidelines to follow when I'm working.
- In general, the way I learn new things hasn't changed much since I was a student.
- I find I use rote-learning less and less now when I'm learning something.
- When it comes to keeping up to date, I find it very difficult to know what I really need to learn.
- I find it difficult to relate what I learn to the way I manage my patients.
- I learn more effectively at lectures than on my own.

Theme 4.

- I often find myself reading medical articles just for interest
- I sometimes feel that I am on an educational conveyor belt that I can't wait to get off .
- I find the learning I am doing now quite a strain.
- I enjoy working for exams.
- Learning is more interesting when I can relate what I am learning to a personal level.
- I'm glad exams are over now I am in general practice.
- I mostly learn by trial and error these days.
- It is easier to want to learn something than it is to actually learn it.
- When I learn something new, I like to spend some time thinking about it before putting it into action.
- My main reason for attending refresher courses or meetings is to improve the way I manage patients.
- I enjoy competition; I find it stimulating.
- When I attend a course or meeting, I suppose I am more interested in the people I meet than the meeting itself.
- I am better than most doctors at finding out what I need to learn.
- I'm not as interested in learning as some other doctors seem to be.
- I don't learn very well on my own.
- I never seem to find the time to think about what I am learning.
- As far as I'm concerned constant learning finished once I became a GP.

Theme 5.

- Thinking about the patients I see and how I manage them is a good way for me to learn.
- Learning in general practice has made me more confident as a person.
- Taking more responsibility for what I do makes me feel more confident as a person.
- Role models play a very important part in my own development.

- Thinking about the problems I face in managing patients is a good way for me to learn
- I find I often give myself feedback about how I am doing.
- It is important to develop a sense of self-criticism as a doctor.
- As a trainee, it is up to me how much I learn.
- I feel comfortable when left to learn on my own.

- Relating what I learn to the patients I see is a good way of learning for me.

Theme 6.

- I look on my work as a doctor as a means to an end rather than as a vocation.
- I find it difficult to balance the demands of my work with the demands of my family.
- Being my own boss is what attracted me to a career in general practice.
- General practice is all about the relationship between two people - the doctor and the patient.
- I don't get on very well with people in general.
- Patients usually seem to find it easy to relate to me as a person.
- I believe that effective medical treatment depends on a partnership in which the patient plays an active part.

5.4 Discussion

This section discusses each of the six themes mentioned above and uses verbatim extracts from the interviews to illustrate trainee feelings or views.

Theme 1.

Trainees commented frequently on the need to discuss problems with either their trainer, the practice partners or with their peers at release course. Some found that this was a natural and easy way to strengthen their learning and experienced little difficulty gaining access to a helpful ear. Others observed that their medical friends or spouses also played an important part in providing support for difficulties. It was often possible to fall back on friends from previous hospital jobs to gain advice about procedure or treatment. Two trainees worked in training practices with two trainees on-site at once. (This is not a common situation, with accepted practice being for the regional trainers appointment panel recommending that a maximum of one trainee is authorised, except in exceptional circumstances). Both trainees in this situation spoke very highly of the arrangement, especially because it afforded a degree of peer support that they found very valuable. Other trainees commented that they found seeking advice not only difficult but also personally rather embarrassing. This may reflect the personality of the trainee, of the trainer and the teaching climate of the practice or of both. Those who found difficulty in this area also felt less a part of the practice than others. This general theme reflects an openness of approach to professional and personal issues and a preference for working

with colleagues rather than alone on the one hand, and on the other, a tendency towards introspection and detachment.

> 'video consultations have been useful... both doing them my self and watching other people's and discussing them afterwards. I think the interesting thing is that you think at the time that you are doing everything .. you exploring every avenue that you can think of at the time but then when you actually sit back objectively and watch it with other people and you hear what other people say it gives you a whole new perspective on it and you think I never thought of that ... I will think of that next time. I feel as if I think more broadly certainly much more in depth about things than I did when I started in general practice'.

Theme 2

This theme reflects a tendency towards feelings of vulnerability and anxiety about work in general practice. The items highlight key issues mentioned by trainees during the interviews and suggest that the period of general practice training is a very sensitive one in terms of self-esteem, work satisfaction, role adequacy and role legitimacy. There are also concerns both about receiving feedback and about feelings of personal and professional isolation. Here, a tendency to work alone may reflect an individuals perception of his or her own adequacy rather than a true strength in independent learning and may relate to Branthwaite's findings in the West Midlands (Branthwaite et al 1988).

> '...group teaching - that was a totally new experience...that was initially incomprehensible. I mean normally when you are taught in groups in hospitals it is some person who has prepared a lecture and a group of you (students) go there. If you are interactive, you are only interactive with the lecturer or through the lecturer on points that someone else has raised - it is a very sort of stratified relationship. The idea of sitting down in a room with people and generating an outcome with no input and interacting with everyone at once seemed horrendously unworkable. I didn't know what to do so that it was initially stressful'.

> 'I have managed to put off being videoed until now [10 months] and I am finally being made to do it under great pressure because I have awful memories of being videoed when I was a student - it was terrible. We used to be videoed with all the class sitting next door killing themselves laughing you could hear them - it was every week for four weeks in general practice and then again in psychiatry and that was worse than general practice - much worse - it was so false, you didn't have the skills and you didn't have the knowledge - it was one of the worst things we did at medical school and one of the most unproductive.'

> 'In the surgery you are here on your own and you have got to the make the decision...and I find that more difficult...I think the feeling of isolation is much greater in this job.'

Theme 3

This Theme links together issues related to the process of learning in medicine. The

characteristic features of the theme are of a need for clear directions and guidelines when learning, a definite preference for lectures, a loss of direction (or purpose) in learning and a lack of discipline in learning. The theme suggests a lower level of learning skills than would be expected amongst successful independent learners. The issues also suggest that there may be a number of trainees with genuine learning difficulties and points out the need for a transitional period in training during which such dependent learners may acquire the confidence to learn on their own.

> '...being a fairly rigid person, I like some sort of rules and I look analytically at things and say 'what are the rules running this situation'. I like to form a little scheme in my own mind and learn a sort of structure semi-formally...'

> 'Learning the hard way in general practice. I had done very specialised other hospital jobs and there were still great areas of knowledge that weren't particularly good... I had to go home and look up all those sort of little things that I almost take for granted now so particularly, in the first six months, there was enormous change and things sort of calmed down now and I am sort of refining .. refining by learning'.

> 'The way I do it is to read and write things down. I can't just read because I don't concentrate if I am just reading something so I read and write things down and then I do that for say 40 minutes and then I'd stop doing what I was doing and then see what I'd remembered of what I had done...and then a week later I would do it again...the same stuff without reading it first to see what I could remember about it'.

> 'I was never very fond of lectures ... I attended them and took notes but I didn't feel that was my best way of learning... I learned most from.. actual bedside teaching with patients to examine and be shown things and then going away afterwards and discussing it amongst yourselves and having a tutorial...' I find it easier to remember if you are relating it (what you learn) to a person you can remember'.

Theme 4

The theme reflects concerns about the process and purposes of learning. It unites elements of the deep approach to learning ('I often find myself reading medical articles just for interest') with elements of the Strategic ('I enjoy competition; I find it stimulating'). It also has indicators of learning pathology ('I mostly learn by trial and error these days'; It is easier to want to learn something than it is to actually learn it'); of motivation towards learning and of perceived success in learning .

> '...the main process at the start was going to lectures and listening to someone else talking for an hour...writing notes...and then relearning the notes...very early on as a student but after it was that we had to do a lot more reading outside that and so I sort of felt more encouraged to do extra work myself not just to take on what was being force fed to me ... and when we started clinical work suddenly you had hands on

experience and *you were expected to understand things*, say things or be shown up in front of your peers which I think was the quickest way for me to learn... I would go away and think about something so that I wouldn't show myself up.

Theme 5.
This cluster of issues includes a view of learning as intrinsic part to personal growth, a feeling of comfort when learning alone, and an acceptance of responsibility for learning and for professional decisions.

'I always talk..talk to people about subjects I have been interested in and other things I have done. I find I learn a lot from what other people tell me as well... we would learn things from each other '" often to actually verbalise what you have done makes you realise whether you actually understand what you have done.'

'I learned best in small groups... I used to find at the end of a lecture I might have taken a sheet of notes but it hadn't gone in at all... and often you would read through your notes and I would say I didn't write this.. I didn't find that useful...I am not a very sort of enormously self-disciplined person - reading around on my own when I did do that was fine but that tended to be at just before exams and I felt that I wished I did this more often! - but what I found was in small groups where there was participation [it was easier]. I learn 'visually' - I mean the situation and who said what and in what situation they said it.

'certainly in general practice you have got to be able to work as a team and feeling as a team member is important... working as part of a system that works and also defining what you are there for'.

Theme 6
This theme brings together feelings about the purpose of general practice, relationships with people, the demands of family, patients and work and choice of general practice as a career.

'...that has been a problem with me. I attracted a lot of people who come with chronic anxiety, depression and sit there and go on and on and I got to the stage where I can't stand it anymore and I have to..start to learn ways to protect myself and ways of deflecting patients elsewhere and how to terminate consultations...just to protect myself because...I was getting so many of these people... and you just can't go on listening to it all the time...well, they go home feeling OK, you go home feeling terrible.'

'the first thing that springs to mind is thinking of certain patients that I've not got on particularly well with ... or they keep coming back to see me and I feel that I can't offer them anymore and they keep coming back to see me and I find that quite hard to deal with because I haven't yet figured out how to calm a situation down so that they will go elsewhere...'

5.5.1 Possible dimensions involved in general practice learning

It is now possible to identify and list elements that may be involved in influencing learning at

a personal level amongst trainees. These elements are drawn from our understanding of the approaches that trainees may adopt to learning, from the factors identified using the readiness to self-directed learning inventory and from the interview survey described above. They are expressed here, Table 5.3, as six 'dimensions' and may be seen as speculations or hypotheses to be tested by further work.

Table 5.3

Speculative dimensions influencing learning in general practice.

1.	Learning for self-growth Uses experience as basis for learning	learning for job waits to receive instruction
2.	Prefers to be self-directed	prefers to be taught
3.	Learning as problem-solving	learning as a technique
4.	Enjoys learning Positive self-concept as a learner	glad when learning over dependent, passive, stressed
5.	Sees patients as people with problems	patients are disease entities
6.	Sense of support & teamwork	Professional isolation

5.5.2 Construct validity.

Every researcher approaches the interpretation of data from a unique perspective and may, unwittingly, introduce bias. This is especially true of the interpretation of qualitative data. Methods to check the validity of the interpretations made in this small study may include: using more than one observer, triangulation of the results with the results obtained using different approaches and by ensuring that the interpretation of data is undertaken within a sound

theoretical framework. A small panel (5) of general practitioner trainers from Liverpool have been approached by a research assistant and asked to sort cards carrying the questionnaire statements described above into categories reflecting their own views of learning in general practice. The doctors were asked to 'force' the 76 items on the cards into six categories wherever possible. Their responses are shown below.

Table 5.3 Replies from five trainers to forced card sort of LIGPI† items.

Doctor 1.

[1]. Good doctor; prepared to learn; shares experience; group worker; prepared to discuss problems; open.
[2]. Threatened by work as a GP
[3]. Over-confident; maybe can't learn from others; probably runs committees; consultant mentality
[4]. Loner
[5]. Stressed
[6]. Average doctor; difficulty in keeping up with CME; wants things to be organised for him.

Doctor 2.
[1]. Still got an open-mind; willing to learn; questions what they are doing
[2]. Like [1] but lacks confidence; requires support from group. Maybe lacks initiative; needs group work
[3]. Arrogant; learns but in isolation; difficult to teach because they feel they don't need help.
[4]. Gave up when passed Finals; may as well forget CME; not interested.
[5]. Finds the whole business of being a GP far too difficult.
[6]. Lost their way with CME; hasn't got the time; can't sort themselves out.

Doctor 3
[1]. Directed; task-oriented learning
[2]. Self-awareness
[3]. Burnt out; disillusioned
[4]. 'Stuck' in learning
[5]. Sharing / communication
[6]. Independent / isolation

Doctor 4.
[1]. Isolation
[2]. Learning methods
[3]. Co-operation
[4]. Development as a GP
[5]. Fears / inadequacy
[6]. Developing confidence and maturity
[7]. Attitude to general practice.

Doctor 5.
[1]. Directed learner

† Learning in general practice inventory

[2]. Burnt out GP syndrome
[3]. Group learner; prepared to be honest; open
[4]. Fears group work
[5]. Communication; relating to patients
[6]. Reactionary; no time for 'new fangled' learning
[7]. Disorganised; harassed learner
[8]. Competitive learner
[9]. Reflective
[10]. Impulsive

There is a marked concordance between the responses and they reflect the range of positive as well as negative issues identified in the interviews. The responses of these trainers lend general support to the speculative dimensions outlined above.

Further support for the suggestion that the six hypotheses above may play a part in learning in general practice may be gained from applying the statements, in the form of a questionnaire, to a large group of trainees. The next part of this thesis sets out the results of such a study and then goes on to describe the further application of the questionnaire, in a modified form, to a sample of general practitioners.

Summary

This section has described a small interview study with trainees at the end of their training experience. These interviews indicate a range of elements involved in the process of learning. These elements include relationships with patients, with trainers and with partners in the practice; relationships with peers; the influence of family; the need for support; self-confidence and role legitimacy; the effect of clinical uncertainty; the diminishing role of rote-learning and increased recognition of the importance of experience-based learning activities. The factors identified have been classified into speculative dimensions, or hypotheses, and questionnaire statements developed to test the distribution of these factors amongst a general population of trainees. Analysis of the responses of a large sample of trainees to this questionnaire may indicate the presence or absence of these factors. The results of such an investigation will have immediate implications for teachers of general practice.

CHAPTER SIX

The Learning in General Practice Inventory: trainee sample.

This chapter describes the results of applying the statements identified in the previous chapter to a sample of general practice trainees.

Introduction.

The previous chapter described the use of an interview study to explore aspects of the learning process with trainees at the end of their training experience. It was possible, using information gained from the interviews and from our understanding of how trainees go about learning, to derive a series of constructs that may explain differences between trainees as learners. An inventory of statements operationalising these constructs has been prepared and a questionnaire developed. This chapter, and the one that follows, assesses the validity of these constructs by applying the questionnaire first to a sample of general practice trainees and secondly, to a sample of general practitioners.

6.1 Purpose and aims of the study.

This investigation, of which the study reported here is a part, examines learning in general practice from the point of view of the trainee. The surveys in this and the next chapter, make use of a questionnaire derived both from statements made by trainees in an interview study and from the theoretical background of the 'approaches to learning' model of learning in higher education. The survey aims {i} to confirm the presence of six factors that may have an important influence on learning in general practice and {ii} to use the results of the survey to develop our understanding of how learning in general practice may be improved. This chapter confines itself to a presentation of the results of the survey. Discussion of the results, in the light of previous work and our existing understanding of general practice learning, will be laid out in Chapter 8.

6.2 Method

The items identified from the interview survey were written in a form suitable for inclusion in a questionnaire and a five point Likert-like scale ranging from strongly agree to strongly disagree used for participant response. The questionnaire contained a mixture of positive and negative items. Likert scaling is concerned with ensuring that items measure the same thing. Participants are required to place themselves on an attitude continuum for each statement (Oppenheim, 1992). A five point scale is common, although seven point scales are also not uncommon and are used when concern about the neutrality of the mid-point is high. Likert scales are useful for producing reliable, 'rough-ordering' of people with regard to a particular attitude (Oppenheim, op cit). They are also easier to construct than certain other scales (eg Thurstone scales which require a panel of judges to develop), respondents prefer their simplicity (cf the scales for the SDLRS inventory), they provide fairly precise information about the degree of agreement or disagreement and it is possible to include items that are not obviously related to attitudes in question, offering an opportunity for subtlety.

6.3 Study Sample

The questionnaire was distributed to trainees in the following regions of England.

Region	number
North west	74
Mersey	89
Yorkshire	117
West Midlands	190
SE Scotland	90
SW Thames	120
Total	680

Three hundred and twenty seven replies were received (48%). However, only 261 (38% overall) of these were received early enough to enter the data analysis phase of the study. The majority of the remainder (35) arriving in a parcel together having been collected over some months in a postgraduate centre but not sent on to us. This response rate is low compared to some postal surveys but represents a very good response from trainees during their training year. The regional advisers approached for permission to carry out this part of the survey were only

able to provide mailing lists for trainers or course organisers with responsibility for trainees. They were not able to specifically identify trainees. We therefore wrote to trainees 'care of' their trainer in the West Midlands and North West regions and to the individual course organisers in the others. Course organisers were asked to distribute the questionnaires and return envelopes during the release course. The regional adviser in North West region asked us to delay distributing questionnaires until their own local survey was completed and the regional adviser in West of Scotland refused permission for the survey because they were conducting their own surveys and felt this additional one would get in the way. There is no information available concerning non-responders.

6.4 Results.

6.4.1 Descriptive statistics

Table 6.1 below sets out the characteristics of the trainee sample.

Table 6.1

LIGPI Trainee sample: Age and sex distribution of replies

Number of cases: 261

Male 132: mean 29.7 (sd 5.3) range 25-45
Female 109: mean 28.1 (sd 2.6) range 24-39
(20 missing gender data)

Mean age:	29.7 years Standard deviation 3.9
Age range:	24-45 years
Median:	28 years
Mode:	27 years

Summary statistics.

The average score on an item was 3.24 with a range of 1.75 to 4.6. The average item variance was .84 with a range of .39 to 1.6. The correlations between items ranged from -.53 to .65. The average correlation is .04. Standardized alpha for the overall scale .779.

6.4.2 Frequencies

The frequency table for the LIGPI(tr) is shown in Appendix 6.1. The main points are set out below.

Theme 1:

The majority (70%), comfortable talking about clinical management to other doctors (Q9) and 80% find listening to others is a good way for them to learn (Q13). 84% see talking about the problems they face as a trainee as a good way of reducing personal stress (Q32).

60% feel a part of the practice team but 15% do not feel a part at all (Q5) and 24% feel detached from the day-to-day activity of the practice as the trainee (Q48).

20% are uncomfortable expressing their feelings in groups (Q27)

60% find discussing problems relatively easy (Q2) but 14% find discussing their management of cases embarrassing (Q50).

Theme 2:

78% agree that trainees are 'vulnerable' (Q34)

59% find general practice a 'very stressful' job (Q55).

42% nervous at thought of being fully established principal (Q10).

40% find difficulty balancing the demands of being a GP with those of the family (Q7).

33% find themselves thinking of work and the problems they have much of the time (Q3)

30% question why they chose general practice as a career (Q60)

29% depressed by sense of isolation they feel in general practice (Q12).

22% uncomfortable in the 'unstructured' atmosphere of general practice (Q42).

23% find their role as trainee frustrating (37).

Theme 3:

75% learn better when they have definite learning targets (Q26); 44% say that medical teachers should give more direction about how and what to learn whilst 20% are happy with the way things are (Q45). 54% want clear sets of guidelines when working (Q53).

22% feel the way they learn hasn't changed since they were medical students but 65% recognise there have been changes (Q57); 74% agree they use rote-learning less and less as

trainees (Q58). 25% feel they have lost their sense of direction in learning since they left medical school (Q25). 25% feel they are an educational conveyor belt that they are unable to get off (Q16)

Theme 4:

85% recognised the importance of relating their learning to their own personal experience and 80% found relating what they were learning to patients they saw a good way to learn (74).

44% thought working in groups or teams was the best way to learn (Q72); 30% said they learned much more in groups than on their own whereas a quarter disagreed (Q75); 28% say they learn better at lectures than on their own (Q70). 18% admit to not learning very well on their own; 23% equivocal (Q66)

39% found one-to-one teaching quite intimidating; 44% were comfortable with it (Q76)

55% are comfortable when left to learn on their own (44)

85% were against the idea that constant learning finished once they became a GP (Q73)

nearly half the sample prefer group work to working alone (Q8).

Theme 5:

55% are comfortable when left to learn on their own (44)

55% more confident in themselves as a result of general practice experience (Q19).

75% respond positively to notion of having more responsibility (Q22).

60% reckon they are good at taking responsibility for decisions about a patients management (43)

48% admit to reading medical articles for interest (Q11) but 18% admit to not reading books anymore (Q20).

76% readily prepared to admit ignorance.

Theme 6:

Talking to patients not a problem for vast majority

55% more confident in themselves as a result of general practice experience (Q19).

There was a weak tendency to see being a doctor as a vocation rather than as a means to an end (Q6).

70% confident they can recognise when they need to know more about something (Q24).

75% respond positively to notion of having more responsibility (Q22).

41% find role-models play an important part in their development.

47% say that being their own boss is what attracted them to general practice (Q21).

6.4.3 Factor analysis

Six factors were extracted using varimax rotation. This solution accounted for 36 percent of the total variance and the factor structure is shown below.

Table 6.2
Learning in General Practice Inventory: Contribution of factors

Factor	eigenvalue	Variance percent	Cumulative percent
Factor 1	11.41	15.0	15.0
Factor 2	5.60	7.4	22.4
Factor 3	2.96	3.9	26.3
Factor 4	2.81	3.7	30.0
Factor 5	2.56	3.4	33.4
Factor 6	2.27	3.0	36.4

Factor structure with varimax rotation.

Factor I

Q59 (.71)	I believe that effective medical treatment depends on a partnership in which the patient plays an active part
Q29 (.68)	Thinking about the problems I face in managing patients is a good way for me to learn
Q33 (.68)	Self-awareness is an important characteristic in a trainee
Q31 (.66)	A good trainee is someone who is prepared to explore issues that arise in consultations
Q32 (.66)	Talking about the problems I see in practice helps to reduce the stress they cause in me
Q30 (.65)	I think its important to share difficult experiences with other people
Q47 (.64)	Patients usually find it easy to relate to me as a person
Q71 (.64)	Thinking about the patients I see and how I manage them is a good way for me to learn
Q51 (.62)	It is important to develop a sense of self-criticism as a doctor
Q74 (.61)	Relating what I learn to the patients I see is a good way of learning for me
Q73 (.60)	As far as I'm concerned constant learning finished once I became a

	GP
Q34 (.60)	Trainees are vulnerable
Q39 (.60)	I would usually recognise when I don't know something about a particular field of practice
Q46 (-.59)	I don't get on well with people in general
Q58 (.53)	I find I use role-learning less and less now when I'm learning something
Q1 (.52)	Being able to discuss problems in my work as a doctor with others is an important part of my own development.
Q54 (.51)	As a trainee its up to me how much I learn
Q57 (-.42)	In general, the way I learn new things in medicine hasn't changed much since I was a student
Factor II	
Q5 (-.56)	When I'm working in the practice I usually feel very much part of the team
Q48 (.52)	As a trainee, I feel rather detached from the day to day activity of the practice
Q12 (.52)	The feeling of isolation I experience in general practice sometimes makes me depressed
Q40 (.50)	I find getting personal feedback about how I'm doing as a doctor very threatening
Q37 (.45)	I find being the 'trainee' in the practice very frustrating
Q76 (.43)	One-to-one teaching can be quite intimidating
Q2 (-.42)	I find it easy to discuss the problems I have as a doctor
Q17 (.41)	I find the learning I am doing now is quite a strain
Q41 (.41)	I mostly learn by trial and error these days
Q50 (.40)	I find discussing how I manage cases embarrassing
Factor III	
Q68 (-.58)	I am better than most doctors at finding out what I need to learn
Q65 (.53)	When it comes to keeping up to date I find it very difficult to know what I really need to know
Q36 (.53)	When it comes to reading journals, I'm not very disciplined
Q62 (-.49)	I enjoy competition; I find it stimulating
Q64 (.49)	I'm not as interested in learning as some other doctors seem to be
Q18 (-.45)	I enjoy working for exams
Factor IV	
Q45 (.59)	Teachers in general practice should give more direction about what and how to learn
Q53 (.52)	I prefer to have a clear set of guidelines to follow when I'm working
Q4 (.52)	When I'm learning something I prefer to be told exactly what to do and when
Q42 (.48)	I find the unstructured atmosphere of learning in general practice difficult to cope with
Q26 (.42)	I find I learn better when I have a definite target to aim for
Factor V	
Q72 (.73)	Working in groups as teams is the best way to learn
Q75 (.72)	I learn much more in groups than on my own
Q8 (-.67)	I prefer learning on my own to working in groups
Q66 (.49)	I don't learn very well on my own
Q23 (.42)	Role models play a very important part in my own development
Q27 (.41)	I feel comfortable expressing my feelings in group work

Factor VI	
Q35 (.54)	General practice is all about the relationship between two people - the doctor and the patient
Q22 (.51)	Taking more responsibility for what I do makes me feel more responsible
Q19 (.49)	Learning in general practice has made me more confident as a person
Q43 (.49)	I'm good at taking responsibility for decisions about a patients management
Q21 (.46)	Being my own boss is what attracted me to a career in general practice
Q15 (.42)	I find it easy to talk with patients

Eighteen items contribute strongly to **Factor 1.** The factor is dominated by Q59 'I believe that effective medical treatment depends on a partnership in which the patient plays an active part' (.71). There are three items relating to differing aspects of reflection: Q29 ' Thinking about the problems I face in managing patients is a good way for me to learn' (.68) (relating to problems in the abstract); 'Thinking about the patients I see and how I manage them is a good way for me to learn' (.64) (relating to specific problems), and ' Relating what I learn to the patients I see, is a good way of learning for me' (.61) (applying material learned elsewhere into clinical practice). Two items Q33 'Self-awareness is an important characteristic in a trainee' (.68) and Q51 'It is important to develop a sense of self-criticism as a doctor' (.62) suggest a process of personal development. Q31 'A good trainee is someone who is prepared to explore issues that arise in consultations' (.66) and Q47 'Patients usually find it easy to relate to me as a person' (.64) along with Q32 'Talking about the problems I see in practice helps to reduce the stress they cause in me' (.66) and Q30 'I think it's important to share difficult experiences with other people' (.65) appear to indicate an openness of character/approach and a positive strategy for consultation skills. An awareness of the importance of others in stress management is suggested by Q1 'Being able to discuss problems in my work as a doctor with others is an important part of my own development' (.52).

Five items, Q73 'As far as I'm concerned constant learning finished once I became a GP' (-.60); Q39 'I would usually recognize when I don't know something about a particular field of practice' (.60); Q58 'I find I use rote-learning less and less now when I'm learning something' (.53); Q54

'As a trainee it's up to me how much I learn' (.51), and Q57 'In general, the way I learn new things in medicine hasn't changed much since I was a student' (-.42) suggest a mature and confident approach to learning.

Factor 2 has the negatively loading item Q5 'When I'm working in the practice I usually feel very much part of the team' (-.56) as its highest loading item. Both Q48 'As a trainee, I feel rather detached from the day to day activity of the practice' (.52) and Q12 'The feeling of isolation I experience in general practice sometimes makes me depressed' (.52) support the strong feeling of isolation and lack of integration. Feelings of threat, strain and frustration are reflected by Q40 'I find getting personal feedback about how I'm doing as a doctor very threatening' (.50); Q37 'I find being the trainee in the practice very frustrating' (.45); Q76 'One-to-one teaching can be quite intimidating' (.43) and Q17 'I find the learning I am doing now is quite a strain' (.41). Both Q2 ' I find it easy to discuss the problems I have as a doctor' (-.42) and Q50 'I find discussing how I manage cases embarrassing' (.40) complement each other and support the rather embarrassed, tentative and negative feelings engendered by this factor. It is not surprising then that Q41 'I mostly learn by trial and error these days' (.41) is also included in this factor.

Factor 3 has three negatively loaded items, including the strongest loading item, Q68 'I am better than most doctors at finding out what I need to know' (-.58). Both Q65 'When it comes to keeping up

to date, I find it very difficult to know what I really need to know' (.53) and Q36 'When it comes to reading journals, I'm not very disciplined' (.53) have the same item loading. Q62 'I enjoy competition; I find it stimulating' (-.49); Q64 'I'm not as interested in learning as some other doctors seem to be' (.49) and Q18 'I enjoy working for exams' (-.45) make up the remainder of the factor.

Factor 4 consists of five items. Q45 'Teachers in general practice should give more direction about what and how to learn' (.59) is the highest loading item. Q53 'I prefer to have a clear set of guidelines to follow when I'm working' and Q4 'When I'm learning something, I prefer to be told exactly what to do and when' both have factor loadings of (.52). Q42 'I find the

unstructured atmosphere of learning in general practice difficult to cope with' (.48) and Q26 'I find I learn better when I have a definite target to aim for' (.42) also load well on this factor.

Factor 5 has three high loading items and three medium scores. The factor is dominated by both Q72 'Working in groups or teams is the best way to learn' (.73) and Q75 'I learn much more in groups than on my own' (.72). Q8 'I prefer learning on my own to working in groups' is negatively loaded at (-.67). Q66 'I don't learn very well on my own' (.49) is the remaining strong item.

Factor 6 has Q35 'General practice is all about the relationship between two people -the doctor and the patient' (.54) as its highest item. Items Q22 'Taking more responsibility for what I do makes me feel more responsible' (.51), Q19 'Learning in general practice has made me more confident as a person' (.49); Q43 'I'm good at taking responsibility for decisions about a patients management' (.49) and Q21 'Being my own boss is what attracted me to a career in general practice' (.46) give a strong professional responsibility theme to this factor.

Each of the factors may be named using the items within the factor as guides to the general meaning of the factor. The Summary Box below sets out the factor by name.

Table 6.3.
Learning in General Practice Inventory: naming the factors.

Factor 1:	Learning from patients
Factor 2:	Isolation & stress
Factor 3:	Non-academic approach
Factor 4:	Desire for clear guidelines
Factor 5:	Group learning
Factor 6:	Doctor/patient relationships

6.5 Further analysis of the Learning in General Practice Inventory for trainees: LIGPI(Tr)

Further analysis of the inventory was carried out using standard procedures (Oppenheim, 1992; Zyzanski, 1989). A second principal components analysis was performed, after removal of 'unreliable' items (using the 'alpha if' statistic), and a rotated six factor solution extracted. This resulted in two new factors, confirmation of the original factor One as the principal component and the reorientation of the other three factors (III, IV, V) resulting in stronger definitions. The new six factor solution accounts for 37% of the total variance (Cronbach's alpha was 0.76). The scree plot suggested that extracting either 7 or 10 (accounting for 50% variance) could be worthwhile, but on examination of each of the six, seven and ten factor solutions the most parsimonious result was obtained from the six factor solution with 46 items.

Factor One on both extractions is identical. Further examination of the items within the factor suggests that there may be up to 5 discernible subscales:

- relationships with patients (Q46, Q47, Q59);
- self-awareness (Q31,Q33,Q51);
- vulnerability / confidence (Q1, Q30, Q32, Q34, Q39);
- maturity as a learner (Q54, Q57, Q58, Q73) and
- internalising / reflecting as a learning process (Q29, Q71, Q74).

The new factors emerging from this analysis are Factor II(b) consisting of six items indicating comfortable talking and discussing problems and Factor VI(b) with five items suggesting a competitive and positive individual; good study skills; a successful learner, and an achieving orientation.

Summary of factors extracted from second varimax rotation with reduced inventory.

Table 6.4 LIGPI(Tr): items contributing to factors in second analysis.

Factor II(b)
Q2. I find it easy to discuss the problems I have as a doctor (0.62)
Q15. I find it easy to talk to patients (0.61)
Q14. I usually quite readily admit when I don't know something (0.58)
Q27. I feel comfortable expressing my feelings in group work (0.48)
Q9. Talking to other doctors about how I look after patients makes me feel uncomfortable (-0.47)
Q24. I'm good at knowing when I need to find out more about something (0.45)

Factor III(b)

Q17. I find the learning I am doing now is quite a strain (0.59)
Q55. I think general practice is a very stressful job (0.55)
Q16. I sometimes feel that I am on an educational conveyor belt that I can't wait to get off (0.49)
Q37. I find being the 'trainee' in the practice very frustrating (0.48)
Q6. I look on my work as a doctor as a means to an end rather than as a 'vocation' (0.44)
Q3. I find I am thinking about my work and the problems I encounter most of the time (0.43)
Q5. When I'm working in the practice I usually feel very much part of the team (-0.41)
Q10. When I look back I sometimes wonder why I ever became a GP (0.40)

Factor IV(b)
Q4. When I'm learning something I prefer to be told exactly what to do and when (.53)
Q67. I never seem to find the time to think about what I am learning (.50)
Q65. When it comes to keeping up to date, I find it very difficult to know what I really need to learn (.48)
Q53. I prefer to have a clear set of guidelines to follow when I'm working (.44)
Q25. Since I left medical school my learning seems to have lost its since of direction (.43)
Q26. I find I learn better when I have a definite target to aim for (.42)
Q50. I find discussing how I manage cases embarrassing (.40)
Factor V(b).
Q75. I learn much more in groups than on my own (.76)
Q72. Working in groups or teams is the best way to learn (.75)
Q8. I prefer learning on my own to working in groups (-.69)
Q66. I don't learn very well on my own (.56)
Q44. I feel comfortable when left to learn on my own (-.46)
Factor VI(b).
Q62. I enjoy competition; I find it stimulating (.68)
Q68. I am better than most doctors at finding out what I need to learn (.58)
Q18. I enjoy working for exams (.54)
Q49. I find I often give myself feedback about how I am doing (.48)
Q36. When it comes to reading journals, I'm not very disciplined (-.47)

Factor I(b): has 15 items and is exactly as for Factor I in initial analysis and with possibility of 5 subsets: Factor name: **'Learning from patients'**

Factor II(b): has 6 items and appears to be a new factor. Comfortable talking and discussing patients; professional; open: Factor name **'Openness as a learner'**

Factor III(b): has 8 items and is like the original Factor II (Feeling isolated) but with very much more emphasis on 'learning a strain' ' GP stressful job': generally an anxious, confused, frustrated. Factor name **' Learning Difficulties'.**

Factor IV(b): consists of 7 items whereas as there where only 5 in the original factor IV(a) The factor emphasises dependence on teachers; disorganised study methods; confusion as a learner and lack of confidence. Factor name **'Desire for clear guidelines'.**

Factor V(b): has 5 items and is very much like Factor V(a) (group work) but clue to motivation in item 44 suggesting need for peer support as opposed to liking group work per se. **Factor**

name 'Group learning'.

Factor VI(b): 5 items a new factor with a strong element of competition; positive thinking; good study skills; a successful learner with an achieving orientation. It resembles Factor Two, positive self-concept as a learner, identified in Chapter Four with the SDLRS, but with greater emphasis on competition. Factor name '**Competitive approach to learning'.**

Summary table 6.5.

LIGPI(Tr) Factor names and reliability scores.

First rotation	Second rotation
1 Learning from patients (.74)	Learning from patients (.74)
2 Isolation & Stress (.42)	Openness as a learner (.42)
3 Non-academic approach (.14)	Learning and personal difficulties (.48)
4 Desire for clear guidelines (.61)	Desire for clear guidelines (.63)
5 Group learning (.21)	Group learning (.21)
6 Doctor - patient relationships (.61)	Competitive approach to learning (.23)
Overall Scale = .77	Overall scale = .76

6.5.1 Group scores.

Table 6.6 below shows the mean scores, standard deviation and range for each of the factors identified in the first analysis. The factor scores have been computed by taking negatively loading items into account and converting them accordingly.

Table 6.6

LIGPI(Tr): Factor scores by age and sex

Factor	sex	mean	sd	min	max	n	p
1	m	69.9	8.35	31	85	126	.89
	f	69.8	7.84	36	84	104	
	t	69.8	8.36	31	85	250	
2	m	24.1	4.76	12	38	126	.105
	f	25.1	5.14	15	40	103	
	t	24.6	4.93	12	40	249	
3	m	19.4	3.32	12	26	130	.139
	f	20.1	3.58	12	29	108	
	t	19.7	3.40	12	29	258	

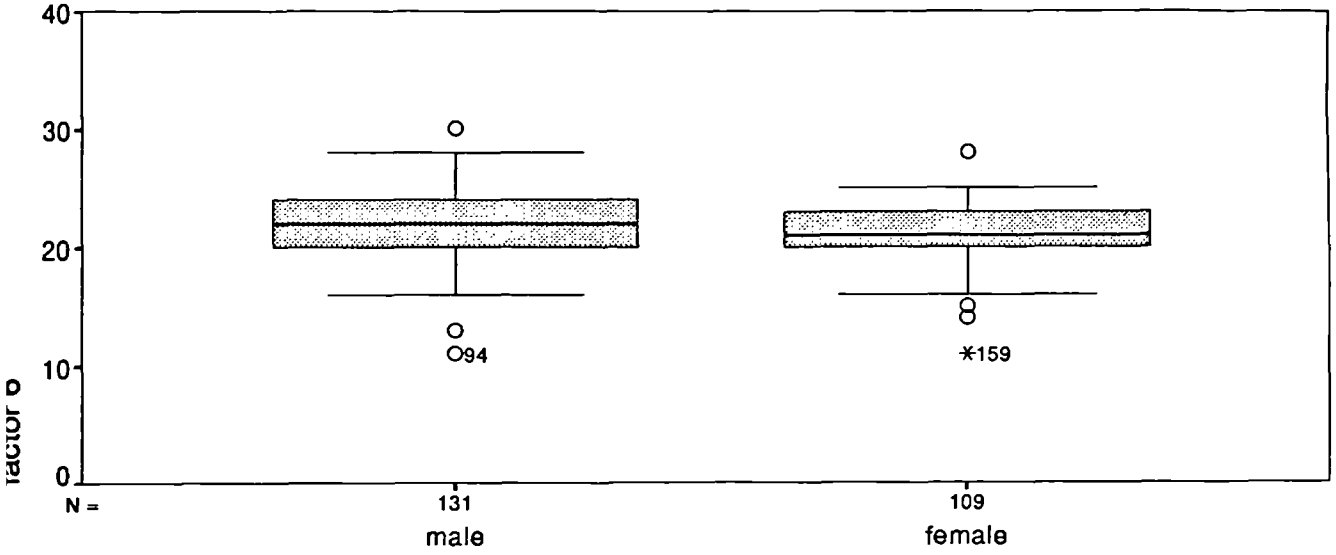
4	m	15.9	2.92	8	23	131	.132
	f	16.4	2.83	10	22	108	
	t	16.1	2.89	8	23	259	
5	m	18.5	3.30	10	27	130	.124
	f	19.1	3.31	10	28	107	
	t	18.8	3.37	8	28	256	
6	m	21.8	3.27	11	30	131	.049
	f	21.0	2.86	11	28	109	
	t	21.5	3.08	11	30	260	

This table shows that there was a significant difference between replies only on Factor 6. Figure 6.1 shows a box and whisker plot for Factor 6. Boxplots summarise information about the distribution of values in a dataset. They use summary statistics for the distribution (the median, the 25th and 75th percentiles and values for outliers and extremes). They are particularly useful when comparing distribution of values within several groups as in the gender comparisons in this study. The lower border of the box represents the 25th percentile, the upper border the 75th percentile and the horizontal line within the box is the median (the value above and below which one half of the observed values lie). Extreme values lie more than 3 box lengths from the upper or lower border and outliers are found between 1.5 and 3 box lengths. The 'whiskers' are drawn to values that are outside the box but which are not outliers. The result of the t-test for factor 6 only just achieves statistical significance (0.049). The educational significance of such a difference in this context is difficult to define. The Figure shows that whilst the mean scores for each group were very similar, the median and the distribution of scores were quite different.

Figure 6.1

Box and whisker plot

Factor 6 by sex LIGPI(Tr)



In view of the findings from the SDLRS survey, the scores for each item were analyzed using independent sample *t*-tests to investigate possible gender differences. Table 6.7 shows the results of this analysis.

Table 6.7

LIGPI(Tr) t-tests by item by sex

Item	n	mean	sd	t	p
21	131	3.43	1.11	2.94	.004
	109	3.01	1.07	2.95	

Being my own boss is what attracted me to a career in general practice.
Males score more highly than females

41	132	2.40	.828	-3.21	.002
	109	2.76	.912	-3.18	

I mostly learn by trial and error these days
Females score more highly than men; men less likely to feel this way

43	132	3.75	.755	3.69	.000
	109	3.39	.733	3.70	

I'm good at taking responsibility for decisions about a patient's management
Males score more highly

44	132	3.57	.763	3.09	.002
	109	3.24	.884	3.05	

I feel comfortable when left to learn on my own
Males score more highly

5	131	3.74	.897	2.57	.011
	108	3.42	1.04	2.53	

When I'm working in the practice, I usually feel very much part of the team
Males score more highly

62	131	3.17	.916	2.61	.010
	108	2.86	.942	2.60	

I enjoy competition; I find it stimulating
Males score more highly

66	131	2.37	.844	-2.90	.004
	108	2.69	.859	-2.89	

I don't learn very well on my own
Females score more highly; are more likely to feel this way

75	131	2.92	.874	-2.23	.026
	108	3.17	.863	-2.24	

I learn much more in groups than on my own
Females score more highly
Women have a stronger tendency towards group work

Table 6.7 shows that there are statistically significant differences in the replies made by male and female trainees to items 5, 21, 41, 43, 44, 62, 66 and 75.

6.5.2 Factor analysis by gender.

The sample was split according to gender and the data set for each sex subjected to principal components factor analysis. Six factors were extracted for each analysis and varimax rotation to independent factors attempted. The results are shown below.

The items contributing strongly (ie factor loadings of >0.4) are shown for each sex below.

Table 6.8

LIGPI(Tr): Male factor analysis: principal items contributing to factors.

Factor 1.
Q1. Being able to discuss problems in my work as a doctor with others is an important part of my own development (.70)
Q31. A good trainee is someone who is prepared to explore issues that arise in the consultation (.70)
Q32. Talking about the problems I see in practice helps to reduce the stress they cause in me (.70)
Q33. Self-awareness is an important characteristic in a trainee (.70)
Q59. I believe that effective medical treatment depends on a partnership in which the patient plays an active part (.70)
Q71. Thinking about the patients I see and how I manage them is a good way for me to learn (.64)
Q46. I don't get on well with people in general (-.63)

Factor 2
Q16. I sometimes feel that I am on an educational conveyor belt that I can't wait to get off (.57)
Q67. I never seem to find the time to think about what I am learning (.56)
Q7. I find it difficult to balance the demands of my work as a GP with the demands of my family (.54)
Q55. I think general practice is a very stressful job (.48)
Q12. The feeling of isolation I experience in general practice sometimes makes me feel depressed (.47)
Q17. I find the learning I am doing now quite a strain (.45)
Q25. Since I left medical school, my learning seems to have lost its sense of direction (.40)

Factor 3
Q66 I don't learn very well on my own (.51)
Q64 I'm not as interested in learning as some other doctors seem to be (.47)

Q18 I enjoy working for exams (-.48)
Q68 I am better than most doctors at finding out what I need to learn (-.41)

Factor 4
Q23 Role models play a very important part in my own development (.45)
Q72 Working in groups or teams is the best way to learn (.45)
Q36 When it comes to reading journals, I'm not very disciplined (-.40)

Factor 5.
Q24 I'm good at knowing when I need to learn more about something (.48)

Factor 6
Q56 When I learn something new I like to spend a little time thinking about it before it into action (.43)
Q9 Talking to other doctors about how I look after patients makes me feel uncomfortable (.41)

Table 6.9.

LIGPI(Tr): Female factor analysis.

Principal items contributing to each factor.
Items scoring >.40 included

Factor 1.

Q33 Self-awareness is an important characteristic in a trainee (.81)
Q29 Thinking about the problems I face in managing patients is a good way for me to learn (.71)
Q32 Talking about the problems I see in practice helps reduce the stress they cause in me (.70)
Q51 It is important to develop a sense of self-criticism as a doctor (.66)
Q39 I would usually recognise when I don't know something about a particular field of practice (.64)
Q30 I think it's important to share difficult experiences with other people (.36)
Q58 I find I use rote-learning less and less now when I'm learning (.61)
Q59 I believe that effective medical treatment depends on a partnership in which the patient plays an active part (.60)

Factor 2

Q48 As a trainee I feel rather detached from the day to day activity of the practice (.64)
Q5 When I'm working in the practice I usually feel very much part of the team (-.61)
Q37 I find being the 'trainee' in the practice very frustrating (.60)
Q41 I mostly learn by trial and error these days (.54)
Q67 I never seem to find the time to think about what I am learning (.49)
Q76 One-to-one teaching can be quite intimidating (.49)

Factor 3

Q13 Listening to the way other doctors work is a great way of learning for me (.66)
Q19 Learning in general practice has made me more confident as a person (.55)
Q20 I don't find myself referring to books very often anymore (-.47)
Q22 Taking more responsibility for what I do makes me more responsible (.44)

Factor 4

Q45 Teachers in general practice should give more direction about what and how to earn (.66)
Q53 I prefer to have a clear set of guidelines to follow when I'm working (.65)
Q4 When I'm learning something, I prefer to be told exactly what to do and when (.62)
Q52 It is easier to want to learn something than it is to actually learn it (.45)
Q61 My main reason for attending refresher courses is to improve the way I manage patients (.45)

Factor 5

Q62 I enjoy competition; I find it stimulating (.67)
Q68 I am better than most doctors at finding out what I need to earn (.66)
Q65 When it comes to keeping up to date, I find it very difficult to know what I really need to learn (-.56)
Q18 I enjoy working for exams (.54)
Q49 I find I often give myself feedback about how I am doing (.44)
Q67 I never seem to find the time to think about what I am learning (-.43)

Factor 6

Q75 I learn much more in groups than on my own (.74)
Q72 Working in groups or teams is the best way to learn (.65)
Q66 I don't learn very well on my own (.65)
Q8 I prefer learning on my own to working in groups (-.63)
Q44 I feel comfortable when left to work on my own (-.46)
Q27 I feel comfortable expressing my feelings in group work (.43)

Each of the factors has been named and the summary box below sets out the names for each factor by sex.

Table 6.10

LIGPI(Tr): Summary of male and female factors

Male	Female
1. Personal development/self-awareness	Self-awareness
2. Negative feelings about learning	Detached from practice
3. Doesn't learn well alone	Listens to others
4. Role models important	Wants direction
5. Knows when needs to learn more	Enjoys competition
6. Reflection	Learns better in groups

This analysis can only be seen as a tentative exploration of the field. It is possible though to gain a feel for the strength not only of the six constructs identified by the interview study but also of distinct gender differences.

Summary.

This study has provided evidence to support the construct validity of the speculative hypotheses put forward in the previous chapter. It has also suggested that gender differences found in previous work may be echoed amongst this sample of trainees. The following chapter describes the application of a shorter version of the LIGPI(Tr) inventory to a sample of general practitioners in order to gain further evidence for the validity of the factors and to investigate their relationships with other aspects of professional practice.

CHAPTER 7.

The Learning in General Practice Inventory:

Learning amongst general practitioners.

Introduction

This chapter describes the application of the Learning in General Practice Inventory (LIGPI(GP)) to a sample of general practitioners drawn from FHSAs across the country. The purpose of the study was to determine the significance of the factors identified in the earlier investigations with trainees for an audience of general practitioners and to investigate the relationship between these factors and other aspects of practice eg postgraduate qualifications, years in practice or number of partners.

7.1 Sample.

7.1.1 Study sample.

The study sample was drawn from the lists of registered practitioners in contract with FHSAs in Avon, Barking & Havering, Cumbria and Nottingham. These FHSAs represent a cross-section of the types of practice seen in the UK. The doctors were selected on a 1 in 3 basis by administrative staff at the University and each sent a questionnaire, introductory letter and a stamped addressed return envelope. Each questionnaire was individually numbered on the reverse to enable identification for compliance purposes. A total of 680 questionnaires were distributed in the first round. This first resulted in 342 completed questionnaires. A further mailing, to those not replying some six weeks after the first questionnaire, brought in a further seventy-four completed questionnaires. Therefore 416 (61%) analyzable questionnaires were entered into the data analysis phase. Table 7.1 sets out the characteristics of the respondents.

Table 7.1

LIGPI(GP): Number of questionnaires distributed and returned by FHSA.

	FHSA				
	Avon	Notts	Barking	Cumbria	Overall
1st mailing	265	223	94	98	680
2nd mailing	112	121	62	0	295
Returned	193	135	44	61	433
incomplete	11	6	0	0	17
% of population represented	69	58	41	59	61.2

7.1.2 Non-responders.

Amongst the non-responders, there was a small group who returned the questionnaire uncompleted or, in some cases partially completed, and who took the opportunity to make a comment concerning the health service or the request for their participation in research eg a three doctor partnership in Avon wrote at length about the time implications of completing the questionniare. They reported they had spent one and a half hours reading and discussing the questionniare and then decided that it was too long to complete because they were overstretched by health service commitments. A smaller number made comments about the questionnaire itself eg "too long"; "Sorry - too time consuming" ; "I'm sick of these opinion surveys for statisticians. They bore me and reinforce my views about the absence of meaningful social research in General Practice".

7.1.3 Alterations to the Inventory.

Before administration the questionnaire was altered to make the items more appropriate to an audience of general practitioners and to reflect the findings of the trainee analysis. From the original pool of seventy-six items, fifty-five were selected for the GP version of the inventory. The basis for selection being inclusion in factor solution for trainee sample and relevance to general practice rather than specifically to training. The items excluded from the inventory are shown in the Appendix.

7.2 Results.

7.2.1 Descriptive and summary statistics.

Table 7.2 shows the characteristics of the study sample and Figures 7.1 and 7.2 show pie charts of the distribution of the study sample in terms of type of practice and postgraduate qualifications. There are significant differences between male and females for years in practice, training status and full time practice.

Item 45 has the largest standard deviation (1.34). The average raw score for the scale is 180.26 with a standard deviation of 10.5. The average score on an item is 3.2 with a range of 1.5 to 4.3. The average item variance is .78 with a range of .34 - 1.8. The correlations between items range from -.53 to .72. The average correlation is .03. Descriptive statistics, including frequencies are shown in Appendix 18.

Table 7.2. LIGPI(GP): Characteristics of the general practice sample.

	Mean	SD	range	
Age	42.4	8.37	27-65	males mean age 43.5yrs sd 8.39; females mean age 41.1yrs; sd 8.15
Partners	3.6	1.94	0 - 9	
Years in practice	12.6	8.63	1 - 39	

Sex		**Work**	
Male	290	Full time	361
Female	121	Part time	48
Missing	5	Missing	7
		(p = 0.000)	

Type of practice		**Training status**	
Urban	228	Trainer/course organiser	68
Rural	42	Undergraduate teacher	52
Semi-rural	104	GP tutor	11
Inner city	38	Not teaching	280
Missing	4	Missing	5
		(p = 0.000)	

Postgraduate qualifications.			
MRCGP	200	None	97
MRCP	19	Missing	3
FRCS	6	MD	2
DCH	16	DRCOG	72

Figure 7.1

LIGPI(GP)

GP population

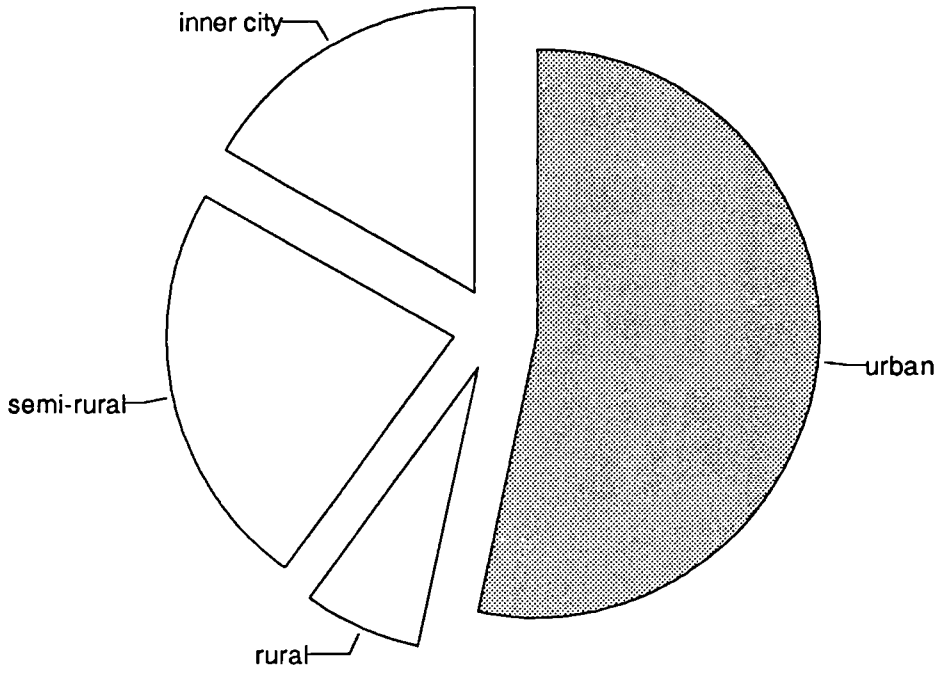
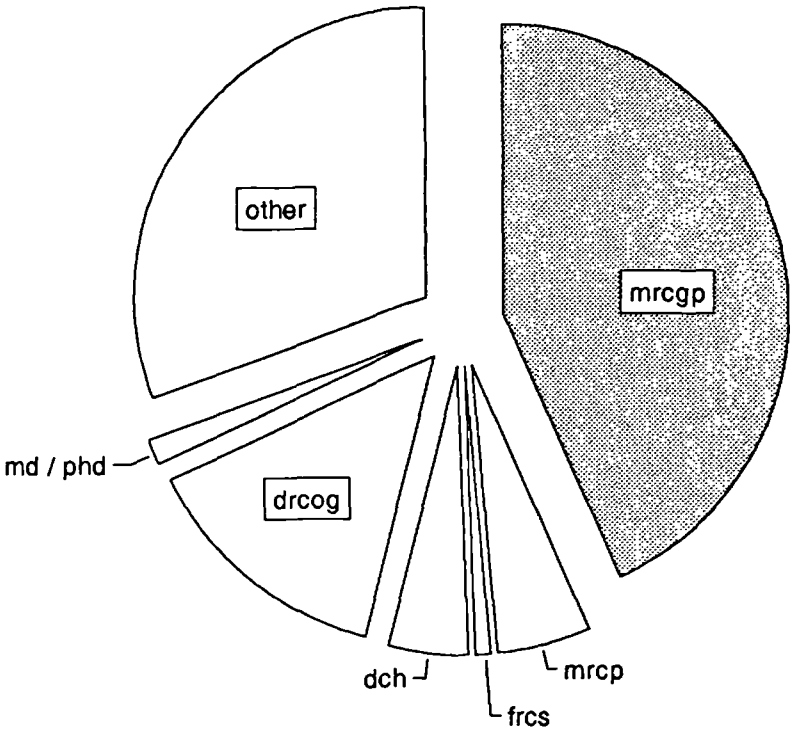


Figure 7.2

LIGPI(GP)

Postgraduate qualifications



7.2.2 Reliability.

The six factors identified by factor analysis accounted for 36% of the total variance within the sample.

Cronbach's alpha was again used as a measure of internal reliability and the results are shown in Table 7.3 below.

Table 7.3

LIGPI(GP): Scale and subscale reliability

Six factor solution

Factor 1: .77
Factor 2: -.11
Factor 3: -.27
Factor 4: -.06
Factor 5: .63
Factor 6: .59
Overall : .64

7.2.3 LIGPI(GP). Factor analysis

Table 7.4 Items contribuing to factors.
Items loading >.40 are included.

Factor 1
Q24. A good doctor is someone who is prepared to explore issues that arise in consultations (.64)
Q23. I think it's important to share difficult experiences with other people (.63)
Q25. Talking about the problems I see in practice helps to reduce the stress they cause in me (.60)
Q21. Thinking about the problems I face in managing patients is a good way for me to learn (.55)
Q26. Self-awareness is an important characteristic in a GP (.55)
Q51. Thinking about the patients I see and how I manage them is a good way for me to learn (.49)
Q20. Learning is more interesting when I can relate what I am learning to a personal level (.47)
Q1. Being able to discuss problems in my work as a doctor with others is an important part of my own development (.43)
Q38. It is important to develop a sense of self-criticism as a doctor (.42)

Factor 2
Q37. I find discussing how I manage cases embarrassing (.72)
Q52. I find getting personal feedback about how I am doing as a doctor very threatening (.63)
Q8. Talking to other doctors about how I look after patients makes me feel uncomfortable (.62)
Q13. I find it easy to discuss the problems I have as doctor (-.41)
Q19. I feel comfortable expressing my feelings in group work (-.45)

Factor 3.
Q29. I'm glad that exams are over now that I'm in general practice (.66)
Q14. I enjoy working for exams (-.64)
Q28. When it comes to reading journals, I'm not very disciplined (.57)
Q50. I am better than most doctors at finding out what I need to learn (-.51)
Q46. I enjoy competition; I find it stimulating (-.47)

Q36. I find I often give myself feedback about how I am doing (-.43)
Q49. I never seem to find the time to think about what I am learning (-.40)

Factor 4.
Q55. I learn much more in groups than on my own (-.66)
Q53. Working in groups or teams is the best way to learn (-.64)
Q33. I feel comfortable when left to learn on my own (.56)
Q7. I prefer learning on my own to working in groups (.54)
Q48. I don't learn very well on my own (-.48)
Q44. I'm good at knowing when I need to find out more about something (.44)
Q10. I find it easy to talk with patients (.41)
Q32. I'm good at taking responsibility for decisions about a patients management (.40)

Factor 5.
Q45. When I look back sometimes I wonder why I ever became a GP (.63)
Q41. I think general practice is a very stressful job (.63)
Q22. I sometimes feel isolated and alone in practice (.62)
Q3. I find I am thinking about my work and the problems I encounter most of the time (.46)
Q12. I find the learning I am doing now is quite a strain (.42)

Factor 6.
Q34. Teachers/tutors in general practice should give more direction about what and how to learn (.61)
Q39. I prefer to have a clear set of guidelines to follow when I'm working (.58)
Q4. When I'm learning something I prefer to be told exactly what to do and when (.57)

Nine items contribute strongly to **Factor 1.** Q24 'A good doctor is someone who is prepared to explore issues that arise in consultations' (.64) and Q23 'I think it's important to share difficult experiences with other people' (.63) are the highest loading items. This factor is very similar to Factor 1 in the trainee survey with eight of the items corresponding directly.

Factor 2 is dominated by Q37 'I find discussing how I manage cases embarassing' (.72) with Q52 'I find getting personal feedback about how I am doing as a doctor very threatening' (.63) and Q8 'Talking to other doctors about how I look after patients makes me feel uncomfortable' (.62) providing srong support. Q13 'I find it easy to discuss the problems I have as a doctor' (-.41) and Q19 'I feel comfortable expressing my feelings in group work' make up a factor indicating considerable interpersonal communication difficulties and low professional self-esteem. This factor has three items from Factor 2 of the trainee survey.

Factor 3 relates to negative feelings about academic learning with Q29 'I'm glad that exams are over now that I'm in general practice' (.66) and the negatively scoring Q14 'I enjoy working for exams' (-.64) a its leading items. Items Q28 'When it comes to reading journals, I'm not very disciplined' (.57), Q36

'I find I often give myself feedback about how I am doing (-.43) and Q49 'I never seem to find the time to think about what I am doing' (.40) suggest disorganised study skills. The negative item Q46 'I enjoy competition; I find it stimulating (-.47) associated with the remaining items suggests a factor reflecting little interest in learning. This factor shares four items with Factor 3 from the trainee survey.

Factor 4 is a very definite indication of independence in learning with Q55 'I learn much more in groups than on my own' (-.66) and Q53 'Working in groups or teams is the best way to learn (-.64) loading strongly in the factor. Q44 'I'm good at knowing when I need to find out more about something' (.44) and Q32 'I'm good at taking responsibility for decisions abot a patients management' (.40) suggest belief in one's own ability and study skills. This factor is the exact opposite of factor 5 in the trainee sample and shares five items with that factor.

Factor 5 reflects a stressed, disillusioned theme with Q45 'When I look back sometimes I wonder why I ever became a GP' (.63); Q41 'I think general practice is a very stressful job (.63) and Q22 'I sometimes feel isolated and alone in practice (.62) as the main items contributing to the factor. Q12 'I find the learning I am doing now is quite a strain' (.42) is shared with the trainee inventory. This factor is very similar to the third factor identified by the secondary analysis of the trainee sample.

Factor 6 indicates the need for clear guidelines and direction in learning with Q34 'Teachers/tutors in general practice should give more direction about what and how to learn (.61) as the highest loading item (.61). This factor is very similar to Factor 4 in the trainee study and all three items appear in both factors.

Table 7.5 Summary of factor names for LIGPI(GP)

Factor 1	Learning from patients
Factor 2	Interpersonal discomfort
Factor 3	Non-academic approach to learning
Factor 4	Independence in Learning
Factor 5	Disillusioned/stressed
Factor 6	Desire for clear guidelines

For ease of comparison, Table 7.6 below sets out the factor names from both parts of the survey.

Table 7.6 Summary of Factors identified by principal components analysis of LIGPI.

LIGPI(Tr)	LIGPI(GP)
1. Learning from patients	1. Learning from patients
2. Isolation & stress	2. Interpersonal discomfort
3. Non-academic approach	3. Non-academic approach to learning
4. Desire for clear guidelines	4. Independence in Learning
5. Group work	5. Disillusioned/stressed
6. Doctor-patient relationships	6. Desire for clear guidelines

7.3 Group scores and gender differences.

7.3.1 Differences in means.

Previous analyses have demonstrated a gender difference in both responses to individual items and to factor scores. The data in this part of the study were analysed for similiar differences. Scores achieving levels of $p<0.05$ are set out in Table 7.7 below.

Table 7.7

LIGPI(GP): Independent sample t-tests - questionnaire items by sex.

Item	n	mean	sd	t	p
2	288	3.79	.997	6.84	.000
	121	3.01	1.15	6.44	

Being my own boss is what attracted me to a career in general practice
Males score more highly than females

23	285	4.15	.657	-2.71	.007
	121	4.33	.59	-2.81	

I think it's important to share difficult experiences with other people.
Females score more highly than males.

25	284	3.79	.882	-4.31	.000
	121	4.18	.671	-4.80	

Talking about the problems I see in practice helps to reduce the stress they cause in me.
Females score more highly than males.

32	289	3.89	.635	3.14	.002
	121	3.66	.768	2.91	

I'm good at taking responsibility for decisions about a patient's management.
Males score more highly than females.

46	289	3.13	1.04	3.99	.000
	121	2.68	1.04	3.99	

I enjoy competition; I find it stimulating.
Males score more highly than females.

51	289	3.77	.664	-2.86	.004
	121	3.97	.639	-2.91	

Thinking about the patients I see and how I manage them is a good way for me to learn.
Females score more highly than males.

This table show that there are statistically significant differences between the responses of male and female general practitioners on six items ie Q2, Q23, Q25, Q32, Q46, Q51.

Table 7.8 below shows the mean scores, range and standard deviation for each factor. Table 7.9 shows these scores aggregated by gender. As in earlier parts of this investigation, these scores have been calculated after taking negatively scoring items into account.

Table 7.8
LIGPI(GP): Group scores by factor

Factor	mean	sd	min	max	n
1	36.6	3.71	25	45	403
2	12.0	3.25	5	23	405
3	23.2	3.34	12	31	403
4	27.1	3.82	17	38	407
5	15.6	3.54	5	25	408
6	8.8	2.01	3	14	408
overall	178.9	12.50	112	220	416

Table 7.9

LIGPI(GP): group scores by factor by sex.

Factor	sex	mean	sd	min	max	n
1	m	36.2	3.84	25	45	278
	f	37.4	3.3	30	45	121
2	m	11.8	3.18	5	23	279
	f	12.3	3.37	5	22	121

3	m	22.8	3.26	13	31	280
	f	24.1	3.35	12	30	118
4	m	27.3	3.71	17	38	283
	f	26.7	4.05	18	38	119
5	m	15.8	3.62	5	24	282
	f	15.3	3.29	8	25	121
6	m	8.7	2.05	3	14	285
	f	9.0	1.88	3	13	118
Overall	m	178.5	13.07	112	214	290
	f	188.0	11.09	157	220	121

Further analysis of the data was undertaken to establish the effects of other characteristics on response to items and to factors. Only those tests reaching statistical significance at the $p<0.005$ level are included.

Table 7.10

LIGPI(GP): Independent t-tests

{i} MRCGP vs no qualification by factor

Factor	n	mean	sd	t	p
1	193	37.4	3.37	4.47	.000
	97	35.5	3.7	4.32	

Doctors with the MRCGP qualification score higher on Factor 1, Learning from Patients than do those without.

2	195	11.2	2.8	-4.15	.000
	95	12.8	3.5	-3.85	

Doctors MRCGP score less on Factor 2, Interpersonal Discomfort than those without the qualification.

6	193	8.19	1.89	-4.25	.000
	97	9.2	1.99	-4.17	

Doctors with the MRCGP score less than those without on Factor 6, Desire for Clear Guidelines.

{ii} Teaching vs no teaching

Factor					
1	126	37.5	3.72	3.41	.001
	274	36.1	3.64	3.39	
2	127	10.9	3.06	-4.51	.000
	275	12.5	3.23	-4.60	

3	126	22.6	3.31	-2.38	.018
	274	23.46	3.30	-2.38	
6	128	8.3	1.87	-3.12	.002
	277	8.9	2.03	-3.21	

Doctors with teaching experience as course organisers, trainers, GP Tutors or as undergraduate teachers, compared to those without such experience score

higher on Factor 1 (Learning from Patients) and lower on Factors 2 (Interpersonal Discomfort), 3 (Non-academic Approach to Learning) & 6 (Desire for Clear Guidelines).

{iii} type of practice

Factor 1

Urban	221	36.2	3.59	-2.56	.011
inner city	38	37.8	3.39	-2.67	

This is a very small sample of inner city doctors and the results suggest a weak tendency towards doctors in inner city practices scoring higher on Factor 1 than doctors in urban practices.

{iv} years in practice

code 1 = less than 10 years; 2 = 11 - 20 years; 3 = 21+ yrs

1 vs 2

Factor	n	sd	t	p	
1	189	37.1	3.61	2.54	.011
	143	36.1	3.67	2.54	
4	187	26.7	3.76	-2.15	.033
	149	27.6	3.64	-2.15	

1 vs 3

Factor	n	sd	t	p	
5	190	16.1	3.23	2.74	.007
	64	14.8	3.39	2.67	

The strongest association here is between doctors in the early stages of their career (1, < 10 years) against doctors in practice for 21 years or more. Doctors in practice for less than 10 years are more likely to score higher on Factor 5 (Disillusioned/Stress) than older doctors.

This is a finding supported by analysis by age below.

Number of partners

code 0-1 = 1; 2-4 = 2; 5+ = 3

1 vs 2

Factor	n	mean	sd	t	p
3	52	22.4	3.15	-1.99	.048
	213	23.5	3.41	-2.09	
4	54	28.27	4.4	2.4	.017
	215	26.8	3.7	2.16	

1 vs 3

5	53	16.1	3.38	2.07	.04
	132	15.02	3.35	2.06	
6	55	9.12	2.53	2.04	.04
	133	8.46	1.77	1.76	

2 vs 3

5	216	15.9	3.64	2.29	.023
	132	15.0	3.35	2.33	

Age

code 1 = 27-40 yrs; 2 = 41-55 yrs; 3 = 56-65

Factor	n	mean	sd	t	p
1	179	37.08	3.5	2.23	.027
	32	35.59	3.2	2.35	
5	181	15.7	3.2	2.74	.001
	32	14.03	3.9	2.38	

Young doctors are more likely to score higher on Factor 1 (Learning from Patients) and on factor 5 (Disillusioned/Stressed) than older doctors.

The effects of gender on each of the factors was assessed using independent sample *t*-tests as previously. Table 7.11 below shows that a significant difference at the $p < 0.005$ level was obtained for factors 1 and 3 with females scoring higher on both factors. Figures 7.3 and 7.4 show box and whisker plots for these factors.

Table 7.11

LIGPI(GP): Independent t-tests. Factors by sex

Factor	n	Mean	SD	t	p
1	278	36.23	3.83	-2.99	.003
	120	37.44	3.30	-3.18	
2	279	11.83	3.18	-1.51	.132
	121	12.36	3.36	-1.48	
3	280	22.81	3.26	-3.51	.001
	118	24.07	3.34	-3.47	
4	283	27.33	3.71	1.42	.156
	119	26.73	4.04	1.37	
5	282	15.76	3.61	1.30	.194
	121	15.26	3.28	1.35	
6	285	8.66	2.05	-1.57	.116
	118	9.00	1.87	-1.63	
Total	290	178.4	13.07	-1.12	.264
	121	180.0	11.08	-1.20	

The sample was divided by gender and the data from each sex subjected to factor analysis. The resulting factor structures are shown in the Appendix.

The items contributing to each factor are shown below.

Table 7.12

LIGPI(GP): Contributions of factors by sex.

	Male		
	eigen	pct var	cum pct
Factor 1	7.580	13.8	13.8
Factor 2	3.744	6.8	20.6
Factor 3	3.418	6.2	26.8
Factor 4	2.317	4.2	31.0
Factor 5	2.020	3.7	34.7
Factor 6	1.711	3.1	37.8
	Female		
Factor 1	5.836	10.6	10.6
Factor 2	4.986	9.1	19.7
Factor 3	3.224	5.9	25.5
Factor 4	2.809	5.1	30.6
Factor 5	2.563	4.7	35.3
Factor 6	2.268	4.1	39.4

Figure 7.3
Box and whisker plot: LIGPI(GP) Factor 1 by sex.

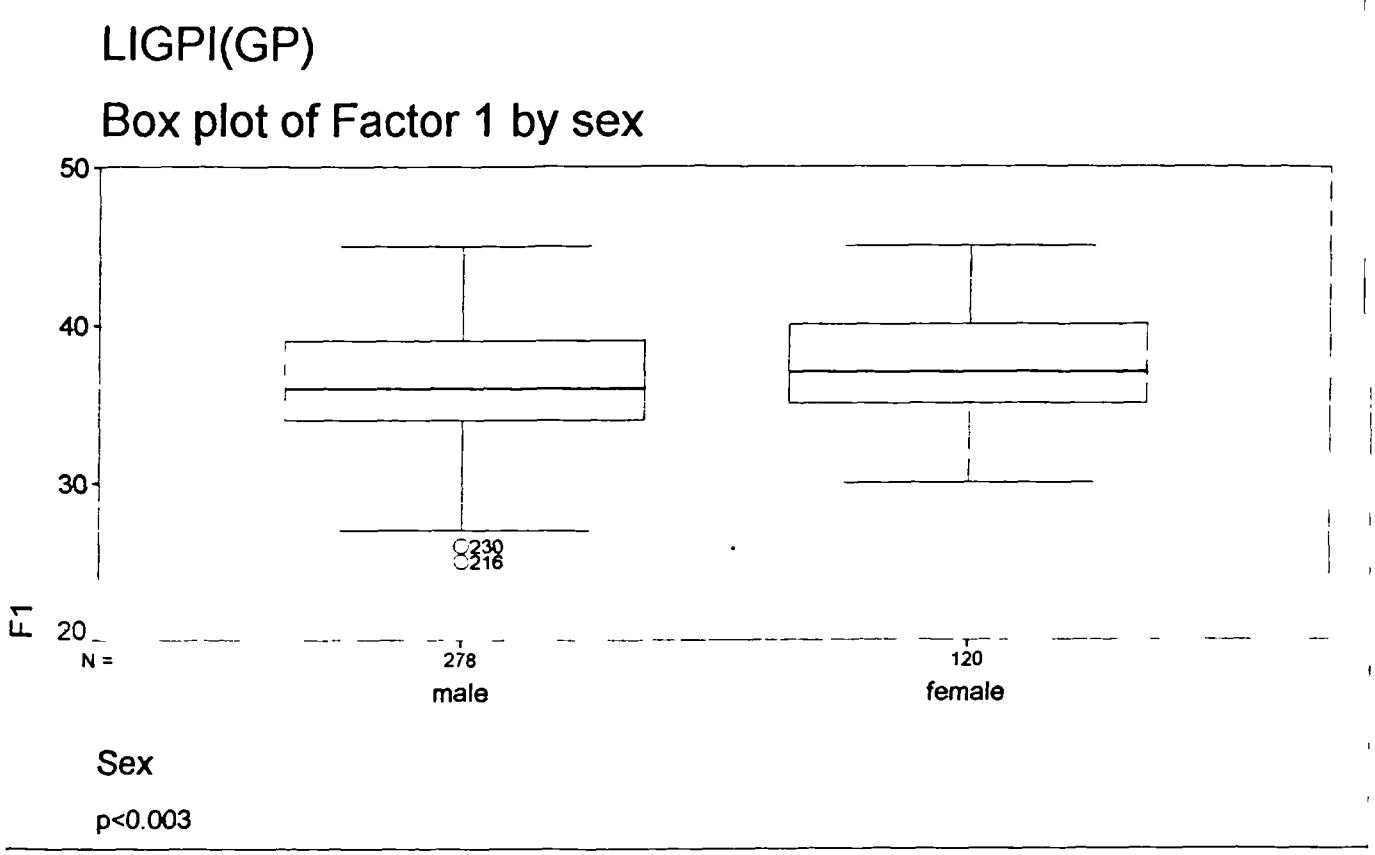
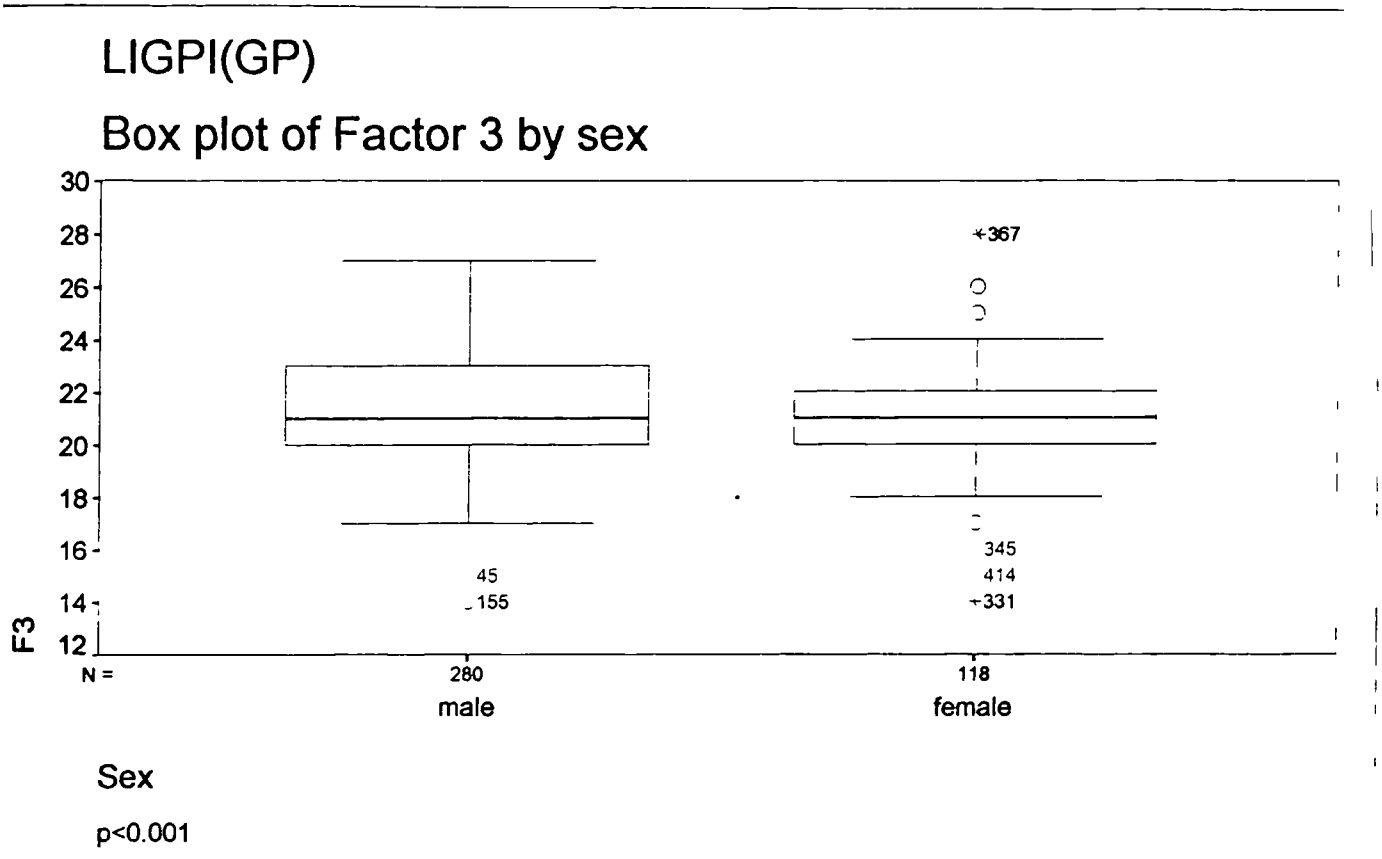


Figure 7.4
Box and whisker plot: LIGPI(GP) Factor 3 by sex.



7.3.2 Factor content by sex.

This next section sets out the factor content by gender:

Males

Factor 1
Q23 I think it's important to share difficult experiences with other people (.66)
Q26 Self-awareness is an important characteristic in a GP (.65)
Q24 A good doctor is someone who is prepared to explore issues that arise in a consultation (.62)
Q25 Talking about the problems I see in practice helps reduce the stress they cause in me (.59)
Q20 Learning is more interesting when I can relate what I am learning to a personal level (.52)
Q21 Thinking about the problems I face in managing patients is a good way for me to learn (.50)
Q1 Being able to discuss problems in my work as a doctor with others is an important part of my own development (.50)
Q38 It is important to develop a sense of self-criticism as a doctor (.44)
Q16 I believe that effective medical treatment depends on a partnership in which the patient plays an active part (.46)

Factor 2
Q29 I'm glad exams are over now that I'm in general practice (.64)
Q28 When it comes to reading journals I'm not very disciplined (.62)
Q14 I enjoy working for exams (-.62)
Q50 I am better than most doctors at finding out what I need to know (-.52)
Q49 I never seem to find the time to think about what I am learning (.46)
Q46 I enjoy competition; I find it stimulating (-.46)

Factor 3
Q22 I sometimes feel isolated and alone in practice (.69)
Q45 When I look back sometimes I wonder why I ever became a GP (.63)
Q41 I think general practice is a very stressful job (.61)
Q5 When I'm working in the practice, I usually feel very much a part of the team (-.50)
Q3 I find I am thinking about my work and the problems I encounter most of the time (.43)

Factor 4
Q55 I learn much more in groups than on my own (-.71)
Q52 I find getting personal feedback about how I am doing as a doctor very threatening (-.68)
Q7 I prefer learning on my own to working in groups (.64)
Q33 I feel comfortable when left to work on my own (.54)

Factor 5
Q30 I would usually recognise when I don't know something about a particular field of practice (.58)
Q18 I find I learn better when I have a definite target to aim for (-.57)
Q37 I find discussing how I manage cases embarassing (-.55)
Q44 I'm good at knowing when I need to find out more about something (.52)
Q35 Patients usually seem to find it easy to relate to me as a person (.44)

Factor 6
Q4 When I'm learning something I prefer to be told exactly what to do and when (.63)
Q34 Teachers/tutors in general practice should give more direction about what and how to learn (.61)
Q39 I prefer to have a clear set of guidelines to follow when I'm working (.50)
Q40 As a GP it's up to me how much I learn (.40)
Q42 When I learn something new I like to spend some time thinking about it, before putting it into

action (.45)

Females

Factor 1
Q55 I learn much more in groups than on my own (.78)
Q48 I don't learn very well on my own (.69)
Q53 Working in groups or teams is the best way to learn (.67)
Q33 I feel comfortable when left to learn on my own (-.58)
Q28 When it comes to reading journals, I'm not vey disciplined (.55)
Q7 I prefer learning on my own to working in groups (-.51)
Q50 I am better than most doctors at finding out what I need to learn (-.43)
Q17 Since I left medical school my learning seems to have lost its sense of direction (.41)
Q49 I never seem to find the time to think about what I am learning (.41)

Factor 2
Q24 A good doctor is someone who is prepared to explore issues that arise in the consultation (.68)
Q35 Patients usually seem to find it easy to relate to me as a person (.62)
Q10 I find it easy to talk wth patients (.60)
Q25 Talking about the problems I see in practice helps to reduce the stress they cause in me (.57)
Q38 It is important to develop a sense of self-criticism as a doctor (.55)
Q9 I usually quite readily admit when I don't know something (.45)
Q44 I'm good at knowing when I need to find out more about something (.44)

Factor 3
Q52 I find getting personal feedback abouthow I am doing as a doctor very threatening (.77)
Q37 I find discussing how I manage casesembarrassing (.71)
Q47 When it comes to keeping up to date, I find it very hard to know what to learn (.57)
Q42 When I learn something new I like to spend some time thinking about it before putting it into action (.41)

Factor 4
Q5 When I'm working in the practice I usually feel very much part of the team (.57)
Q39 I prefer to have a clear set of guidelines to follow when I'm working (.57)
Q46 I enjoy competition; I find it stimulating (.55)
Q18 I find I learn better when I have a definite target to aim for (.53)
Q36 I find I often give myself feedback about how I am doing (.46)
Q14 I enjoy working for exams (.44)
Q2 Being my own boss is what attracted me to a career in general practice (.43)

Factor 5
Q41 I think general practice is a very stressful job (.67)
Q45 When I look back I sometimes wonder why I ever became a GP (.63)
Q11 I sometimes feel that I am on an educational conveyor belt that I cannot get off (.61)
Q22 I sometimes feel isolated and alone in practice (.42)

Factor 6
Q34 Teachers/tutors should give more direction about how and what to learn (-.56)
Q51 Thinking about the patients I see and how I manage them is a good way for me to learn (.52)
Q21 Thinking about the problems I face in managing patients is a good way for me to learn (.52)
Q20 Learning is more interesting when I can relate what I am learning to personal level (.50)
Q43 In general, the way I learn new things in medicine hasn't changed much since I was a student (-.49)

7.3.3 Factor names by gender.

This section names each of the factors above and sets them out in a Table:

Table 7.13 LIGPI(GP) Factor names by sex

	Male	Female
Factor 1	Learning from patients and others	Group learning
Factor 2	Non-academic approach	Learning from others
Factor 3	Isolation/disillusion	Threatened by feedback
Factor 4	Independent learner	Team worker
Factor 5	Self-concept as learner	Stress/disillusion
Factor 6	Dependent learner	Meaningful learner

Summary

This chapter has set out the results gained from an analysis of the responses of a sample of general practitioners to a shorter version of the LIGPI. The results suggest strong support for recognizable constructs relating to learning amongst both trainees and general practitioners. These constructs and the factors influencing them will be considered in detail in the next chapter.

Chapter 8

Discussion

'Our patients make us into doctors; our students make us into teachers'.

Introduction

This chapter introduces a discussion of the results of the LIGPI surveys and relates the findings to the constructs identified from the SDLRS and interview studies in Chapters 4 and 5. In the second part, the findings of the LIGPI study are set in the context of what we know about trainee and general practitioner learning. The chapter starts with a critical discussion about the methodology used in the overall study.

8.1 Methodology.

Before considering the results of the LIGPI studies, it is important to take into consideration the design of the study (Figure 8.1), the study sample and the methods used to collect and analyze the data. Qualitative research, like the interview study reported in this study, is concerned with understanding the respondent's rather than the researcher's perspective. It is complementary to quantitative research. Open-ended questioning, the principal method used, puts the emphasis on individuals rather than groups or populations. Such questions allow respondents to explore and explain how they perceive their world. The direction of qualitative research of this type, is guided, to a greater or lesser extent, by the respondent, as much as by the interviewer. The use of the respondents own language introduces a flavour of reality, but common terms need to be clarified to establish shared understanding. Qualitative methods allow the focus of research to react flexibly to emerging themes and issues - no two interviews are alike. Fleming (1990) warns that the interview must be seen as only a staging post between the reality of the respondents world and that of the researcher. The setting of the interview influences the response and this must be considered in interpretation of data. In the interview study reported in Chapter 5, a number of trainees were concerned that the interview was a form of assessment either of themselves, or of their trainers and this conditioned their initial approach to the interview until reassurance was accepted.

Qualitative research, unlike quantitative, explores processes as opposed to outcomes and is ideal for

exploring attitudes and beliefs, and so is appropriate for a study such as this. The end product of such research may be

> 'elucidation of a new concept, construction of a new typology, mapping of the range of phenomena within a subject area, generalisation of new ideas or hypotheses, development of an explanatory framework, or the basis of an intervention strategy...What it [qualitative research] cannot do is measure the importance of an attitude or belief in terms of its distribution in a population nor provide prevalence figures' (Britten & Fisher, 1993).

In this study, the LIGPI questionnaires introduce an initial quantitative step towards the measurement of the constructs emerging from the interviews amongst samples of general practice trainees and principals.

Sample adequacy.

Each of the questionnaire studies was constrained by cost considerations limiting the number of questionnaires available. However, the SDLRS and LIGPI(Tr) studies received over two hundred replies and the LIGPI(GP) study over four hundred. For exploratory factor analysis, a sample size of over one hundred is essential (Comrey, 1978). Streiner (1989) suggests that for factor analysis of questionnaires, a sample population three to five times greater than the number of items is acceptable. The response rate for each of the parts of the overall study was good. The problem of mailing general practice trainees during the training year has been mentioned previously, and despite the demands of the new contract and the negative views of some respondents to the general practice mailing, a very good response was obtained using one reminder. The trainee sample for the LIGPI(Tr) survey was drawn from a wide sample of training schemes across the country and achieved replies balanced, in terms of age and gender, with the national picture. The LIGPI(GP) sample was again drawn from a wide cross-section of the country with FHSAs representing urban, rural, mixed and inner-city areas. The numbers in the sub-groups used for subsidiary comparisons eg inner-city vs urban practices and single-handed vs larger partnerships are small and caution must be observed in extrapolating conclusions from the results.

8.2 Validity

'Validity indicates the degree to which an instrument measures what it is intended to measure' (Oppenheim, 1992)

Introduction

This section considers the Learning in General Practice Inventory and its suitability as an instrument for collecting data. Issues of validity and reliability are discussed.

8.2.1 Face validity.

Face validity, in the context of a questionnaire, refers to the acceptability of the items of the questionnaire to the reader. The items should be readily understood and avoid the possibility of misinterpretation. In the case of the LIGPI, the questions were mainly drawn from the words used by trainees in the interview study and care was taken to avoid the use of jargon. One way of estimating the face validity of the questions is to examine items with missing values and to look for marginal statements or comments made by respondents on the questionnaire itself. Review of completed questionnaires showed that little comment was made by respondents about the majority of questions. However, for the trainee version (LIGPI(Tr)) 'I'm glad exams are over now I'm in general practice' prompted comments indicating that some trainees interpreted the item literally pointing out that the MRCGP and other postgraduate qualifications were still extant. The question was more appropriate to established general practitioners because of this. A very small number either did not answer or made marginal comments about the term 'rote-learning' in 'I find I use rote-learning less and less these days'. A review of missing values, taking 5% non-response as a target cut-off point, did not single out any item or items for especial comment. For the LIGPI(GP) questionnaire the range of missing values was 0-7 and for LIGPI(Tr) 0 - 5.

8.2.2 Content validity.

The content validity of a questionnaire is the ability of the items composing it to reflect, in a balanced fashion, the ideas or construct, being investigated. The ideas and constructs generated by the interview study were described by a series of statements later gathered together in the LIGPI questionnaires. The small survey of general practice trainers, in which they were asked to separate out the items for the

questionnaire into clusters of similar meaning, the 'forced' sort reported in Chapter 5, was an attempt to gain a measure of content validity. The trainers produced clusters of items that were similar not only between the trainers themselves, but also similar to the constructs identified from reading the interviews suggesting that the items of the questionnaire have strong content validity.

8.2.3 Concurrent and predictive validity.

Tests for concurrent validity estimate how well the results obtained through the use of a new or experimental instrument correlate with other measures of the same constructs. To some extent, a theme of concurrence runs through this study with the findings of the LASI and SDLRS studies pointing to characteristics reflected in the LIGPI results. However, we know nothing of the predictive validity of the LIGPI ie its' ability to forecast a criterion likely to occur in the future eg success at the MRCGP examination. A longitudinal cohort study would be helpful here.

8.2.4 Construct validity

Construct validity has been referred to in earlier chapters. It is the ability of the questionnaire to measure or reflect the abstract constructs upon which it is based. In this work, factor analysis has been the principal analytical method used to establish construct validity.

Factor analysis condenses the attitude statements used in the questionnaire and lets underlying themes, if any, emerge. In this study, it was used to see whether factors relating to the six hypothetical dimensions derived from the interview survey and the SDLRS survey held true amongst wider populations of trainee and practising general practitioners.

The main result of this study is clear. Amongst general practice trainees and established general practitioners there are several identifiable factors that reflect themes associated with learning. These factors are consistent across both doctors in training and those who are in practice. There are variations largely associated with gender and age but also with postgraduate qualifications, especially possession of the MRCGP diploma, and experience of teaching and with length of time in practice and with type of practice.

The first theme, **Factor 1**, strongly characterised by items common to both the general practice and the trainee samples may be termed 'professionalism'. The factor encompasses a thoughtful, self-aware and self-critical doctor who is prepared to relate closely to patients. These doctors find it easy to

discuss problems with patients and feel that patients find them easy to get on with.

Sharing feelings and experiences which cause difficulty is seen as an important and an essential part of personal learning.

Reflection plays a large part in learning, with the consultation the major source of material for learning. The intention, when learning, is to understand how to relate new material to the clinical and other needs of the patient - meaningful learning in a clinical sense. We know from previous studies that such 'intrinsic motivation' towards learning is associated with a deep approach to study and more successful learning outcomes (Entwistle & Ramsden, 1983). Reflection is an active form of learning in which the learner internally develops his or her own understanding of material in relation to existing knowledge - a process by which insights may be formed for use in designing future learning activities. Recent thinking amongst general practice educators suggests that reflection is a key element of professional learning amongst established practitioners (Stanley et al, 1993). A discussion about the role of reflection in developing experience-based learning is set out later in this chapter.

For the trainee, the relationship with patients takes a prominent role with Q59 'I believe that effective medical treatment depends on a partnership in which the patient plays an active part' as the highest loading item on Factor 1. This may reflect the growing awareness amongst trainees of the importance not only technically and professionally of the consultation, but also the personal dimension of learning 'communication' skills during the training year from their trainer and course organisers. For trainees, this first factor includes elements suggesting increasing maturity as a learner, especially with the recognition that rote-learning is less important as a learning strategy, that learning has changed in character since medical student days and that responsibility for learning rests with the individual. The presence of Q73 'As far as I'm concerned constant learning finished once I became a GP' suggests not a cynical disregard for continuing medical education but rather an awareness that learning in clinical practice is less of a burden and more of a personal task associated with positive feelings.

Exploring issues that arise in the consultation is a very positive concept for both trainees and practitioners. This may reflect the transition from hospital history-taking using a systematic, inductive and impersonal approach to the deductive, hypothesis formation of general practice, where history taking is a process tailored to the presentation of the patient and the ideas this raises in the mind of

the doctor - a process not dissimilar to that of the experienced hospital clinician (Barrows & Tamblyn, 1981; Grant & Marsden, 1982).

Frequency analysis of the responses of both the trainee and the established general practitioner samples shows that by far the majority are comfortable talking about clinical management to other doctors and find it relatively easy to do. An important corollary here, is that listening to others is recognised by four-fifths of doctors as a good way to learn. Talking about problems as a method of reducing stress is recognised by over eighty percent of the respondents but is a finding that emerges more strongly amongst females than males on factor analysis. Receiving feedback about clinical management though, appears to be welcomed by male principals as a part of their 'independence' factor but may be a problem for female principals who find discussing cases embarrassing.

Figures 8.2 to 8.9 show bar charts for a number of key questions from the general practice sample exemplifying these points.

For principals, whilst listening and talking to other doctors about clinical management is a strong feature of Factor 1, Factor 3 suggests that working together in groups may not be welcomed, at least initially, by some. This factor exhibits very strong independence and self-confidence characteristics. This factor is important in view of the increasing use of small group teaching settings by medical educators not only in vocational training but also in continuing medical education. Doctors in practice for between 11 and 20 years (that is entering practice before the introduction of compulsory vocational training) ($p=.033$) and doctors in single-handed or with only one partner ($p=.017$) score slightly higher than younger doctors on this factor. Collaborative learning is a feature of adult learning approaches, but variation in adult students' views about cooperating with fellow students range from a conception that there are many benefits to gained from working together to the other, individualistic extreme suggested by the results of the present study (McKinley, 1983). In McKinley's study, this extreme view was related to the view that other students may hinder the pace of learning or may have nothing to offer in a learning sense.

The need for sharing and discussing problems to alleviate stress calls for support from peers and a mechanism for flexible access to such support. Younger doctors score more highly than older doctors

on Factor 1 perhaps reflecting early enthusiasm for general practice but they also score more highly on factor 5, a factor suggesting stress and disillusion.

Inspection of the frequency responses and of the results of the factor analysis of the trainee sample to the questionnaire suggested that this first factor may comprise at least five sub-scales. These sub-scales are

' relationships with patients (items 46, 47, 59)

' self-awareness (items 31, 33, 51)

' vulnerability/ confidence (items 1, 30, 32, 34, 39)

' maturity as a learner (items 54, 57, 58, 73)

' internalising / reflecting as a learning process (items 29, 71, 74)

Factor 2 is almost the polar extreme to Factor 1. Here the factor flavour is of individuals who are uncertain, uncomfortable with their professional practice to the extent that they are embarrassed discussing their management of cases. The factor suggests low professional self-esteem and low assertiveness. Individuals scoring highly on this Factor are possibly introspective, anxious people. An overall title for the factor may be 'Sensitivity' or 'Interpersonal Discomfort'. This factor attracts higher scores from those without the MRCGP diploma, and those without any teaching commitment.

Factor 3 is similar in both the trainee and the general practice samples with four items shared. This factor gives a strong suggestion of a non-academic approach to learning, of individuals for whom active learning (about medicine) finished some time ago. Those scoring highly on this factor form a group of doctors for whom the aphorism 'To be trained is to have arrived, to be educated is to continue to travel' is particularly apt. There is an indication of disorganised, unplanned and reactive study methods, unawareness of reflection as a learning approach and a passive attitude to clinical performance. Doctors with a teaching commitment score less highly on this factor than those without ($p = 0.018$). There is a significant difference between male and female responses to this Factor with men scoring less highly ($p = 0.001$).

Factor 4 shares five items with the trainee sample and reflects a strong preference for independent

learning contrasted to learning in groups. Single-handed practitioners score more highly on this factor than those with partners (p = 0.17) as do doctors who have been in practice for between 11 and 20 years. High scorers on this Factor have a marked preference for working alone, they feel comfortable when learning on their own and are confident that not only do they know what they need to learn but also that they can learn it effectively by themselves. They have good relationships with their patients and are confident in their ability to take decisions about patient care.

Factor 5 is again common to both samples and is a clear statement about career disillusion related to perceived or actual work- related stress. Doctors scoring highly on this Factor have serious problems, considerable negative thinking about their work and their ability to do it properly and some may be depressed. Learning in such circumstance is an additional strain. Younger doctors, including those with less than 10 years in practice score more highly than older doctors, and the fewer the number of partners then the more likely a high score on this Factor.

Factor 6 shares all three items with the trainee sample and reflects a need for clear guidelines and direction. This desire may extend beyond wanting direction in learning and may be interpreted to include a desire for clear protocols and patterns to follow in clinical work. A pattern that would accord with observation, especially amongst younger doctors, many of whom welcome the New Contract because it brings with it greater management of practical clinical work. Doctors with the MRCGP, with teaching experience or working with more than 5 partners score less highly on this factor.

It is difficult to ignore the possibility of the influence of undergraduate and subsequent hospital training on the attitudes reflected in the survey. Bourgeois et al (1993) have used medical students responses to a series of vignettes characterising typical teaching situations in medicine as the basis for collecting data about abuse through teaching. Amongst other conclusions they infer that

'doctors are likely to teach as they were taught and will probably behave towards others as others have behaved towards them' (p369).

The factors identified in this survey show that general practitioners are sensitive interpersonal communicators. It is not beyond the realms of possibility that they have been profoundly affected by previous negative experiences both with teachers and, possibly, with patients in their early years in practice.

8.3 Discussion

8.3.1 Improving learning in general practice.

This section sets out a discussion about possible strategies for improving the quality of learning in general practice. Both the structure and process of the learning environment in general practice are addressed and suggestions made about possible change.

There are four broad areas for the educational agenda to consider.

[1]. Changes in the professional context of general practice.

The recent changes to the national health service and the new contract for general practice have brought opportunities and challenges to general practice. There are opportunities to play a greater role in the care of patients with the adoption of a community-focus and the obligations of responsible prescribing and, for an increasing number, of fund-holding. There are new skills to be learned eg child health surveillance, financial management, the use of computers and old ones to refresh eg minor surgery. All general practitioners are involved in team work to a greater or lesser extent. With the new contract and the needs of the community to serve, the team has grown and the level of responsibility for first-line patient care altered. Practice nurses offer a range of clinical care options for the patient, local support and counselling services have developed, hospital specialists are more accessible and, in some areas, are available to hold consulting sessions in the community. Early discharge from hospital care means an increased workload on the practice and the implications of the Community Care Act, whilst still in its early days, threaten to add still more to the load of primary care responsibility with devolution of responsibility for the elderly and for the mentally ill to the community.

From these points three sets of issues arise. These concern professional, structural and process matters.

Professional concerns focus on identifying and asserting a role for the general practitioner within the new health service. A spectrum of understanding is emerging about the role of the generalist in providing health care in the world and the UK is a part of this debate. This is especially the case with changes to inner city areas and the influence of substantial reform of the health care service provided in London calling for the provision of primary health care as distinct from traditional general practice. In this debate, primary health care is seen as an extended service for patients offering easier access

to health care delivered by a wider range of professional and lay persons within a variety of settings, including the doctor's surgery and the health centre, but also within community hospital facilities staffed by doctors and others with a wider range of specialist skills than the general practitioner ordinarily holds. By contrast, at the other end of the spectrum, there is family practice (now a term used widely in the USA to denote a 'specialist' often with academic ties and practising from a well-equipped 'office' but rarely carrying out house visits). Irvine's definition of the future role of the general practitioner in the UK given in Chapter 1 sets the scene for training and for continuing medical education in this new world.

Structural issues such as premises, contractual terms and conditions are at the forefront of most general practitioners concerns and have affected both recruitment and the retention of clinicians within the service and have been discussed in detail in Chapter 1 - some of the very strong negative feelings associated with these issues were reflected in the replies made by respondents to the general practice LIGPI and may account for the attitudes shown in some of the factors identified.

Process questions address the personal and professional problems of working within an actively managed service, of working together in teams of health care workers, of seeing a position of leadership in health provision at local level challenged and of increased accountability both to managers and to the public.

[2] Changes in knowledge and technology.

Medical knowledge continues to grow rapidly. Advances in molecular and cellular biology, in our understanding of genetic markers for disease and in the development of new approaches to pharmacology mean that now, more than ever before, doctors need to continue to learn to keep abreast of modern treatment potentials. Advances in technology have introduced information technology to the consultation and to health care management and new surgical and imaging techniques have opened up diagnostic and intervention options with effects not just on clinical service but also in patient expectations of the health service.

[3] Changes in the world in which we live.

Global technological, political, educational and financial changes have produced challenges for medicine and for medical education. The emergence of new, virulent disease eg AIDS and the re-

emergence of previously controlled diseases resistant to conventional treatment eg tuberculosis, malaria and diphtheria threaten both the developed and the under-developed world. Mortality rates in developing countries are falling but poverty, famine, child and maternal health are still major causes of death. In the developed world, domestic violence, the erosion of traditional family values and drug and alcohol related problems bring immense challenges to primary care services (Bowman & Schwenk, 1993; Lundberg & Lamm, 1993). Life expectancy in the developing world is rapidly approximating to that enjoyed in developed countries. Increased life expectancy brings with it a growing population of elderly people with chronic diseases, malignancies and social and welfare demands (World Bank, 1993). Ethical dilemmas are posed by political regimens and cultural norms putting additional pressure on a medical education system that addresses a purely biomedical agenda.

[4] Changes in educational approach

> *'The purpose of medical education is to provide a range of competent medical practitioners (general practitioners, specialists, public health medicine consultants), who can communicate effectively, make a diagnosis, assess prognosis, recommend or carry out treatment or institute effective public health measures. The purpose is not only to provide a service to the individual or community but, by research and development, to improve health..... We need to look again at how doctors learn and how teaching methods can be improved in order that the time spent in education can be used efficiently. Supervision and feedback are crucial and it is essential that we establish a culture of self-learning'*. Calman, 1993

Reaction to traditional didactic approaches to medical education and consultant-led teaching and the consequent factual overload coupled with increasing awareness of adult learning principles (Jones, 1993) has led to greater selectivity in the use of teaching methods. Amongst medical educators in general practice, a tendency to 'learner' centredness' is increasing the use of small group work, not only in vocational training but also in continuing medical education (Marwick, 1991). Although as this study has shown, there are a number of general practitioners (rather than trainees) who would dislike the use of group work especially when emotional issues are being discussed - areas of increasing concern to general practitioners (Cartwright, 1990). MacLeod and Nash (1993) found, in a study in the South-West

of England of general practitioners educational needs and preferred method of learning in palliative care, that the majority would prefer didactic approaches and would feel uncomfortable in stressful areas with experiential teaching. Increasing sophistication of these educators has raised awareness of the need to proactively plan educational activities with the needs of learners, managers and patients in mind (Al-Shehri et al, 1993) rather than leave provision in the hands of the pharmaceutical industry. People learn best when what they are learning relates to their interests and their work. They wish for some control over what and how they learn and in some cases for a say in the assessment and evaluation procedures as well. Principles of adult learning have been set out by many authors and have been summarised by Brookfield (1988). The central principles are that participation is learning is voluntary; that learners and teachers should collaborate in the planning and decision-making process; that a climate of mutual respect should exist between both teacher and learner; learning activity should be part of a cycle of action (or experience) followed by reflection followed by analysis and then further action (a process Brookfield calls 'praxis'); learning must foster a spirit of critical reflection in participants and learning must nurture self-directed empowered people.

8.3.2 Learning and clinical audit.

The emerging importance of medical (or clinical) audit in medical practice since the introduction of medical audit advisory groups by the NHS and Community Care Act in 1991 offers a mechanism for relating learning to service (Hutchison, 1992). However, audit has been introduced with a strong sense of managerial direction and there has been reluctance for the results of audit to become public even to the extent of feeding local educational activities in some areas. The key concepts of audit lend themselves to personal learning, to the identification of personal learning goals and needs, to the development of standards and to involvement in peer group discussion.

8.3.3 Self-diagnosis

> 'To study in an optimal way, students should be aware of their own and other possible ways of learning, thinking about learning and orientating towards studying and, when necessary, change theirs' (Vermunt, 1988).

Involvement of individuals in learning can be increased by encouraging self-diagnosis of learning needs and of personal learning characteristics. The use of a learning styles inventory eg the S-SDLRS,

encourages learners to reflect on their own study processes and the conceptions they have of learning, teaching and of working alone or with others. Learners may also compare their own position with that of others and interpret their scores to gain an impression of their strengths and weaknesses. By considering what they want to learn in the light of their newly discovered insights into their own learning approach, it will be possible to make more effective plans for the use of resources (including time) and for their choice of learning method. It is probable that, for many, the solitary completion of such instruments will be enhanced by discussion with peers or local medical educators (eg clinical tutors). The LIGPI offers a more specific instrument for examining learning within the general practice setting. It allows respondents to identify their position in six areas, each with especial relevance to their professional work. Whilst further developmental work is required to polish the inventory for public use, it does offer the potential of context-sensitive measurement of an individual's approach to professional education. Whilst the internal reliability (Cronbach's α) of the overall scale is acceptable at .78 for the trainee sample, the result for the general practice sample is just .64. The scale scores show a wide variation with three of the scales having values above .60 and one with a value of .42. Findings from the use of the LIGPI must be interpreted with some caution. It is not possible to draw evidence for causal relationships from the data and the sample of general practitioners was small, so that within it sub-groups, eg inner city general practitioners, are too small for security of interpretation. Nevertheless, the study results do provide an essence of possible differences in attitudes and feelings amongst both trainees and general practitioners about how they perceive their work that have significant implications for medical educators working in primary care. Six factors have been identified to explain over a third of the variance in attitudes to professional work and learning amongst a sample of trainee and established general practitioners. These factors have been named: Professionalism, Sensitivity to criticism, Non-academic approach to learning, Independence in learning, Disillusionment, and Desire for clear guidelines. Amongst trainees, Group work, Isolation and the Doctor-Patient relationship are factor names that better explain the orientation of items within the analysis.

There are differences between male and female responses to a number of the items of the inventory used to obtain data and in aggregate scores on three of the factors.

8.4 Gender issues

8.4.1 Item analysis.

The results of the SDLRS survey suggested that females were more likely to seek personal meaning from education than males ('I believe thinking about who you are, where you are and where you are going, should be a major part of every person's education') and were more likely to find independent learning difficult ('I don't work very well on my own'). Males, on the other hand, were more certain of their problem-solving and were more competitive ('I'm good at thinking of unusual ways of doing things'; 'I'm better than most people at trying to find out the things I need to know'; 'I happy with the way I investigate learning problems'). They were also more assertive ('I become a leader in group learning situations'). These findings were echoed in the Factors with males tending to score more highly on Factor 2 Initiative and Independence in Learning, Factor 4 Creativity and Factor 6 Self-concept as a learner than females.

In the trainee part of the LIGPI survey, these results were confirmed, with gender differences shown on eight items, Table 6.7. Female trainees were more likely than males to prefer group work to men and to find difficulty with independent learning ('I don't learn very well on my own' and ' I learn much more in groups than on my own'). There was also a suggestion of disorganised learning that was more common amongst females ('I mostly learn by trial and error these days'). The results for male trainees also confirmed their confidence in their learning ability and competitiveness and assertiveness in learning ('I'm good at taking responsibility for decisions about a patients management'; I feel comfortable when left to learn on my own'; 'I enjoy competition; I find it stimulating'). Independence was further stressed with 'Being my own boss is what attracted me to a career in general practice'.

In the general practice part of the LIGPI survey, six items showed gender differences, Table 7.7. For men, the results echo each of the previous surveys with 'Being my own boss is what attracted me to a career in general practice'; 'I'm good at taking responsibility for decisions about a patients management' and 'I enjoy competition; I find it stimulating' each attracting higher scores from men. Female general practitioners, were more likely to recognise the importance of talking about difficulties with patient care and the stress they feel at work ('I think it's important to share difficult experiences with other people'; 'Talking about the problems I see in practice helps to reduce the stress they cause in

me'). Females were also more likely to use reflection about patients as a way of learning than men (Thinking about the patients I see and how I manage them is a good way for me to learn').

Amongst the factors identified with the general practice sample, Table 7.11, only Factor 1 and 3 showed statistically significant differences at the <0.005 level, these were Factor 1, Learning from patients', with men scoring more highly than women, and Factor 3, Non-academic approach, with women scoring more highly than men.

Whilst these results help us to understand the process of learning better, we do not know how these observations relate to the outcome of learning. Confidence is an important predictor of success in learning, but as Anthoney (1986) pointed out, medical students may not be aware of their learning problems and use inappropriate methods. The same may be true of trainees and general practitioners and further investigations are needed to elucidate the relationship between perceived learning style and strengths and the outcome of learning.

8.4.2 Factor analyses by gender.

The SDLRS analysis resulted in the identification of a small number of factors for each sex, Table 4.16. For males, Desire to Learn, Complacency towards Learning and Learning Problems and for females, Determination to Learn, Confidence in learning, Belief in the importance of learning for oneself and Reticence to engage in learning emerged.

Analysis of the LIGPI results from the trainee sample is shown in Table 6.10 and though reflecting the general themes pervading this study, it does show a difference in emphasis between the sexes. For male trainees, the six factors suggest an awareness of learning for personal development, negative feelings about learning, difficulty studying alone, the need for role-models, confidence about recognising learning needs and the use of reflection as a learning technique. For females, the factors also recognise self-awareness but also the importance of working with and learning from others especially in groups, feeling part of the team in a practice, wanting clear direction and guidelines about learning and a sense of competition.

Amongst the general practice sample differences can again be demonstrated within the general framework of the study findings, Table 7.13. For males, learning from patients, colleagues and peers, a non-academic approach, feelings of isolation and disillusion, independence in learning, a positive self-

concept as a learner and a need for guidance and direction when learning are the six factors. For females, learning with others especially in groups, feeling threatened by personal feedback, being part of a team and having clear guidelines to follow when working, feelings of stress and disillusion with GP as a career and a factor suggesting a 'deep' approach to learning in which professional learning is related to patients could be identified.

This discussion of the results of the gender analysis of the SDLRS and the LIGPI surveys suggests a number of characteristics. Whilst these characteristics may reflect aspects of the gender in general, they also indicate specific tendencies of importance to teacher and learner alike. The female analysis suggests a need to learn in groups with peers, and a sense of discomfort with independent learning. There may be a significant degree of difficulty handling personal feedback and this may get worse as the doctor ages. Female doctors want to be part of the practice team and recognise and respond to talking about problems. They are likely to use reflection about their patients as a major learning strategy. Men are competitive, self-assured and assertive as learners. There is a strong tendency to independence but with a persistent need for guidelines and direction in learning.

Turning now to the model of learning in general practice set out in Chapter 6, how do the results of the present study relate to our understanding of this learning? The model suggested that a variety of influences may play a part in learning and set out possible relationships between the different elements. The model assumes the learner's perspective and whilst it identifies certain combinations of learning style, expectation of learning and teaching and motivation it lacks detail concerning individual differences. The results of the present study add some of this detail by identifying a range of attitudes to learning, and to practice, that may play a part in influencing the process and outcome of learning activity. These attitudes have been clustered into six factors using principal components analysis, but further detail from inspection of the frequency tables and the results of the SDLRS survey suggest nine areas that may be seen as continua along which individual learners may be located.

These areas are:

Learning for self-growth —— Learning for job

Prefers to be taught —— Prefers to be self-directed

Learning as a technique —— Learning as problem-solving

Enjoys learning —— Glad when learning over

Sees patients as people —— Sees patients as disease entities

Professional isolation —— Sense of support & teamwork

Uses experience as the basis — Waits to receive instruction
for learning

Patient-centred —— Doctor-centred

Positive self-concept as a — Dependent, passive, stressed
learner

8.5 Implications.

This section considers the implications of the study for teaching in general practice.

The study findings echo and develop those of others. There is considerable diversity amongst general practitioners and trainees as learners - an observation made by others using different methods and different approaches (RCGP, 1972; Branthwaite et al, 1988; Bolden & Lewis, 1989). This study shows that these differences are not only in attitude and approach to learning but also in preferred learning style and context (for example, working alone or in groups), with professional self-esteem and personal motivation for and satisfaction with general practice as a career. There are relationships with gender, age, postgraduate qualifications and experience of general practice. The results suggest that general practice learners should have more say in what and how they learn and, ideally, learning opportunities should be designed so that individuals have greater choice of both presentation style and of the extent of their own personal participation. Feedback about performance and progress should be encouraged so that professional growth may be maintained. Such feedback should be sensitive to gender and to confidentiality. A curriculum for continuing medical education for general practice should address not

only the knowledge and skills required to carry out the essential components of the task but also address the personal and professional needs of individual doctors. Teaching methods need to be more learner-centred than they currently are and encourage involvement of learners whilst maintaining professional and educational leadership. Some doctors want specific guidelines and direction in learning and a majority want case discussion and peer involvement. A possible approach may be the development of an education strategy for general practice similar to that currently being introduced in undergraduate medical education.

Here a core and options approach aims to ensure all students achieve competence in basic knowledge, skills and attitudes across a wide range of subjects central to the effective practice of medicine. In addition to achieving these core competencies, students are encouraged to develop in-depth understanding in a variety of other areas of their choice. These may include basic science as well as clinical subjects. Such an approach would suit continuing medical education in general practice very well and would offer a number of advantages and opportunities to general practitioners, medical teachers and to educational administrators and to the health service as a whole. For general practitioners, a clearly defined core curriculum (Samuel, 1992) would provide guidance about what should be learned and for educators, it would provide a clear sign of what should be provided. In view of the findings of this and other studies, local implementation would encourage the necessary variation in styles needed to satisfy local needs. For the health service, a core curriculum assures the public that fundamental knowledge and skills are addressed in continuing professional education whilst it offers managers and government the opportunity to ensure that national priorities (for example, the Health of the Nation recommendations or the Improving Prescribing Scheme) are addressed by an educational process in addition to a managerial one. The approach also provides a much needed mechanism for linking the results of health service related research to clinical practice accelerating the implementation of new knowledge and skills. The options component is available not only to satisfy individual learning needs, but also to encourage doctors to study in depth those areas of practice that are important but not essential, but which broaden the skills offered by the doctor to his or her patients, for example minor surgery skills, counselling or management training. In addition, the options component offers opportunities to add personal and career development to the core of professional development (for

example, educational or research skills). Such a strategy requires active management and coordination. The existing regional advisory structure is too loosely focused to provide such a service uniting research, service and clinical needs with the development of educational provision and a central, representative, coordinating body may be necessary. At the same time, vocational training for general practice, though more closely identified with a core curriculum set out by the Royal College of General Practitioners (RCGP, 1972) and maintained and developed by the examination board of the MRCGP diploma, needs to respond to the demands of the new health service and of changes in both structure and provision of primary care services in the UK. There are widely agreed core components to current teaching but these focus on the clinical consultation and on problem-solving approaches to patient management. Within the quality assurance mechanisms of vocational training, provision for examining the structure of training dominate and little attempt is made to observe the process of teaching or of learning. Attempts to measure the outcomes of training were described in Chapter 2 and have not proved successful in demonstrating the effects of training on patient care, quality of service delivery or on doctor's careers. In the context of greater sensitivity to learner's needs, educational strategies such as problem-based learning (Barrows, 1985), task-based learning (Bligh & Harden, 1988) and learning contracts (Knowles, 1975) may offer ways of relating individual learning needs and learning styles to the requirements of satisfactory professional performance requiring a high degree of self-direction.

Vermunt and Rijswijk (1988) extracted common or fundamental themes from a review of the adult education literature and identified two different kinds of learning activity with relevance to learning in general practice. The first, *processing',* is the way in which students actually learn new material and the second, *regulating,* the way in which the student controls and carries out his or her learning. Skill in both is required for effective self-directed learning but elements of each are identifiable from the results of this study of learning in general practice. There are eight components to the processing part of the model. These are selecting from a wide range of material that should be studied; relating the subject matter to other parts of a course or plan of learning; concretizing new materials to things that are already known; analysing, examining in depth and detail; structuring, bringing together the parts of the course or learning experience and integrating this with existing knowledge; personalizing, 'making

knowledge part of oneself' leading to changes in behaviour or attitude, an improved understanding of a problem; activity, seeking out answers, drawing conclusions, checking facts and logic, forming one's own interpretation and opinion and finally, memorising and rehearsing, imprinting isolated facts by rehearsal etc.

For the regulating process, there are also eight mechanisms. These are orienting, preparing for learning by examining the task, setting objectives, identifying existing knowledge; planning, relating objectives, content and activities in a sequence that is comfortable and convenient; monitoring, checking that learning is achieving the desired outcomes; testing, checking that one actually does know or understand; diagnosing, examining possible causes of failure or success; repairing, changing the original plan on the basis of the previous steps, deciding on alternatives methods, objectives or resources, selecting parts of the material for special attention, persisting; evaluating; judging whether the final outcome is what was required and whether all went according to plan and reflecting, thinking about learning, teaching and working and relating new material to one's own way of working and thinking, developing new understanding and insight.

Kolb (1984) uses the term reflection as part of his explanation of how people learn from experience. In Kolb's model, experiential learning is the process that links education, work, and personal development. Experience is the basis for reflection and for observation. Stanley et al argue that, for general practitioners, such experience may consist not only of clinical work with patients but also of reading and of peer discussion and audit (Stanley et al 1993 op cit). Conceptualization and analysis follow reflection and lead to generalization. The resulting ideas are tested and then applied resulting in further experience and entry into another cycle of learning. This study suggests that, amongst general practitioners, ground for the application of such a model is fertile and that medical educators may seek to 'foster opportunities for learning' that enable [doctors] to work with, and build upon, learning experiences in a variety of ways' (Boud, 1989). The consultation is the central focus of a general practitioners' work and therefore represents the central building block upon which active experiential learning can be cultivated. Figure 8.10 shows a simplified model uniting Kolb's learning cycle with other ideas discussed in this study. The model brings together elements of reflection and feedback focussed on the consultation and may represent an useful first step in developing new

approaches to learning in general practice.

Summary.

The study reported in this thesis may be regarded as an observational one, with both descriptive and analytic phases. The descriptive phase made use of an established questionnaire, the SDLRS, and an interview study to explore aspects of learning from the perspective of trainees both at the beginning and at the end of training in general practice. This part of the study generated hypotheses which were then tested in the second part, the analytic phase (Grisso, 1993), in a study of established general practitioners. The analysis of data obtained and interpretation of the results indicates that whilst the suggested hypotheses are confirmed, further investigations are indicated. These may be conducted to examine questions of both the predictive and of the concurrent validity of the inventory and to confirm the nature, distribution and significance of the factors amongst a wider sample of general practitioners, other groups of trainees, and amongst learners in general. In addition, further work is required to examine in detail the educational relationship between trainers and their trainees, to determine the actual study patterns of trainees and of general practitioners and to continue the process of determining the achievements of vocational training.

Figure 8.1

Diagrammatic representation of study design

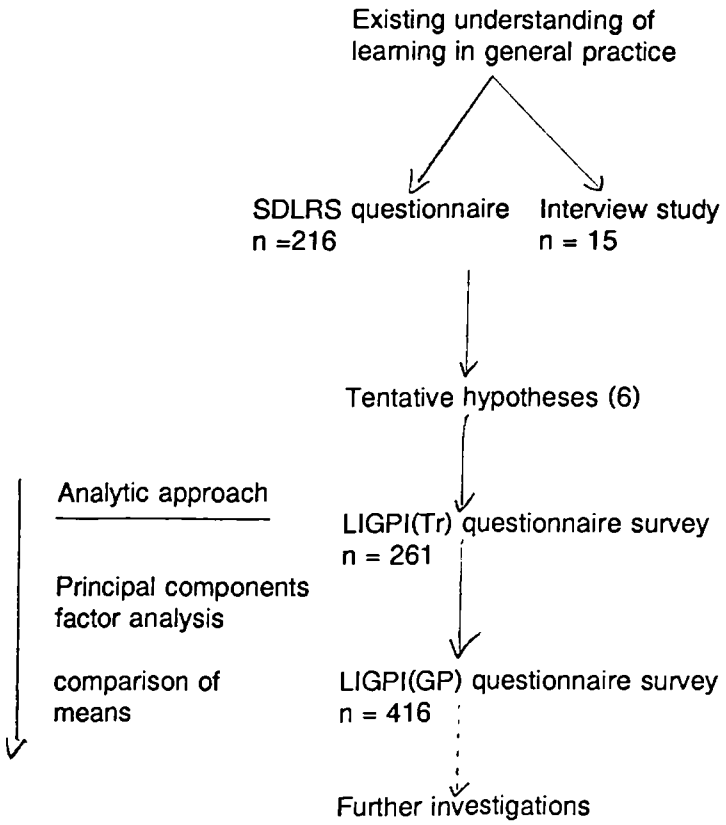
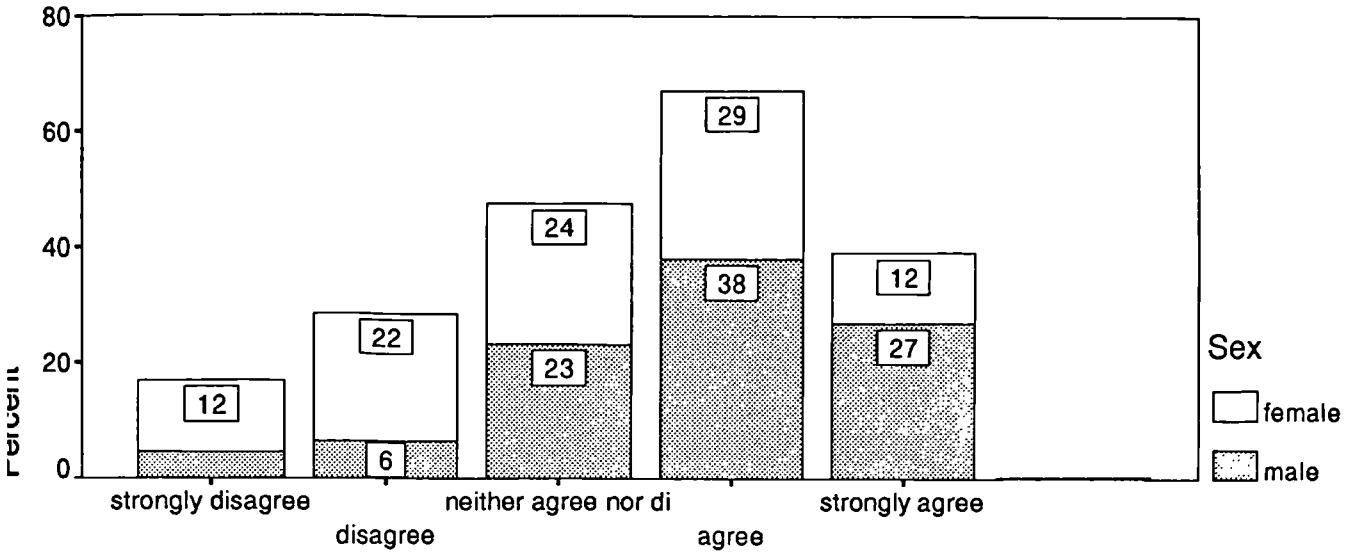


Figure 8.2

Frequency score Q2 by sex

LIGPI(GP)

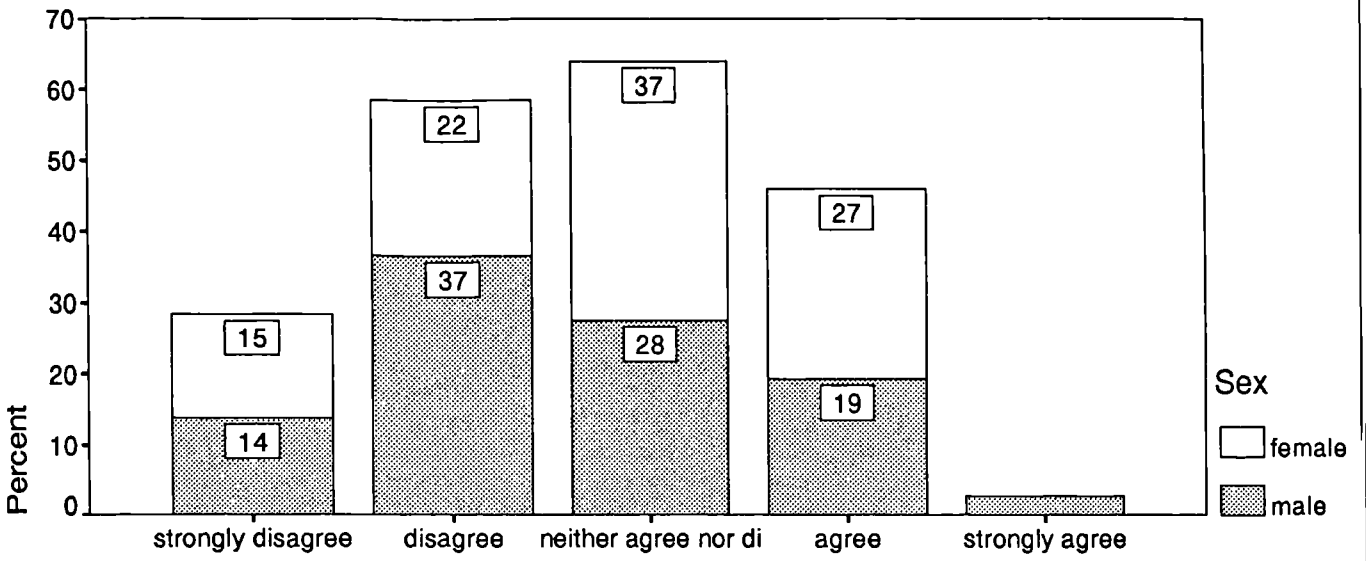


being my own boss

Figure 8.3

Frequency score Q4by sex

LIGPI(GP)

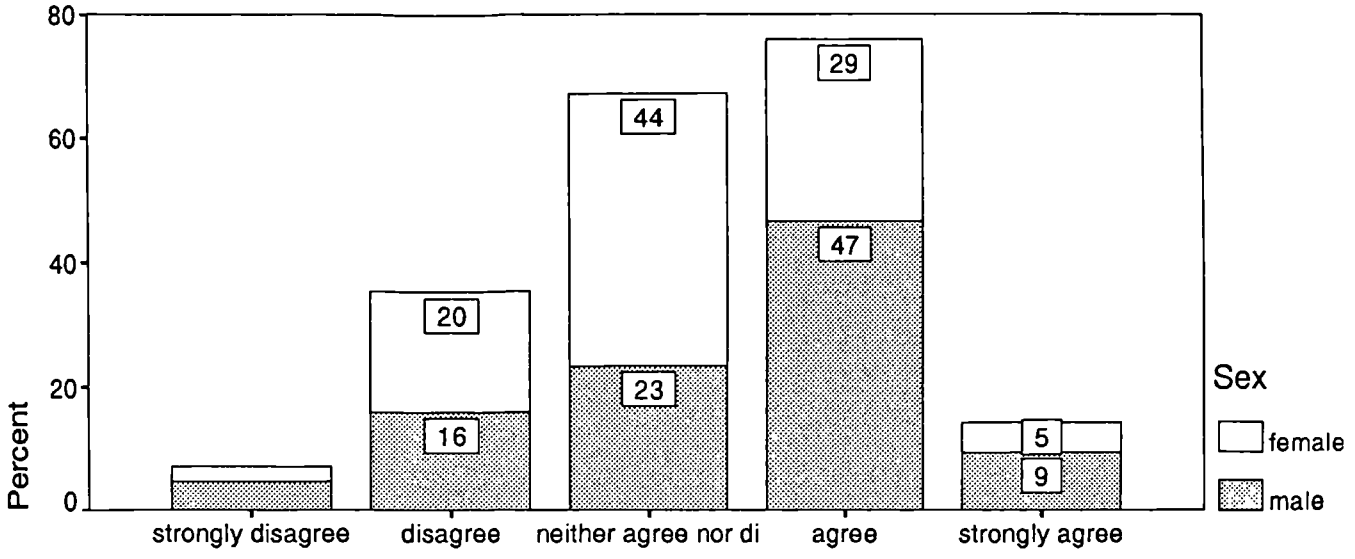


prefers to be told

Figure 8.4

Frequency score Q19 by sex

LIGPI(GP)

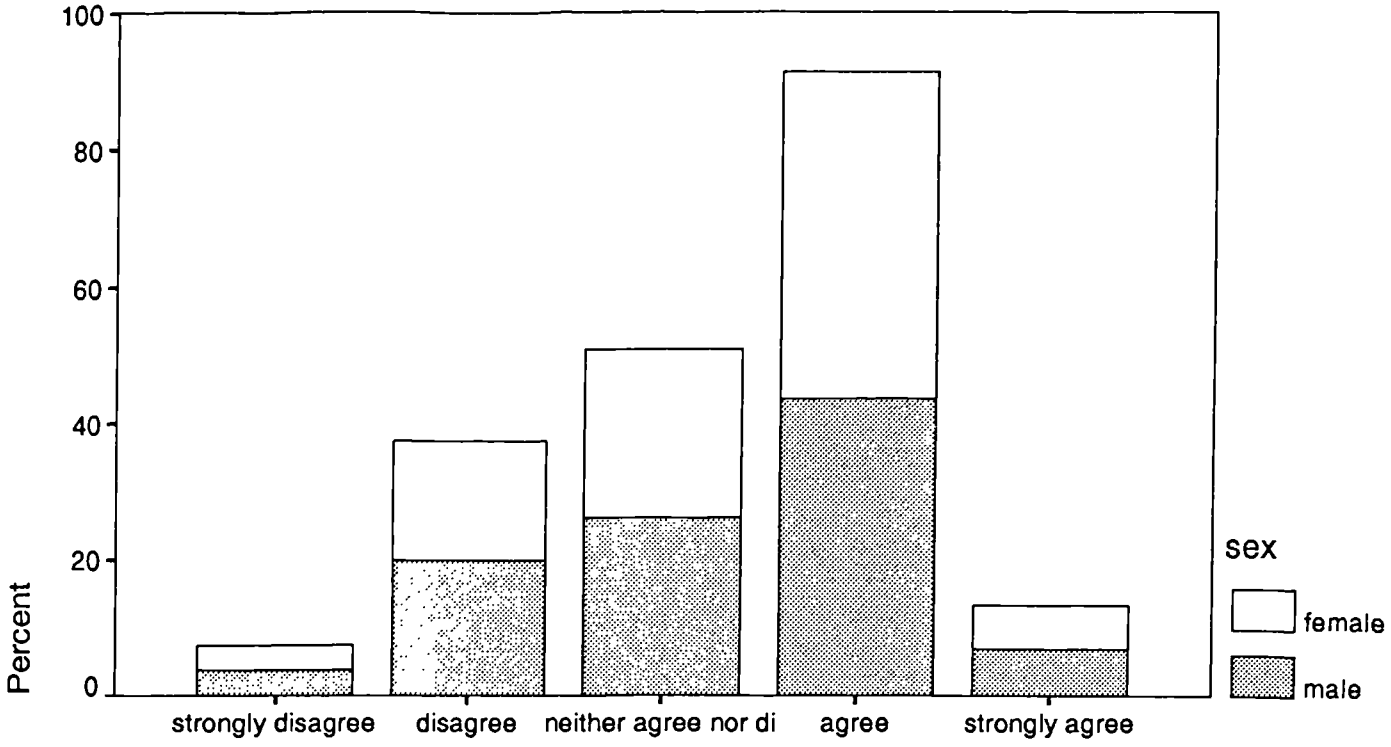


comfortable with feelings in groups

Figure 8.5

Frequency score Q27 by sex

LIGPI(Tr) Inventory



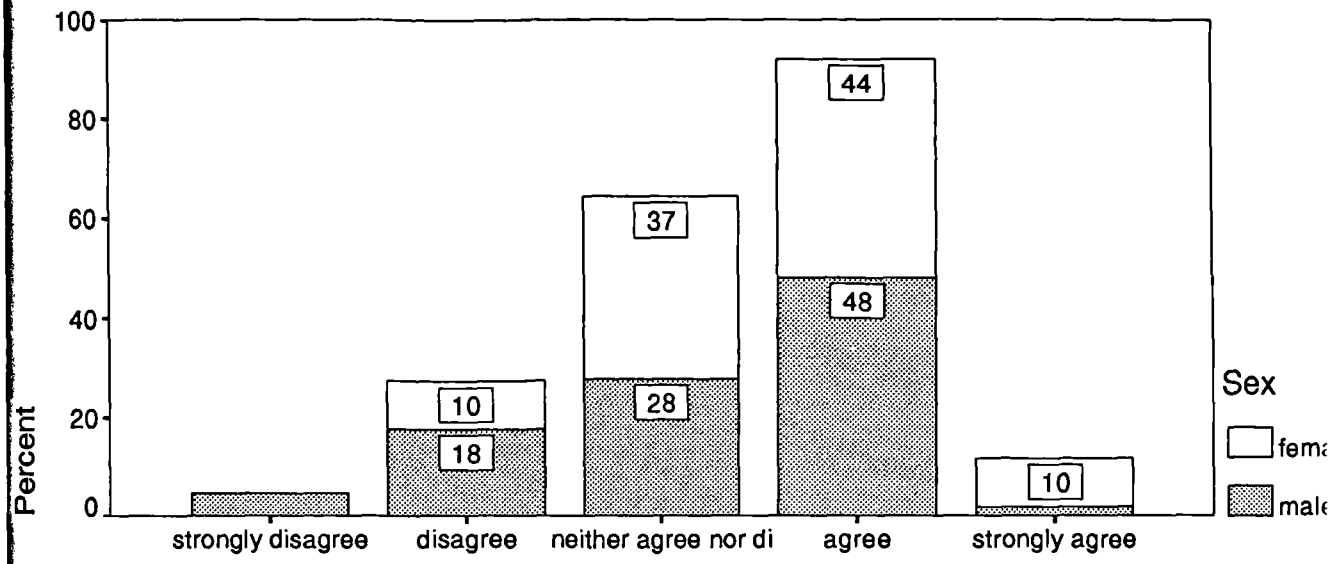
Q27

Comfortable expressing feelings in groups

Figure 8.6

Frequency score Q39 by sex

LIGPI(GP)

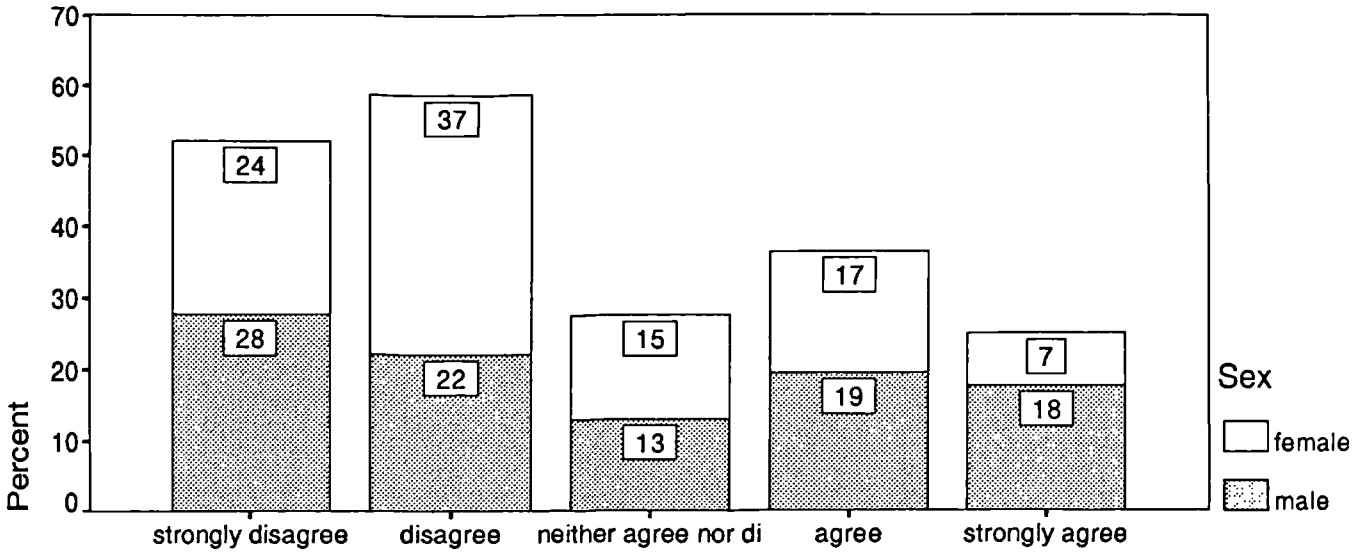


wants clear guidelines

Figure 8.7

Frequency score Q45 by sex

LIGPI(GP)

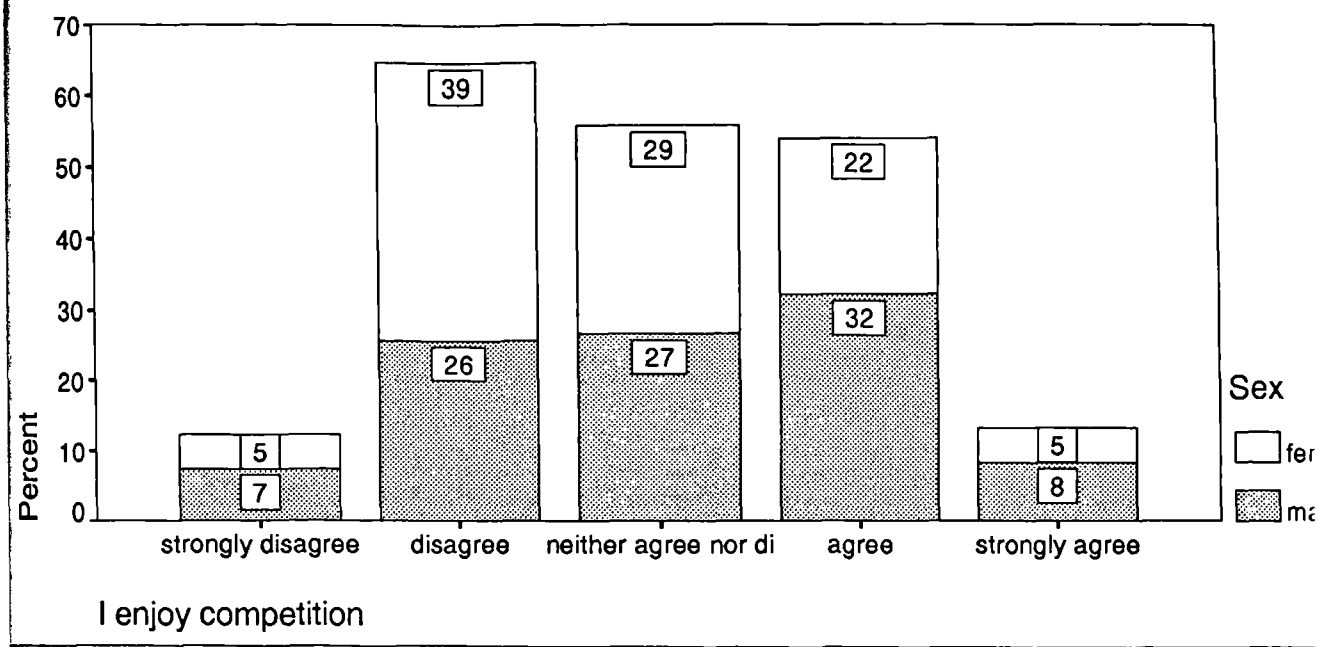


wonders why became GP

Figure 8.8

Frequency score Q46 by sex

LIGPI(GP)

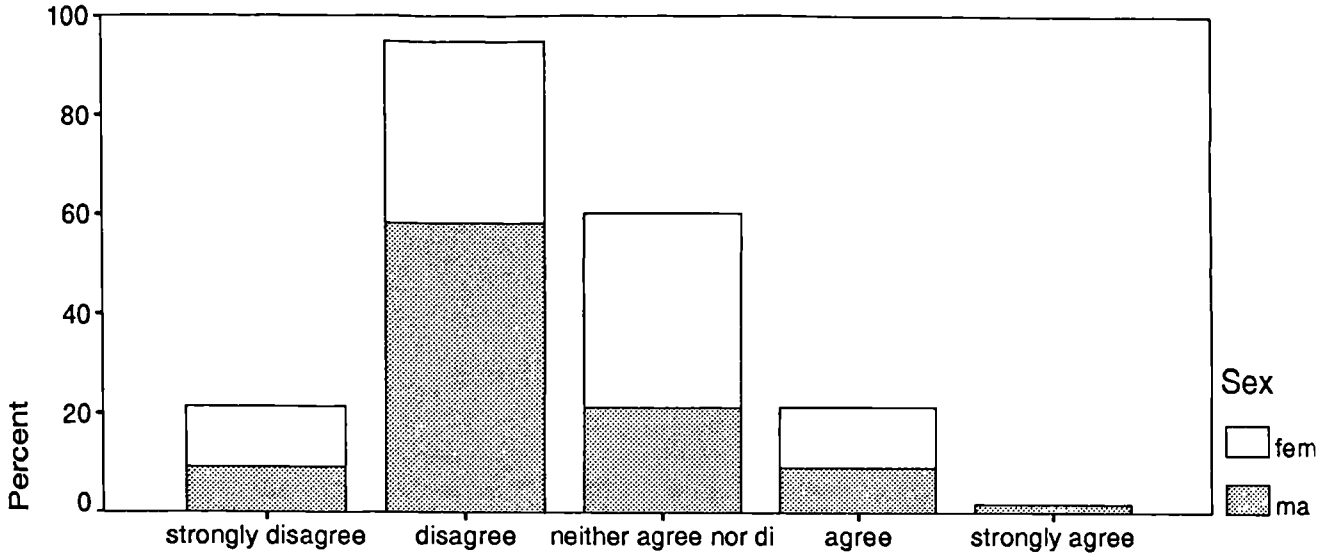


I enjoy competition

Figure 8.9

Frequency score Q52 by sex

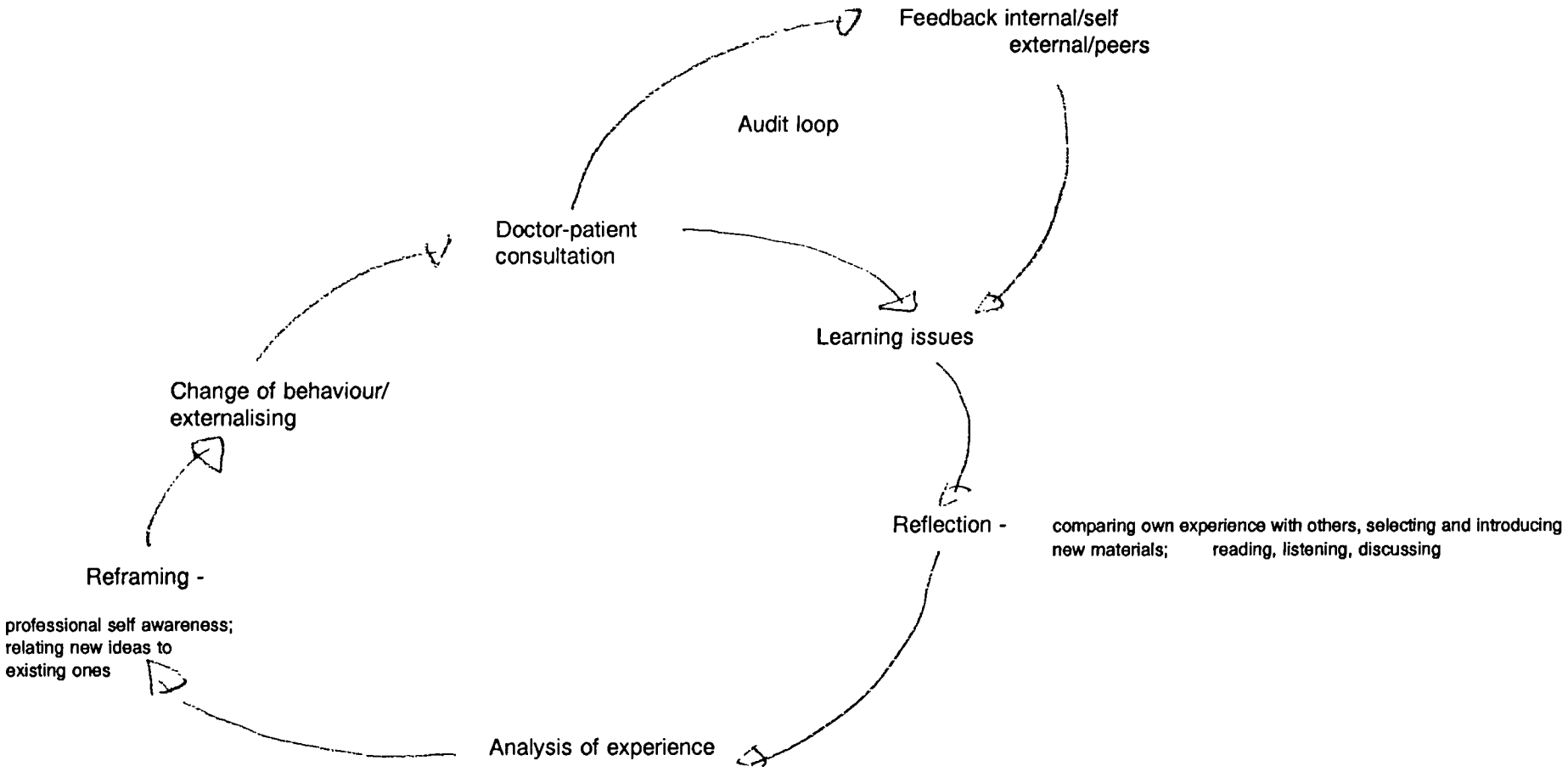
LIGPI(GP)



feedback very threatening

Figure 8.10

A model of experiential learning in general practice.



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Appendices

Name _____ Sex _____ Birthdate _____

Date of Testing _____ Location of Testing _____

QUESTIONNAIRE

INSTRUCTIONS: This is a questionnaire designed to gather data on learning preferences ar attitudes towards learning. After reading each item, please indicate the degree to which you feel th statement is true of you. Please read each choice carefully and circle the number of the respon which best expresses your feeling.

There is no time limit for the questionnaire. Try not to spend too much time on any one item however. Your first reaction to the question will usually be the most accurate.

EMS:	RESPONSES				
	Almost never true of me: I hardly ever feel this way.	Not often true of me: I feel this way less than half the time.	Sometimes true of me: I feel this way about half the time.	Usually true of me; I feel this way more than half the time.	Almost always true of me; there are very few times when I don't feel th
. I'm looking forward to learning as long as I'm living.	1	2	3	4	5
I know what I want to learn.	1	2	3	4	5
When I see something that I don't understand, I stay away from it.	1	2	3	4	5
If there is something I want to learn, I can figure out a way to learn it.	1	2	3	4	5
I love to learn.	1	2	3	4	5
It takes me a while to get started on new projects.	1	2	3	4	5
In a classroom, I expect the teacher to tell all class members exactly what to do at all times.	1	2	3	4	5
I believe that thinking about who you are, where you are, and where you are going should be a major part of every person's education.	1	2	3	4	5
I don't work very well on my own.	1	2	3	4	5

	Almost never true of me: I hardly ever feel this way.	Not often true of me: I feel this way less than half the time.	Sometimes true of me: I feel this way about half the time.	Usually true of me: I feel this way more than half the time.	Almost always true of me: there are very few times when I don't feel this way
0. If I discover a need for information that I don't have, I know where to go to get it.	1	2	3	4	5
1. I can learn things on my own better than most people.	1	2	3	4	5
2. Even if I have a great idea, I can't seem to develop a plan for making it work.	1	2	3	4	5
3. In a learning experience, I prefer to take part in deciding what will be learned and how.	1	2	3	4	5
I. Difficult study doesn't bother me if I'm interested in something.	1	2	3	4	5
i. No one but me is truly responsible for what I learn.	1	2	3	4	5
. I can tell whether I'm learning something well or not.	1	2	3	4	5
. There are so many things I want to learn that I wish that there were more hours in a day.	1	2	3	4	5
. If there is something I have decided to learn, I can find time for it, no matter how busy I am.	1	2	3	4	5
Understanding what I read is a problem for me.	1	2	3	4	5
If I don't learn, it's not my fault.	1	2	3	4	5
I know when I need to learn more about something.	1	2	3	4	5
If I can understand something well enough to get a good grade on a test, it doesn't bother me if I still have questions about it.	1	2	3	4	5
I think libraries are boring places.	1	2	3	4	5
The people I admire most are always learning new things.	1	2	3	4	5

	Almost never true of me: I hardly ever feel this way.	Not often true of me: I feel this way less than half the time.	Sometimes true of me: I feel this way about half the time.	Usualy true of me: I feel this way more than half the time.	Almost always true of me: there are very few times when I don't feel this way
5. I can think of many different ways to learn about a new topic.	1	2	3	4	5
6. I try to relate what I am learning to my long-term goals.	1	2	3	4	5
7. I am capable of learning for myself almost anything I might need to know.	1	2	3	4	5
8. I really enjoy tracking down the answer to a question.	1	2	3	4	5
9. I don't like dealing with questions where there is not one right answer.	1	2	3	4	5
). I have a lot of curiosity about things.	1	2	3	4	5
. I'll be glad when I'm finished learning.	1	2	3	4	5
. I'm not as interested in learning as some other people seem to be.	1	2	3	4	5
. I don't have any problem with basic study skills.	1	2	3	4	5
. I like to try new things, even if I'm not sure how they will turn out.	1	2	3	4	5
. I don't like it when people who really know what they're doing point out mistakes that I am making.	1	2	3	4	5
. I'm good at thinking of unusual ways to do things.	1	2	3	4	5
I like to think about the future.	1	2	3	4	5
I'm better than most people are at trying to find out the things I need to know.	1	2	3	4	5
I think of problems as challenges, not stopsigns.	1	2	3	4	5
I can make myself do what I think I should.	1	2	3	4	5

	Almost never true of me: I hardly ever feel this way.	Not often true of me: I feel this way less than half the time.	Sometimes true of me: I feel this way about half the time.	Usually true of me: I feel this way more than half the time.	Almost always true of me: there are very few times when I don't feel this way.
41. I'm happy with the way I investigate problems.	1	2	3	4	5
42. I become a leader in group learning situations.	1	2	3	4	5
43. I enjoy discussing ideas.	1	2	3	4	5
44. I don't like challenging learning situations.	1	2	3	4	5
45. I have a strong desire to learn new things.	1	2	3	4	5
46. The more I learn, the more exciting the world becomes.	1	2	3	4	5
47. Learning is fun.	1	2	3	4	5
48. It's better to stick with the learning methods that we know will work instead of always trying new ones.	1	2	3	4	5
49. I want to learn more so that I can keep growing as a person.	1	2	3	4	5
50. I am responsible for my learning — no one else is.	1	2	3	4	5
51. Learning how to learn is important to me.	1	2	3	4	5
52. I will never be too old to learn new things.	1	2	3	4	5
53. Constant learning is a bore.	1	2	3	4	5
54. Learning is a tool for life.	1	2	3	4	5
55. I learn several new things on my own each year.	1	2	3	4	5
56. Learning doesn't make any difference in my life.	1	2	3	4	5
57. I am an effective learner in the classroom and on my own.	1	2	3	4	5
58. Learners are leaders.	1	2	3	4	5

APPENDIX 2

SDLRS. Frequency Table

Item	Not true of me	True of me
1. I am looking forward to learning as long as I am living.	8%	71%
2. I know what I want to learn.	10%	50%
3. When I see something that I don't understand, I stay away from it.	70%	5%
4. If there is something I want to learn, I can figure out a way to learn it.	25%	74%
5. I love to learn.	8%	61%
6. It takes me a while to get started on new projects	19%	47%
7. In lectures, I expect the lecturer to tell all class members exactly what to do at all times.	70%	13%
8. I believe that thinking about who you are, where you are and where you are going should be a major part of every persons education.	15%	65%
9. I don't work very well on my own.	74%	10%
10. If I discover a need for information that I don't have, I know where to get it.	9%	64%
11. I can learn things on my own better than most people.	23%	35%
12. Even if I have a great idea, I can't seem to develop a plan for getting it to work.	54%	12%
13. In a learning experience, I prefer to take part in deciding what will be learned and how.	15%	57%
14. Difficult study doesn't bother me if I am interested in something.	5%	80%

	Not true of me	True of me
15.No one but me is truly responsible for what I learn.	9%	72%
16.I can tell whether I'm learning something well or not.	8%	76%
17.There are so many things I want to learn that I wish there more hours in a day.	26%	49%
18.If there is something I have decided to learn, I can find the time for it, no matter how busy I am.	27%	32%
19.Understanding what I read is a problem for me.	69%	7%
20.If I don't learn it's not my fault.	84%	5%
21.I know when I need to learn more about something.	5%	79%
22.If I can understand something well enough to get a good mark on a test, it doesn't bother me if I still have questions about it.	58%	20%
23.I think libraries are boring places.	60%	20%
24.The people I admire most are always learning new things	26%	42%
25.I can think of many different ways to learn about a new topic.	24%	33%
26.I try to relate what I am learning to my long term goals.	15%	61%
27.I am capable of learning for myself almost anything I might need to know.	19%	37%
28.I really enjoy tracking down the answer to a question.	15%	43%
29.I don't like dealing with questions where there is not one right answer.	53%	22%
30.I have a lot of curiosity about things.	8%	67%
31.I'll be glad when I've finished learning.	75%	10%

	Not true of me	True of me
32.I'm not as interested in learning as some other people seem to be.	47%	27%
33.I don't have any problems with basic study skills.	17%	46%
34.I like to try new things, even if I'm not sure how they will turn out.	15%	59%
35.I don't like it when people who really know what they are doing point out mistakes that I'm making.	56%	15%
36.I'm good at thinking of unusual ways of doing things.	46%	18%
37.I like to think about the future.	6%	78%
38.I'm better than most people at trying to find out the things I need to know.	20%	24%
39.I think of problems as challenges not as stop signs.	6%	61%
40.I can make myself do what I think I should.	14%	48%
41.I'm happy with the way in which I investigate learning problems.	24%	28%
42.I become a leader in group learning situations.	47%	17%
43.I enjoy discussing ideas.	8%	62%
44.I don't like challenging learning situations.	55%	16%
45.I have a strong desire to learn new things.	5%	65%
46.The more I learn the more exciting the world becomes.	11%	57%
47.Learning is fun.	8%	52%

	Not true of me	True of me
48.It's better to stick with the learning methods that we know will work instead of always trying new ones.	48%	19%
49.I want to learn more so that I can keep growing as a person.	10%	70%
50.I am responsible for my learning - no one else is.	9%	70%
51.Learning how to learn is important to me.	15%	56%
52.I will never be too old to learn new things.	5%	88%
53.Constant learning is a bore.	59%	22%
54.Learning is a tool of life.	2%	78%
55.I learn several new things on my own each year.	7%	77%
56.Learning doesn't make any difference in my life.	87%	6%
57.I am an effective learner in lectures and on my own.	12%	48%
58.Learners are leaders.	26%	34%

Appendix 3. SDLRS: Three factor trial rotation.

Three factor solution. Correlations between scale items and rotated principal components (Items loading > .4 only shown).

Item		Rotated component			Communality
		I	II	III	
1.	I'm looking forward to learning as long as I'm living.	.59			
4.	If there is something I want to learn, I can figure out a way to learn it.		.46		
5.	I love to learn.	.61			
8.	I believe that thinking about who you are, where you are, and where you are going should be a major part of every person's education.			.42	
10.	If I discover a need for information that I don't have I know where to go to get it.		.55		
13.	In a learning experience, I prefer to take part in deciding what will be learned and how.		.49		
14.	Difficult study doesn't bother me if I'm interested in something.		.47		
15.	No one but me is truly responsible for what I learn.			.58	
17.	There are so many things I want to learn that I wish that there were more hours in a day.	.52			
21.	I know when I need to learn more about something.			.47	
24.	The people I admire most are always learning new things.	.52			
25.	I can think of many different ways to learn about a new topic.	.51	.48		
27.	I am capable of learning for myself almost anything I might need to know.		.55		
30.	I have a lot of curiosity about things.	.51			
34.	I like to try new things, even if I'm not sure how they will turn out.		.48	.41	
36.	I'm good at thinking of unusual ways to do things.		.55		
38.	I'm better than most people are at trying to find out the things I need to know.		.59		
39.	I think of problems as challenges, not as stop signs.		.50		
41.	I'm happy with the way I investigate problems.		.61		
42.	I become a leader in group learning situations.		.53		
43.	I enjoy discussing ideas.	.57			
45.	I have a strong desire to learn new things.	.77			
46.	The more I learn, the more exciting the world becomes.	.69			
47.	Learning is fun.	.70			
48.	It's better to stick with the learning methods that we know will work instead of always trying new ones.			.40	
49.	I want to learn more so that I can keep growing as a person.	.64			
50.	I am responsible for my learning - no one else is.			.71	
51.	Learning how to learn is important to me.	.59			
52.	I will never be too old to learn new things.	.55			
55.	I learn several new things on my own each year.	.41			

Appendix 4. SDLRS: Five factor trial rotation.

Three factor solution. Correlations between scale items and rotated principal components (Items loading > .4 only shown).

Item		Rotated component				
		I	II	III	IV	V
1.	I'm looking forward to learning as long as I'm living.	.55				
4.	If there is something I want to learn, I can figure out a way to learn it.			.43		
5.	I love to learn.	.64				
8.	I believe that thinking about who you are, where you are, and where you are going should be a major part of every person's education.		.45			
10.	If I discover a need for information that I don't have I know where to go to get it.			.46		
11.	I can learn things on my own better than most people.					.75
12.	Even if I have a great idea, I can't seem to develop a plan for making it work.			-.61		
13.	In a learning experience, I prefer to take part in deciding what will be learned and how.		.52			
14.	Difficult study doesn't bother me if I'm interested in something.					.42
15.	No one but me is truly responsible for what I learn.				.59	
17.	There are so many things I want to learn that I wish that there were more hours in a day.	.56				
21.	I know when I need to learn more about something.				.47	
24.	The people I admire most are always learning new things.	.54				
25.	I can think of many different ways to learn about a new topic.		.62			
26.	I try to relate what I am learning to my long-term goals.		.47			
30.	I have a lot of curiosity about things.		.50			
36.	I'm good at thinking of unusual ways to do things.		.62			
38.	I'm better than most people are at trying to find out the things I need to know.					.67
39.	I think of problems as challenges, not as stop signs.			.47		
41.	I'm happy with the way I investigate problems.			.58		
42.	I become a leader in group learning situations.		.55			
43.	I enjoy discussing ideas.		.58			
45.	I have a strong desire to learn new things.	.69				
46.	The more I learn, the more exciting the world becomes.	.70				
47.	Learning is fun.	.68				
48.	It's better to stick with the learning methods that we know will work instead of always trying new ones.				.43	
49.	I want to learn more so that I can keep growing as a person.	.59				
50.	I am responsible for my learning - no one else is.				.72	
51.	Learning how to learn is important to me.	.58				
55.	I learn several new things on my own each year.			.40		

Appendix 5. SDLRS factor structure: Males. Items loading >.30 are shown.

Item	factor loading							
	Factor							
	I	II	III	IV	V	VI	VII	VIII
1	.46							
2				-.40				
3			.40					
4	.47							
5	.57							
7							.37	
8				.35				
9			.50					
10	.39							
11					.35			
12			.64					
13	.49							
14	.49							
15					.39			
18	.49							
21		.59						
22							.30	
24	.61							
25	.55							
26	.50							
28	.55							
29							.49	
30	.56							
31	-.56							
32		.40						
33		.37						
34	.43							
35								.33
36						-.42		
38						-.44		
40	.42							
41	.40							
42	.47							
43	.54							
44	-.45							
45	.75							
46	.54							
47	.64							
48		.53						
49	.60							
50		.49						
51			.56					
53		.59						
54	.53							
56		.48						
57	.37							
58	.44							

Appendix 6. SDLRS. Females - factor table (items loading >0.30 are shown)

Item	Factor loading							
	Factor							
	I	II	III	IV	V	VI	VII	VIII
1	.61							
2								.38
3	-.38							
4	.30							
5	.51							
6				.47				
7						-.43		
8	.33							
12		-.32						
13	.45							
14	.43							
15						.41		
16				.33				
18		.37						
22					.35			
23				.46				
24						.33		
25	.59							
28	.63							
30	.40							
31	-.48							
32	-.50							
33		.47						
34		.40						
35							.32	
39	.68							
40			.48					
43	.56							
44	-.54							
45	.65							
49	.50							
50			.42					
52	.55							
53	-.39							
56			-.50					
58	.43							

CORRELATIONS BETWEEN SCALE ITEMS AND ROTATED PRINCIPAL COMPONENTS

		ROTATED COMPONENT										
No	ITEM	I	II	III	IV	V	VI	VII	VIII	IX	X	Commun-ality
1	I'm looking forward to learning as long as I'm living	.54	.001	.08	-.05	.08	-.04	.44	-.24	.15	.02	.59
4	If there is something I want to learn, I can figure out a way	.17	.13	.37	-.05	.17	-.11	.15	.12	.06	.44	.48
5	I love to learn	.64	-.00	.32	-.13	-.00	-.02	.10	.03	.11	-.02	.56
8	I believe that thinking about who are, where you are, & where you are going should be a major part of every person's education	.07	.08	.05	.15	-.07	.69	.0	00	-.07	.06	.53
10	If I discover a need for information that I don't have, I know where to go to get it	.00	.16	.59	.14	.16	.15	.19	-.06	-.07	.20	.53
11	I can learn things on my own better than most people	.06	.03	.13	.18	.07	-.08	.12	.76	-.05	.07	.67
12	Even if I have a great idea, I can't seem to develop a plan for making it work	.06	.06	-.14	.18	-.67	.20	-.27	-.01	-.17	.10	.64
13	In a learning experience, I prefer to take part in deciding what will be learned and how	.22	.41	.36	.06	.14	.24	-.03	.09	-.08	-.26	.52

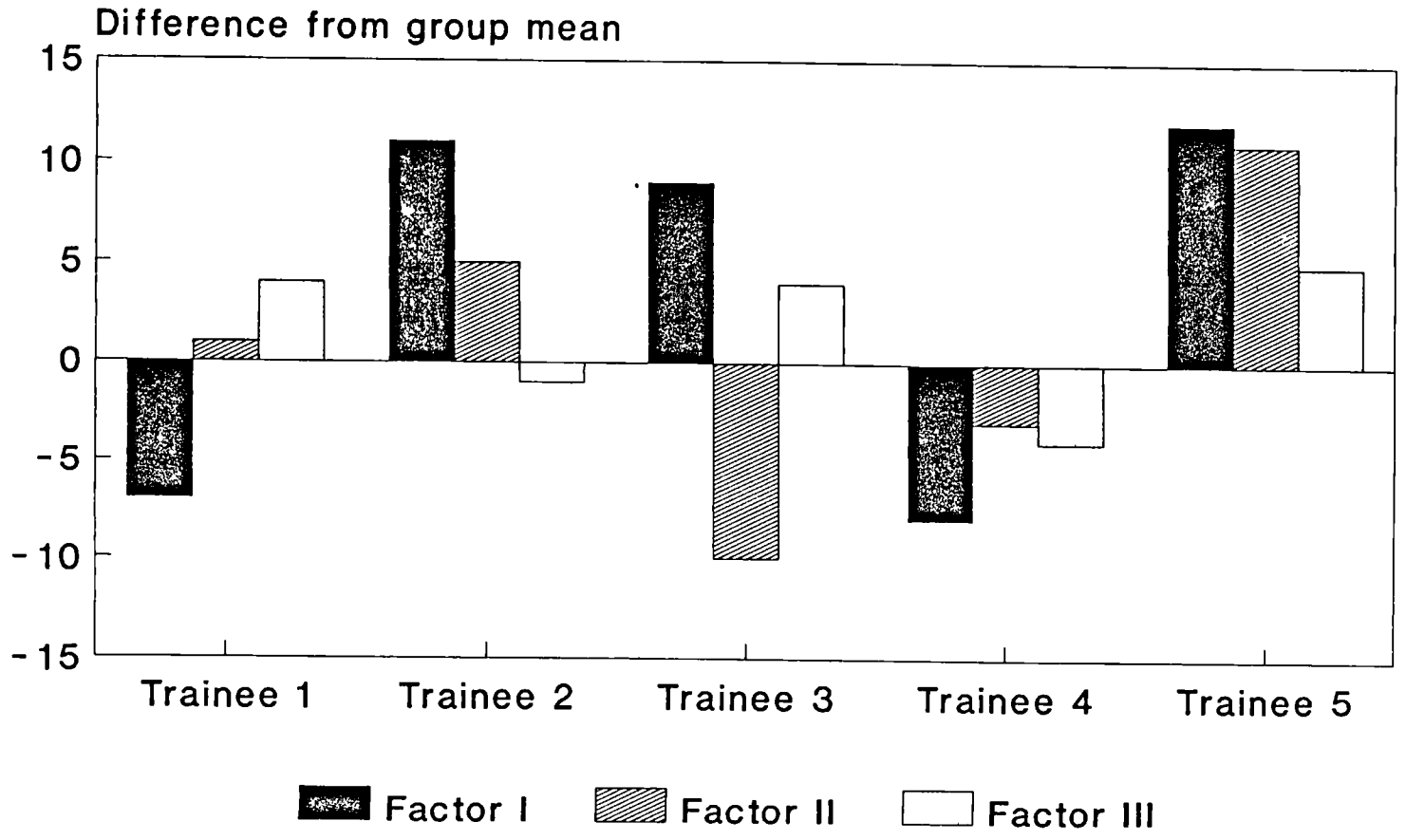
No	ITEM	ROTATED COMPONENT										
		I	II	III	IV	V	IV	VII	VIII	IX	X	Commun-ality
14	Difficult study doesn't bother me if I'm interested in something	.28	.08	.59	.10	.01	.02	.11	.16	-.04	-.07	.50
15	No one but me is truly responsible for what I learn	.08	.03	.12	.78	-.01	-.01	.04	.15	-.03	-.15	.67
17	There are so many things I want to learn that I wish that there were more hours in a day	.58	.20	-.14	.09	-.08	00	-.12	.21	.03	-.02	.48
21	I know when I need to learn more about something	.01	.00	.02	.10	-.12	.16	.04	.03	-.09	.76	.65
24	The people I admire most are always learning new things	.57	.00	.27	.11	-.04	.15	-.08	00	-.17	-.12	.49
25	I can think of many different ways to learn about a new topic	.30	.66	.11	.00	-.08	.23	.22	00	.11	-.13	.69
26	I try to relate what I am learning to my long-term goals	.12	.19	.26	.00	-.07	.61	.21	-.18	.11	.05	.60
27	I am capable of learning for myself almost anything I might need to know	.05	.07	.51	.20	.08	.24	.00	.25	.40	.14	.62
30	I have a lot of curiosity about things	.39	.57	-.05	.07	.23	-.06	.00	-.23	-.15	.25	.69
34	I like to try new things, even if I'm not sure how they will turn out	-.03	.39	.24	.40	.35	.06	.07	-.29	-.08	.07	.61

		ROTATED COMPONENT										
No	ITEM	I	II	III	IV	V	VI	VII	VIII	IX	X	Commun-ality
36	I'm good at thinking of unusual ways to do things	-.08	.68	.08	00	.15	.14	.02	.12	.18	.07	.58
38	I'm better than most people are at trying to find out the things I need to know	.07	.55	.23	00	-.05	-.03	.09	.53	.08	.06	.68
39	I think of problems as challenges, not as stop signs	.31	.21	.19	.33	.38	.08	.14	-.07	.13	.16	.52
41	I'm happy with the way I investigate problems	.00	.24	.37	.01	.12	-.02	.61	.02	.07	.04	.60
42	I become a leader in group learning situations	.22	.30	.07	-.07	.57	.27	.14	.15	-.09	-.08	.61
43	I enjoy discussing ideas	.40	.24	.01	.00	.54	.37	-.20	-.06	.06	.01	.71
45	I have a strong desire to learn new things	.71	.25	.13	.19	.02	.06	.15	-.14	-.03	.07	.69
46	The more I learn, the more exciting the world becomes	.72	.04	.13	-.09	.09	.09	-.11	.08	.05	.00	.59
47	Learning is fun	.68	00	-.03	00	.27	.02	.18	.05	.18	.09	.62
48	It's better to stick with the learning methods that we know will work instead of always trying new ones	-.08	-.06	.18	.05	-.14	0.7	.04	-.03	-.78	.22	.74
49	I want to learn more so that I can keep growing as a person	.56	.03	-.10	-.05	.22	.39	.04	.19	.04	.20	.62
50	I am responsible for my learning - no one else is	-.02	-.03	.03	.83	.01	.17	.01	.04	.05	.12	.75
51	Learning how to learn is important to me	.52	.10	-.26	.18	-.26	.34	.27	-.13	.06	.03	.67

		ROTATED COMPONENT										
No	ITEM	I	II	III	IV	V	VI	VII	VIII	IX	X	Commun-ality
52	I will never be too old to learn new things	.44	.07	.17	.21	.06	.04	.15	-.29	.22	.21	.50
55	I learn several new things on my own each year	.26	.14	.25	.07	-.06	.05	.06	-.18	.53	.18	.52
57	I am an effective learner in the classroom and on my own	.08	.02	.04	.10	.13	.18	.70	.18	-.09	.10	.62

S-SDLRS scores

Specimen trainee scores



TRAINEE VERSION - LIGPI(T)

Date.....

Age.....

Sex.....M / F
(please circle)

QUESTIONNAIRE

Instructions.

This is a questionnaire designed to gather data on learning in general practice. Please read each item carefully and then respond by placing a circle around the number that best expresses your feeling about the item. There is no time limit to the questionnaire but try not to spend too much time on each item - your first response is often the best. This questionnaire is confidential.

Scale: 5 = strongly agree; 4 = agree; 3 = neither agree nor disagree; 2 = disagree; 1 = strongly disagree

	Item	Responses				
1.	Being able to discuss problems in my work as a doctor with others is an important part of my own development.	1	2	3	4	5
2.	I find it easy to discuss the problems I have as a doctor.	1	2	3	4	5
3.	I find I am thinking about my work and the problems I encounter most of the time.	1	2	3	4	5
4.	When I'm learning something I prefer to be told exactly what to do and when.	1	2	3	4	5
5.	When I'm working in the practice I usually feel very much part of the team.	1	2	3	4	5
6.	I look on my work as a doctor as a means to an end rather than as a 'vocation'.	1	2	3	4	5
7.	I find it difficult to balance the demands of my work as a GP with the demands of my family.	1	2	3	4	5
8.	I prefer learning on my own to working in groups.	1	2	3	4	5
9.	Talking to other doctors about how I look after patients makes me feel uncomfortable.	1	2	3	4	5

Scale: 5 = strongly agree; 4 = agree; 3 = neither agree nor disagree; 2 = disagree; 1 = strongly disagree

10.	The idea of being a fully established principal in general practice makes me feel nervous.	1	2	3	4	5
11.	I often find myself reading medical articles just for interest.	1	2	3	4	5
12.	The feeling of isolation I experience in general practice sometimes makes me depressed.	1	2	3	4	5
13.	Listening to the way other doctors work is a great way of learning for me.	1	2	3	4	5
14.	I usually quite readily admit when I don't know something.	1	2	3	4	5
15.	I find it easy to talk with patients	1	2	3	4	5
16.	I sometimes feel that I am on an educational conveyor belt that I can't wait to get off.	1	2	3	4	5
17.	I find the learning I am doing now is quite a strain.	1	2	3	4	5
18.	I enjoy working for exams.	1	2	3	4	5
19.	Learning in general practice has made me more confident as a person.	1	2	3	4	5
20.	I don't find myself referring to books very often anymore.	1	2	3	4	5
21.	Being my own boss is what attracted me to a career in general practice.	1	2	3	4	5
22.	Taking more responsibilty for what I do makes me feel more responsible.	1	2	3	4	5
23.	Role models play a very important part in my own development.	1	2	3	4	5
24.	I'm good at knowing when I need to find out more about something.	1	2	3	4	5
25.	Since I left medical school my learning seems to have lost its sense of direction.	1	2	3	4	5
26.	I find I learn better when I have a definite target to aim for.	1	2	3	4	5
27.	I feel comfortable expressing my feelings in group work.	1	2	3	4	5
28.	Learning is more interesting when I can relate what I am learning to a personal level.	1	2	3	4	5

Scale: 5 = strongly agree; 4 = agree; 3 = neither agree nor disagree; 2 = disagree; 1 = strongly disagree

29.	Thinking about the problems I face in managing patients is a good way for me to learn.	1	2	3	4	5
30.	I think it's important to share difficult experiences with other people.	1	2	3	4	5
31.	A good trainee is someone who is prepared to explore issues that arise in consultations.	1	2	3	4	5
32.	Talking about the problems I see in practice helps to reduce the stress they cause in me.	1	2	3	4	5
33.	Self-awareness is an important characteristic in a trainee.	1	2	3	4	5
34.	Trainees are vulnerable.	1	2	3	4	5
35.	General practice is all about the relationship between two people - the doctor and the patient.	1	2	3	4	5
36.	When it comes to reading journals, I'm not very disciplined.	1	2	3	4	5
37.	I find being 'the trainee' in the practice very frustrating.	1	2	3	4	5
38.	I'm glad that exams are over now that I'm in general practice.	1	2	3	4	5
39.	I would usually recognise when I don't know something about a particular field of practice.	1	2	3	4	5
40.	I find getting personal feedback about how I am doing as a doctor very threatening.	1	2	3	4	5
41.	I mostly learn by trial and error these days.	1	2	3	4	5
42.	I find the unstructured atmosphere of learning in general practice difficult to cope with.	1	2	3	4	5
43.	I'm good at taking responsibility for decisions about a patients management.	1	2	3	4	5
44.	I feel comfortable when left to learn on my own.	1	2	3	4	5
45.	Teachers in general practice should give more direction about what and how to learn.	1	2	3	4	5

Scale: 5 = strongly agree; 4 = agree; 3 = neither agree nor disagree; 2 = disagree; 1 = strongly disagree

46.	I don't get on very well with people in general.	1	2	3	4	5
47.	Patients usually seem to find it easy to relate to me as a person.	1	2	3	4	5
48.	As a trainee I feel rather detached from the day to day activity of the practice.	1	2	3	4	5
49.	I find I often give myself feedback about how I am doing.	1	2	3	4	5
50.	I find discussing how I manage cases embarassing.	1	2	3	4	5
51.	It is important to develop a sense of self-criticism as a doctor.	1	2	3	4	5
52.	It is easier to want to learn something than it is to actually learn it.	1	2	3	4	5
53.	I prefer to have a clear set of guidelines to follow when I'm working.	1	2	3	4	5
54.	As a trainee it is up to me how much I learn.	1	2	3	4	5
55.	I think general practice is a very stressful job.	1	2	3	4	5
56.	When I learn something new I like to spend some time thinking about it before putting it into action.	1	2	3	4	5
57.	In general, the way I learn new things in medicine hasn't changed much since I was a student.	1	2	3	4	5
58.	I find I use rote-learning less and less now when I'm learning something.	1	2	3	4	5
59.	I believe that effective medical treatment depends on a partnership in which the patient plays an active part.	1	2	3	4	5
60.	When I look back sometimes I wonder why I ever became a GP.	1	2	3	4	5
61.	My main reason for attending refresher courses or meetings is to improve the way I manage patients.	1	2	3	4	5
62.	I enjoy competition; I find it stimulating.	1	2	3	4	5

Scale: 5 = strongly agree; 4 = agree; 3 = neither agree nor disagree; 2 = disagree; 1 = strongly disagree

63.	When I attend a course or meeting I suppose I'm more interested in the people I meet than the meeting itself.	1	2	3	4	5
64.	I'm not as interested in learning as some other doctors seem to be.	1	2	3	4	5
65.	When it come to keeping up to date, I find it very difficult to know what I really need to learn.	1	2	3	4	5
66.	I don't learn very well on my own.	1	2	3	4	5
67.	I never seem to find the time to think about what I am learning.	1	2	3	4	5
68.	I am better than most doctors at finding out what I need to learn.	1	2	3	4	5
69.	I find it difficult to relate what I learn to the way I manage my patients.	1	2	3	4	5
70.	I learn more effectively at lectures than on my own.	1	2	3	4	5
71.	Thinking about the patients I see and how I manage them is a good way for me to learn.	1	2	3	4	5
72.	Working in groups or teams is the best way to learn.	1	2	3	4	5
73.	As far as I'm concerned constant learning finished once I became a GP.	1	2	3	4	5
74.	Relating what I learn to the patients I see is a good way of learning for me.	1	2	3	4	5
75.	I learn much more in groups than on my own.	1	2	3	4	5
76.	One-to-one teaching can be quite intimidating.	1	2	3	4	5

APPENDIX 9

Learning in General Practice Inventory: trainee version (LIGPITr)

Overall frequencies for each item.

	Item	Response (percent)					
		Disagree			Agree		
		1	2	3	4	5	MV
1.	Being able to discuss problems in my work as a doctor with others is an important part of my own development	1.9	1.2	1.2	27.3	68.5	1
2.	I find it easy to discuss the problems I have as a doctor	.4	14.7	22.8	50.6	11.6	2
3.	I find I am thinking about my work and the problems I encounter most of the time	4.6	37.3	23.8	29.2	5.0	1
4.	When I'm learning something I prefer to be told exactly what to do and when	4.6	38.3	29.5	21.2	6.5	0
5.	When I'm working in the practice I usually feel very much part of the team	3.1	11.5	22.6	45.6	16.5	2
6.	I look on my work as a doctor as a means to an end rather than as a 'vocation'	1.5	35.8	22.7	21.2	5.4	1
7.	I find it difficult to balance the demands of my work as a GP with the demands of my family	5.1	33.6	21.9	27.3	12.1	5
8.	I prefer learning on my own to working in groups	7.3	42.1	32.2	15.3	3.1	0
9.	Talking to other doctors about how I look after patients makes me feel uncomfortable.	23.4	47.1	14.9	13.0	1.5	0
10.	The idea of being a fully established principal in general practice makes me feel nervous	15.0	29.6	13.5	37.7	4.2	1
11.	I often find myself reading medical articles just for interest	1.2	20.0	30.8	41.9	6.2	1

12.	The feeling of isolation I experience in general practice sometimes makes me depressed	12.8	39.5	18.6	23.3	5.8	3
13.	Listening to the way other doctors work is a great way of learning for me	.8	4.6	11.9	57.3	25.4	1
14.	I usually quite readily admit when I don't know something	.4	10.8	11.9	58.5	18.5	1
15.	I find it easy to talk with patients	.8	3.5	6.5	59.6	29.6	1
16.	I sometimes feel that I am on educational conveyor belt that I can't wait to get off	14.2	37.3	22.3	20.4	5.8	1 an
17.	I find the learning I am doing now is quite a strain	3.8	41.2	24.6	28.5	1.9	1
18.	I enjoy working for exams	27.3	32.3	25.8	13.5	1.2	1
19.	Learning in general practice has made more confident as a person	2.3	10.0	32.3	45.4	10.0	1
20.	I don't find myself referring to books very often anymore	13.9	49.4	17.4	16.6	2.7	2
21.	Being my own boss is what attracted me to a career in general practice	3.5	26.9	21.9	35.0	12.7	1
22.	Taking more responsibility for what I do makes me feel more responsible	.8	5.0	17.7	62.7	13.8	1
23.	Role models play a very important part in my own development	3.5	17.8	37.8	35.5	5.4	2
24.	I'm good at knowing when I need to find out more about something	0.0	6.5	23.5	61.5	8.5	1
25.	Since I left medical school my learning seems to have lost its sense of direction	11.2	44.6	20.0	20.4	3.8	1
26.	I find I learn better when I have a definite target to aim for	.8	8.1	14.6	58.1	18.5	1
27.	I feel comfortable expressing my feelings in group work	3.8	18.8	25.8	45.4	6.2	1
28.	Learning is more interesting when I can relate what I am learning to a personal level	0.0	3.8	11.2	59.6	25.4	1

29.	Thinking about the problems I face in managing patients is a good way for me to learn	.4	4.2	6.1	62.8	26.4	0
30.	I think it's important to share difficult experiences with other people	.8	5.0	3.4	54.8	36.0	0
31.	A good trainee is someone who is prepared to explore issues that arise in consultations	.4	4.2	6.5	59.0	29.9	0
32.	Talking about the problems I see in practice helps to reduce the stress they cause in me	1.5	6.1	7.7	54.4	30.3	0
33.	Self-awareness is an important characteristic in a trainee	1.1	3.8	13.4	53.4	28.4	0
34.	Trainees are vulnerable.	2.7	7.3	12.3	45.6	32.3	0
35.	General practice is all about the relationship between two people - the doctor and the patient	3.1	27.2	30.7	30.3	8.8	0
36.	When it comes to reading journals I'm not very disciplined	3.8	17.6	12.3	47.1	19.2	0
37.	I find being 'the trainee' in the practice very frustrating	10.5	41.0	25.0	17.6	5.9	0
38.	I'm glad that exams are over now that I'm in general practice	9.7	22.2	41.2	18.3	8.6	4
39.	I would usually recognise when I don't know something about a particular field of practice	.4	9.6	5.7	70.9	13.4	0
40.	I find getting personal feedback about how I am doing as a doctor very threatening	13.9	44.0	23.9	17.0	1.2	2
41.	I mostly learn by trial and error these days	8.4	41.0	34.1	16.1	.4	0
42.	I find the unstructured atmosphere of learning in general practice difficult to cope with	8.1	43.5	25.0	21.9	1.5	1
43.	I'm good at taking responsibility for decisions about a patient's management	.8	6.9	31.4	53.3	7.7	0
44.	I feel comfortable when left to learn on my own	1.1	15.7	27.6	51.0	4.6	0
45.	Teachers in general practice	2.7	20.3	31.8	37.9	7.3	0

	should give more direction about what and how to learn						
46.	I don't get on very well with people in general	46.0	41.8	3.8	5.0	3.4	0
47.	Patients usually seem to find it easy to relate to me as a person	1.9	6.5	15.3	66.7	9.6	0
48.	As a trainee I feel rather detached from the day to day activity of the practice	11.7	42.6	20.7	21.9	3.1	5
49.	I find I often give myself feedback about how I am doing	1.2	21.5	36.2	38.8	2.3	1
50.	I find discussing how I manage cases embarrassing	11.5	58.1	15.0	13.5	1.0	1
51.	It is important to develop a sense of self-criticism as a doctor	.4	5.4	9.2	62.5	22.6	0
52.	It is easier to want to learn something than it is to actually learn it	1.1	7.7	11.5	51.0	28.7	0
53.	I prefer to have a clear set of guidelines to follow when I'm working	.8	15.7	28.0	49.4	6.1	0
54.	As a trainee it is up to me how much I learn	.4	12.0	13.1	59.1	15.4	2
55.	I think general practice is a very stressful job	1.9	14.6	24.2	38.1	21.2	1
56.	When I learn something new I like to spend some time thinking about it before putting it into action	1.2	25.4	26.9	42.7	3.8	1
57.	In general, the way I learn new things in medicine hasn't changed much since I was a student	15.3	50.6	11.5	19.3	3.4	0
58.	I find I use rote-learning less and less now when I'm learning something	1.2	7.4	16.7	57.4	17.4	3
59.	I believe that effective medical treatment depends on a partnership in which the patient plays an active part	1.5	3.8	4.2	53.1	37.3	1
60.	When I look back sometimes I wonder why I ever became a GP	20.8	33.5	16.5	19.6	9.6	1
61.	My main reason for attending refresher courses or meetings	1.6	6.6	13.2	61.6	17.1	3

	is to improve the way I manage patients						
62.	I enjoy competition; I find it stimulating	5.0	26.3	31.7	34.0	3.1	2
63.	When I attend a course or meeting I suppose I'm more interested in the people I meet than the meeting itself	2.3	41.7	37.5	16.6	1.9	2
64.	I'm not as interested in learning as some other doctors seem to be.	3.5	31.3	29.7	30.9	4.6	2
65.	When it comes to keeping up to date, I find it very difficult to know what I really need to learn.	.8	27.4	28.2	37.1	6.6	2
66.	I don't learn very well on my own.	6.2	52.5	23.2	17.0	1.2	2
67.	I never seem to find the time to think about what I am learning	1.2	32.3	33.1	29.2	4.3	4
68.	I am better than most doctors at finding out what I need to learn	1.5	27.4	61.8	8.9	.4	2
69.	I find it difficult to relate what I learn to the way I manage my patients	6.6	59.8	24.7	8.9	0.0	2
70.	I learn more effectively at lectures than on my own	5.4	33.2	33.6	25.5	2.3	2
71.	Thinking about the patients I see and how I manage them is a good way for me to learn	0.0	7.0	8.5	66.7	17.8	3
72.	Working in groups or teams is the best way to learn	.8	15.8	39.8	35.5	8.1	2
73.	As far as I'm concerned constant learning finished once I became a GP.	48.6	37.7	5.8	4.3	3.5	4
74.	Relating what I learn to the patients I see is a good way of learning for me	.8	6.2	12.0	64.9	16.2	2
75.	I learn much more in groups than on my own	1.9	25.2	43.0	24.4	5.4	3
76.	One-to-one teaching can be quite intimidating.	9.3	34.0	17.8	33.6	5.4	2

APPENDIX 10

LIGPI(Tr): Factor analysis by sex: Males

Factor	eigen	pct	cum pct
1	12.952	17	17.0
2	5.0993	6.7	23.8
3	3.369	4.4	28.2
4	3.1070	4.1	32.3
5	2.8216	3.7	36.0
6	2.5848	3.4	39.4

KMO = .629
Bartletts test for sphericity = 4913.966, p = .000

Factor structure, simple rotation. Varimax failed to converge in 25 iterations

Item	Factor					
	1	2	3	4	5	6
1	.70					
2	.61					
7		.54				
9						.41
12		.47				
13	.49					
15	.62					
16		.57				
17		.45				
18			-.48			
22	.50					
24					.48	
25		.40				
27	.40					
28	.55					
29	.65					
30	.63					
31	.70					
32	.70					
36				-.40		
39	.52					
40	-.50					
46	-.63					
47	.62					
51	.61					
55		.48				
56						.43
59	.70					
64			.47			
66			.51			
67		.56				
68			-.41			
71	.64					
72				.45		

Appendix 11. LIGPI(Tr)

Factor analysis by sex: Females

Factor	eigenvalue	pct	cum pct
1	11.419	15.0	15.0
2	6.987	9.2	24.2
3	3.7532	4.9	29.2
4	2.9208	3.8	33.0
5	2.81165	3.7	36.7
6	2.6296	3.5	40.2

Varimax structure

Item	Factor					
	1	2	3	4	5	6
4				.62		
5		-.61				
6			.53			
9	-.44					
12		.56				
13			.66			
18					.54	
19			.55			
20			-.47			
22			.44			
24	.41					
27						.43
30	.69					
31	.63					
32	.70					
33	.81					
34	.59					
36	.41					
37		.60				
39	.64					
41		.54				
42		.44				
43	.44					
44						-.46
45				.66		
46	-.55					
47	.59					
48		.64				
49					.44	
51	.66					
52				.45		
53				.65		
54	.41					
55	.45					
58	.61					
59	.60					
62					.67	
63		.43				

65			-.56	
66				.65
68			.66	
71	.53			
72				.65
74	.57			
75				.74
76		.49		

Appendix 12. LIGPI(GP) QUESTIONNAIRE

Instructions.

This is a questionnaire designed to gather data on learning in general practice. Please read each item carefully and then respond by placing a circle around the number that best expresses your feeling about the item. There is no time limit to the questionnaire but try not to spend too much time on each item - your first response is often the best. This questionnaire is CONFIDENTIAL **but we would be grateful for details of your age, sex and professional status.**

Please complete this section:

AGE . . . . . [ ] years

SEX . . . . . M [ ]
. . . . . F [ ]
(Please tick)

Years in practice . . . . . [ ]

Number of partners. . . . . [ ]

Are you a full-time or part-time GP?

. . . . . F / T
(Please circle)

Are you a Member or Fellow of the RCGP? . . . . . Y / N
(Please circle)

University of qualification:

.....

Type of practice: (please tick)

Urban . . . . . [ ]

Rural . . . . . [ ]

Semi-rural . . . . . [ ]

Inner city . . . . . [ ]

Postgraduate qualifications: (please tick)

MRCGP . . . . . [ ]

MRCP . . . . . [ ]

FRCS . . . . . [ ]

DCH . . . . . [ ]

DRCOG . . . . . [ ]

DCCH . . . . . [ ]

MD . . . . . [ ]

PhD . . . . . [ ]

MSc/MA . . . . . [ ]

Other . . . . . [ ]

Are you a

Trainer / Course organiser? [ ]
Undergraduate teacher? . [ ]
GP tutor? . . . . . [ ]

Thank you. Please now turn the page and complete the questionnaire.☺

QUESTIONNAIRE.

Scale:
1 = strongly disagree; 2 = disagree; 3 = neither agree nor disagree; 4 = agree; 5 = strongly agree

	Item	Responses				
		Disagree				Agree
1.	Being able to discuss problems in my work as a doctor with others is an important part of my own development.	1	2	3	4	5
2.	Being my own boss is what attracted me to a career in general practice.	1	2	3	4	5
3.	I find I am thinking about my work and the problems I encounter most of the time.	1	2	3	4	5
4.	When I'm learning something I prefer to be told exactly what to do and when.	1	2	3	4	5
5.	When I'm working in the practice I usually feel very much part of the team.	1	2	3	4	5
6.	I look on my work as a doctor as a means to an end rather than as a 'vocation'.	1	2	3	4	5
7.	I prefer learning on my own to working in groups.	1	2	3	4	5
8.	Talking to other doctors about how I look after patients makes me feel uncomfortable.	1	2	3	4	5
9.	I usually quite readily admit when I don't know something.	1	2	3	4	5
10.	I find it easy to talk with patients	1	2	3	4	5
11.	I sometimes feel that I am on an educational conveyor belt that I can't wait to get off.	1	2	3	4	5
12.	I find the learning I am doing now is quite a strain.	1	2	3	4	5
13.	I find it easy to discuss the problems I have as a doctor.	1	2	3	4	5

14.	I enjoy working for exams.	1	2	3	4	5

Scale:
1 = strongly disagree; 2 = disagree; 3 = neither agree nor disagree; 4 = agree; 5 = strongly agree

		Disagree			Agree	
15.	Learning in general practice has made me more confident as a person.	1	2	3	4	5
16.	I believe that effective medical treatment depends on a partnership in which the patient plays an active part.	1	2	3	4	5
17.	Since I left medical school my learning seems to have lost its sense of direction.	1	2	3	4	5
18.	I find I learn better when I have a definite target to aim for.	1	2	3	4	5
19.	I feel comfortable expressing my feelings in group work.	1	2	3	4	5
20.	Learning is more interesting when I can relate what I am learning to a personal level.	1	2	3	4	5
21.	Thinking about the problems I face in managing patients is a good way for me to learn.	1	2	3	4	5
22.	I sometimes feel isolated and alone in practice.	1	2	3	4	5
23.	I think it's important to share difficult experiences with other people.	1	2	3	4	5
24.	A good doctor is someone who is prepared to explore issues that arise in consultations.	1	2	3	4	5
25.	Talking about the problems I see in practice helps to reduce the stress they cause in me.	1	2	3	4	5
26.	Self-awareness is an important characteristic in a GP.	1	2	3	4	5
27.	General practice is all about the relationship between two people - the doctor and the patient.	1	2	3	4	5
28.	When it comes to reading journals, I'm not very disciplined.	1	2	3	4	5
29.	I'm glad that exams are over now that I'm in general practice.	1	2	3	4	5
30.	I would usually recognise when I don't					

	know something about a particular field of practice.	1	2	3	4	5

Scale:
1 = strongly disagree; 2 = disagree; 3 = neither agree nor disagree; 4 = agree; 5 = strongly agree

		Disagree			Agree	
31.	I mostly learn by trial and error these days.	1	2	3	4	5
32.	I'm good at taking responsibility for decisions about a patients management.	1	2	3	4	5
33.	I feel comfortable when left to learn on my own.	1	2	3	4	5
34.	Teachers/tutors in general practice should give more direction about what and how to learn.	1	2	3	4	5
35.	Patients usually seem to find it easy to relate to me as a person.	1	2	3	4	5
36.	I find I often give myself feedback about how I am doing.	1	2	3	4	5
37.	I find discussing how I manage cases embarrassing.	1	2	3	4	5
38.	It is important to develop a sense of self-criticism as a doctor.	1	2	3	4	5
39.	I prefer to have a clear set of guidelines to follow when I'm working.	1	2	3	4	5
40.	As a GP it is up to me how much I learn.	1	2	3	4	5
41.	I think general practice is a very stressful job.	1	2	3	4	5
42.	When I learn something new I like to spend some time thinking about it before putting it into action.	1	2	3	4	5
43.	In general, the way I learn new things in medicine hasn't changed much since I was a student.	1	2	3	4	5
44.	I'm good at knowing when I need to find out more about something.	1	2	3	4	5
45.	When I look back sometimes I wonder why I ever became a GP.	1	2	3	4	5
46.	I enjoy competition; I find it stimulating.	1	2	3	4	5
47.	When it comes to keeping up to date, I find it very difficult to know what I really need to learn.	1	2	3	4	5

Scale:
1 = strongly disagree; 2 = disagree; 3 = neither agree nor disagree; 4 = agree; 5 = strongly agree

		Disagree				Agree
48.	I don't learn very well on my own.	1	2	3	4	5
49.	I never seem to find the time to think about what I am learning.	1	2	3	4	5
50.	I am better than most doctors at finding out what I need to learn.	1	2	3	4	5
51.	Thinking about the patients I see and how I manage them is a good way for me to learn.	1	2	3	4	5
52.	I find getting personal feedback about how I am doing as a doctor very threatening.	1	2	3	4	5
53.	Working in groups or teams is the best way to learn.	1	2	3	4	5
54.	As far as I'm concerned constant learning finished once I became a GP.	1	2	3	4	5
55.	I learn much more in groups than on my own.	1	2	3	4	5

Thank you

22.	Taking more responsibility for what I do makes me feel more responsible.	1	2	3	4	5
23.	Role models play a very important part in my own development.	1	2	3	4	5
42.	I find the unstructured atmosphere of learning in general practice difficult to cope with.	1	2	3	4	5
46.	I don't get on very well with people in general.	1	2	3	4	5
48.	As a trainee I feel rather detached from the day to day activity of the practice.	1	2	3	4	5
52.	It is easier to want to learn something than it is to actually learn it.	1	2	3	4	5
58.	I find I use rote-learning less and less now when I'm learning something.	1	2	3	4	5
61.	My main reason for attending refresher courses or meetings is to improve the way I manage patients.	1	2	3	4	5
63.	When I attend a course or meeting I suppose I'm more interested in the people I meet than the meeting itself.	1	2	3	4	5
64.	I'm not as interested in learning as some other doctors seem to be.	1	2	3	4	5
69.	I find it difficult to relate what I learn to the way I manage my patients.	1	2	3	4	5
70.	I learn more effectively at lectures than on my own.	1	2	3	4	5
74.	Relating what I learn to the patients I see is a good way of learning for me.	1	2	3	4	5
76.	One-to-one teaching can be quite intimidating.	1	2	3	4	5

Thank you

University of Liverpool, 1993

Appendix 13. Items excluded from LIGPI(GP)

22. Taking more responsibility for what I do makes me feel more responsible.

23. Role models play a very important part in my own development.

42. I find the unstructured atmosphere of learning in general practice difficult to cope with.

46. I don't get on very well with people in general.

48. As a trainee, I feel rather detached from the day to day activity of the practice.

52. It is easier to want to learn something than it is to actually learn it.

58. I find I use rote-learning less and less now when I'm learning something.

61. My main reason for attending refresher courses or meetings is to improve the way I manage patients.

63. When I attend a course or meeting I suppose I'm more interested in the people I meet than in the meeting itself.

64. I'm not as interested in learning as some other doctors seem to be.

69. I find it difficult to relate what I learn to the way I manage patients.

70. I learn more effectively at lectures than on my own.

74. Relating what I learn to the patients I see is a good way of learning for me.

76. One-to-one teaching can be quite intimidating.

Appendix 14. LIGPI(GP) Six factor solution: varimax rotation

	Factor					
Item	1	2	3	4	5	6
1	.43					
3					.46	
4						.57
7				.54		
8		.62				
10				.41		
12					.42	
13		-.41				
14			-.64			
19		-.45				
20	.47					
21	.55					
22					.62	
23	.63					
24	.64					
25	.60					
26	.55					
28			.57			
29			.66			
32				.40		
33				.56		
34						.61
36			-.43			
37		.72				
38	.42					
39						.58
41					.63	
44				.44		
45					.63	
46			-.47			
48				-.48		
49			.40			
50			-.51			
51	.49					
52		.63				
53				-.64		
55				-.66		

Appendix 15. LIGPI(GP) Nine factor solution

	Factor								
Item	1	2	3	4	5	6	7	8	9
1	.54								
3									
4									.81
5						.67			
7			-.69					-.51	
8				.62					
9				-.50					
10					.74				
11									
12									.45
13									.42
14		-.73						-.52	
16	.45								
19			.40						
20									
21							.41		
22							.71		
23	.72							.73	
24	.55								
25	.74								
28		.57							
33			-.42						
34						.68			
35					.68				
37				.76					
38							.45		
39						.71			
40									.61
46		-.47							
48			.50						
49		.40							
50		-.47							
51							.71		
52				.69					
53			.80						
55			.84						

Appendix 16

LIGPI(GP)

Male factor analysis: varimax rotation.

Item	Factor					
	1	2	3	4	5	6
1	.50					
3			.43			
4						.63
5			-.50			
7				.64		
13			-.42			
14		-.62				
16	.46					
18					-.57	
19				-.42		
20	.52					
21	.50					
22			.69			
23	.66					
24	.62					
25	.59					
26	.65					
28		.62				
29		.64				
30					.58	
33				.54		
34						.61
35					.44	
37					-.55	
38	.44					
39						.50
40						.40
41			.61			
42						.45
44					.52	
45			.63			
46		-.46				
48				-.47		
49		.46				
50		-.52				
52				-.68		
55				-.71		

Appendix 17.

LIGPI(GP) Female factor table: varimax rotation.

Item	Factor					
	1	2	3	4	5	6
2				.43		
5				.57		
7	-.51					
9		.45				
10		.60				
11					.61	
14				.44		
17	.41					
18				.53		
20						.50
21						.52
22					.42	
23		.45				
24		.68				
25		.57				
26		.40				
27				.40		
28	.55					
29				-.41		
33	-.58					
34						-.56
35		.62				
36				.46		
37			.71			
38		.55				
39				.57		
41					.67	
42			.41			
43						-.49
44		.44				
45					.63	
46				.55		
47			.57			
48	.69					
49	.41					
50	-.43					
51						.52
52			.77			
53	.67					
55	.78					

APPENDIX 18.

LIGPI(GP): Item frequencies, means and ranges.

		mean	sd	dis	agr
1.	Being able to discuss problems in my work as a doctor with others is an important part of my own development.	4.2	.78	1.7	87.7
2.	Being my own boss is what attracted me to a career in general practice.	3.6	2.27	17.1	65.8
3.	I find I am thinking about my work and the problems I encounter most of the time.	3.2	1.09	29.3	45.6
4.	When I'm learning something I prefer to be told exactly what to do and when.	2.5	.98	52.2	19.5
5.	When I'm working in the practice I usually feel very much part of the team.	3.6	.92	13.0	62.2
6.	I look on my work as a doctor as a means to an end rather than as a 'vocation'.	2.5	1.1	56.5	21.2
7.	I prefer learning on my own to working in groups.	2.7	1.02	45.2	23.8
8.	Talking to other doctors about how I look after patients makes me feel uncomfortable.	2.0	.91	75.2	8.2
9.	I usually quite readily admit when I don't know something.	4.0	.76	5.7	87.0
10.	I find it easy to talk with patients	4.3	.65	.7	93.7
11.	I sometimes feel that I am on an educational conveyor belt that I can't wait to get off.	2.2	1.0	63.2	13.0
12.	I find the learning I am doing now is quite a strain.	2.5	1.02	55.1	19.5
13.	I find it easy to discuss the problems I have as a doctor.	3.3	.98	20.4	51.0
14.	I enjoy working for exams.	2.1	1.1	58.0	15.1
15.	Learning in general practice has made me more confident as a person.	3.4	.88	13.2	57.5
16.	I believe that effective medical treatment depends on a partnership in which the patient plays an active part.	4.1	.67	1.9	88.2
17.	Since I left medical school my learning seems to have lost its sense of direction.	2.3	.94	63.7	12.0
18.	I find I learn better when I have a definite target to aim for.	3.6	2.1	16.8	63.2
19.	I feel comfortable expressing my feelings in group work.	3.3	1.04	25.0	48.3
20.	Learning is more interesting when I can relate what I am learning to a personal level.	3.9	.67	3.4	81.9
21.	Thinking about the problems I face in managing				

	patients is a good way for me to learn.	4.0	.65	15.6	83.3
22.	I sometimes feel isolated and alone in practice.	3.0	1.1	38.0	41.1
23.	I think it's important to share difficult experiences with other people.	4.2	.64	1.9	90.1
24.	A good doctor is someone who is prepared to explore issues that arise in consultations.	4.1	.65	.4	85.8
25.	Talking about the problems I see in practice helps to reduce the stress they cause in me.	3.9	.84	8.2	76.9
26.	Self-awareness is an important characteristic in a GP.	4.1	.65	.7	87.0
27.	General practice is all about the relationship between two people - the doctor and the patient.	3.7	.88	10.1	69.5
28.	When it comes to reading journals, I'm not very disciplined.	3.5	1.1	21.7	58.7
29.	I'm glad that exams are over now that I'm in general practice.	3.7	.97	10.3	62.8
30.	I would usually recognise when I don't know something about a particular field of practice.	4.1	2.0	2.6	87.0
31.	I mostly learn by trial and error these days.	2.2	.81	68.0	8.5
32.	I'm good at taking responsibility for decisions about a patients management.	3.8	.68	4.1	74.7
33.	I feel comfortable when left to learn on my own.	3.5	.85	12.0	56.5
34.	Teachers/tutors in general practice should give more direction about what and how to learn.	2.9	.85	28.4	24.1
35.	Patients usually seem to find it easy to relate to me as a person.	4.0	.59	.7	85.8
36.	I find I often give myself feedback about how I am doing.	3.1	.85	21.7	33.9
37.	I find discussing how I manage cases embarrassing.	2.1	.83	72.4	8.9
38.	It is important to develop a sense of self-criticism as a doctor.	4.0	.64	2.4	87.0
39.	I prefer to have a clear set of guidelines to follow when I'm working.	3.2	.86	19.7	47.1
40.	As a GP it is up to me how much I learn.	3.4	.95	19.5	55.0
41.	I think general practice is a very stressful job.	4.2	.90	6.0	82.0
42.	When I learn something new I like to spend some				

	time thinking about it before putting it into action.	3.7	.87	13.7	57.0
43.	In general, the way I learn new things in medicine hasn't changed much since I was a student.	2.3	.90	67.1	15.4
44.	I'm good at knowing when I need to find out more about something.	3.5	.74	6.8	56.0
45.	When I look back sometimes I wonder why I ever became a GP.	2.6	1.3	54.8	29.6
46.	I enjoy competition; I find it stimulating.	3.0	1.0	32.7	35.9
47.	When it comes to keeping up to date, I find it very difficult to know what I really need to learn.	2.7	.93	45.4	24.5
48.	I don't learn very well on my own.	2.5	.89	58.4	17.3
49.	I never seem to find the time to think about what I am learning.	3.0	.94	33.4	33.9
50.	I am better than most doctors at finding out what I need to learn.	2.8	.64	24.7	1.4
51.	Thinking about the patients I see and how I manage them is a good way for me to learn.	3.8	.66	4.5	77.7
52.	I find getting personal feedback about how I am doing as a doctor very threatening.	2.4	.91	60.6	15.6
53.	Working in groups or teams is the best way to learn.	3.2	.87	18.2	44.0
54.	As far as I'm concerned constant learning finished once I became a GP.	1.5	.73	92.3	2.4
55.	I learn much more in groups than on my own.	3.0	.5	28.1	35.1

Glossary

Systems for categorising students:

Syllabus-bound & syllabus-free

Hudson (1970) divided students into two groups according to the way in which they approached their course work.

Syllabus-bound students preferred clear instructions, deadlines and defined courses; they restricted their learning to a defined syllabus and to specific tasks and read very little beyond what was required to complete assignments. Their primary interest was in passing the course rather than the subject matter and tended to criticise courses with little guidance.

Syllabus-free students wanted more autonomy and often had prior experience of the subject. They wanted to follow up aspects of the course that interested them beyond the defined syllabus. They were critical of courses that restricted their freedom and were more at-risk of failure than the syllabus-b ound group.

Cue-seekers, cue-blind etc

Miller & Parlett (1974) identified three broad types of student attitude towards assessment and exams. Those who actively sought out lecturers, made a good impression and tried to discover what was required were called 'cue-seekers'. Others, who believed that cues were very important, that impressions counted and that cues should be looked out for, but who didn't actively approach staff were called 'cue-conscious'. A third group saw exams as an objective assessment and believed that revising everything was the best way to pass. They felt that classroom impressions counted for little and were called 'cue-deaf'. In the Miller study, this group made up almost half the class.

Learning style :

a learner's way of accomplishing a learning task (Pask, 1976). It is a stable characteristic of an individual and represents a consistent preference for certain strategies and processes of learning.

Operation learning style:

Operation learners use a process which relies on a logical step-by-step approach with a cautious acceptance of generalizations only when based on evidence. They tend to emphasise factual and procedural detail and tend to rote-learning, especially when under pressure. The style is more common amongst science students. The operation style is linked to the use of a serialist learning strategy.

Comprehension style.

Learners using a comprehension style are usually linked with a holist strategy and are initially concerned with the outlines of ideas and thie interconnections with other ideas and previous knowledge. They attempt to give material personal meaning and make use of analogy. The approach is more common amongst arts students.

Formal teaching methods, limited choice of topics, clearly set out goals for learning and vocational relevance are associated with operation learning. Informal teaching methods and diffuse goals are associated with a comprehension style.

The 'Versatile' learning style.

In higher education, a further style associated with the ability to adapt both the comprehension and operation styles interchangeably or to use whichever is appropriate to the learning task has been suggested. This is particularly useful where students are required to take a wide perspective and build up interrelationships between parts of material under study but must also examine facts, arguments and processes in sufficient detail to support their overview.

Learning strategy:

a learning strategy is the actual behaviour adopted to achieve a learning task or to improve learning eg active rehearsal, paraphrasing, imaging, elaborating, outlining etc

Serialist and Holist strategies:

Serialist learners look closely at details and the steps in an argument. They make little use of analogy or illustration as strategies and have been compared to 'sophisticated' surface learners.

Holist learners begin with a broad focus and then try to see the task globally and to relate it to previous knowledge. Thye tend to use analogy, illustration and other explanatory devices to improve their understanding. They look for connections between ideas.

Learning pathology.

Pask suggested that some students were unable to achieve or maintain this ideal versatile style because of too strong a reliance on either the operation or comprehension styles. Such students were then prone to a 'learning pathology' associated with their preferred style.

Improvidence refers to too-great a reliance on the operation style leading to missing interrelationships between facts and ideas. The learner may be over cautious and too concerned with detail.

Globetrotting refers to the 'pathology' associated with comprehension learning. Here the student is overly concerned with building an overview and has too great a readiness to reach conclusions from insufficient evidence and to generalize too readily.

Surface approach

Based on Marton et al (1976 et seq). This approach to learning is characterised by the student who attempts to memorise course material and who is primarily motivated by fear of failure or by concern to complete the course and gain the associated qualification. The student often sees learning as something imposed by external authority and learning is often mechanical. Assessment criteria are met by reproduction of material achieved by rote-learning. A superficial level of understanding results. Such students adhere narrowly to the syllabus with little attempt to follow-up interesting material. They want to get the learning task over as quickly as possible and focus on lower-level objectives - information is not reorganised and integrated into existing knowledge and understanding. The prognosis for learners adopting this approach is generally poor, despite concern about passing.

Deep approach

Students taking a deep approach to their studies are characterised by an intention to make sense of the subject. They have an intrinsic interest in the material and a desire to learn. They follow up their interests and are less bound by the syllabus. T .hey fi nd what they are learning interesting. Those who do best with this approach display a versatility based on understanding broad principles supported by relevant facts. Newly acquired information is related to previous knowledge and used to establish personal meaning.

Approach to Learning

This is a term, developed by Biggs in Australia (1985) and by Entwistle and colleagues in Lancaster (1979), used to link learning strategy with m' ,otivation. There are three common approaches to learning:

Meaning, in which the students seek to actualise their interest in the subject matter and adopt a strategy which will enable them to undetstand the meaning of what they are learning

Reproducing, in which students motives are related to obtaining a qualificatio: n with the minimum of effort or to fear of failure and the adopted learning strategy reproduvces what is perceived as essential data,

Achieving (or strategic), indicating competitiveness, well organised study methods and hope for success. Students with this app roach use both surface and deep processes but the difference between these students and less successful ones lies in motivation and intention. The need to achie✓e high marks and to compete with others is characteristic.

Orientations to Study

This term is derived from the developmental work involved in the LASI. An orientation to study relates elements of an app roach to study with motivation and is a general tendency to adopt a particular approach. Orientations are associated with characteristic forms of motivation and attitude to studying Entwistle & Ramsden, 1983).

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Independent learning among general practice trainees: an initial survey

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Summary. Self-directed learning is a natural way for adults to learn. Vocational training for general practice is a preparation for unsupervised clinical work that will be supported, in the main, by continuing medical education. This study uses the Self-Directed Learning Readiness Scale to investigate factors influencing readiness for such learning among a sample of general practice trainees. Three principal factors emerged from analysis: enjoyment and enthusiasm for learning; a positive self-concept as a learner and a factor suggesting the possibility of a 'reproducing' orientation to learning. These factors may reflect approaches to learning in general rather than these adopted for professional learning, but offer helpful pointers for the development of both vocational training and of continuing medical education.

Key words: family practice/*educ; *educ, med, undergrad; *learning; attitude of health personnel; students, med/psychol; questionnaires; programmed learning

Introduction

The General Medical Council has highlighted the 'promotion of a capacity for self-education, for critical thought and the evaluation of evidence' as central targets for undergraduate education in medicine (General Medical Council 1991). They suggest that doctors should, when they graduate, have attitudes to medicine and to learning that will equip them both for their professional careers and as lifelong learners. The concept of medical school education and of vocational training being adequate preparation for professional life has become obsolete; continuing education, both formal and informal, is a necessity for everyone. Self-directed learning may be the most natural way for adults to learn, and they usually respond more favourably to class-room learning formats which allow at least a degree of the self-direction they exercise in their own learning projects (Knowles 1970). Effective self-directed learning is vital in professional practice, as the rate of change in knowledge and skills increases. Adult education models (Knowles 1970); Marton & Saljo 1976; Entwistle & Ramsden 1983) suggest that there are rich differences in both motivation and expectation and of styles and approaches to learning among any potential audience. Such diversity has been recognized amongst medical undergraduates in Australia (Newble & Clark 1986), Indonesia (Emilia & Mulholland 1991), British and Dutch medical students (Coles 1985), British general practitioners (Lewis & Bolden 1989) and general practice course organizers, trainers and trainees (Bligh 1989a). This study looks at a sample of trainees in general practice to determine factors influencing their readiness for self-directed learning.

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Methods

In this study, the Self-Directed Learning Readiness Scale (SDLRS) (Guglielmino 1977) was administered to trainees in general practice as they started the general practice component of their training. Training for general practice in the UK is compulsory and follows a pattern of 2 years' hospital experience and one year's general practice experience in an approved training prac-

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tice. The year in general practice may be divided between the early and late phases of training or may be taken as a block either before or after the hospital component. The trainees in this study were from the Mersey and North-West regions of the UK and all were beginning the general practice phase of their training. Data collection took place over an 18-month period, with questionnaires given to trainees in Mersey as they attended week-end introductory courses at the start of their training year. A single postal distribution was used for trainees in the North-West region. The postal questionnaire returned a 72% (80/110) response rate. Two hundred and sixteen analysable forms were collected (men 121 (55·8%); women 95 (43·8%); age range: 24–44 years, mean 28·7 + 4·0 years). The SDLRS inventory is a 58-item questionnaire, with integer responses between 1 and 5. Factor analysis of the responses was performed with varimax rotation using SAS software on the IBM3081 mainframe at Liverpool University.

Results

Three factors emerged from the principal components analysis, accounting for 50% of the variance, whereas eight factors account for 75%. After varimax rotation, the resulting factor loadings for each item were examined in the factor table (Table 1). Items with loadings of 0·4 or greater have been taken into account for all

Table 1. Factor table

Factor 1	
Q47	Learning is fun (0·69)
Q45	I have a strong desire to learn new things (0·62)
Q46	The more I learn, the more exciting the world becomes (0·59)
Q5	I love to learn (0·58)
Q1	I am looking forward to learning as long as I'm living (0·57)
Q55	I learn several new things on my own each year (0·55)
Q49	I want to learn more so that I can keep growing as a person (0·51)
Q52	I will never be too old to learn new things (0·50)
Q43	I enjoy discussing ideas (0·47)
Q51	Learning how to learn is important to me (0·46)
Q17	There are so many things I want to learn that I wish there were more hours in a day (0·45)
Q24	The people I admire most are always learning new things (0·41)
Q30	I have a lot of curiosity about things (0·41)
Negative items	
Q31	I'll be glad when I've finished learning (−0·60)
Q53	Constant learning is a bore (−0·59)
Q32	I'm not as interested in learning as some other people seem to be (−0·50)
Q56	Learning doesn't make any difference in my life (−0·46)
Q44	I don't like challenging learning situations (−0·41)
Factor 2	
Q41	I'm happy with the way in which I investigate learning problems (0·58)
Q4	If there is something I want to learn, I can figure out a way to learn it (0·44)
Q10	If I discover a need for information that I don't have, I know where to get it (0·44)
Q36	I'm good at thinking of unusual ways of doing things (0·44)
Q38	I'm better than most people at trying to find out the things I need to know (0·43)
Q42	I become a leader in group learning situations (0·43)
Q27	I am capable of learning for myself almost anything I might need to know (0·42)
Q39	I think of problems as challenges not as stop signs (0·42)
Q34	I like to try new things, even if I'm not sure how they will turn out (0·41)
Q57	I am an effective learner in lectures and on my own (0·41)
Negative items	
Q9	I don't work very well on my own (−0·48)
Q12	Even if I have a great idea, I can't seem to develop a plan for getting it to work (−0·47)
Q19	Understanding what I read is a problem for me (−0·44)

Table 1. Continued

Factor 3
Positive items
Q56 Learning doesn't make any difference in my life (0·56)
Q31 I'll be glad when I've finished learning (0·51)
Q53 Constant learning is a bore (0·48)
Q48 It's better to stick with the learning methods that we know will work instead of always trying new ones (0·44)
Q12 Even if I have a great idea, I can't seem to develop a plan for getting it to work (0·38)
Q44 I don't like challenging situations (0·35)
Q3 When I see something that I don't understand, I stay away from it (0·34)

Negatives
Q55 I learn several new things on my own each year (−0·45)
Q52 I will never be too old to learn new things (−0·41)
Q1 I'm looking forward to learning as long as I'm living (−0·38)
Q47 Learning is fun (−0·37)

Factor 4
Positive items
Q43 I enjoy discussing ideas (0·58)
Q42 I become a leader in group learning situations (0·52)
Q36 I'm good at thinking of unusual ways of doing things (0·48)
Q30 I have a lot of curiosity about things (0·39)
Q25 I can think of many different ways to learn about a new topic (0·38)
Q39 I think of problems as challenges not as stop signs (0·34)
Q34 I like to try new things, even if I'm not sure how they will turn out (0·33)

Negative items
Q44 I don't like challenging learning situations (−0·50)
Q7 In lectures, I expect the lecturer to tell all class members exactly what to do at all times (−0·45)
Q29 I don't like dealing with questions where there is not one right answer (−0·37)

Factor 5
Q26 I try to relate what I am learning to my long-term goals (0·52)
Q8 I believe that thinking about who you are, where you are and where you are going should be a major part of every person's education (0·47)
Q37 I like to think about the future (0·43)
Q10 If I discover a need for information that I don't have, I know where to get it (0·38)
Q25 I can think of many different ways to learn about a new topic (0·34)
Q34 I like to try new things, even if I'm not sure how they'll turn out (0·32)

Factor 6
Q38 I'm better than most people at finding out the things I need to know (0·59)
Q11 I can learn things on my own better than most people (0·51)
Q14 Difficult study doesn't bother me if I'm interested in something (0·37)
Q36 I'm good at thinking of unusual ways of doing things (0·31)
Q13 In a learning experience, I prefer to take part in deciding what will be learned and how (0·31)
Q27 I am capable of learning for myself almost anything I might need to know (0·30)

Factor 7
Q50 I am responsible for my learning — no one else is (0·66)
Q15 No one but me is truly responsible for what I learn (0·53)

Factor 8
Q21 I know when I need to learn more about something (0·42)

Factor loadings in brackets.

factors but for weaker factors items with loadings of 0·30 have been included to gain a flavour of the factor.

Factor 1 is dominated by 'learning is fun' (factor loading 0·69) and 'I have a strong desire to learn new things' (0·62). There were significant negative loadings on related items: 'I'll be glad when I've finished learning (±0·60) and 'Constant learning is a bore' (−0·59).

Factor 2 is overshadowed by 'I'm happy with the way in which I investigate learning problems' (0·58) and negative loadings on 'I don't work very well on my own' (−0·48), but also includes three equally weighted items related to problem-solving: 'If there is something I want to learn, I can figure out a way to learn it' (0·44), 'If I discover a need for information that I don't have, I know where to get it' (0·44) and 'I'm good at thinking of unusual ways of doing things' (0·44).

Factor 3 is dominated by 'Learning doesn't make any difference in my life' (0·56) and 'I'll be glad when I've finished learning' (0·51) with related negative items 'I learn several new things on my own each year' (−0·45) and 'I will never be too old to learn new things' (−0·41).

Factor 4 has two predominant items, 'I enjoy discussing ideas' (0·58) and 'I become a leader in group learning situations' (0·52).

Factor 5 is dominated by 'I try to relate what I am learning to my own long-term goals' (0·52) and 'I believe that thinking about who you are and where you are going should be a major part of every person's education' (0·47) and 'I don't like challenging learning situations' (−0·50) and 'In lectures, I expect the lecturer to tell all class members exactly what to do at all times' (−0·45) as contributing negative items.

Factor 6 has two strong items: 'I'm better than most people at finding out the things I need to know' (0·59) and 'I can learn things on my own better than most people' (0·51).

Factor 7 has only two significant items (i.e. with factor loadings above 0·30); 'I am responsible for my learning — no one else is' (0·66) and 'No one but me is truly responsible for what I learn' (0·53).

Factor 8, the weakest factor, has 'I know when I need to learn more about something' (0·42) as its only strong item.

Discussion

Before discussing the results of the study it is important to consider its possible shortcomings. The questionnaire was designed to investigate students at high school, college or graduate level in the USA who were preparing for self-directed study. It relies on self-reporting, but clearly explaining the purpose of the study, i.e. 'to assist in the development of teaching for trainees' and ensuring confidentiality encourages respondents to be honest. The high factor loadings on related negative items suggest that trainees responding to the questionnaire understood this and were making an effort to provide definite responses. The eight factors are strongly weighted and accounted for 75% of the variance within the sample. The study sample is homogenous and of a reasonable size (Comrey 1978) and the sex distribution closely resembles the national picture. A number of smaller studies using factor analysis have been reported using similar criteria (Feletti *et al.* 1983; McFarlane *et al.* 1989). Trainees in the sample were all at the beginning of their general practice year and may not be representative of more experienced trainees nor of established principals. Their responses to the questionnaire may reflect attitudes determined by undergraduate and hospital experience. The questionnaire is North American in origin and some of the items may not have strong face validity in the UK. However, the construct validity of the results is increased by their similarity to features found in other studies with the questionnaire (Guglielmino 1977). The first four factors are reasonably strong but one must be wary about conclusions drawn from the weaker four that comprise fewer items. Nevertheless, it is still possible to make tentative suggestions about the eight-factor solution.

Guglielmino identified eight factors associated with successful self-directed learning by using the Self-Directed Learning Readiness Scale. The eight factors were: openness to learning opportunities; self-concept as a learner; initiative and independence in learning; informal acceptance of responsibility for one's own learning; love of learning; creativity; future orientation; ability to use basic study and problem-solving skills. The inventory is now commercially available and is used by teachers in educational institutions in the

USA as part of their assessment of individual students and of learning group characteristics during curriculum planning.

This factor analysis suggests that approaches to independent learning among trainees in general practice at the beginning of their training year are similar to the factors identified by Guglielmino as central factors influencing success in independent learning.

Factor 1 is dominated by enjoyment and enthusiasm for learning and the desire to learn new things. This factor includes items indicating intention to continue learning over a lifetime and of using learning to enhance personal growth. There is an indication of interest in the skills of learning and of an intellectual responsibility towards one's own learning. Strong self-motivation and independence, the influence of role modelling in learning and the attraction of sources of knowledge are also components of this factor. The factor suggests distinct intrinsic interest in what is being learned and is similar to the 'meaning' orientation to study described by Entwistle & Ramsden (1983). It also bears a close resemblance to the 'academic' approach to learning described among trainees (Bligh 1989b) and to the first factor described by Guglielmino: 'openness to learning opportunities'.

Factor 2 is characterized by a positive self-concept as a learner; of being able to organize time for learning and of being aware of learning needs and resources. The factor indicates independence as a learner and satisfaction with problem-solving and reading skills as well as a willingness to consider difficult study in areas of interest. There is also confidence at working well on one's own and the ability and discipline to initiate, plan and complete projects. Such self-confidence is an important ingredient of any successful style (de Bono 1991) and relates closely to Guglielmino's second factor: 'self-concept as an effective learner'.

Factor 3 is similar to the 'reproducing' orientation of Entwistle & Ramsden (1983) and protrays learners as passive receivers of information who perceive education as mere transmission of knowledge. Such individuals have low interest in learning and may be 'syllabus bound' in that they prefer clear instructions, deadlines and defined courses. They tend to restrict reading to the defined syllabus and tasks and read very little beyond what is required to complete assignments. Vu & Galofre (1983) observed among American medical students that there was a 'tendency towards analytic rather than independent learning and that . . . in general, they did not have well-planned study systems or search beyond what they are expected to do'. Other items suggest difficulty with planning and completing projects and reluctance to engage in difficult learning issues or problems. Fear of failure or extrinsic interest in qualifications may be the principal motivating factors here.

Factor 4 is characterized by enjoyment of verbal discussion, suggesting a willingness to accept and to learn from criticism. There is a positive self-concept as a problem-solver and as a leader. There is clear satisfaction with the use of basic study skills and a belief in the exploratory nature of education. This factor may resemble Guglielminos' 'creativity' construct.

Factor 5 indicates a thoughtful approach to learning in which new ideas are related to existing knowledge and concepts and integrated to achieve personal meaning. This factor closely resembles Guglielmino's 'future orientation'.

Factor 6 is strongly dominated by a positive self-concept as an effective and independent learner. There is a desire to be involved in planning learning activities and willingness to tackle difficult issues if they are of personal interest. The factor resembles the 'achieving' approach described by Entwistle & Ramsden (1983).

Factor 7 is a clear acceptance of responsibility for one's own learning and factor 8 may indicate awareness of learning need but is the most difficult to interpret. This is an important area because as both Knox (1976) and Anthoney (1986) have pointed out some medical students may have difficulties recognizing cognitive weakness and as a result they may tend to use memorizing inappropriately rather than asking themselves questions about new material.

These factors reflect how trainees perceive themselves as learners and suggest that this view is of being competent and successful learners and problem-solvers for whom learning is strongly related to personal achievement and improvement. Within this broad view there are possibly smaller subsets including one that suggests that for some trainees learning is not an attractive

experience and may be associated with learning difficulties. The factors represent a spectrum of attitudes to learning among trainees and are positive indicators for medical teachers considering the introduction of independent learning activities to the curriculum. They portray trainees as generally committed, enthusiastic and successful independent learners with well-developed basic study and problem-solving skills. There are indications that a variety of teaching methods, including small-group activity as well as traditional didactic input, will be acceptable to trainees as learners but that, for some, clear guidance and help with adjustment to unfamiliar learning styles, especially if these involve independent learning, will be necessary.

This study suggests that the SDLRS may be a useful instrument with which to explore trainee learning and further analysis of the data is required to explore levels of independent learning among trainees and possible differences between men and women and between trainees at different stages of their training.

Providers of continuing medical education activities for established general practitioners may wish, on the basis of this picture of trainees as self-dependent learners, to develop programmes that stimulate and encourage independent learning activity (Cairncross 1985) to complement the staple diet of established teaching. The analysis indicates a very strong desire to continue with learning and a positive recognition that such continuing learning is a personal responsibility. Given the skills to identify their own learning needs and then to plan, implement and evaluate their own learning programme this study indicates that the results of such continued learning should be good.

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The S-SDLRS: a short questionnaire about self-directed learning

JOHN BLIGH

Summary

This paper describes a short questionnaire derived from an original, longer inventory developed in the USA to investigate readiness for self-directed learning. The questionnaire has been validated amongst general practice trainees, and comparative scores have been obtained from general practice trainers and from nurses undergoing postgraduate training. The questionnaire offers an opportunity for teachers and learners in general practice to examine their approach to learning using three factors associated with successful independent learning. The factors are 'interest in learning', 'learning skills' and 'responsibility for learning'.

Introduction

A great deal of learning in general practice is self-directed and many trainers and course organizers reflect this in their teaching (Savage, 1991). Knowles (1975) described self-directed learning as a process that involves taking the initiative, with or without the help of others, in diagnosing learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes. This process usually takes place not in isolation, but in association with various kinds of resources, such as teachers, mentors, peers and other 'human resources'. There can be little doubt that self-directed learning of this nature is a crucial professional activity in medicine. However, as many medical teachers know, trainees 'without . . . the skills of self-directed enquiry will experience anxiety, frustration and often failure – and so will their teachers' (Knowles, 1975).

Behaviours and abilities associated with successful self-directed learning include intelligence, independence, confidence, persistence, initiative, creativity, ability to evaluate oneself critically, patience, a desire to learn and task orientation (Long and Agyekum, 1983). Other factors such as tolerance of ambiguity, the ability to discover new approaches to problems, preference for working alone, knowledge of resources, and ability to plan and carry out projects, may also be included in this list. Successful professional learning depends on motivation and interest in learning, technical skills in studying and problem solving, and acceptance of responsibility for one's own learning (Järvinen, 1989).

The questionnaire

How do we recognize some or all of these characteristics in trainees, students or ourselves? Discussion and examination of experience play a part, but it can be difficult to quantify information gained informally and more difficult to compare individuals. This paper describes a short questionnaire, based on an original instrument developed in the USA but subsequently validated with trainees in the UK, that may be used to examine some of the factors contributing to success in self-directed learning. The questionnaire has 28 items, each answered on a five point scale ranging from strongly agree to strongly disagree, and gives results across three domains representing combinations of

factors identified as important to effective self-directed learning.

The original inventory of items, the self-directed learning readiness scale (SDLRS), was developed in the USA by Lucy Guglielmino (1977) as part of her doctoral thesis at the University of Georgia. That research involved a three stage delphi study of 14 experts in self-directed learning in the USA, which asked them to list important characteristics of successful self-directed learning. The original questionnaire comprised 58 items and was the result of factor analysis of the experts' responses. From the results of administering the questionnaire to more than 300 adult learners from a variety of backgrounds, Guglielmino identified eight factors contributing to self-directed learning. These factors were openness to learning opportunities, initiative and independence in learning, love of learning, future orientation, self-concept as a learner, acceptance of responsibility for one's own learning, creativity and ability to use basic study and problem-solving skills.

The shorter version of the inventory (S-SDLRS) was developed by following well-established steps for confirming the validity and reliability of questionnaires for use in the behavioural sciences and primary care (Streiner and Norman, 1989; Zyzanski, 1992; Lydeard, 1991) and has been described more fully elsewhere (Bligh, 1992).

Briefly, the original inventory was administered to 216 general practice trainees in Mersey and North West regions, and the results were analysed using the statistical package for the social services (SPSS). This phase of the analysis confirmed the validity of Guglielmino's original eight factors and established an overall reliability for the inventory of 0.76 [coefficient α (Cronbach, 1951)]. Further statistical steps reduced the number of items and improved the reliability of the inventory ($\alpha = 0.86$). Principal components analysis of this shorter inventory resulted in three major factors and it is these that form the basis of the questionnaire described here.

Scores for general practice trainers and nurses in postgraduate training have been obtained to act as comparators. Individual scores can be compared to the means of the respective comparator group and may, if required, be expressed as bar charts to obtain a 'picture' of each individual as a self-directed learner. Figure 1 shows specimen results for five trainees, indicating that a range of responses may be obtained. Respondents can add their scores for each

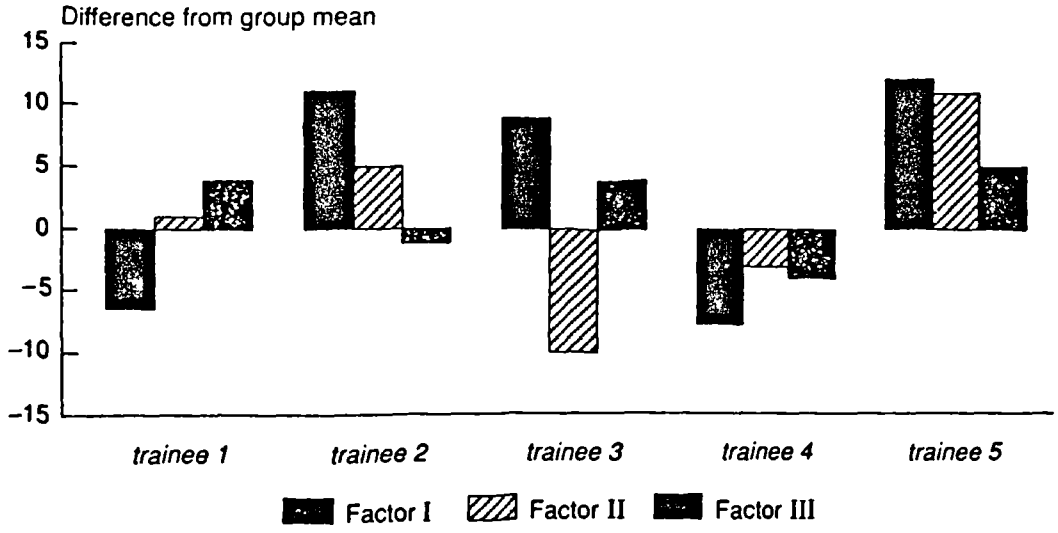

Figure 1 S-SDLRS scores: specimen trainee scores

Table 1 Short self-directed learning readiness scale (S-SDLRS)

Learning factors	Mean scores and standard deviatons		
	trainees	*trainers*	*nurses*
I	48 (7.6)	51 (7.2)	49 (11.8)
II	33 (5.2)	36 (4.9)	33 (6.4)
III	18 (2.9)	18 (2.2)	19 (3.6)

factor and then gain an understanding of what their score may mean by referring first to the norming group scores (Table 1) and then by reading an explanation of the characteristics defined by the domain.

S-SDLRS: explanations for each component

Factor I (interest in learning) reflects a creative, forward-looking individual, intrinsically interested in learning and one who derives pleasure from it. Those who score highly on this dimension are enthusiastic and committed to learning – they love learning. They may undertake several learning activities on their own behalf each year and are keen to question, examine and talk about issues that concern them. Their role models may include other successful learners. They see learning as contributing to their own personal development.

Factor II (learning skills) indicates an area in which those who score well are likely to be strongly motivated individuals with good basic study skills and who are satisfied with their problem-solving skills. They are assertive and confident learners who want to be involved in every aspect of learning, including planning. They tend to be leaders in group work and respond to challenges in a positive manner. They are good at organizing time, at planning and at completing projects. They show persistence, initiative, creativity and independence, and are prepared to make an extra effort to learn difficult things.

Factor III (responsibility for learning) indicates the degree to which individuals take responsibility for their own learning. Those who score highly here are capable of accepting responsibility for their own learning and may be good at recognizing their own needs. They relate learning to their own personal goals, and are concerned that education should encourage a person to think deeply about themselves and about the direction in which they are developing. There may be a tendency amongst this group to conservatism, especially in choice of learning method, which shows preference for tried and trusted ways rather than experimentation with new or alternative methods.

Discussion

There can be no single way of meeting educational need. People are different and have different strengths and preferences as learners. This is true of GPs just as for any other group of learners (Bolden and Lewis, 1989). Understanding these differences and building teaching activities around them will result in greater satisfaction and enjoyment for both the teacher and the learner.

The short questionnaire described here may be useful as a tool for stimulating thinking and discussion about learning, particularly in the one-to-one setting of the practice. It has been validated for use in general practice, is reliable and easily administered, and discriminates well across a range of individuals. The dimensions explored by the questionnaire reflect characteristics which most learners possess in part. These characteristics may be context-dependent, but because the questionnaire concentrates solely on the learner's own perspective it can only give an impression of a person's approach to learning in general (Ramsden, 1988). It does not take the content or context of learning into account. In a professional teaching environment the degree to which individuals possess some of these characteristics may have significant implications for outcome. Knowledge of these char-

acteristics will be useful for course planning and for helping doctors acquire a framework within which to understand their own learning (Saljo, 1988). Used alone, the questionnaire will help both trainees and trainers to recognize individual strengths and abilities and, used in conjunction with other commonly found inventories – such as the 'learning styles' inventory (Honey and Mumford, 1986; Lewis and Bolden, 1989) or the Lancaster 'approaches to studying' inventory (Entwistle and Ramsden, 1983) – it will contribute to a comprehensive picture of an individual as a learner and help in preparation for self-directed learning in the future.

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Copies of the S-SDLRS, including guidance about scoring, are obtainable from: GP Postgraduate Office, Duncan Building, The University, Liverpool, L69 3BS.

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Appendix

Items in the short SDLRS (S-SDLRS):

I have a strong desire to learn new things.
Learning is fun.
The more I learn, the more exciting the world becomes.
I want to learn more so that I can keep growing as a person.

I love to learn.
I'm looking forward to learning as long as I'm living.
Learning how to learn is important to me.
I enjoy discussing ideas.
I will never be too old to learn new things.
There are so many things I want to learn that I wish that there were more hours in a day.
The people I admire most are always learning new things.
I have a lot of curiosity about things.
I learn several new things on my own each year.
I'm happy with the way I investigate problems.
I'm better than most people are at trying to find out the things I need to know.
I'm good at thinking of unusual ways to do things.
I am capable of learning for myself almost anything I might need to know.
If I discover a need for information that I don't have, I know where to go to get it.
I become a leader in group learning situations.
I think of problems as challenges, not as stop signs.
In a learning experience, I prefer to take part in deciding what will be learned and how.
Difficult study doesn't bother me if I'm interested in something.
If there is something I want to learn I can figure out a way to learn it.
I am responsible for my learning – no-one else is.
No-one but me is truly responsible for what I learn.
I know when I need to learn more about something.
I believe that thinking about who you are, where you are, and where you are going should be a major part of every person's education.
It's better to stick with the learning method that we know will work instead of always trying new ones.

PILOT STUDY ONE

9th June 1992

Thinking about when you were a medical student. Can you describe the ways that you went about learning things? What did you do when you got onto learning ground?

Any sort of things? Not just clinical things?

All sorts of things.

lectures that we went to, practical that sort of thing. You could ask the lecturers at the practicals if you have questions... you would read text books, go and look things up in the library if you weren't sure, ask your friends if you didn't understand something .. ask your friends see if they understood it better ... when it got to the clinical side we'd talk to each other or talk to the junior doctors ... on the ward, or the consultants or and still use books and things.

So that is where you got the information from?

mmmm

How did you put it into your head so that you remembered it?

... by sitting in the library for three hours a night every night for about 2 years!

Oh, and what were you doing in the library?

I .. (what was the process?) The way I do it is I read .. and write things down. I can't just read ... 'cos I can't I don't concentrate if I am just reading something (oh) and so I read and write things down and then I do that for say ... 40 minutes and then I'd stop doing what I was doing and then see what I'd remember of what I had done.

And so you would test yourself?

Yeah .. and then a week later I would do it again .. the same stuff without reading it first to see what I could remember about it.

Is that the same way as you worked for A Levels?

... oh God I can't remember .... yeah, I think basically yes it was.

So it was really a matter of memorising?

A lot of it is rote-learning yeah.

Is there any other form of

I mean clinical was different 'cos you learnt that on the wards and you would go back to patients and go through what you'd look for in illnesses and ... and you would talk to each about it I mean I think we learnt a lot more in clinical sessions because .. there would be 5 of us on a ward and we would go and see a patient and then we'd go and we'd sit and we'd talk about it ... and how we diagnose things and how what we do about it and that sort of thing.

And so the process of learning there was more

Was more interactive learning

Right, and what was happening in your head in interactive learning? What was the first stage?

through yourself and then listening to what other people had to say and ... try and remember the sort of things they had said that you hadn't thought of.

And it was based on seeing the patient yourself?

would just pick a topic .. and talk about it. If we had seen one of the patients on the wards sometimes and there were patients ... there wasn't anybody left that we hadn't seen then we would just pick a topic .. that we either thought we knew a lot about or we knew nothing about.

Right so that would apply for knowledge and facts.

Yeah

What about skills?

Well part of that was you'd get, would be taught by the consultants and the other doctors .. most days, particularly when we first started clinical you were just taken to patients and told shown how to do things and then be asked to do it yourself in front of everybody and then people would say you did this right, you did this wrong whatever ... and particularly as it got to the exams we used to do a lot of that we would go in groups to patients and .. examine people and then present our findings to friends or whatever.

Right. and so how did you get better at it?

By doing lots of it .. I mean the clinical examination particularly you know they kept on saying to us you have got to make it look like you have done this a thousand times and it is just ... you know.

That is just on knowledge and skills. The other bit that people talked about is attitudes. How as a medical student did you pick up attitudes?

patients (mmm) erm...

What sort of values and beliefs

I think partly from watching other people and seeing how they deal with the patients ... you know the other doctors, the consultants, the juniors or whatever ... I think some of it is in you though, I think it is a value you will always have and how you get on with people some people find it very easy to deal with patients and talk to them and some people find it very difficult .. and I think some of that is just how you are.

What about role models?

... well I mean you could watch other people ... and see what they did, but some of them you are positive you don't want to do the way they did it you know I mean you would watch some people and think ... they have just dismissed this patient completely they have not, they have just ignored this patient completely and you know I don't want to do it like that ... but you do find yourself doing it sometimes (yes indeed. it is a short cut isn't it?) mmm

If that is as a medical student what is happening now is the trainee of the year of the trainee. Not when you are in hospital 'cos I think we could take advantage that that was the same almost service work (yeah). What about the trainee year. how have you learnt?

the clinical stuff you know when I have not been certain of what has been wrong with somebody ... I usually get one of the partners and we usually get John, If he is here, 'cos he is my trainer ... otherwise I would get one of the other partners ... and I would say to them "I think it is this, what do you think?" "What do you think I should do? This is what I think I should do" .."Do you think this is what I should do?" ... I mean that is straight forward things like a child with a rash and I don't know what it is .. or something I do know what it is but I don't know what to do with it ... other things where I know what it is

... you know there is practical things,like a lot of things that I didn't know how to deal with when I first came into practice which don't need to be dealt with straight away, but I would say to the patient ... come back and I will find out and that usually involved similar things either asking one of the partners, or sometimes the receptionist or the practice manager then they, simple things, practical things they usually know what to do but I hadn't come across them before ....

What about when it gets more difficult and when time goes by and you have had the first month or six weeks or so?

erm.... I mean .. actually in the surgery now if I don't know what to do it is still the same sort of pattern, I either have to ask at the time, I mean sometimes I have to ask the hospital, people have been seen at hospital and .... I don't know what they have been discharged on and things like that I don't know what they want us to do with them and things like that or if they have been followed up by the hospital and then something goes wrong and I am not sure what I should do.

And so it is a matter of fact isn't is or management fact? How do you know when you don't know something?

'cos I sit here thinking oh heck, what do I do? ..... I usually quite readily admit that I don't know things 'cos I feel there is a lot of things I don't know ..... er..... I don't know .. I suppose I just sit here and I think I don't know what to do and I have thought of all of the options I can think of and I don't know if it is right..

Right, and so when the patient is sitting here and you are sitting there

and I am examining them or I am talking and thinking I don't know what to do about this and so then I am thinking what am I going to do about it? Do I need to sort it out now, or can it wait?

If it is something that you can't ask about or you are not going to ask about. How would you find that out? Because you don't ask about everything, presumably.

Well, you I'd go and look it up in a book, go and ask friends, I mean I have got friends who are doing all sorts of different jobs and go and ask them what they'd do if they were in a particular job ... my husband is a medical registrar and so I tend to ask him quite a bit .... or I will sometimes ... I don't know .. I would say ring the hospital, but that is asking as well .....

Now that sounds like a very reactive way of learning, do you do anything pro-active?

I mean if I find things I don't know about I will go and I will read around it and then I will think I'll know what to do with this and other related things next time ... and when journals come if there is something that looks relevant I will read it even if the thing doesn't come up ....

Lets go back to the finding out how you, if you don't know something. Apart from waiting for that sinking feeling to go in consultation is there any other way of finding out about things you don't know?

Well I have had to do questionnaires and things here.

And that is part of your assessment is it?

Well when I started just to find out what I thought I knew about and what I didn't ... and I have had tutorials as well where I have been asked about things .. and you know you have to explain things and then you soon know if you don't know things ...

Are we talking about knowledge, skills and attitudes now or are we just still talking about knowledge and management? What about the skills of general practice where do they come from?

I mean the clinical skills and what you have done before, I mean dealing with minor things that you ..... I haven't really come across minor illness before I mean I have done caz and you get a bit of it in that

particularly paeds caz, but ... learning how to reassure people ... most people when they come to hospital it is because there is something wrong they need sorting out a lot of people that come here there isn't really anything wrong from my point of view, but because they don't have any medical knowledge they think there is something wrong ... and learning to reassure people really I have just learnt from doing it, but to do that you have got to be quite confident ...

How do you know you are doing it well?

Well I am meant to be videod! I don't know except that I mean all I can say is the patients come back and so you must think you are doing something all right.

They come back for other things?

For different things, yeah. Or they will bring other members of the family to see you and so you think well I must be doing, oh I don't know, they must think that you are doing something right and particularly if you are reassuring people if then nothing else happens and the child gets better or the person gets better and you don't here any more of it ... then you know ... maybe I have done it right or maybe it just got better anyway.

We quite often do it far better than we think and the main thing we don't do is congratulate ourselves on doing something well (yeah) we usually congratulate ourselves because we have spotted a disease but we only do that occasionally. The bit we do all the time we take for granted and sometimes feel a bit negative about it but really its quite important.

Well you do do a lot of it. I think that is what you find difficult when you come into a practice you are suddenly presented with all these things and I think you start looking for something more in it than there is because you know you wouldn't go to the doctor with it yourself, but when you actually say to somebody what are you worried about often it is something quite ridiculous that couldn't possibly .. but that is what they thought and as soon as you know that you can reassure them that that is it. I mean that is one thing I have learnt .. to say to the patient .. you know what are you worried about what do you think it is?

What do patients think of that?

Most are ok. I mean some of them say well that is what I am here for you know .... that is why you are the doctor and I am the patient you know ... but most of them ... will tell you and often they come because of relatives who have got some dreadful disease and they had this symptom .. first .. and so they think they are getting it.

I had one in and one of them said that he wanted a CT scan I said is it because you have got you know headaches or something like that he said no. well why is it you want a CT scan? Because my brother has just had one and I want to have one too.

Yeah.

Now I must ask you. Oh yes. we have talked about knowledge. we've done a bit about skills. what about this other bit? The values and beliefs attitudes bit from GP where does that come from?

..... partly from listening to the partners I think talking about how they deal with people .. and talking to them about how you deal with people and what your feelings are .. I mean I feel quite antagonistic towards some patients .... and feel quite bad about it but then you realise that other people feel .. troublesome patients, drug addicts who cause trouble .. get me upset .. get me angry and I feel bad about it because I think oh you know, but then you realise other people feel the same and it is ok to feel like that because if people are going to treat you like that then it is ok to get angry about it .. and so I think partly from listening to them talking about how they have dealt with patients and ... partly from seeing how receptionists deal with people .. you know .. because they know the patients better than we do most often well more than I do anyway they have known them for a long time and they live with them in their area and .... so from that .. partly again from .. what is me you know ... how I .. sort of see

people and their problems and how I think I should deal with them .. just from the way I have always been .. and it is easy to talk to my husband because he is not a tolerant person that is why he is in hospital medicine! You know and when I talk about things I have done and and patients I have seen he goes I don't know how you put up with it ... I wouldn't go back and see them .. I wouldn't do this but that is because he is in a different situation ... but I think .. he wouldn't do this job because I don't think he would survive.

A different sort of person ..

But it is just that is just because he is different.

But it strikes me that the difference between how you describe medical student time and how you are describing now time one of the differences is in the ... I suppose greater degree of independence, isolation?

I find isolation is a word in General Practice particularly .. I think you are a lot more on your own .. in hospital .. and that is what I found difficult in General Practice I found hospital jobs easier because there are colonies about ... like paeds cas at Alder Hey it must have been much more stressful than this but I found it much easier because there were always other people there to ask .. and it is more a confidence thing I think but .. in the surgery you are here on your own and you have got to make the decision .. and I find that more difficult .. I think the feeling of isolation is much greater in this job.

You haven't mentioned other trainees.

Oh, obviously I do speak to them, God, if they weren't here I would have gone.....! Yeah I mean there was three of us the last six months there is only two of us this time, but we do talk to each other a lot about things.

And is it important to have them here on site or would it be just as easy to have at the half-day release course?

No it is better to have them here. I mean it is alright at the half-day release, but here they can identify with the actual problems in this practice .. often they may see the patient .. or know that patient and also it is better to have them there .. it is more immediate .... you know you could have something stored up but you forget about it if you only see people half-day if they're just there around you can sort of talk to them about things sort of there and then.

You are unusual having more than one trainee in the practice because most trainees I think in this region find that they are by themselves and they have to wait then until every Thursday afternoon and take there turn in the agenda to say something which is difficult.

I find I would have found it a lot more difficult if I'd have been the only trainee.

Rote-learning seems to have become less important then?

Yeah .. I mean I find now that it is a lot easier to read and understand things .. I think because rote-learning at the time it was things I had never done before and it is the only way you can learn .. I mean rote- learning was more important in things like anatomy, biocose, all that sort of stuff because... it was the only way you could do it really to get it done in the time and get through the exams ... I think the clinical stuff you don't realise how much you learn just by osmosis really .... and just I find it more interesting now .. I will go and read things just for interest not because I have got to .. and I think they tend to stay there, plus you are using them more, if you are using these skills every day then you do remember them.

Do you think that is what osmosis is in this case then? I used osmosis when I went for my interview to be a trainee. I said a lot of learning was done by osmosis. I thought it was really clever at the time, but I don't know what, what do you mean by.....

Well I think you are not aware that you are learning things .. in hospital you do all .. these I mean I started say in paediatrics, I had never seen a child as a patient in my life and was terrified and after six months I felt I knew quite a lot, now I hadn't specifically gone home and read books every night and had teaching sessions because we didn't have teaching sessions .... I had picked it up because they had dealt with patients and I had had to learn at the time what to do .... alright, you have to go and ask people about things or you know you just copy off it but you weren't consciously saying I am going to learn this today .... you just gradually become aware that you have more skills than you had three few months ago just by doing the job.

Would it have been any easier to have had a structured approach to learning because it sounds fairly random unstructured way of learning at the moment.

Well ... it is not all like that because you have a programme for tutorials where you go through things and you decide what you want to know more about and what you want to talk about and so you have to go and read that up and talk to people about it ... before hand ..

Well part of the difficulty is that patients aren't very structured ...

Well that is it, I mean a lot of the problems aren't problems until they arise to you you can't think of them out yet out of thin air, it is only when they actually arise in front of you that you realise that that is a problem and you don't know what to do and until it has come up .. you don't know ..

Can we hang onto that then about identifying problems because it goes back to how do you know when you don't know something. We have dealt with medical students and we have dealt with a bit of the training, what about when you're a proper doctor and you are by yourself as an established and senior house principle.

Yeah, I'd be scared stiff!

How will you learn then? What will be the spare and how will you do it?

Er... well you still have to read, particularly to keep yourself up-to-date .... with what is going on .... you know ..... like new drugs like that or something or the patients coming out of hospital on this drug what is it you have go to know about things like that ... new ways of managing things .... you know or ... chronic illnesses I mean that illness about asthma that has come out recently or guidelines I mean you have got to know all of these sort of things which you can only .. learn really by reading up ... relevant articles or whatever ..

And so what will make you do that? I mean as time goes by do you think that the interest in reading will maintain itself a long time away ...

But .... you have got to know what to do and what you should be doing for your patients, I mean if you don't know then you can't do it and then you are not giving the patients the service that you are supposed to.

Do you think all doctors do that now for GP's?

I don't know .. I am sure they don't but... I .. I am the sort of person that I want to know what I am doing and why I am doing it and that that is the right way to do it ... so .. I feel that you have got to know that sort of thing I mean I can also ask my husband ... which is quite good I mean he's as doing medicine, hospital medicine it is quite an easy way to find things out because he is dealing with it all the time.

But that is facts again isn't it?

Yeah ... but the management thing I think you have got to ... I mean we also have meetings here once a week where some weeks it is just weeks and some weeks one of the doctors will give a talk or ... one of the consultants will come from the hospital to talk about what they, how they deal with certain things now or ... somebody from a drug company will come and show us a video about something .. and that is

all ...

What about the doctor, the person as the doctor? Once you have qualified for vocational training is that you for the next 30 years?

Oh no, ... I think you become more experienced with dealing with things just by seeing them every day and you gradually get so you have got a management plan for lots of things in your head and you learn .. that while you are sitting listening to the patient you are working out what you are going to do and have a proper .. management plan for it because when I started here it was a case of oh, well I don't know what to do and that was it what do I do where as ... you realise that you can deal with everything eventually and you have got to sort out is it urgent, can it wait and what are you going to do about it .. in the short term....

So that is management stuff, what about the doctor? Does the doctor stay the same person? How do you avoid burnout?

Yeah I mean that has been a problem with me in that I attracted a lot of people who come with chronic anxiety, depression and sit there and go on and on and on and I got to the stage where I can't stand it anymore and I have had to .. start to learn ways to protect myself and ways of deflecting the patients elsewhere and how to terminate consultations .. nicely you know without brushing the patients off but how to sort of say you know that is it come back next week or whatever .. just to protect myself because .. I was just getting so many of these people ... and you just can't go on listening to it all the time...

There comes a limit?

Well you they go home feeling ok, you go home feeling terrible.

But apart from controlling the type of patients you see.

Well it is not controlling the type of them I mean still I will still see them but it is controlling how you deal with them which I think you can only learn by seeing more and talk it through with other people about what they do and you can only ask lots of people and then try things yourself and see what suits you best.

And being aware of what effect they are having on you.

Yeah, I mean that was quite a big thing ... that I just couldn't they were just getting on top of me I couldn't stand listening to it anymore ... and realising that you know in the end this is just a job and you can't let it ruin your life ...

Yeah, it is interesting isn't it? People used to think of general practice as a vocation and it is difficult to know quite what they mean by that.

Well, patients go on about how it is not how it used to be you know the GP calling in the evening and on a Saturday ... now maybe that suits some people, but that doesn't suit me I as a female particularly have other things to do.. or will do you know if I have children I am going to have other things to do outside work .. and I don't feel that I should be spending my I don't I am not living to work I am working to live .. and I don't know if that is the right attitude or not but that is the one that is that is the way I am going to have to be to survive .. and have a normal family life outside work.

I doubt there is a right attitude personally.

No, it is just what is right for you ... some people .. I mean some people can work every hour that God sends and that suits them fine, but that is not what suits me ... and I have to be able to get away from it and do other things.

Right move onto another area?

Yeah.

Thinking about learning in general terms during the year as a trainee what sort of circumstances have made things go very well?

..... I think ... er.... having dealt with somebody and then asking other people and the have said yes you did the right thing makes you feel ... better... er.... being able to say I don't know ... at first I thought what on earth is he going to think when I say I don't know but there is so many things you don't know you know and I think if you are honest with them and say you don't know then that is alright as long as you can say to them but I know a man who does or whatever! ....so that has made things easier .. because in hospitals there is always somebody else there you know well I can ask the consultant when he comes around I mean I think it is different to when you feel as if they are your patient when you are in the surgery with them and you should be able to deal with it ... er..... I suppose having come across the situation and having to find out how to deal with it or whatever and then come across the same situation again and being able to deal with it ...without having to ask without having to worry about the things just knowing what to do ... you think oh well I have remembered this and this is a lot easier and .....

Where do you think you have done most of your learning? Here in the surgery or in the tutorials or in the half-day release course or in the bath or in the car or on holiday on the beach!

In consultation with the patients I think .. yeah most of it .. the half-day our half-day release has been a bit rubbish .. half of them haven't turned up half the time and it has not been the last few weeks have been good but before that it was a bit
of a dead loss really .. the best bit about it was that we used to take problem cases and talk about them ... which wasn't necessarily relevant to you at the time but if you came across that situation in the future at least you'd talked it through ... and you'd have got a better idea of what to do ..... and the tutorials really you would do a similar sort of thing we have gone through random cases sometimes or I have picked things that er ... I wanted to talk about ..... and then we've gone through things like problem solving you know and John presents me with a problem and I have to you know say how I am going to go about sorting it out ..... but probably most of it has been actually dealing with the
patient.

What is the most difficult group of patients you have had to deal with?

... it is difficult in different sorts of ways I mean there is difficult aggressive patients who frighten me ... but there is difficult aggressive patients who get me angry... and then there is difficult anxious depressive patients who keep coming back and you know you feel you are doing nothing for them ... so they are all difficult but in different sorts of ways the ones that have caused me the most trouble myself have been these long term anxiety depressive patients just because of .. of the volume and the amount of time that they have taken up ....

They are all feelings problems.

Yeah

My answer to the same question would have been young babies I didn't do paeds you see.

Because I have just come from paeds and if I see children under five in my box I am quite happy .. they don't worry me that much ..... I mean ... no they are usually alright.

What would be your great experience of the year what would be your picture of an ideal trainee what sort of characteristics? To be successful as a trainee.

.... somebody who gets on with all the staff the doctors and the other surgery staff ... somebody who's quite independent who quite likes being working on their own ...somebody who is quite prepared to admit when they don't know and quite prepared to ask people ... and not pretend that they know.... omebody who has done quite a few jobs I am .. just almost at the end of my training I mean I have

done three years, I haven't done obs and gynae but that is what I will do next but I have done three years I would have found it awful if I had done this first I mean on some schemes you do it first and I don't know what I would have done ... I found it bad enough now I would have found it awful then but even going into practice and being presented with babies then I would have been terrified .. I was terrified enough going to Alder Hey but I mean I have done two caz jobs and I think in that you see most things that would worry you in practice .. you've seen sick people and you know what a sick person looks like and ... I think that is a bit easier it makes it easier in practice I would have found it difficult if I hadn't done my jobs first.

Did you do psychiatry?

No, which I wish I had done .. but now I have spent a year doing it I wouldn't do it now!

You have seen more than most psychiatry trainees!

Yeah .. I mean .. the psychiatrically ill people aren't the problem ... but it is the counselling that is the problem and that is something I wish I'd done before .... what else ....

How about examples or characterisation of the one that is going to fail?

Somebody who thinks they know it all when they come into practice .. they have done all their jobs and they're they know what they are doing and they can deal with anything who doesn't ask anybody about what to do ..... somebody who is not prepared to listen to patients .... you know somebody who behaves to much like .. your typical hospital consultant ..... I think you have got to give patients more time in General Practice and you have got to want to be interested in their families and how they live and I think you have got to accept that this is part of why they are ill and this is why they come to you and ... if you are not interested or I think it must be quite difficult if you don't .. you are not prepared to listen to them .....

What sort of part does the MRCGP exam play in training?

Nothing in mine ... there is a lot of pressure on you to do it in some practices particularly if one of them is an examiner .. one of the partners .... a lot of people in my half-day release have done it this time ... I for a number of reasons apart from my husband has moved away and I have been travelling up and down and various reasons ... I haven't done it .. I think I would have done it but for a lot of number of circumstances that have meant I just I couldn't have done the work for it.

But if you could have done it why would you want to do it?

Mainly because of the pressure on you to do it! from here I think ... I .. I mean I have talked to people who believe in it very strongly and I have talked to people who believe very strongly against it ..... I was under the mistaken belief or impression that you couldn't be a trainer unless you had your MRCGP not that I have any intentions of being a trainer because I only intend to work part- time .... but that is you know I think that if you work in a practice where it is all towards it you get a very biased view of it ... I think the only reason the main reason for doing it would have been ... for the ease of getting a job after .. and also there is a lot of things that you have to learn for the MRCGP that you don't know that you wouldn't come across otherwise .... a lot of them say oh it is a dead easy exam but I don't think it is ... you have to do a lot of a lot of people who don't work in GP that is a lot of hospital people you know oh I have got my MRCP and that's you know yours is nothing compared to that which is a load of rubbish .. you have to do a heck of a lot of I mean I have done a lot of the reading in my own time that you do for it because I sort of partly half though of doing it so ... partners have leant me things to read and reading things like the health of the nation and all these sorts of things are things you probably wouldn't do otherwise and I think you become more aware of what is going on but it is more ... the administration side and the political side and that sort of thing .. rather than the clinical side of the practice.

Right, enough of the exam the other things. Coming from hospital work into GP is a different experience how different did you find it and how close to your expectations was it? What happened, how did you cope with that?

... I found it completely different to hospital .. like I said when I first started I felt very isolated and found it very difficult at first you are making a lot of decisions very quickly .. I think I have learnt a lot more in this twelve months than I have done over two years relevant to what I want to do .. because there has been a lot more .. teaching and more interest in what I am doing .. in hospital a lot of it is just getting the job done and not so much on are you learning something you know and what do you want to know more about which I found quite different .. people are a lot more interested in you I think in General Practice mainly because you have a trainer I suppose who's responsible for you and knows you ... . I think like I said about all the minor illnesses that thing surprised me .. I was trying to make it more difficult than it was when I first I was trying to .. make more of everything ..and it takes a while to realise you know it is quite safe to say this is alright you know go away ... and if it is still there in six weeks come back or something ... I found that quite difficult because you are so used to seeing people who have got something wrong with them .. that when you first come I think it is quite a shock .. to realise what people come to the doctors with particularly around here ..they are very dependant on the doctor .... and can't or won't deal with simple illness at all ..... I think that was the main thing that I found different to what I expected .... and like I say being on your own so much .....I suppose you just have to get used to it .. you realise you are not on your own you can ask if you want to ..there are people around ....the first few weeks I felt like I was asking all the time and I thought God they must think I am really stupid you know.. you don't realise that the other two trainees are doing exactly the same but they are asking their trainers so you don't see it .... and so it wasn't difficult from the point of view that they didn't make it difficult they are all very approachable and would help with anything but I think I mean from your own point you feel that you are asking people all the time .... I think you have got a bit more responsilbilty than you have in hospital because usually in hospital patients are always seen by somebody more senior than you whereas here people can go months and they only see you and nobody else would know what you were doing .... and I think at first you find that a bit strange .. I mean I needed a lot of reassurance that what I was doing right and yeah so they are that is how I got around it eventually it just by doing it I think you just get used to it and being more confident .... yourself about things

And talking to yourself about it?

Yeah, I would go home and think about it all as well.

If things were to be done differently if you were a trainer how would you do things differently?

.... I've lucky in this practice I think because they are very good and are very supportive and don't pressure you when you start off with long appointments and you decide when they are shortened and .....they are approachable .... I don't know how to make the feeling of isolation easier because I don't think you can ... I think it is just because it is so different to anything you have done before you have just got to get used to it and that depends a lot on your personality I don't suppose everybody finds it as difficult as I did ..... but I think it is just something that is different that you have just got to get used to .. I mean ..some people do combined surgeries with their GP's when the GP sits in the corner and they sit but I would hate that even more .. I mean I have managed to put off being videod until now I mean that is like ten months and I am finally being made to do it under great pressure you know because I have awful memories of being videod when I was a student it was terrible we used to be videod with all the class sitting next door killing themselves laughing you could hear them .. I went to the University of Edinburgh and it was every week for four weeks in GP and then again in psychiatry and it was worse than GP much worse than GP and I think at the time it was so false because you didn't have the skills and you didn't have the knowledge .. I mean I did it when I was a fourth year student having not done any medicine or surgery ....and it was awful ..I mean it was one of the worst things we did at medical school and I think one of the most unproductive things we did ... and I think you don't forget that well I mean why you do it and why you should do it because the only judgment you have got of yourself is yourself and if you are like me and you are very hard on yourself you know....

So are they going to let you watch the video yourself first?

Well I don't know if I want to watch it at all! But that is what they say .. I think I will take it home and watch it and if you want to block things out you can ... but... I mean why I mean like John says he has got to do an assessment of me and he thinks he knows what I am like but he hasn't got any objective

evidence of me ...

I can't think of any way of making it easier for you with that kind of previous experience.

Well there is nothing I mean I have told him just don't tell me when it is and I will just have to turn up and it will be there and that will be it.

One of the surgeries on the Wirral have a camera in the room all the time and you don't know whether it is on.

I mean I think that would be easier though, if it was there all the time and you didn't know .... but I can see why they want to do it.

PILOT STUDY TWO

17th June 1992

Now casting your mind back to when you were a medical student can you remember how you went about learning things?

Do you mean for exams or as I went along?

Well lets take as you went along first.

I would say .. we had a lot of formalised teaching and .. to be honest I didn't really go over the notes terribly carefully after I had been to the lectures but when it came to exams I would use my notes and books and tutorials ..

So what do you mean by formalised teaching?

Lectures .. mostly ..

And what did you think of those?

often than not very boring ..

Can you think of any examples of a lectured which stayed in your mind either that has been very good or very bad?

I can't think of any specific examples that spring to mind.. sometimes the personality of the lecturer will come over and make it more interesting .. and it wouldn't necessarily be er.. an interesting topic that made it interesting it was more the personality and also you know obviously when they are firing questions at you that is a bit more .. interesting and keeps you more alert.

So what did you do, you took notes in the lectures? And then how did the notes get into your head?

Well I would file them away and then .. when I needed to revise the information I would read them and then supplement them with .. book reading.

And how did that stuff stay in your mind?

I suppose difficult stuff you know .. would .. I would have to go over it time and time again and look at it from different aspects .. easy sort of memory stuff usually goes in quite well just by reading it.

What about things to do with patients how did you learn about dealing with patients?

Oh right, will in clinical .... years er.. there was a lot of on ward work and ... introducing us to clinical patients .... well I think they were quite good in Edinburgh because they did most of the teaching of the ward in small groups maybe about nine or ten of us and they went over the theory of it and then they made us go and talk to patients .. which was quite good and we got a lot of bedside teaching and I found that that was it was a lot easier to learn from that because you can always remember somebody in your mind better than .. a page.

What about the other people in your group did you spend any time working with them?

It varies again on the personalities in the group and how motivated we were .. you know the time of the year and all that ...

Did you find working with the other students helpful or not?

Again if you were in a good group it was helpful .. we had a very good group for ophthalmology and we used to ... not have formalised sort of learning sessions together but .. it was quite good and you know sort of coming up to exams people used to .. try that little bit harder to sort of be thinking about these

things ..

How do you find a good group then?

I suppose an even mix of personalities and .. people that have similar ... outlooks and motivations .. it became quite difficult if one person was either very disinterested or one person was very ambitious a lot more than anybody else.

That seems to cover thinking about knowledge and I suppose a little bit about skills what about this thing about attitudes because people talk about attitudes don't they? How did you pick those up?

I think really from seeing how people behaved .. how clinical you know the SHO's and registrars behaved on the wards ... and when I moved away from Edinburgh I was quite surprised to see how different it was down here because it was definite style up in Edinburgh.

You sort of felt that exam learning was different to routine learning and so what was the difference for you?

Well I always found exams very stressful and er.. I suppose looking back on it I didn't do an awful lot of work at medical school in the times between exams because I was very busy doing other things and er .. I think most 18- 19 year olds are like that really and so I used to get very worked up before exams and it would be a very sort of slow build up and erm... quite heavy sessions of work.

Quite a lot of anxiety?

Yeah especially with erm pre-clinical exams you know anatomy and biochemistry an awful lot of anxiety follows yeah.

Right well lets get away from being a student to being a trainee not a doctor in hospital but now as a trainee how have things changed at all how do you feel about learning things now?

Erm.. I do most of my learning at work.

How?

By discussion with the partners .. if I have a problem erm.. if I have a problem when I am doing surgery then I can go and interrupt them ... and if I have a problem that I can talk to them about during a coffee break or during a tutorial with my trainer and I usually bring it up and we discuss it ... sometimes it erm .. sometimes I do go home and I look up things but not really very often I don't find myself resorting to books very often any more .. which is quite refreshing really ... I discuss a lot of things with friend as well you know medical friends .. and I also learn erm.. from patients when they come back and see me you know .. using time as sort of diagnostics .. aid ..

How do you know when you don't know something?

Erm.. I feel very uncertain about it and I won't recognise it.

Right so how do you recognise it eventually? I mean as appose to recognising a rash or something I mean how do you recognise that you don't know how to treat it? Do you have to wait until it comes through the door or do you are you able to spot that you don't know anything about it.

I know, I think, I know where my areas of weakness are I mean I feel very uncertain about an awful lot of areas and coming into general practice after basically just doing my house jobs I haven't done any SHO jobs erm having to do you know paediatrics and obs & gynae and that stuff I mean ... I am not really very confident about that at all.

How does that make you feel?

I am sure my anxiety levels go up whenever a child comes in or a pregnant woman, especially pregnant

women I worry about them.

Are you good at asking for advice for help?

people ...

Quite helpful?

Yes they are, yes.

You said that it is a relief not to read books and things. Will you be pleased when it is all over - the learning bit?

No I don't I don't find that er.. I find it a strain the learning that I am doing just now I mean I think that I will want to try and do a few more exams and then I'll key up my working into a more sort of formalised scheme then and .. whenever I do that the more often I do that the more often I enjoy it actually and I am beginning to take exams and all that kind of work more in my stride now .. and certainly whenever I have had to .. produce some sort of presentation I have really quite enjoyed that .. so I think I am getting more confident.

It sounds as though the learning you did at medical school was more individual and more isolated for you.

Yes.

But here you are describing a different picture.

Yes I would agree because the people that teach you at medical school .. you are not being taught by your contemporaries..

Which would you prefer.. I mean the atmosphere here or the one that you were used to at medical school?

I think that is difficult to say because I was a very different person when I was a student erm.. I don't think the atmosphere I have got here would have worked when I was a student .. really but I do prefer this you know .. I feel a bit more adult and take a bit more responsibility yeah..

Quite a bit more!

Yeah!

What do the patients think seeing a young doctor?

... well they are always surprised in that they say I look very young but the other doctors here are quite young as well I don't think I look significantly younger than the 2 other female doctors ..

A bit younger than Paul I think!

A bit younger than Paul yes. Erm.. one patient apparently had a moan to one of the receptionists because I went out and did a visit and they said you didn't even send a real doctor to see me sort of thing which usually I don't have a problem with it .. and it is nice because people are beginning to come back to see me and ask for me now and that is really nice.

Have you come up against any groups of patients that you find particularly difficult?

Yes I have.

What sort of groups?

Well .. er.. I can't really categorise them into groups really. It is just one or two people I find their personalities difficult to handle .. and there is a particular case that I am dealing with just now erm.. where I find that because er.. the patient has done something in the past that I feel very strongly about I find it very difficult to handle him ... I hope that doesn't come across in the consultation but I have had to talk about that quite a lot .. sort of with my supports.

And do you find talking to people is something that you can manage? About the way you handle patients.

Yeah, I think so .. well I don't have a problem with it.

What about talking to your peers the trainees?

Well I don't know any trainees personally as personal friends .. I know er.. some of them from the half day release the people I know as personal friends are all hospital doctors which is a slightly artificial situation I suppose but .. I find it very interesting that we are all so different ... I mean there is one other girl in my group who is at the same stage as me and then all the others are much more experienced .. and are married and have children and you know so there is quite a difference there ..

What is the difference? I mean obviously they have got life experience but what is the difference as doctors?

Erm.. well quite often in discussions ... when we are discussing clinical matters they just have knowledge that I don't have .. you know.. which at first we had a day when we were talking about .. contraception and at first I was very concerned about that you know I was thinking .. I am not up to scratch but then I realised that these people had done their gynae jobs already and I haven't so .. I hope that by the time I have done them then I'll .. feel a lot more confident about it ..

So would it be reasonable to say that you see that the pressure on your learning at the moment is acquiring facts?

Er... I think that is most probably the area which I feel most anxious about ... although I do realise that there is more to it than that! But.. I sort of feel that perhaps the attitude will come more easily to me than the facts really.. I hope so anyway.

Thinking about the trainees that you know I know you don't know that money but would it be possible to characterise what a typical successful trainee would be? Or alternatively an unsuccessful one, whichever you find easier.

training.. well I suppose someone that has a warm personality that does find it possible to communicate with people and .. has an understanding attitude towards patients .. and .. some kind of insight as to their lives you know sort of holistic side of things but also someone that has got a very firm medical knowledge .. and somebody that knows when it is appropriate to .. refer or to ask for help .. someone that has got some idea of ... management of personnel in the work place ... and has a bit of knowledge about .. you know budgeting, fundholding and all that side of things er.. computers I suppose ...

What about .. I don't think it is exactly opposites which would make a bad trainee is it? Someone who is going to be unsuccessful in training.

to do .. wanted to pursue a different career path .. and have not managed and have therefore gone into general practice ... I think they would find it difficult ... and certainly in Edinburgh where I came from originally a lot of the GPs weren't very good there and I think they were people that had who weren't really enjoying general practice that they had unsuceeded in what they initially wanted to do I think it makes them bitter you know and not really enjoy the job.

Which fits neatly into continuing medical education. How would you see that working when you become an established principle? How are you going to keep up-to-date?

Well .. I probably .. it is very difficult to say because I don't really know what my personal life will be like when I am in practice whether I will be part-time or whatever .. but I would imagine that I would like to be involved in training whether as a trainer or as a partner in a training practice ... I think it keeps you up-to-date you know and you see new people coming in who are learning it sort of .. sort of stimulating you like to think you can help them along the way as well I suppose .. and I see all these leaflets and pamphlets coming in for workshops and lectures and things like that and so I suppose ... I'd keep my eye on those .. and if anything interesting comes up then .. go along and subscribe to a few chosen journals ..

So how would you avoid becoming burnt-out?

I don't know!

I wonder if those GP's that you described in Edinburgh were truly people who were not happy in general practice because they didn't like doing it or whether they had started off doing it or whether they had started off wanting to do GP and simply can't mature on the way ...

Oh well it is impossible to tell because I don't actually know them but I should imagine that is quite a big problem ....

Have you always wanted to be a GP?

No, no I haven't.

What made you decide to do general practice?

... well I didn't really know what I wanted to do .. I did erm ... an honours year in the middle of my medical degree and I liked the erm .. independence and I thought about doing medical research for a while and then I thought about hospital medicine but I don't like the atmosphere in hospital and erm... that that feeling didn't stay with me for very long the feeling that I wanted to do that and erm .. towards the end of my house jobs I started thinking that I would really like to be my own boss really .. and that is what appealed to me about general practice ..

O.K. Brilliant! That will be it.

JGB3/TINA/P#STUDY2.176

PILOT STUDY THREE

19th June 1992

The easiest place to start is when you are an undergraduate. at least it is for the purpose of this. If you could cast your mind back to when you were a student and try to describe the sort of things that you did in terms of learning. How did you learn things when you were a student?

Right .. I learnt best in ... small groups .. er .. orally .. er .. I found I didn't find er.. you know lectures you could just sort of you know take notes from but I used to find at the end of a lecture I might have taken a sheet of notes but it ... it hadn't gone in at all .. er .. and often you would read through your notes and I would say did I right this you know and so I didn't .. I didn't find that very useful ... reading around on my own I am not an enormously self- disciplined person when I did .. when I did do that that was fine ... but that tended to be a time sort of just before the exams that that happened and I felt that I wish I did this more often! but on a sort of more pragmatic level what I found was ... in small groups where there was erm ... participation was er was easy within the small sort of tutorial type of groups - there was very little of that teaching incidentally.

Who would set the agenda for those groups?

erm .. I am thinking right back actually now in the pre-clinical years .. there were a few done in anatomy erm .. which was in I mean which what I thought was an awful subject anyway but I mean .. it was least awful done in that sort of erm .. that sort of format er.. there was a few occasionally as well in pathology as well and that also worked quite well .. oh but those were very sort of erm .. matter of fact learning subjects that basically you sort of had to sort of ..... an enormous quantity of material .. going onto sort of clinical things I mean all the way through the sort of clinical teaching you do it in small firms I mean in a sort of vaguely tutorial setting and I found that very useful because you are also getting I learned visually partially as well and they were my best memories is visually retentive ...

Do you mean that you recall the picture of the words on the page?

No.

What do you recall then?

I mean the situation and who said what and in what situation they said it ...

So it is more than just a vision isn't it. it is a sort of sensation thing ... can you still feel the temperature or smell the smells as well?

No, but it is visual and I am seeing the person and .. them doing it I wouldn't say that it particularly went that much broader than that erm .. but .. I know what it was sort of like if it was a tutorial ... with a patient there .. I mean there sort of responses and things like that and other peoples input .. well certainly the things that I you know sort of snipits from those I still very clearly retain whereas sort of you know a lecture with 150 of us sitting in a room have all completely gone.

Well that is not uncommon is it? What happens. what is the process when you are sitting in a group when you are in a group learning situation. how do you retain things? Do you know what processes that go on in your head? Why it works for you?

I don't know why it works for me .. I mean .. It is certainly not really a sort of pattern recognition but it also I think it is partly because of the interactions between the individuals in the group which are often quite interesting and people rising to other people's points.

But why does that stay in your head. how does it stay in it? What sort of processor keeps it there. do you know?

No I don't really .. I mean er .. I am er .. I am adlibbing really er .. but I mean I am aware though that group sort of situations it isn't just in sort of .. a lonely situation I can envisage that in other areas and I think that that in other areas and I think that that is certainly a way that I find I have remembered a lot in

that situation than perhaps in a different one ..

So I presume you find talking in groups easier?

Fairly, yeah.

What sort of person are you in a group?

... I don't think I am terribly dominating but I am certainly not one of the quiet ones .. I .. I mean attend a sort of barlant group and I wouldn't say I was .. I would say probably .. I feel very comfortable with being able to express myself in a group .. I suppose it is very different to er .. difficult to see yourself er .. from the outside .. I would certainly say that I contributed less than I can think of a couple of people but perhaps more than you know...

One of the dangers of a small group working half-day release course is that there is a tendency to assume that silence means non- participation, which of course that is a terrible mistake .

It is an enormous misassumtion yeah ...

What happened to rote learning? What part does rote learning play?

I don't feel that I have got .. I mean that was the .. the ability for rote learning really goes off after childhood .. I mean certainly I think in childhood it is the most wonderful form of learning .. I mean for somebody who is virtually enumerate to have tables stuck in my head .. I mean I don't think I could do any mental arithmetic without them and I very sad to think that they are not teaching kids those them because obviously kids that can understand numbers it is great .. but for the ones that can't it is a ..

Well mine are starting doing it, mine are doing tables now ..

Oh right, because the local schools that I know don't .. but I mean so that level but certainly for sort of like anatomy sort of mnemonics and things like that .. I did sort of vaguely try them because they seem to be sort of you know a way of learning a totally
cold factual subject I didn't find them enormously useful.

So how do you learn facts?

... I suppose try and link them in er.. It was much easier when I started doing clinical medicine because I actually found clinical medicine much more interesting and therefore could relate it on a much more personal level .. and therefore .. by linking things ..

Linking in what way?

mean if I had a patient with something then I would become much more interested in the condition and would be able to like reading about the condition I would be relating it back to the individual person .. and so it would cause that sort of ...

What about now as a trainee in post what is the learning pattern like now?

Er.. well I have done 2 sets of traineeships the first one which was when I was completely new to general practice was for a year when I was in Princess Park when I did attend the half day release course but I attended that for a year so I haven't bothered this time because I didn't find a greatly enormous useful ...

Remind me to ask you why .. why you didn't find it useful.

I erm .. the trainer I had there was Mrs X and we used to have 3 hours tutorials once a fortnight and we used to not do a surgery at that was that .. and in that time ..there were a few different formats that we took which all of which had benefits one was just sort of straight forward discussing problems per cases but radifying out into more .. abstract and he would always play devils advocate so I would have to erm

..... It was very thought provoking .. very good ..I was trying to take on some people for psychotherapy and he supervised me for that ... and working out my own interactions with the patient on that level .. er .. I found very beneficial .. I don't think we ever opened or read a book which I was extremely relieved about! and er... I have never had such intensive teaching and I found it extremely and I found it absolutely wonderful and it made me understand a lot about myself and why I wanted to do general practice ...

How would you define learning, what would be your definition of learning?

knowledge in such a way ..... that it ... was readily accessible .. and also .. could be used .. to extrapolate laterally into either areas perhaps areas not very related ..

Are you using knowledge there to mean facts or are you using in the broader sense?

A rather broader sense than just facts I think .. I mean it also comes into an experience and things like that ...

Yeah, I mean the relationship with your previous trainer seemed to be slightly broader in its focus didn't it? Than just merely acquiring facts and things. Tell me about why you didn't find the half-day release course interesting.

Er ... what I liked about it first was that it was quite nice to meet the other trainees ... er .. and ... to compare notes on one level ... what I didn't like about it was the course organiser who was managing it who .. I found a person that antipathy towards and I am not somebody who takes a normal dislike to people but I actually did to him .. and I found that .. I became very aware that I didn't like the way he practiced general practice .. and I was very aware that I didn't like the way that he perceived his role in .. that which I felt that it was useful in a sort of ... its most benefit was for people to bring their problems to it and to have a erm ... sort of and to brainstorm that together in a sort of in perhaps a slightly barlent type of way ... whereas I think he felt that it was nice to sort of see a representative of such and such an organisation and a representative of such and such an organisation which they again perhaps have their value but I mean .. I sort of felt that for me I wasn't terribly interested but there were individuals that I might have been interested to see but the garage of people was quite wide and ... erm so I didn't really .... you know I think perhaps I was down on it as well because I just didn't actually like it very much.

That's the negative side of it .. it was a personal thing .. was there anything negative about the process of the half-day release course?

.. There were rather a lot of us in the group, I think there were about 13 and so .. I felt that there were times when people wanted to say things but they .. they didn't get heard you know erm ... I mean not everybody does find it an easy forum and it is all right for sort of people who are gabblers like me but .. not everybody .. you know I mean that it .. can be very threatening ... erm .. I think that there were occasions when people brought videos which was again quite interesting .. erm .. there was too many I think ..

But there was only one course organiser was there at that time?

Er.. no but because there were quite a lot of trainees in the region at that time it was one guy that was dealing with our particular group of 13 ... and ... I think that because there were too many it stopped .. you know stopped things happening that would have been quite interesting and it just became a bit of a drag ..

You talked about your experience in the previous practice which was to do with you as a person ...

Yes and finding my style of consultation .. it was a lot about consultation ..

So what is happening in this practice then, now you have matured in a way..

I think that my .. situation in this practice is a little bit different in that I have been .. I have just had twins and they are very kind and they have slotted me in as an extra ... my training .. I haven't had a lot of formal tutorials .. although I have felt very free to come up with problems er .. particularly to one of the partners and I have felt that .. you know they .. David who was here the other trainee who is here for a year it is his first year I felt that I was very happy to sort of fit in so it has been a more problem orientated approach .. I have had a few formal tutorials...

Problem orientated meaning that you bring the cases and you ...

I say I have got a problem with such and such .. which of these options do you think are the best with this particular patient I don't really know .. that type of thing you know .. and it sort of erm .. just to bring another .. thought on it ..

Is that useful?

It has been it is not always enormously but yeah, I know I think it clarifies things in your own mind really doesn't it to do that .. yeah it is useful ..

What would make it better? What would be your ideal circumstance for learning in a practice?

I think in practice that the partners should have at least 10/15 minutes together every day to just have a cup of coffee and I think that that is something I really miss in this practice in that you know even if you have had a bad call out for instance say this is somebody's patient I have just seen her blah blah .. and also just so that everybody knows what is going on with everyone else .. and I think that that is really sad that it doesn't happen ..

Yeah it didn't happen in our old practice either although we certainly tried to do it.

I mean pragmatically on a pragmatic level it is very hard to get that to happen but erm ... but working in a practice that it did happen that had enormous problems and it was under a lot of stress I think it is a really important part of it you know .. it is certainly something that in the future I would definitely put as a fairly high priority because otherwise you can just keep missing people I mean not so much here because there is only three partners but where there are sort of seven .. you know things can can ..

Can we go on a bit to asking you to characterise opposites a bit. What would you characterisation of a good trainee be? Someone who is going to be successful as a trainee.

I think it would be someone who was quite self aware .. you aware of their own failures, aware of their own interactions with patients .. I mean .. I think that a lot of .. of training is about the whole consultation it is not only about medicine it is not only about getting people off tranqs it is not really about .. it is actually about .. about the whole consultation .. I mean the other parts are .. are details really .. therefore I mean if somebody isn't reasonably sort of self aware then I think it is going to be hard for them to be a good trainer .. er .... I think that .. I mean I suppose all the sort of positive qualities will all .. all be of benefit .. but I mean I think erm ... I think it is also important that that person isn't a bully because they are in a position of quite a lot of power particularly in a sort of one to one situation where the trainee is actually being asked to sort of open up ... and are in a potentially very vulnerable situation and power games I mean I don't think .. I think that if the situation if misused could be quite dangerous for .. for both parties ..

What would be the characteristics of a good trainee to a good trainer?

The one who is interested in .. in exploring .. so the issues that arise .. I mean if you are not interested in it then it all becomes a rather sort of baron exercise really ..

Where do you think the interest comes from?

I think the interest can be endangered by somebody else's enthusiasm .. I suppose .. part of it is hopefully ... there by that persons personality and the fact that they have chosen to do general practice rather than go into a sort of hospital speciality or .. or a research post or something ..

What about the opposite of the trainee who isn't going to do well?

I think the probably .. the .. the same sort of thing I think also people who are unprepared to get involved ... you know I think you have to .. I don't think you can be that detached in general practice in the way that you can in hospital medicine .. I mean you have to build up a relationship with your patients ... and that takes two .. it isn't just your patients building up a relationship with you and therefore unless you are prepared to give quite a bit erm ... I think it is rather doomed really but I mean .. it doesn't mean that you can't be a sort of adequate clinician .. in general practice .. it just means that quite a lot of the part general practice which is finding out why somebody is there just goes by the board and you know I mean concentrating on organic medicine is a bit, bit of a waste of time in general practice but ..

Ah, the exam the MRCGP exam how do you see it fitting into the process of learning as a trainee?

there may be issues that need to be covered in its preparation that might not have been erm ... explored before hand .. in terms of a piece of paper with a .. few letters on it I don't .. I am not really .. that person leaves me cold .. but I think in terms it is often a motivating force .. you might have the best will in the world but I mean still not get around to numerous things .. if you virtually have to sit an exam then there are areas and things that you will read that you know ..

It is a good motivator?

Yeah, I wouldn't particularly rate it higher than that.

No, I suppose most people see it as a good way of comparing their own performance against others don't they and they quite like that idea being able to rate themselves ..

I think .... it is very erm ... I think it is a very uncertain rating myself ....

How do you know when you don't know something?

..... I don't usually have any problem in that erm .. I would sort of say there is quite a lot of areas in clinical medicine which I have very little confidence in .. and I don't actually mind at all telling patients that I don't know and I need to look this up and you will have to come back to me on this one or go elsewhere .. I mean I have got areas that I do feel very confident in but there are a lot of areas that I don't and I am fairly clear on the divide on that ..

And what do you do about the ones that you don't know about? Are they statics or are they something that you have got on the agenda to deal with?

Right well there are 2 .. I think there are 2 things on that .. sometimes are sort of organic problems where I don't know what is going on .. if anything erm .. then there is the other ones that are not organic problems but are people that you are working with on a more psychological level .. but with whom you have got stuck erm ..... on the latter I mean something like the group is wonderful for that I mean it brings a whole different perspective on it and it also makes you come back with what is becoming perhaps a bit of a heart sink problem really with, with enthusiasm .. so and so on that level I think I would probably approach something like that in that way or .. with .. with I mean I would want to talk about it with somebody .. er .. for the former .... I mean I would sort of I would try and communicate with a patient as much as possible about ... what my feelings were .. what the likelihood things I felt were and I would be very honest about my unsureity ...

Right and how would you sort that out, with the patient having left, what process would you go through?

I think actually my first port of call would be to actually ask somebody who I thought might know either ring somebody up that was appropriate or .. to talk to someone in the practice if I thought they might have an answer so it would be a verbal erm .. I suppose it is the sort of soft option really! I would I .. occasionally I have actually rang people up in front of the patient if in fact they have needed an answer there and then and .. and I have said I have tried to get hold of somebody who I think might know .. so that .. that would be my first thing .. if it was something sort of very ... erm .. discreet .. then I would actually perhaps look it up .. you know or something like that .. I can't see myself doing lit research for

something I haven't got .. that .. that is not feasible in my situation ..

I would be surprised if you did and I would be surprised if trainees do because doctors don't do that sort of thing. To finish continuing education when you are qualified - when you are out in the big wide world by yourself how do you plan to keep up to date?

I don't know really .. it is something I have thought about a bit because I am not an inveterate journal reader .. I mean I do have a go .. I glimpse through them but I ... I think erm.. I think it is very important to keep in touch with .. other doctors doing similar work I mean things like sort of .. I don't know if you know if you are aware of the Agooda organisation .. erm .. I would very much want to .. I mean I was involved with them as a trainee and I'd want to .. to take that up because that is different doctors working in deprived areas ... and being aware of what their ideas are ..and so in that sort of form I would find it very useful .. I think that within the forum .. I think .. I think actually having clinical meetings within general practice .. itself on a regular basis is important because it is a motivating factor to do things and it is also you .. you are picking the brains of other people who have done it .. so I suppose .. and I think also I mean like doing sort of courses and things that are interesting and sort of PGEA scheme I think are .. I mean it depends .. I mean they are fairly far between and few of the useful ones but there are useful ones that come up I mean I think for instance things like .. on sort of AIDS counselling and things like that .. I mean there are ones that people have sort of limited knowledge on and it is a fairly quick way of acquiring and so I wouldn't sort of totally demograte those either I mean I think they have limited value but ..

Great, thank you.

JGB3/TINA/P#STUDY3.196

PILOT STUDY FOUR

19th June 1992

The easiest way I find to start is to cast your mind back to when you were an undergraduate and think about how you learned things then and to tell me in general terms how you went about learning things as an undergraduate.

Well I think that the way in which er .. I did .. I used to learn was er .. obviously you'd get er ... starts first on lectures and also on the practical sessions that you spend with er ... well on a ward and .. the whole thing is that you actually can learn whilst you are having group discussions and I found it quite useful in .. self exchanging information because well .. when one person is away you can only do so much whereas if you actually go around and then come in for a little discussion you can actually discuss some of the materials you may not be coming across in your study .. so I think that is quite er .. well I think those are the sort of main methods of learning ..

How did you feel about the spoon feeding bit?

Well I think .. I think first of all it is er ... it is important from the point of view of passing exams that er .. those lectures need to be attended to er .. with my little experience they seem to er .. use the materials that they've talked about during the lectures most of it anyway .. so I from that point of view I think it is important .. I think secondly that er .. the lectures are very useful in er .. highlighting the important points .. obviously if it is not important they won't talked about .. during the lecture time and therefore it gives you an idea which are the sort of main emphasis to stress or if you have .. well if you have more interest or more time you can look around or read about the subject a bit more ..

And did you?

Well .. to a certain extent but not .. not that much!

What would make you interested in something enough to go and read around on?

Well there is erm .. there is a few things really .. if there is something that is going to relate to your current experience at the time that you actually want to explore more about a subject .. now I think that is the first thing that would probably stir me up to look at it .. if not immediately then within the next few days erm .. and also the second thing is something which actually er .. is extraordinary that you well .. I as a student time the second one is something actually you thought about it before but not sort of got to the bottom of it and then it was brought up on an occasion you have actually been stirred up again and had the chance to look it up .... and I think probably that is about it really.

And groups learning in groups if you were comparing the spoon feeding lecture bit to the group learning that you described which would you prefer which would you feel more comfortable?

Well I think it depends on a lot of factors .. you can't really say whether one is more useful that the other erm .. I think that being spoon fed seems to have so little er .. I think it has got a very good effect on certain parts of the exam anyway erm .. but er .. second thing is that er .. it the group discussion in fact I didn't actually find it as useful as comparatively to now .. that once you are actually out of the medical schoolship ..

Well lets talk about now what about learning now as a trainee how are things?

Well I think it is also again divided in several aspects .. er again that er once you are out of the medical school you are not actually spoon fed as such er .. well you get .. a lot of courses you actually can attend but they are not actually compulsively to go even the half-day release course you are not supposed to come you can also attending and having those half days but .. I think once you have actually out of the medical school well I feel that I once I've finished the medical school I feel that er .. you've certainly found this feeling of er .. missing something .. you are used to well I was so used to sort of coming that you seem to be getting more new information all the time regularly where as once after the medical school it seems that we have to explore ourselves you have to take out a more active growing er .. doing things .. researching whatever you like erm .. so therefore I feel that there is er ..

suddenly there is a little gap once er .. finished the medical school.

Did it make you feel uncomfortable to take on a more active role?

Well I think .. well I wouldn't describe it as uncomfortable but I think that er.. it just takes a little time to get used to but once you have been sort of feeling suddenly nothing is going right then you are just er .. well it will probably take a short while to adjust to a more active role of learning..

And now in general practice learning in general practice how do you go about learning?

Well obviously there will be quite regular tutorials with the trainers and partners ..

How do you learn from those?

Well there are several ways really because there are different content of the tutorials that we actually do .. er we usually discuss a few things during that for example the er .. analysis with discussion of erm .. just read up cases ..

How does that make you learn? I know about the techniques erm .. I want you to tell me a bit more about you as a receiver of that technique. how does that help you to learn things?

Well what I feel about the case analysis is that you er you have the chance to actually re-evaluate your consultation techniques er .. then followed on with you er .. diagnosis, management of the patient, follow- up which erm I think it is a very good chance to discuss things because sometimes you think oh well I have managed this patient really well and then when you have a discussion with your trainer or the other partners then it is oh how come you didn't do that or how come you didn't think about this and it sheds light on the things you omitted ..

Are you happy discussing cases with other doctors?

Well I think it is er .. the fact of it is er .. a way .. a way of learning and also er .. well medical audit is part of the primary programme .. nowadays though .. and I think it is a useful exercise ..

And you feel O.K about it?

A sort of factor is I mean you treat it as an exercise off loading you know .. I think that is well quite reasonable to you so yes.

What about working as a GP how do you find that compared to your previous experience sort of working in hospital for example?

Well from ... well from the last 6 few months the comparison between hospital work and general practice work is that .... it is more ... it seems to be more involved with the family as a GP than with er .. than compared with the hospital doctor .. er .. first of all you see .. quite often you see the whole family er.. well you know er.. individual occasions several occasions but er .. whereas in hospital you well you obviously have to have discussions with the family with management care if there is any serious illness or anything like that but other than that you only see the patient by himself or herself er .. that seems to be the anaestoria and then they come and see you in another three months and you don't know what is happening in between er..

Well what about the patient as an individual when you are dealing with him. Is there a difference between how you are dealing with here and the way you deal with him in hospital?

Well it certainly has given me more insight into the family involvement of the .. well of the patient care erm ... it is more like erm .... erm .. well holistic in a way er whereas if

There holistic means the rest of his family?

Yeah that is right but more of the whole family dynamics you think about more about family dynamics than well I would I have anyway than just seeing them in out-patient department..

What about you as a doctor then? You as a doctor here compared to you as a doctor in the hospital are there any significant differences in the way that you work or feel?

..... well without previously having any general practice experience before coming to this job er ... when I was in hospital I think most people were .. er .. had the same sort of feeling that er .. how come this patient at this time of the night waking me up this time of the hour when I think having worked in general practice for a while you realise the er .. the difficulties encountered in general practice ..

What I was thinking about doing was more to do with that some GP trainees feel that they are more alone when they are in general practice without the support of the registrar and the SHO and the hospital. Is that a feeling that you get? Or is that not something that has been a problem for you?

Well I think it has been, you could .. well you have less hierarchy and therefore less .. well therefore less support because you have got less .. er.. but I think though there are other supportive team members in the primary health care which actually does .. have quite a great deal in the management of the patients in the primary care setting ..

Are you able to have a conversation with them if you need to about uncertainties that you might have?

Yes, yes well in most cases really er.. I think .. I think that er .. it actually does help that when the partners are quite easily accessible er and if you have any queries just .. ask them .. er ..I think I am quite lucky in the terms that er .. this year there are 1 1/2 trainee er .. and I've I have er .. other people say that the trainee by yourself is rather lonely er .. and I am quite lucky that the another trainee is there and she is actually a bit senior than I am and so if I have any difficulties and I can't get enough out of people then I can have a good discussion with her er .. and I think that that has helped quite a bit really ..

The half-day release course how is that going?

Well I was just going to rightly say to give the to give the er .. summary to what happened over the last year or so ... right the first .. the first half of the day release course was erm ... I think comparatively er not as good as the latter half er .. and I think the reason behind it is that er the second half, we had different groups anyway, and so there are a lot of variables er .. the second half we had to split into two groups which are one with people who are actually aiming to get exams whatsoever .. the other half is the one I am in that are actually towards the exam orientated .. towards MRCGP ... erm... I think in exams that you have actually got a fixed goal at the end of the day seems to help organise things with more er .... they help organise things a bit better ..

And it is useful to have something to aim for?

That is right .. it is useful to have something at the end of the day you have that goal to go for whereas erm ... I think the general in my group anyway the general consensus felt that you know the first well the ones who were in the same group in the past that they the order of the day seems to be sometimes majoring on our subjects you know .. without a sense of achievement ..

Yes, it is difficult isn't it? Change of tack a bit. Can I ask you to think about in general terms what a good trainee would be how you would identify or characterise a good trainee?

.... that is a difficult question! Erm .. yes it is open ... erm well I think ... it comes back to the point again that if you are actually ... it depends on the experience of the trainee if the trainee has been actually doing a lot of hospital work or .. had very bad experiences er .. but never done general practice before then obviously this is a new field towards this practical training .. er .. I think to make a good trainee would be .. firstly that you have to .... erm .... like the work that you are going to do for the rest of your life er .. secondly to er ..... have good er .. attitude towards patients ... and that you have er .. that er consultation techniques .. therefore patients care erm ... towards those aims I think it would be probably advisable to have a clear frame of mind at the beginning of the trainee year ... or to set some

goals .. I done that before actually erm ... at the beginning of the year and therefore perhaps when the year is through you know see how much you have actually achieved .. er ..

Does that happen?

Erm ... to a certain extent it has happened to me .. I don't know about the others ... well I have planned to take a few exams which I am doing now and so to a certain extent it has been going O.K for me ..

What would be the opposites then? What are the characteristics of a poor trainee?

Erm ... well I think that from the patients point of view that er .. that a poor trainee would be the one who actually er .. just wanting to complete there .. trainee programme but not .. bothering very much along the way as such er ... that they just want to perhaps .. just get on with the work and then not care too much about the patients care or .. er improving on their standards of er .. of techniques or other general aspects in the building of a good GP really ....

Another area, what difficulties have you faced as a trainee learning in this environment not in you know specific to this practice but in general terms what difficulties have you faced?

.... Erm ..

Or has it all been easy?

Well I think that .... I think that er .. I mean learning wise er ..... mmm ... difficult this one ..

How do you know how well you are doing?

Well I think that er because of the fact that I had strategic plans, which doesn't mean anything really but er .. it gives me an idea of .. of er assessment as such .. er .. that I am doing something .. er .. and also erm .. that you do get feedback from the trainers and er .. they have er say after exams a discussion session .. they would obviously I think I've only started to let yourself talk a bit about your own opinion by yourself and then they .. they would give their er .. opinion about you afterwards .. I think that is another way of feeding back and therefore assessment of er .. what you have been doing throughout the year really ..

Do you find that helpful?

Well I think it is very helpful .. I think in the way that er .. there is actually somebody feeding back to you er .. not on a piece of paper saying that you have passed your exam .. er it seems to be more sort of intimate er .. relationship than just a piece of paper.

How does that feel? Does that feel comfortable or threatening or what?

In some ways it is threatening at times er .. because you have found that you have already done the best that you can do and there is always some room for improvement and you think oh well, I should have done that er .. but I think it .. it all comes back to the same idea that it is a very good in my way.

How do you know when you don't know something?

Er yes .. that is a very difficult question! I think that I would usually recognise when I don't know anything about a particular field ..

That is when the patient is in?

Yeah, er ..

So it is sought of reactive?

It is in a way yes, and sometimes you might, you might actually come across things that er .. you think that you actually know a lot about er .. and but then you .. you read some literature in a journal or whatever and er .. you discover that er .. oh well, there is a lot to learn! So that is another way of opportunistic picking up er .. the sort of er.. black holes in the grey.

Do you find that you are reading journals and medical things more or less now as you are a trainee?

Well I think that er.. I read it more because .. firstly because I am doing all the exams and because so therefore it is probably more of an incentive to read more er .. comparatively to when I was a medical student .. erm .. and I think once you actually get started you feel there is a whole world of knowledge in these journals that you .. I found .. I used to find it very boring .. but now I find it is very .. I don't know .. I actually enjoy it now er ...

Well why are you enjoying it? What has happened? It is not just the exam .. you can't say it is the exam..

I think it is the .. no .. I think it is the .. I don't know .. I don't know why I am starting to enjoy them because er .. well the thing is that the text books they give you the information which is er .. concrete er .. and also it is .. it is not exciting the science study has been there for a while before it is sort of printed .. whereas in the journals they seem to be more up-to-date and it is er .. there are a lot of things er .. and there are a lot of things that er .. a particular piece of article that you haven't looked through er .. and they give you all sorts of funny figures that you can't explain ...

What about keeping up-to-date when you become a principle? Are you looking forward to being a principle?

Yes .. er .. not yet!

Why?

Yes I am really ...

Are you worried about being a principle?

No, well it is just because .. well I have plans really .. I have got .. things that I have wanted to do er ... I think that er .. once you become a principle I think that er .. I think you will be at a different stage whereas er .. where you can hopefully call your partners and other supportive staff or maybe your secretary .. but hopefully those are the people around you who can actually help you to keep up-to-date with the current affairs within the medical field or even the medical political field .. erm .. and also you will be urged to do PGEA that you .. you go on courses and up-date your knowledge

And how do you choose those?

Well .. well I think it ought to be something that you .. something you are actually er .. firstly find out .. well there are two ways of looking at it .. one is that direct your interests in that particular field up-date on that particular field or something you feel that you are actually er .. lacking in knowledge therefore you want to increase your knowledge in that particular field .. those are the probably 2 main streams that would probably come along ...

What about keeping your consultation skills up-to-date? That is a really difficult one.

Well I think that there are .. there are ways that you can do this .. for example video tape ..

Ah yeah, but then CME. In fact I hadn't thought about it before David and it is a bit unfair to ask you this but is this consultation skills a bit like riding a bike - or do you think it might evolve?

Well I don't think there is anything that is actually static as such er .. I think you can always improve on something which is already there .. it is like doing medical audit you just have to stand there and ... come back in a period of time and see how things are .. has actually been improving or going worse or

But is it likely to be a good source of CME then?

Well I think it would be ..I think it would serve the purpose of reviewing the well in this particular instance how the particular doctor does in the interviewing techniques but then again its having said that its .. its kind of true that is sometimes people are not quite happy with it because of the fact that it is quite artificial because you know that you are going to be taped therefore you behave differently er .. and also the fact that the patient should be on the tape as well and therefore the would behave differently ... so I know it is a good tool but I don't know how to sort of ..... you know ..

O.K. I'll stop now.

JGB3/TINA/P#STUDY4.196

PILOT STUDY FIVE

22nd June 1992

The easiest way I find to start this is to cast your mind back to when you were a student - a medical student and to start thinking about the ways in which you learned knowledge, required skills and picked up some attitudes and things. Can you remember how you went about the process of learning as a student?

I started off trying to learn parrot fashion .. all the facts and figures from the books such as lets say for instance the anatomy of the arm I would try and learn the muscle which nerve innovates it and what it does and then I found it was much easier to actually look at the arm as a whole, see what each muscle group did ... take it for red that the same muscle group would have the same nervous innovation .. and group all the muscles in groups like that so that I then found that it was much easier to learn .. for me .. to learn principles and then imply those principles later on er .. not to actually sit down parrot fashion and learn things .. but to just learn one or two basic principles by which you can apply and get the information whenever you needed it for .. and that is what I do all the time now I cannot sit down and learn parrot fashion in a book I hate it ..

So can you give me an example of how that works in general practice?

Erm ..... lets say for the instance of referral er .. you have got to learn how to refer patients to hospitals .. if I learnt every single erm .. consultant in the hospitals I'd be here until kingdom come to find which ones are the best and everything so I have learnt basic principles about which consultants do which bit so for instance I know Mr Greeney is sorry which one is it I have forgotten now one of them is a consultant surgeon who that specialises in erm .... cardiovascular work so you just learn the principles .. and off you go .. er that is not a good not a very good example erm ..

What about prescribing as an example .. how would you go about learning that because quite a lot of that is new in general practice.

Yeah, absolutely again .. that is another method of learning that I do is .. to er .. a try it and see method or of experience .. erm .. I will come across something .. something will come in and sit down and say I have got something that I have never come across before and will not know how to treat er .. so then it is a case of books BNF, MIMMS find out what the real treatment is and give it to the patient who will then come back and say this is a load of rubbish so I will go onto the next line and then I'll .. I will eventually work out a way of doing it myself .. I mean the classic one now is like when you are in hospitals all you are learning in asthma is how to treat an acute asthmatic attack .. you never learn what the presenting symptoms are .. what the er .. the first line treatment is and how to go about it so during my first six months and now my second six months I have had to gradually erm .. set myself a pattern .. a protocol if you like of treatment and of diagnosis and of treatment which I now have now firmly in my mind .. erm ..

So that covers management things doesn't it, fact things. What about skills because people talk about knowledge, skills and attitudes don't they?

What .. what do you mean by skills?

Well how about the consultation that is said to be a skill as oppose to a sort of fact isn't it?

Well again I think that is .. that is something that can't be taught and people who try to teach it I think are wrong ... you can be given a few tools .. people can give you an examples of tools er .. that you can use .. you can try to use er .. but I think everybody is different and ... the way I've I think learnt to do my consultations is simply but finding out what how other people do it erm .. getting a few of those tools in my mind and then trying them out and then by trial and error erm .. finding the best way that suits me .. and that is and I .. I floundered around for about 2 1/2 - 3 weeks in my very first GP job er .. but after that I think .. and I got to a point where I was adequate and since then you sort of gradually home your skills .. you always meet somebody comes in will go out you always feel totally adequate you know you did a bad job but next time you think well I'll try it a different way and you are still going to get those throughout your career I would imagine .. but erm I think for the vast majority of patients now I probably

have got an idea of how to deal with each one as they come in.

So do you find yourself reviewing what you have done in a sort of self assessment way?

Yeah, well there is two ways you get that .. you get feedback from trainer one of the GP's in the practice who said this came to see me he said you were hopeless .. you know or .. erm you get self feedback and that is ... you know when you have done something wrong because when the patient goes through the door the patient feels dissatisfied .. and you feel dissatisfied you will think to yourself I didn't handle that properly because you know the patient is going out dissatisfied and therefore you feel dissatisfied.

What sort of cases cause that?

Erm .. it tends to be .. nowadays it tends to be youngsters erm .. who when I say youngsters I mean young adults who .. seem to have an idea of what they want out of general practice .. but is totally at odds with .. with what we want to offer! Erm .. and er .. they will come in, sit down and tell you what they want .. quite often you agree with it and then that is a great consultation you know for like hay fever sufferer comes in sits down and says can I have some trumydown it works fair enough here is your trumydown he goes out happy and I'm well fair enough then you get somebody coming in saying I want er .. I want some tamazopan and then you say well I am sorry we don't give tamazopan but I want it and then you will go on like that .. er and then it gets difficult and it really does get difficult those are the ones I don't like when they do that the other one are the again it seems to be the young adults that come in with really minor symptoms ... which I suffer from every week and wouldn't dream of asking advice about .. having said that I know I perhaps talk from a privileged position that I know perhaps there is nothing serious going on you know when you have got a bit of a twinge in your back or something .. but erm .. very minor symptoms .. but you know to ... you can't just oh there is nothing wrong with you get out .. you have got to sit there take a full history .. do a full examination before you sit down and say well I have done everything I can think of and I can't find anything wrong ... erm the headaches are the worst .. if someone comes in and says oh I am getting these ... these headaches and .. and you know it is going to take you 20 minutes to tell them there is that it is a tension headache.

So what does that sort of thing make you feel like?

Erm ..... those consultations just make .. just make me think well I wouldn't be talking to my doctor about this .. I know even when I was a child and I didn't have no medical information at all that I knew that I was all right .. and I wouldn't have been bothering my doctor .. and it just makes me go eugh! and I feel erm .. angry that they are wasting my time ..

Well what happened when you are flying alone will they continue to cause you trouble do you think?

I would probably be more confident in telling them there is nothing wrong one of the things that .. is really in the back of my mind all the time is that these aren't my bodies they are somebody elses ... and if I make a cock up it is them that carries the can .. I actually probably feel more confident knowing that it is going to be me that is carrying the can .. rather than dumping it on somebody else ... so I probably .. am a little more meticulous than .. than I would be if ... if it was one on my list and then I probably wouldn't do as much before telling them that I don't think that there is very much wrong with them ..

Yes it is a difficult dilemma.

When it is somebody elses yeah, you are always reminded of that .. that fact when they say oh well my doctor ... my normal doctor is Dr Kingsland .. or my normal doctor is whoever .. but you are the only person with appointments and so I have to come and see you .. you know .. and so you go ah, right I have to make sure I do a good job here because you know that the next time they will be back to see Dr Kingsland anyway .. whatever you do ... because that is their normal doctor ..

Well that is part of training though isn't it?

Well at least I get some feedback from .. from the boss ..

What does it make you feel like as a professional to be treated like that?

I get treated as a student a lot .. as non qualified.

By the patient?

Yeah, we try to get around that ... by informing the patients that I'm erm ... from .. I am a hospital doctor .. who's orientating into general practice so we try to get around that .. so when .. I mean I had a lot of people in the first few months who asked me you are new what are you doing here so I told them that ... that I am a doctor from a hospital who is orientating into general practice and they accepted that fine er .. and I say I have done all my medicine in hospital so far ..

Are you the first trainee here?

I am the very first trainee here.

Yeah so that is why .. so it is an interesting challenge then isn't it?

It is not that bad actually .. I mean I can imagine some of the places that are bad but er .. over the last 2 or 3 years here there have been a lot of locums and changes .. there has been an awful lot of changes here .. so I think the patients are used to change at the moment .. they are not quite .. they are not quite into the settled pattern .. and even now you get a lot of people who have been patients at this practice for a long time and go back to the previous Principles of even before Dr Fennel was here so thinking back to the previous Principles and I would say since then I have not been able to catch up with what has gone on .. and it is probably going to take a few years before they even work out who the four principles here are.

Can we go back to the learning thing? Some doctors some trainees have described a feeling of isolation as a trainee compare to when you are learning certainly a student possibly in hospital. Is that something that has come up?

No. Not at all erm .. both my trainers have been there whenever I wanted them .. in fact I have got more of a feeling of being backed up here than I was when I was a senior house officer in hospitals .. there was no back up there .. there was nobody you .. especially when you are on call at night it erm .. registrars were very reluctant to get out of their bed and you ... you did fly around there whereas here there is somebody down the corridor .. as you probably just saw yourself .. I knocked on his door asked him a few questions about something .. I have always got the back up ..

You don't have any difficulty about asking for help?

No. None at all.

Do you feel difficult about talking to other people about the cases that you are dealing with?

Not at all .. from my point of view I'm .. I have very little problem with the clinical side of it .. it's usually I am asking questions about the procedural side of it .. like simply which consultant specialises in this .. so I can refer them or .. or should I be referring this patient or should I be investigating this as a GP .. so procedural things that are .. that I need to ask .. and then there are a few clinical things but even again it would be well I know basically how to manage it but what is the best way as a general practitioner how to manage it .. and those are the questions I will be asking and I am quite happy to ask those .. quite happy.

Have you had any difficulties during the 2 six month bits - difficulties with learning about general practice?

Erm ..... not really ... I think you have to go back to learning .. the main things I am still unsure about is my level of referrals to hospitals .. my level of investigations within the general practitioners role .. I am still .. I am absolutely positive I am over referring and over investigating .. erm and that is so difficult to learn .. even if I compare myself to my principle for instance .. I mean is that a proper comparison .. it probably isn't ...

Who else have you compared yourself to?

Erm .. well .. I try to compare myself to other trainees .. but that is very difficult because they are all in different practices and they have different ideas and things .. and so I think that is very difficult .. the only other person is the new .. one of the new principles here er .. who is fairly new who's in the similar sort of thing really erm .. I am still sure I am over prescribing, over investigating and over referring .. I am still sure I am.

In your experience so far how would you characterise a good trainee? A trainee that is going to do well.

.... Oh dear! .. now you are asking me .. erm .... I think as a trainee .. once you are in your GP part of the traineeship erm .. I think you have got to .. you have got to say to yourself well .. I must have the clinical skills already ... erm .. those that start their vocational training as .. straight into a general practice I think are at a distinct disadvantage .. because they are not learning general practice .. they are learning .. clinically .. they are still learning their clinical stuff and I think that is a big disadvantage which I am glad I did my 2 jobs right at the end erm .. so a good trainee is one who has got a broad clinical base so they are not forever trying to learn how to diagnose and manage erm .. they .. they should have you know .. a lot of that under the belt already .. erm .. to give them time to learn the .. the important bits which is er .. the consultation and the procedural management skills in general practice .. if you are forever learning how to treat asthma or hypertension erm .. you won't have time to learn those bits and that is important .. and I think an ability .. you must also have at least a grounding in erm consultation ... erm .. otherwise I think your confidence will be destroyed .. and a lot of it I feel is confidence and confidence I don't know or confidence to say you don't need anything erm ... to people so from my point of view I would say that a good trainee would be one well grounded in clinical experience .. who has a modicum of erm .. ground rules in consultation already within himself erm .. so that he can then spend the time experimenting in using them and getting the best way he can out of the consultation.

Right. O.K anything else?

Erm ..... I think it helps if you can speak English.

Yes, that helps a bit! We get the point. What about the trainee who is unlikely to do that would they be the opposite to that or are there other characteristics?

A trainee unlikely to do well is one that won't listen.

To whom?

The patient erm .. there are people that I know who have trouble because just simply they are not able to listen to their patients enough to spot the signals that they are giving er .. and that is someone who is going to make a bad trainee and a bad GP.

Right. Any other characteristics of a poor trainee?

Probably going back to the confidence point of view one that is lacking in confidence and I think when you do .. lack confidence which I suppose you build up over years anyway but if you are totally lacking in confidence you are going to be very much an over prescriber, over erm .. investigator and over referrer which is not what GP is about .. erm .. I see the role of a GP as trying to treat as many people for as long as possible in the community .. and only using investigations and hospitals as .. a .. going towards a last resort.

Right .. talking about definitions how do you define learning? What does the term learning mean to you?

... if you talked to me at the start of my university it would be the ability to imbibe and hold facts to be regurgitated at a later date .. and I think I have altered my idea .. erm ... how to describe .. how to actually get a definition on it I haven't got a clue .. but it definitely isn't that .. it definitely isn't just the ability to to er .. you know take in facts .. erm .. to regurgitate at a later date ..

But what is it?

Erm .. well it is .. it is an ongoing process ..

To do with what though?

To do with your ability to adapt .. I think .. to do with .. you learn .. the learning process is your adaptation process .. erm to adapt to new environments .. even if the new environment is the new patient with the new condition.

So it is a pretty dynamic thing if it is going to be happening with patients, yeah, it is personal isn't it?

Yeah, and everybody is going to do it a different way .... I can't see everybody doing it the same way .. I think most people would come to the same answer in the end ... but left to our own devices we will all do it a different way.

So how what is going to happen, how can things change to .. to improve things for learning in general practice? Given that definition.

Erm ... I think the .. the ideal thing would be for everybody to see the various methods on offer .. of .. of that process .. erm .. for people to see how other people do it .. so that they can alter and .. because you will always er .. you will always .. evolve in your own .. learning process anyway so .. with that you will be able to say .. oh that might be a good idea to do that or .. no I wouldn't do that at all .. you know .. it wouldn't work for me and you'd know .. and you'd be able to .. through seeing the learning processes other people use .. to home yours down to one that suits you the most .. erm ..

Do you think there is a chance for that at the moment?

I think we see a little bit at the moment erm .. in the workshops .. but er .. the workshops themselves .. I didn't find very useful ..

Why?

I didn't find .. I didn't come out of them thinking I had learnt anything .. at most points I said that this was not for me .. and this is not what I want to do .. I suppose that is learning .. but er ..

So how could they have been improved?

It is a difficult one .. we were talking about this last week .. and er .. we went through it in a big way and er .. simply in the group situation that you are in .. you .. your hands are tied to a point .. you can't really be that flexible .. you know because what is good for one person is bad for another .. so erm .. we made a few .. a few pointers erm .. we .. we were disappointed in the amount of input given to us by the course organisers ..

Too much or too little?

Well too much and too little ... erm .. in the content of .. because I mean we decided our own content .. it was one of those trainee orientated things .. so we were supposed to be deciding our own content so we put a list of things we wanted to learn up on the board .. most of which we have not ... erm .. and a few simple ones were picked out .. but then when we were in the groups .. there were lots of long silences .. lots of embarrassment and things like this .. and you are thinking .. well surely the .. the course organiser should be saying well .. no this is what we should be doing .. lets get on with it and .. nudge it in the right direction .. through their own experiences .. because they must have a lot of experience of learning and of learning methods .. etc .. and we felt that they didn't give us an input .. they .. they sat right back and let us get on with it .. erm .. it might be fine for people who've got a few years in which to do it .. but some of us have only got a few sessions in which to do it .. we felt we wasted an awful lot of time ..

So there is a need for more direction?

Once .. the subject matter has been chosen .. and we start trying to .. you know .. learn after I solve the answers which is what we are supposed to be doing ... if there are going to be great gaps of absolute non information nothing is getting done .. we are not going anywhere .. we are just floundering around doing nothing .. which we found we do an awful lot of .. and then only right at the end of the session you were getting somewhere and then it was like .. mm.. 5 o'clock .. time to go and then you were back to square one when you came back in whereas we felt if at the start just a few little hints and pushes in the right direction might have got us there a lot quicker.

Why do they do it like that?

Erm .. because if you do it yourself you learn a lot and you retain more erm .. well that is the theory .. if you have 2 children you tell the children how to do it .. a maths sum and you tell another child well get on with it the child who has got on with it might take longer ..but he will remember more and he will be able to do any sum.

So that is the basis of it?

Well that is what they told us the basis was.
But we thought that well .. perhaps there should be a little happy medium with the child who we said well get on with it but I would start doing it this way.

How do you feel about being treated like children?

Well we are not exactly being treated like children but er ..we were supposed to be getting the way we are supposed to get on our own .. which is what they said .. get their on your own because then you will be able to do it more often .. and I can the point er .. but we have to be able to learn on our own because when we become principles you have still got to learn.

So what is the problem?

Not enough time.

Right, is there anything else that is missing apart from time? Thinking back to the way you learnt as a medical student?

I didn't learn anything as a medical student.
I didn't because medical student is the fact thing .. the facts ..

So what do you need to learn now? What is missing apart from the time bit?

Well we have got forty odd years ahead of us I suppose so erm ... eventually we all get there.

History seems to suggest that some people don't get there.

Yeah, that is true ..

How do we avoid not getting there?

By .. I think by .. especially in the workshop making sure that by the time .... what we were saying was we would like some tools to take with us ... so that our learning process would be a little shorter .. we will get there a little quicker but .. and we will get there on our own .. but just a few little tools would be nice and they were saying no, no you have to go and find the tools yourself.

Yes, it is the old fishing analogy isn't it?
The exam .. what sort of role did the exam in sort of learning to be a GP.

You are talking to a person who doesn't like the exam. If I am going to take it I will take it within in the first 2 years when I am a principle er ..

And why do you think that?

Er.. well from the papers I have seen and the people I have talked to there is no relationship at all to general practice, at the moment .. and I do .. well I know they are changing it and are looking into it desperately to try and get it to be more relevant .. but at the moment I don't think it has got any relevance to general practice at all and so if you have got it it doesn't make you a good GP .. so there is no point in taking it ..

That is true.

And most trainers I have spoken to erm .. think that as well er .. and I am actually in the job hunting market at the moment no .. no practices have asked for it .. at all .. they haven't stated it as a .. a qualification you need to be .. to be a GP .. so .. it is not wanted and it is not needed .. well I suppose it is needed .. some sort of examination might be needed but erm .. it is not wanted at the moment ..

O.K. .. thank you for that. One last question how do you know when you don't know something?

You feel embarrassed! It depends actually ...

Is it a reactive thing though? Are there any pro-active things you can do?

Er ... you could try pre-empt things I suppose but erm .. when I first started general practice I know I didn't know how to treat asthma .. if you go back to that one erm .. one of the first things I said to my trainer was I know we don't want to do too much of this but .. I am a loss with asthma .. please sit down and show me what to do .. and what are the protocols you use.

So how did you know that? How did you know that you didn't know?

I actually sat down when I started and said to myself .. yeah O.K I am coming from the hospital so I can treat acute ... and then I went through things and I thought well you know .. I can treat all these in the hospital but I thought well you know .. what do you do first before they get to you?

Do you do that sort of you know .. that process of review now?

Not so much now, no. What I think .. having said that .. that is probably a reactive thing as well .. because we .. we come into general practice from hospital medicine almost the first person who comes through the doors is going to sit down and give you a problem .. that .. is too mild to be in hospital .. but should be treated in general practice and you haven't got a clue what to do erm so .. it is probably a reactive thing in that that happened and then I sat down and thought well what else don't I know?

Do you think there will come a time when you don't need to think?

No, there will always be something .. whether it is something from the FHSA phoning up and saying erm ... blah, blah, I don't know .. or a patient coming in .. or the tax man phoning me up .. you know anything .. but there is always something you are going to be learning .. and you talk to you know talking to trainers erm .. one of whom is actually near retirement age now who has been a general practitioner for most of his life .. and he is still learning .. you know .. he still comes in and says I have seen this today I didn't know what it was so I phoned up this guy and he said this to me and I have found out what it is .. I have never seen it before and you think .. oh ..

Is that .. is he a sort of role model? Is he a sort of GP person?

Erm .. not for me because .. because he is retiring soon he is not that interested in the new management side of general practice and the supposed profits and everything whereas I am going to have to be whether I like it or not erm so ... probably a closer role model would be the .. my trainer at the moment who is having to do all that ... what I am going to be doing in six months time.

Brilliant. Thank you.
JGB3/TINA/P#STUDY5.226

PILOT STUDY SIX

23rd June 1992

The easiest thing to do is to try and cast your mind back to when you were a medical student. Thinking about the ways in which people learnt then, can you describe the general process that you went through when learning as a student?

I think the main process at the start was going to lectures and listening to someone else talking for an hour .. writing notes erm .. and then relearning the notes .. very early on as a student but after it was .. that we had to do a lot more reading outside that and so I sort of felt more encouraged to .. do extra work myself, not just take on .. what was being force fed to me ..

Right, so what was the process by which it got stuck in your head? How did you keep things in your head?

Erm ... I think initially it was just ... it is difficult to say initially but I know it ... as it sort of went on we sort of became more aware of actually how you do keep information on board and er .. how you managed to recall information .. so I think through the course of the five years .. that process actually changed as I became more aware of how I was .. most able to remember information and I think to start with it was all so new and it was something that I always wanted to do that I think it was very much a feeling of oh well .. it will just stay there .. I have been told it now I will remember it ..

So how do they change?

Erm .. I think probably when we started clinical work because .. suddenly you had hands on experience and you were expected to erm .. understand things, say things, be ... shown up in front of your peers I think which was the .. the quickest way that I found made me learn .. I would go away and think about something so that I wouldn't ... I wouldn't show myself up .. erm ..

So that was when it changed, but how did it change?

Erm .. just because I sort of decided that it was time that .. I wanted to use the information that I had been given .. and I suddenly realised that the information wasn't there, that it was in my books and my notes, but it wasn't in my head where I needed it at the time .. so I would just go back and use it from there.

So the information you learnt when you were a pre-clinical student - was that useful to you?

Erm .... some of it was ..

Is it still in your head?

Not now .. no, not now .. I actually feel that some pre-clinical subjects like anatomy for instance .. I mean I have actually learnt more anatomy since being qualified than .. than I did at the time .. sure, I knew the causes of nerves and so on .. but .. no, I think when you actually use the information I then realise that it has been learnt.

What was the role of talking to others as a student .. how did talking to other people help?

You mean colleagues or?

Well other students.

Erm well I have always .. I mean I have always come from a family with fairly sort of academic family so .. I always talk .. erm .. talk to people about subjects I have been interested in and other things I have done erm .. I find I learn a lot of what erm .. I find I learn a lot from what other people .. from what other people tell me as well erm .. so .. so yes I mean I was in a group of people where we would talk to each other and say oh, remember Mrs X the other day and .. we .. we would learn things from each other erm .. and then if I felt oh I don't remember that I would go away and look it up and then I'd remember

that I would know it for next time so ..

O.K. and what about now as a trainee? How are things, are things any different now?

I think they are different in that .. I don't acknowledge to other people if I am not sure about something .. you know sort of I am much more reserved about .. an insecurity about a fact or .. a management strategy or something .. because I think well I ought to know that so I go away .. look it up and then I do know it .. but I haven't told anybody that I don't know it ..

So what about this open sort of talking .. you were happy as a student to talk about things, but you are not so happy now.

Oh, I mean I think my trainer laughs at me because I talk to him about a lot of erm .. patients in the practice erm .. because I think it is quite important erm ..

I mean do you feel comfortable about talking to him about the management of patients?

I do at the moment yes.

But he laughs at you?

Well no, not laughs at me I think he finds it quite amusing but erm .. you know I obviously need to talk but I do .. I like talking about things because I find them interesting and .. perhaps rightly or wrongly think other people find them interesting as well ..

It is a good way to practice what you are thinking against someone elses objectives.

Yes, that is right .. because often to actually verbalise what you have done makes you realise whether you actually understand what you have done anyway ..

Do you find that when you explain things to people they understand what you are saying?

I think they do .. erm .. there have been several occasions when I have found that they obviously haven't understood what I have said erm .. but I do try and put things across in a way that is simple and straight forward and really emphasise important things that I think are important .. so that I like to think that the patients understand what I have said .. I think they understand what I have said .. I am not sure they remember what I have said ..

Always a different story .. but thinking about learning whilst you have been a trainee have there been any .. highlights .. anything that has gone particularly well for you?

Erm ..... you mean as far as just understanding your own ability to learn? It is difficult to say really because I think there has been a er .. gradual transition during the year .. I mean I have learnt coping with situations better erm .. being presented with things on a daily basis you very quickly establish a routine for yourself so I have learnt .. I think I probably learnt the hard way because when I first started general practice I had done very specialised other hospital jobs and there were still great areas of my knowledge that weren't particularly good .. and I feel that in the same way I have learnt .. I learnt the hard way because I have had to go home and look up all these sort of little things that you know .. I am now almost taking for granted erm ... so I think particularly in the first six months there was an enormous ... change and then things have calmed down now and I am sort of refining .. refining by learning but ..

Are you learning different things in the second six months? Is it a different sort of learning or is it? I think .. I think it is a continuous process .. because people say that .. certainly at the very beginning it is to do with knowledge and facts isn't it?

Yeah, I would certainly think that ..

And as things go on there are different things to learn and the emphasis may not be so much on knowledge or so on ..

Yeah, I would agree with that ..

When people talk about skills and attitudes how do you think you pick on the skills and beliefs and things in general practice?

By .. firstly by listening to what other people say .. I mean I am in a practice where there are five partners and there is a lot of discussion .. erm as to the way in which different people deal with a situations .. erm secondly through experience that I have already had .. erm I know that a certain situation .. if a certain situation occurs, if a certain course of action is taken .. but there will be an outcome from it .. but I have actually had to do it once or twice already to know whether it is a good outcome or a bad outcome .. and .. particularly having 12 months in one stretch has taught me that because I can see .. erm .. I can see things coming to a head now in which perhaps I wouldn't have done in a shorter period of time .. erm .. I'm ... I mean I think I have fairly strong beliefs about .. the way in which I do things .. but .. I mean I always think I am fairly broad minded and can listen to other people .. and take other people's views and so on because I am still establishing my own ground rules .. and like I might try somebody elses ground rules and see if I like them and if I don't well I do something else .. so I am still at that stage of being quite flexible in what I do with things I haven't got a set rigorous .. format for doing things .. just sort of playing the ground a little bit ..

That is a great opportunity of the trainee year to be able to do that.

Yes.

You talked about what might be identified as good bits as a trainee do you recall any bits which haven't gone well? The bits that just perhaps got in the way of maximum efficiency?

Erm ..... right .. I think ... the first thing that springs to mind is .. thinking of certain patients that perhaps I've felt I haven't got on with particularly well or ... erm .. or they keep coming back to see me and I feel I can't offer then any more .. and yet they still keep coming back to see me and I find that quite hard to cope with because I haven't yet figured out how to calm a situation down so that they will go elsewhere .. but then I think patients choose doctors, doctors don't choose patients and if they are not getting what they want from a consultation they will go elsewhere .. erm .. I mean there is one .. one case I can think of a patient who has gradually built up my trust and has felt that she is getting benefit from what I am doing for her ... and then it suddenly all went out of the window on one consultation because she just suddenly found that enough was enough .. and she just wasn't getting from me what she wanted any more .. and she has now gone back to somebody else erm .. I think .. the way our practice is that we are not .. there are no .. we don't have personal lists so patients can chop and change a little bit which can take the heat out of a situation like that ... and erm .. I mean I am sure she will come back .. it is just that at the moment she .. she is not doing that ..

How do you feel about her dropping you?

Quite relieved! No, that is not entirely fair but yes, I am quite relieved because it gives me breathing space to sort of calm things down you know .. and have new ideas when she comes back again as she probably will do ... erm so ..

Any other examples of things that have been getting in the way of learning?

Erm ... I think .. it is difficult because I never sort of think of learning as an actual process ..

Indeed.

It is something that you don't actually acquire .. but it is something that is there and by being there every single day you are learning something new .. everyday whether it be something good or something bad .. erm ...so it is difficult to actually say well yes I learnt this today.

How would you define learning? This is the worst question!

Erm ..... I have never been asked that question before ... perhaps .. perhaps it has something to do with actually being aware .. of .... erm new knowledge, new situations .. erm .. because I think you can learn almost without knowing it .. but the reinforcement of learning is actually being aware of the fact that you are taking the information on board and then reinforcing that .. erm .. I am not very good at defining things ..

That is O.K. Is it just to do with new knowledge, are there other things involved?

Oh no, I think there is a lot more involved in it as well .. I mean I find I learn when I am motivated and I .. I feel I am a highly motivated person and .. the only way that motivation .. what feeds that motivation is the fact that I still want to .. to learn more and I never .. I never feel as though there is nothing left for me to learn .. I always feel as though you know I am not quite sure of myself .. or erm a little bit hesitant about things but ..

So learning is a great personal thing for you?

Yes, yes .. I mean I actually did a degree before I did medicine so I sort of had three years prior to medical school to sort of .. to come to terms with how I learned and the best way of getting information from people .. I mean certainly my first few days after A Levels ... at University my learning was quite different then from how it is now .. in that it is erm ... well again everything was new but well, it is a case of writing everything down a lecturer said inside an hour and getting home and not being able to make head nor tail or re-writing the lecture notes when I got home and then not being able to make head nor tail of what they had actually said .... whereas once I had got through that phase in the first year or so when it actually was quicker than that .. but the first six months it was a case of actually sub-consciously listening to what they were saying ... understanding what they were saying and then putting that understanding into my writing rather than writing down what they were saying.

How did you get to understand what they were saying? I mean listening to what someone is saying is O.K and then writing it down is a little bit .. how did you get to understand it? What do you do to get to understand that?

I have to .. I had to listen to what they said .. so that I could be on their wave length .. so that I could ... understand what they were saying to me .. it is .. I think it is ... it is a very subtle change but .. I mean there were some subjects that I just couldn't understand .. a lecturer could stand there for an hour and I .. I just didn't understand what was being said .. and I just couldn't quite get onto there wave length .. I couldn't along the same way that they were thinking and I found that the subjects that I have always done better in have been ones where I can almost anticipate what they are going to say next because I have understood what they are going to say ... it is like a natural progression of what is going to be said next .. and then as I say write my own notes as a consequence of that ..

I hesitate to put words into your mouth but it is erm ... it is almost a process of trying to get some sort of personal meaning of what has been said .. as oppose to previously just writing down and receiving

That is right, yes, well it became pointless writing down what a lecturer was saying because I couldn't understand what I had written down ... so .. so yes, I think that came to me quite quickly ..

Comparing yourself to other trainees how do you see yourself, would you see yourself as average, better, different?

I think everybody is different .. I mean we all have our own good points and we all have bad points erm ... I would certainly say that I was erm .. average .. but I would like to think that I was better than average .. erm .. but maybe that is me being modest!

It is a difficult question .. what would be your characterisation of a successful trainee someone who is going to be successful and went on to being an established person?

Erm .. I think a lot is dependent on the attitude of that person I mean, sure, knowledge and clinical skills are important .. they go without saying .. but there has to be something extra erm .. there has to be a right .. a correct attitude .. erm ..

How would you define that?

Erm .. I think seeing how people work in relation to other people .. because certainly in general practice you have got to be able to work as a team ... and feeling as a team member .. I think is .. is important .. working as part of a ... part of a system that works .. erm .. and I think that is very important .. it's .. also I think defining what you are there for ... I mean sure I have gone into general practice to .. firstly to find out to whether or not I actually liked general practice or not .. because I never felt we got enough in the way of teaching at undergraduate level but just to see whether I liked it erm .. and .. it's ..... I just feel that it's ..... I've lost the throw of what I was going to say ..

I was trying to simplify the attitude because you said the successful trainee would have the right attitude and I was trying to get the feeling of what that right attitude might be and you mentioned this ability to work in teams and that is an important attitude is that learning on an attitudes perspectives characteristics that would be significant for someone wanting to be approved in training ...

I think the ability again to get on with patients and know that patients feel that they can perhaps relate .. relate to you as well erm .. because I think half the art of general practice and medicine as a whole is being able to .. extract information from people without necessarily realising that you are doing it ..

What about people who come with minor things. how do they fit into that category?

With difficulty sometimes erm but .. I mean I'm .. I think I am not quite as skeptical, I am not too skeptical yet or cynical yet .. but er .. I feel that maybe some people who present with something minor are actually .. if they have made the effort to come and see you that maybe that there is something else that is bothering them and that I would like to feel that whatever they have come with I am given the benefit of the doubt to try and erm .. open up a little bit .. I mean sure there are always people who are going to come irrespective of what they have done .. and just because it is expected to go and see a doctor when they've you know done something ..

What about the characteristics of an unsuccessful or poor trainee? There must be one!

Yeah ... I think again almost the complete opposite of what we have said an inability to get on with people and an inability to feel that erm .. you know you are there as par of a system erm ... I think it is quite difficult because er .. trainees in general are .. are there to learn they are there to find out about general practice .. and yet I was had a sort of mental block as to .. to quote a word supernumerary I mean its .. it is a very difficult word to define because I don't think that you can learn about a subject, you can learn fully about what something is about unless you are completely involved in it ... and to be there as sort of an extra person erm .. who is ... watching what is going on ..seeing how other people do it .. I mean you never really get a feel of what you are trying to do .. what you would want to do yourself I mean certainly within a couple weeks of being in the practice I was in I was sort of itching in the chair next to trainers sort of thinking well I would do this and or I want to get on and get into this .. and I've always felt much happier doing that .. erm so I think personally I've never had a feeling of I've been there as an extra I know I have but I know that you know I've mentally meant to feel that I have mentally felt that I am there .. you know I think ..

How do the patients treat you?

I think they like me ... they erm .. I certainly have a little following of people that keep coming back to see me .. and certainly in the practice it is very easy not to back and see the same person if you don't want to ..

What were the difficulties of settling in the beginning. although I know that this is an established trainee practice and people are used to seeing trainees was there difficulty with patients seeing you as a fully qualified doctor?

A few of them were a little bit you know unsure erm ... particularly when they say you know trainee or are you still doing your training and you say well you know a fully qualified doctor and just doing some more training .. erm after qualifying erm .. but no, I don't think that has been a real problem .. I think less of a problem than it is in hospital ...

The relationship in training .. in general practice is of a one to one with a trainer and a one to group or less with half-day release course .. both of those situations are often new to trainees coming from hospital without out such experience. did you find them difficult, unpleasant, whatever?

I found those quite easy actually erm .. I mean I ... I can talk reasonably easily and I find that it has been fairly easy to talk in the half-day release groups erm .. I have always been in very good groups as well erm .. everybody knows when they have said enough and it is time to let somebody else talk and that always works quite well .. erm .. I haven't exactly had a one to one with my trainer because there have been various problems over the twelve months erm .. and they actually have a sort of policy whereby ... they are all sort of dabbling a little bit but although there is one .. one main trainer erm .. but that ..... no .. I think both extremes have been very useful ..

How, in the ideal world, would you organise training if you were a trainer? How would you do training, would it have been different or would it have been as you have been doing it? If you were setting up a training programme in a developing country for an entirely new system would you have the same process that we have here or?

I think .. it is very difficult having a trainer and trainee on a one to one basis because .. I mean I am fortunate because I think that I get on very well with my trainer and there is no clash of personality but there must be clashes of personalities .. erm .. and you are stuck with them for 6 months or 12 months and that .. that goes against learning and that goes against any sort of useful progression erm ... so maybe some sort of flexibility as far as that is concerned .. it isn't such a bad thing ..

Right, and should there be more than one trainee in a practice?

Oh, I never thought of that ..... I am not sure ...

More than one trainer isn't unusual but more than one trainee is quite unusual. Trainees who have had more than one often say that having another trainee there is tremendous supportful, that there is instant feedback and they don't feel so bad about asking questions and talking about patients to another trainee as opposed to talking to their trainer and that is unusual in this region.

Yes, I mean I did overlap with a trainee for a month when I started .. she had just finished 12 months and I was just starting so ... erm I mean that was quite useful and I mean you sort of feel there is somebody who is more of an ally than anybody else to start with but I think that ... you never get your own ground established erm .. if there is two trainees its .... you .. I like to feel I am there in my own right.

Some people describe the experience of being a trainee as being very lonely, and more of an isolated experience of being in a hospital. Is that something that has perhaps been a nuisance or come up for you?

I have felt that at times actually yes .... because .. I mean in hospitals there is always colleagues around and if you are not sure on something you discuss it or .. well there is just other people around in a similar situation so yes .. I have noticed that but .. erm .. I think that is probably why I talk to the partners as much as I do!

Sure, because that is what they are there for isn't it?

Yeah, but perhaps it has not been as noticeable because I still have a lot of friends who I .. you know can talk to outside that so it has not been ... it has not been in pure isolation .. but yes I can see it can be .. it could be a major problem ..

Can I ask you what sometimes seems an easy question which is how do you know what you don't know?

Erm ..... yeah .. that is actually quite difficult to answer! ..... I find that I always try and reinforce what I do know .... so that you know just double check or go away and look something up and think oh well yes that is right ... because if it is not right and I think it is right ... erm then I will never know if it is wrong so I mean even little things like looking up drug dosages and things .. even in front of the patients I still do that now on drugs that I know that I know the dosage of but if I didn't do it and I got it wrong I wouldn't know I got it wrong ... so my own sort of personal feedback is one way I sort of use erm ... another way increasingly I find is erm .. being presented with a different clinical situation and I am just not quite sure on something and I recognise when I don't ... I don't really know something .. erm and I just drag my heels a little bit well I just suddenly don't know what to do and I thinks well ..

So it is a reactive ..

So it is a reactive kind of thing, yes ... erm .. well I find the prospect quite scary sometimes if somebody were to sit there and say oh by the way you know did you know that is wrong .. because I had always thought it was right .. so I think it is .. it is very important to keep a sort of sense of self criticism .. which I always try and .. always try and have .. if there is a sort of slight nagging doubt I check it because you know .. I mean usually I am right and that I have got it right .. but just to be sure ...

That concept of self criticism or critical view has come through in most of these conversations. it has been fascinating to discover. What about CME when you become a free flyer? How are you going to do that?

Erm .. well I think it's .. it will be part of the same process that I am probably doing already ..

The self criticism?

Yes, sort of ..

What about finding the answers, because it is not so bad in training practices you have got a library and you have got the trainers and the partners and there is half-day release courses but when you are a principle, not necessarily in a training practice and possibly part time what sort of things will happen because it is a bit different in terms of structure isn't it?

Yes there is and .... I don't think that we are ever in isolation you know I mean the situation that we have all been in together means that there are always going to be people around who are very close friends from you know training years together or whatever so there are always going to be other people around, people that you can actually put your confidence in who aren't going to say oh you know sort of so and so didn't know such and such just little things so that you know .. there is always feedback from other people who ... who you can trust not to destroy the confidence that you've .. that you've put in them ... erm and reading and making the most of courses, conferences, whatever, because I think that is very important we can't go through five years at medical school of being given a lot of information and expect that information to stay there ..

How do you make the most of conferences and courses?

You have to go on them ..

Yes that is a start, but how do you make the most of them when you get there?

Erm .. I think you have to be selective, fairly selective as to the ones that you go to, because if you go to one that you really know nothing about then you are not going to get any benefit from it .. possibly erm unless you actually want to learn something about it erm but if you know there is a conference on something that you are interested in to go you already know what the basics are or you know what the current feeling is on it so that you can increase your .. your knowledge on that.

Yes, we searched the calendar about CME and it suggested something to do with this it suggested that doctors would, would take courses on things that they think they know about and will not take courses on things they do not know about which goes back to this question about how you don't know what you don't know, they sent a whole list of things to GPs and asked them to tick boxes about what courses they liked and they were saying about diabetes and hypertension and then they came back in certain and when they looked at the referrals to hospital quite a lot of those groups represented referral patterns and they had this terrible dilemma converting perceived needs into the real world and so I don't know the answer to that one erm I am still struggling to find it!

I think, I think the one thing that I am finding though is by being self critical I probably am actually more knowledgeable about the things that I don't think I am actually .. knowledgeable about erm .. certain things come to mind and I think oh I actually did know that but because my knowledge was perhaps a little bit waivery I sort of made sure I knew about it and it .. it stayed there ..

Do you think audit will help?

Providing the right things are audited yes, yes I think it will help, I mean there is lots of ways in which it will help, but yes I think that will help ...

Are there any barriers to improving the quality of work in general practice are there any things which get in the way?

Erm .. I think one of the potential problems could be that ... trainees are there doing a job sharing the work load or whatever and there are times that you feel well perhaps I would like a little more time to discuss this I mean my .. the practice I am in sort of isn't .. is fine but I know there are certain practices whereby you know .. you are working so hard to see the patients and do the visits that you are not actually having any chance to do the learning side of it .. so that .. I think that can be .. particularly during the summer holidays and whatever .. when numbers are down ..... erm ... I think well personally I always feel that learning it was down to self motivation because if you don't .. if you don't want to learn and there is nobody who is pushing you then there is nobody that will do it .. so if the practice is not particularly erm ... not particularly interested in pursuing certain interests then it just goes the way of all things and it is very ... it much easier to want to learn something than it is to learn something

So how do you keep the self motivation going?

Erm .... I am not sure, I always thought it was inbred ... in-built!

What happens when GPs suffer from burn out?

I think a lot of it ... I mean disillusion sets in and sort of work loads and on-call and you know a sense of well what am I doing here, what am I trying to achieve ... and if that .. if that side of it can be improved whether it be through reducing 24 hour commitment or whatever ... then it might encourage people to be less tired to be able to pick up all the bumph that comes through the front door and actually sort of spark interest again erm .... it is very difficult because again I think the nature of the job as such that erm ... we all run along at a fairly rapid pace and .. it is inevitable that in some people enough is enough ... and once that happens I am not sure how much you can do about it because short of going away for a year and doing something completely different erm .. or more than a year ..

What role has the college exam got to play in the college year?

Erm .... well having not done the exam I am not sure ... I am not really sure how much role it actually has to play in .. in .. not in my year no .. I mean it has made me aware of it .. it has made me aware and the half- day releases have sort of been directed so that we are aware of the sort of questions that are asked and how we should be thinking and you know we should be answering questions ..

Can I ask you why you haven't taken it?

Erm ... I was going to do it and then I decided I didn't want to do an exam this year but I .. I do intend to do it ..

Do you think it would be best to do it as a trainee or to leave it a couple of years?

The impression I am getting is that it is probably better to leave it for a couple of years because erm .. well certainly a lot of the .. the discussion about the paper and the clinical and the viva as such is very much more directed towards general practice which is something that you again learn from experience, it is not something that you can pick up on after six months in general practice there is a lot of things that are now involved which you cannot get out of book you have got it from the experience you have got from general practice itself and I think it is probably possible to take it too early erm .. the only worry is you know that if you get a practice and start then there is no motivation to actually do it and that again goes back to being self motivated to .. you know wanting more from that stage ..

O.K. well I have finished is there anything else you want to say?

I don't think so.

PILOT STUDY SEVEN
15th July 1992

Can you cast your mind back to when you were a medical student?

Yes.

And try to think how you learnt then, can you describe what you did, and how you done it?

Yeah, it was er .. quite a structured form of learning in that er ... I would attend the lectures, obviously take notes and my revision would be based on notes that I had taken and perhaps extending it with text books that they had recommended and referring back to those but it was very structured and .. but on an individual basis you .. you wouldn't learn in groups you would learn as an individual sort of thing.

So how would the information stay in your head?

Really by er .. it was more a process of erm ... covering things again and again .. erm .. reinforcing the information you had learned .. on that sort of basis.

Any problems with that?

No, no I liked learning that way up until then ..

Have you memories of any particular episodes of learning?

that it was an effective mode of learning for me.

JGB

Yeah, that was more on a sort of tutorial basis not on the book reading side but learning from that point of view was more on a sort of tutorial basis that was more informal and it was interesting because you remember what you have seen there you are sort of visualising information and you tend to remember what you have seen so when you read about it you can relate it to individual cases that you have seen.

Can you remember any particular diagnosis of a case?

No, not particularly, no. It was quite stimulating, I enjoyed er .. being on firms and things but no individual ...

Do you see learning something as a student as something you did before here?

Yeah, yes

JGB

Not really, no .. I mean we didn't have group .. sessions I mean not more extended than the tutorial things I mean I regarded it as I would go home and I would start swatting sort of thing.

With your notes for transcription?

Yeah, ...

How do you go about note taking for instance I mean did you write down everything the chap said or did you?

No, not .. well yes in lectures, sort of thing formal things like that in tutorials what I would do I would have a note book make notes of the topics that we had covered and then I would go home and read about them and make notes ..

And what were your notes like?

They were neat, tidy!

Were they listing what had been said or where they ..

No, no they were summaries of the topic I would go back and read what we had talked about and then make a summary combined of what had been ..

Is that how you still make notes now?

No, I learn differently now, I learn more in groups now .. I have just done the MRCGP and learning for that it was more er .. a small group of us formed sort of a nucleus and each of us would have topics, compare those topics with handouts and then er ..

We have done medical students up to now .. how do you feel about learning as a trainee because you have done a year now haven't you?

Yes, this is my last 6 months .. as a trainee er .. well a lot of it has been based on the half-day release and in particular it has been aimed at the moment up towards the exam erm .. so a few of us would get together and learn from that point of view ... in the practice it has been more on an individual basis with my trainer and a sort of problem solving basis and so if .. if there was anything I wanted to discuss tutorials would be centred around that and erm .. that was more the approach.

JGB ..... with one to one in the practice were you expecting this to be the way it is or was?

Well when I first started GP it was ..I mean I had never been in that sort of setting before it .. it comes as quite a shock to be on a one to one basis with somebody ..

In what way is it a shock?

Well .. in the past you have always been sort of cushioned really by erm .. the teacher you know being in a group so if you didn't know something somebody else would and it was more a sort of less intimidating er .. effect but then the atmosphere in general practice is different such that it is I mean once you start I don't find it .. you know I didn't find it intimidating ..

Were you very anxious about it before you started?

I was yes.

When did that thinking about anxiety stop?

Just when I started really, yes.

How soon?

After the first tutorial.

How does the information that you see or learn in practice stay?

I think it is more by reading, by keeping up to date with journals and things.

Do you still take notes?

No, no, not any more because there is just so much information I find it .. it just slows me down now.

How do you know what you don't know?

I think when you see a patient and you realise that you know your knowledge is ropey about something .. or that you feel that you know you need to find out more about it or yeah .. certainly ... I think it would be er .. like if a gap in my knowledge say is .. you know ophthalmology .. I was thinking of attending

some ophthalmology clinics on my study half day .. that sort of thing.

How do you know ophthalmology is poor?

Just because .. I mean I can look at fungi and I know what I am seeing but I feel that I have got a low threshold for referral just because .. you know I don't feel that I know what I am referring if you see what I mean I feel as though my knowledge could be better on that side ...

This thing, the one to one .. who between you and your trainer drives the learning process?

He erm .. the trainer has the time available so I know that there are two hours set aside every week but having said that I feel it is initiated by me .. it is er .. the topic of the tutorial is decided by me .. so I feel that from that point of view it is me.

Well what happens in the tutorial?

It is more .. it is a .. chat really I mean it may start over a patient and recently I have been dealing with a lot .. well a few patients for terminal care and it sort of starts on that .. talking about that individual patient and then we will broaden away from ..

How do you feel about talking about your management problems with patients?

I found it helpful in that setting .. I have had a different I mean another tutorial erm .. was where we went through every third patient I went through in that patient surgery and I didn't like that at all because I find it er ... I find it er .. I mean I think you can pick holes in notes from everybody and I found that more intimidating and .. I became more defensive about that although I didn't feel and my trainer said it wasn't meant in a disruptive manner but it was .. I mean I am sure that is just my personality felt it was er ..

I that just once that happened?

No, we .. we haven't done it again since .. but I found it helpful in the terminal care because I feel that is something that I needed help with anyway so ...

What is the difference in it between the cases and the ....

Well I think in er .. the ones I feel more threatened by are ones that I found that perhaps where I had given into anti-biotics for sore throats .. things that you feel a bit uncomfortable about doing during the surgery anyway and then to have to justify it to somebody else makes you feel more uncomfortable erm .. when it you know if nobody finds out that that is what you have done .. not that I do for every sore throat but .. if you understand what I mean it is that sort of er .. you feel as though you have to justify what you have done I mean you see from previous notes that is what other people do as well but yes that is right it makes you more aware of what you are doing ..

Are there any implications of that feeling for continuing education?

I think .. yes I think it is helpful because I think it is helpful to talk about it because then you realise that you are not the only one that is hemmed into these corners and ...

Well what makes you feel that because you haven't done one yet!

No, no well that would be me, I think that is because the trainer felt I was defensive and felt unreproachable by it .. I mean that is my fault for not saying I didn't mind it sort of thing lets do it again

Talking about areas of uncertainty .. JGB

Yes, that is right yes ...

Half day release course .. how do you .. how do you learn on that?

The half-day release course at erm .. Walton Hospital is a fairly informal course and my the course organiser who is erm taking my group we were divided into an exam and a non exam group and er ... that was .. again we would set the .. we would decide on what to talk about .. or perhaps give each other practice vibes or things but it was lead by the trainees really and he would be there to .. as an .. to overview what we were discussing ..

Do you like the exam was it important for you as a person?

I though it was important for me yes ... yeah because I am not at the moment sure that I want to go into general practice at this particular time and I felt having the exam it would be .. if I ever change .. you know if I do ever want to go into general practice it is there for me and might be easy and I think as well the way they are making GPs more accountable I think it may become a necessity in the future and also they are talking of making it a part one and a part two exam I don't know whether it will or not but I just thought now is the time to get it rather than leave it ..

What about the exam in terms of spurning you on?

I though it was er .. yes I though it was quite a good exam actually it is quite stimulating .. exam whether it is as you practice I am not quite so sure but er .... I found it .. I think it is one of the better .. better exams ..

What is the difference between your group who is doing the exam and the group who decided not to do the exam?

The er ... well I think the people in our group it .. in the other group they were .. they would have people in talking about .. perhaps a practice manager would come in .. but er ..

JGB .....

Difficult to say really because I mean the people who didn't choose to do the exam a lot of them were choosing to do it at a different time .. so we are thinking they would do it at a further date but at that point in time I suppose you could say the exam group was more motivated just because they had name ... and it was a necessity to

JGB .....

Well because you have a there is pressure there to cover ground .. to learn and so it was motivated to with that in ..

JGB ..... learning for the exam gets in the way of learning for general practice .. is there JGB .....

I didn't find that the case ... in fact I found that I thought working for the exam gave me more confidence and also made me more aware of areas that I was having problems with .. and therefore made me more motivated to get more out of .. out of the practice really ..

What would be. mostly thinking about the differences between the two groups and about the learning for general practice what would be your definition of a good trainee?

A good trainee .. somebody who is er .. motivated enough to make the most of the opportunities that are there .. the learning

Any other characteristics apart from motivation?

Erm.....

What sort of doctor does he or she need to be?

Somebody who can er .. sort of take stress because I mean it is stressful so .. from that point of view somebody who can discuss things .. I think it is more stressful than hospital actually yes .. somebody who can work as part of a team as well because I mean I think you have to .. I think it is important to be able to discuss things with your partners and ... erm .. you know be open to advice, receptive to change .. I think you have to be more flexible really ...

You said able to discuss things what did you mean by that?

Well I think if you have problems it is important .. also .. not just with patients but with .. if you have problems within a practice .. I think it needs talking about ..

Why?

Well certainly there are a lot of er .. problems and there is a lot of unease at the practice I am at at the moment .. and it has made me think .. I mean it is obviously things that have been boiling up over a few .. I mean I have only been there at this particular practice six months but an observer looking in it seems to me that there have been problems dating back at least a year eighteen months before that and you wonder if .. why it all comes to a head now which it is doing wouldn't it have been better if people had been more open and talked about it back when all the problems were starting ..

This is a characteristic of trouble isn't it between groups of people and you know people say if they only if they are only able to talk about it and you and a number of other people have said that it is important to talk about problems but they just don't do it do they?

No, I think it is because you are afraid of .. you don't want to offend other people and it might .. other people have different ways of working they are not necessarily your ways .. also if you are in a large practice I think everybody has fixed ideas and its .. I don't know that you every get a consensus with ... with a large practice I don't know that it is possible ..

I wonder if it is possible but they just don't use the right methods?

Yeah ..

A poor trainee .. what would be the characteristics of as poor otherwise trainee?

Er .. I think somebody who doesn't sort of take responsibility ... doesn't sort of follow things .. follow patients through erm ... is always .... well I think .. if somebody hasn't got the confidence to er .. and then sort of ask patients to come back and see other partners to sort out all .. it ends up other partners have to sort out that trainee's problems sort of thing .. I would have thought a bad trainee could have caused quite a lot of .. increase work among the ... other partners ..

Slightly more difficult question .. How would you define the term learning?

An accumulation of experiences really and er ... not definitely .. not sort of academic learning journals and things but it is accumulating experience with patients and dealing with people .. dealing with er partners dealing with the finance management all sorts of things ..

To what purpose?

Well I think the ultimate purpose .. I mean obviously .. I think your aim should be to be providing the best care you can to your patients .. and I think but having said that I think you have to have job satisfaction and to have that I think you need a sort of happy team and things to be running smoothly .. it needs to be efficient .. erm .. so there is a lot of .. you need to look at appointments you know whether you are offering them at the right times just to .. improve your lifestyle and satisfaction from the .. the job as well ..

So that would be a purpose in learning ..

To make it all run smoothly yes and to provide the best care you can for your patients .. and also to be using the services appropriately so you are not referring inappropriately to specialities ..

Have you been doing any learning outside learning for general practice in the last year or so?

I have been to a .. I have been to a communication skills course ..

Right, but that is to do with you as a doctor isn't it?

Yes, well ..

Is there any learning for you as a person?

No I don't suppose I have, no ..

Was there a difference?

Yes, yeah.

How do they differ?

Learning as a person I mean it may not involve medicine ..

Absolutely. How would you go about that?

Well, certainly I mean I if I was wanting to .. further you know my musical interests you know I .. I would go back to taking piano lessons and things like that ..

Have we done any learning for you in the last recent memories?

No.

It is amazing that.

Yes. Shocking really!

I don't think so .. I don't think it is unusual to find somebody although we did once have a trainee (stopped tape??)
Ah, yes .. if you were a trainer how would you organise training for a trainee?

Right, well I think it is important for er .. the trainer to be approachable .. I ... find .. as a trainee I would appreciate that perhaps occasionally the topics for discussion were chosen by the trainer occasionally just because I feel I mean I find it a bit .. hard every week trying to think of problems or trying to think of things that I want to discuss and sometimes I think that it would be nice to feel that there is some not preparation but something coming from the other side .. to talk about .. erm .. also I think it is important to have feedback .. I don't feel as though I have had some feedback but it is more of what I have heard not been direct it is more of what I have heard from other people that you know things are going well sort of thing but you know you don't get any feedback directly from your trainer .. whether I will at the end I don't know but I mean you

It would be fair to say that it would be good for you to know how well you are doing?

Yeah, yes. I think it would be interesting I mean positive or negative feedback I think it is constructive er .... it would be helpful.

A writer in a magazine called "So when was the last time you told your trainee how well they were doing?" the answer was sort of never .. O.K so how well would you stretch your training as a trainer?

I think it is important that they er .. perhaps would have a study half-day so that they could er .. perhaps attend you know clinics or something or do something different or follow the health visitor around or follow the .. yes do a project or something like that and er ... do something for them to give a different look .. a different view ..

When now during the day do you learn?

I think it is er .. well it is different .. before the .. before the exam ... and since the exam I think it has changed because since the exam I think knowing more because you have read more you are probably more confident and you sort of think things through more you are more confident and you sort of think things through more you are more rational in what you do or you like to think you are more rational and so I think it is sort of an ongoing thing this since then but I mean it would be easy not to learn because you have just put your head down and get through the work and not sort of think things through ..

But if you were a student people would say well I learn in the library I learn between two and five but when do you learn now as a trainee?

I think you learn now .. I think it is an ongoing thing at the practice ..

Burnout .. people talk about burnout .. how are you going to avoid it because people indicate it might be inevitable basically at some stage ..

I think it is important to maintain outside interests .. and er ..

Outside general practice you mean?

Outside general practice yeah .. and outside medicine interests erm ... I think one of the problems in the practice in that .. to avoid burnout some partners have taken on things that take them away from the practice but in doing that it may relieve their stress but it creates stress for everybody that is left behind .. seeing patients so I don't necessarily think that that is fair .. because I mean if general practice is what you want presumably that means being at that practice and doing your share of the ... the work and so for me it would be more of you know erm .. making sure I had interests outside medicine.

Nearly finished .. a number of trainees have mentioned when they are in practice and not just at the beginning that they feel more isolated and alone than they did when they were in hospital and certainly as medical students .. is that something that you have though of?

Er .. I think when I first started I felt that ... but er .. that feeling went quite quickly .. actually I mean have found my trainer very in both I have been in 2 practices and I have found the trainer in both of them very approachable ... from that point of view and with having the day at the weekly day release I found that fine so it has not really bothered me ..

Last question ... what would be your definition of a job of a GP?

The job of a GP ...

The most important bit.

To provide continuity of care really to the patients ..

Thank you that is it .. brilliant!!

JGB3/TINA/P#STUDY7.157

PILOT STUDY EIGHT

15th July 1992

The best place to start is to cast your mind back to when you were a medical student and to think about how you went about the process of learning then. Can you describe how you learnt? How you learnt as a medical student.

... right it was er .. I was a reasonable attender at lectures and that formal basis of my learning I used to make notes and er .. because I had found that it was .. the way I learned at medical school was basically the way I learned for A Levels and .. my great difficulty is volumes of er .. facts and the easiest way I found was by having orderly notes ... that I would often .. I would often transcribe lecture notes into er ... better organised note form of the .. you know supplement it from books and I found that the process of actually writing it down was by far the best way of actually that I knew of absorbing facts because ... certainly the first couple of years in medical school there is not much in the way of concepts to grasp so it really wasn't er .. say in like physics at A Level if you .. er .. get hold of a couple of equations and learnt how to do equations you more or less .. that is more or less it .. so yes, it was more or less rote learning .. long hand writing, repetition ... erm up to a pattern I still indulge in

And was there a change when you become a clinical medical student?

Erm .... yes it did er .... certainly the kind of the grasp it highlighted areas that you needed to know better such as the physiology is by far the most important and er .. your examination technique and also the logical explanation of physical science .. which is more challenging and reasonably more easily absorbed because there was practical implications for it and erm ... you could explain it by a logical process .. erm .. and by going back to basis facts which is why mainly physiological basic facts you could generally work out most things ..

So how did things stay in your head on the wards?

Erm .... usually by ... well there is only a few things that you need to keep hold of and they are usually reinforced by frequent repetition .. erm .. in terms of erm ... studying .. I didn't do that much studying apart from around exam time .. a lot of people crammed ..

Your principle input was lectures?

I would have said so yeah ..

What role did patients play?

Erm ... mainly physical signs really I suppose that .. that is how it starts off at er ... starting medical student history .. it was so over inclusive that it was completely worthless erm .. everybody should be taught to do one but then told never to do it .. but er .. certainly the people who taught me most certainly the clinical type ones were probably SHO's registrar level erm ... yeah .. certainly kind of practical day to day recognition of or a simulation of signs and symptoms ..

What about other students .. what role do other students play in your life?

Erm ... it is depending what kind of firm you are in really the tone of the firm is usually set fairly quickly whether it is going to be erm .. I was never sort of terribly competitive although except in final year where there was the pressure of finals .. but .. I wasn't really aware most of the time of having a kind of peer group pressuring you to .. you know to succeed

What I was thinking about more was the role of discussion ..

Erm ... not really a great deal .. I mean I may know some people .. some firms were like that they used to be very keen on discussing patients ... but it was more often a very social firm .. so it was never really something that was talked about outside of the ward situation .. not even at coffee break ..

You mentioned exam technique what is that?

Did I? Er ... well I have always been quite good at doing exams so er .. Oh sorry examination technique with the patients .. sorry ..

Lets move onto now as the trainee .. as the last year of the trainee or so how has your learning been in that time? Has it been different or the same?

Yes I think it has actually I have done 2 six month blocks .. separated by .. by 12 months er .. the first six months have been a lot different from the second erm ... it was .. there was an attempt at structure far more in the first six months .. for a number of reasons by my trainer and also the senior partner in the practice ... I was the first trainee for this particular trainer .. er and .. erm ... the practice had a strong tradition of undergraduate education .. and postgraduate education .. in the second practice it has been more a passive thing and that is due really to the philosophy of the trainer .. who has spent some time in teaching and that is his personal approach ..

What do you mean by passive?

Er ... not so much on relying on having tutorials

So what happens?

Er .. we sit around and have a chat.

Right .. it sounds a terribly duplicating thing I mean is it a chat .. or is there some ..

Oh I think .. I think Tony thinks there is some structure to it though er ... er ... I ... probably think maybe not as much as .. as he thinks ..

So what is happening in it?

Well I'm kind of telling him to retire early and reduce his commitment erm .. and we have a chat about the practice and about personality complex and I think he gets a bit off his chest and I get a bit off my chest .. it is therapy for both of us .. I don't think there is a great deal of learning though erm ... certainly you know the kind of things that I think Tony is good at .. erm .. which are the common sense family based medicine approach er .. I think it is quite good certainly on the er .. which he can teach by example really rather than anything else I pick that up from his patients when I see them and the content of his notes erm .. but in terms of er .. illness management .. in terms of physical illness management I don't really think that he is .. there is a lot for him to tell me though I still consult him on skin rashes and .. er .. using the system.

So how do you learn about illness management?

Erm .. well I have done ...

Or do you any more?

Yes, yes well I have had to for the college exam now whether er .. if whether I would have done otherwise I don't know .. and that is one advantage of the exam that it has it has actually made me do some study er ..

Did you pass?

I did yeah .. in a reasonably kind of logical kind of way erm .. and I kind of read the journals .. I flick through them erm ..

What do you think about reading journals now?

I ... use them fairly selectively .. the BMJ I look at the editorials and that is it

Will you continue now you have done the exam?

I think so, yeah .. probably not at such an intense basis but I will, I will pick certainly Update as well .. I kind of flick through the glossy's because they are quite useful for medical politics and the financial aspect ..

I didn't get them for a couple of months when I changed over jobs and I missed them after a bit and now I have gone back to them and it is quite nice to keep up to date and so on ..

Yes, erm ... but I don't subscribe .. I am thinking of re-subscribing to medicine international .. the college magazine we will probably get er .. I go more for the editorials rather than ..

You will get it anyway if you have paid subscription

Yes well I am not so sure about having .. is it £200?

Yeah, £220.

So we will see anyway .. I might get associate membership anyway .. erm

Go back to this thing you identified about finding out patients about dealing with patients and you said that you learnt from the example of your trainer .. from seeing what he had written in the notes, how important .. how important has that sort of teaching really been over the years? Is it sort of modelling is it or not modelling?

Yeah, well I suppose it is something that really started .. here when I was doing psychiatry er .. that was the most useful job I have done so far I think .. excluding the general practice jobs .. erm ... just the importance of structure and .. how it influences patients either illness or their behaviour towards their illness and .. I realised that more in the second six months was Tony's very kind of .. he practices family medicine with most regard to the family unit er ... which is applicable to our practice area because there is not a great deal of mobility within it the family structures are largely preserved ..

There is not this contrast then between the first trainer and the current trainer?

Yes ..

How would you characterise your first trainer?

Dennis was very enthusiastic er .. he wanted to provide a comprehensive programme .. erm .. he did try and highlight some areas of er ... where I lacked my knowledge but even the way he approached that was very enthusiastic and over inclusive erm ... and he .... he was finding his feet ...

Who led the process in that?

It was very much Dennis lead ..

What did you think about that?

Erm ... I got a bit fed up towards the end I mean .. I kind of understood it later but maybe not at the time .. I used to give them a hard time over it ..

And who leads the process now?

With me and Tony? Tony is very keen on equal partnership and I think it does come across like that actually ...

So if you have got nothing on the agenda he will provide something?

Yep, that is right.

Is there ever anything, is there ever a time when you haven't got anything on the agenda?

Erm ..... er yes, yes, once or twice I mean it is not .. you know the agenda is not totally warped anyway.

What type of patients do you have problems with? Can you identify any?

Erm ..... er ... I have had problems with ones I don't like.

Why don't you like them?

I don't like seeing patients that have ... obviously been involved with one of the other doctors and I am seeing as a stand in .. just because I feel .. and because that situation I feel I should actually make an effort to actually follow what is going on and the whole consultation takes a long time .. it is usually irrelevant both to the patient and me .. but that is kind of a hospital practice attitude er .. it is just difficulty letting go because I don't actually like seeing and I tend to redirect I mean there is usual a reason like they are not there er .. or it is for administrative reasons and I generally try to sort it out or send them back or whenever possible I send them back ..

Any other patients you don't like?

Erm ..... I am a lot more tolerant since my psychiatry job I think erm .. I don't .. sick notes I find difficult er .. usually because there is no practice protocol for dealing with people for issuing sick notes and erm .. it is often difficult interpreting people's handwriting what is going on and I find that a difficult area a stressful area erm ..

How do you deal with stressful things in practice?

Erm ..... I er .. I get annoyed and I get bad tempered well short tempered I ... reduce my on call commitment so when I think I have had enough I don't do the on call er .. everybody else is very relaxed about that because hardly anybody else in the practice does the full quota of on call anyway ... erm I bitch to Tony about it and I talk go on at the junior partners as well .. we have a pub lunch time session when we all have a moan there er .....

Do you find it easy to talk to other people about er .. difficult cases and about stress in the practice?

Er ..... I don't so much talk about the individual cases er ..... but more or less the day to day running of the practice and problems with it and work load problems .. that sort of stuff I go on about ..

If you were to talk about cases would you find that difficult or easy?

Erm ... well fairly easy .. erm perhaps it is fairly set in its ways .. I mean after a while you kind of ... there is no ... you know there is not much point in talking about certain topics unless you just going to let your feelings go and talk to my wife about them .. er because she has worked in practice er .....

And is that straining?

Oh yeah, but it would be different if it was my practice .. if I were the junior partner ..

And how would it be different?

Because I would put it on the agenda and I would go around and .. persuading people that it was worth while getting something done about it .. whereas at the moment I feel that .. I mean all that this practice they are going through a lot of changes anyway .. er .. normally I am treated as a junior partner .. and that is very nice but tends to cut more in their favour than in my favour .. because there are more advantages to them than there are advantages to me er ....

How do you feel about that?

Oh, I think you know .. reasonable but I mean I am not going to speak you I don't tell them what I think because I know there is no point because I can't change things and you know the way I would tell them

would probably upset them ..

Does that make you feel frustrated?

Oh, it does yeah, but I am only there for six months so it doesn't matter .. I quite like the individual people in the practice as well and also I am going back there to do locums so I can't afford to alienate them so you know from the practical point of view there is er ..... lots of reasons..

How would you characterise a successful or good trainee?

Erm ..... well from whose prospective are you looking at?

Yours.

Erm .. my prospective I think there should be a reasonable exposure to clinical material .. I think there should be an encouragement to get involved in educational programmes and acquire necessary postgraduate certification .. that includes family planning .. child health surveillance er ... the MRCGP and also the DipObs .. experience for minor surgery .. I think all the things that need to .. that you need to have .. to be an attractive proposition to an employer .. I think that study time and a fund should be made available for people in general practice here ..

Yes, but what would make a good recipient of that?

Personality traits you mean ..

Yeah, but not the trainer .. from the trainee point of view, how would you describe a good trainee?

Trainee er ..... well ..... yes it is all .. it depends what kind of a GP you want to be ..

You have see erm .. trainees over the years do you have a feeling for how you would spot a good one .. how would you define someone who is going to be you know O.K as opposed to you know the next question is how would you define someone who is a poor trainee?

Well .. right O.K. .. er I think a good trainee or you know a better trainee has got to be erm ... reasonably enthusiastic .. I don't think they have got to be over the top but they have got to be tolerant and flexible er .. I think they have also got to be reasonably determined and have a clear ideas of what they want to get out of it ... erm .. erm ...

What sort of things, determination and objectives, what sort of things would people want to get out of training?

Erm .... well I think it is difficult for people to know until they have actually done it for a bit but I think they need to er .. have a reasonable consultation technique er ... they need to identify the areas of skills they are lacking in and decide which areas they are interested in and develop those so I think it has got to be a reasonable level of competence throughout the whole range .. and develop specific areas as well that they find interesting ..

It is interesting because the way you put that seems to put the emphasis on the trainee him or herself to do that finding out. Is that the way you see it?

Well .. I suppose my prospective .. I mean I am a bit older than most trainees er .. and certainly I had fairly clear ideas of what I wanted out of my traineeship .. erm .....

Is it reasonable to expect younger ones to do the same?

No, no, no, it is probably not but er ... I suppose the encouragement would be to find out what they want as oppose to being directed by the trainers .. erm ... how do you do that? I don't know because you don't really know what general practice is like until you start as a partner .. that is the bottom line ... erm .. I think you have got to decide as a trainee what a reasonable level of commitment for you .. what kind

of medicine you want .. what style of medicine you want to practice .. if it is .. I mean some of these things are pre-determined by your personality anyway er .. so what is good about medicine .. depends on you .. and it is going to be very difficult to break patterns of behaviour that have been going on for thirty years .. although you can try and modify them to a certain extent

So what is the core job of a GP .. I mean what are the most essential parts of it in the top three ..

The top three ... erm ..... right .. provisional of medical services to the patient on a kind of adhoc basis .. health promotion ... and disease prevention .. they are the top three things ..

Right, and what about processes for delivery in those? What would be priorities within that area?

How do you mean? Kind of how you divide your time and ...

Well how you deliver them .. what style you choose for example.

Right erm .. well the style is kind of dictated by a patient profile and the practice profile .. erm .... well maybe not .. but I mean ..

Well there is 26000 GPs just for the sake of argument 26000 GPs and they all deliver those three things because they have to in order to comply to contract are there differences in the ways that those things are delivered? The sort of process by the way those things are delivered?

Yeah ..

Presumably yes, is it possible to characterise ways that are better to deliver those three things and ways which are worse?

Well ... I mean it is a real kind of Royal College magazine thing try and answer everything .. you know .. at one go .. er .. I mean that doesn't mean an intention be made but I think it is kind of an extremely difficult area to approach .. and there are so many variables ..

And how many will you approach it when you are a principle?

When I am a principle? Erm .... well what kind of practice are you dealing with what are the priority areas the mortality and morbidity figures the admission figures, the referral figures erm .. standard ratios, attendance figures, you know just get a general feel to it ..

Having got those .. having found out about the sort of priority things how would you go about delivering those?

Er .... finding out what kind of expertise the practice offers at the moment you know what the other partners can offer .. decide what areas that you are interested in .. er .. you may not even know .. yes and if not .. try and do something about it .. of course the partners could completely ignore you and they are not interested because they are so set in their ways they just want to plod on and the practical difficulties you know ..

That is a black look for the future .. it isn't that bad

Isn't it?

I don't know I think that is a question more than a statement.

Right well, .. I don't know .. they I see .. well I have seen kind of good people leave general practice er .. what really depressed me was Leneratof leaving ..

Yeah, but he retired though

Well he was only fifty something

Yeah, but .. why did that depress you?

Well I er .. I think it is about his kind of association with the Balint Group is a very kind of patient orientated approach and ...

Did you see that as a sort of failure?

Yes.

Not necessarily of him but of the system.

Yes, I did actually .. I thought he .. it was a shame that er .. that the practice lost him, the patients lost him, his partners lost him when there was another .. I don't know 7 or 8 years of potential working life left ..

So how would you change the situation?

Erm ..... I would actually .. as stress managing ways of ... I would actually reduce my commitment .. I would go in with a lower level of commitment in terms of time .. to start off with and take it from there .. and I would see myself as .. starting part-time

But does general practice allow you to do that?

Er .. it may not at the moment but it will do in a few years time ..

Might do ..

Yes erm .... I don't know

Right lets change tack completely and go to another grey cell question. Thinking about the term learning how would you define it?

Erm ... the term learning is the simulation of experience ... facts .. and outcomes to improve your effectiveness .. in whatever aims that you have ..

Right, so would that mean as a doctor or as another sense.

Oh, well I suppose as a doctor in this context really ..

Have you been involved in any other episodes of learning other than to be a doctor over the last few years?

I haven't actually, no. I .. in terms of what?

Legal, antiques or?

No, no no.

If you weren't here what would you do, how would you differ from how you learn now?

Erm .. learning .. well I keep on learning French every September .. I never get very far .. and one thing I would actually like to learn about is car maintenance .. er .. with a view to doing more of my own and actually branching out in terms of business ..

So how would you go about learning car maintenance?

Erm.... I think I would have to have some structured form to start off with because I am really very woolly on the basics so I would probably go to night school er ... and from then on I would increase the amount that I did on my own cars ..... and .. use my local garage man as well .. and manuals that I have

..... yeah .. probably if I was going to get serious about it ...

Back to General Practice. How do you know how well you are doing?

Well I don't really ..

Does no one over tell you?

Erm .. no they don't ..

Is that a good thing or bad thing?

I think it is probably kind of a bad thing erm .... but I mean I know why people don't tell me ..

Why?

I think it is the structure of the practice .. because I practice with my peers .. two junior partners I am actually older them and I knew them at medical school, Tony it is just not his style er .... the senior partner .. I almost have no contact with ... through various reasons ..

Do you think this is unique or is this a common feature for a trainee?

Oh, I am sure it is terribly common ..er .. and when it is I think because it is done so infrequently that it is either delivered in the wrong way or accepted in the wrong way or both ..

Yes, why is he telling me that now .. so if you were to do it differently ... if you were a trainer .. when you are a trainer in five years time or whatever ..

Well .. I suppose different ways of assessment which I suspect is about .. er I think that is probably going to come in like in accreditation ..

What would you do?

What would I do personally .. I'd er ... well I think you can't just look at it in terms of .. in terms of the general practice training year .. it has got to be done in the context of the sort of GP training scheme and I think ... the Liverpool scheme needs to come more like Sheffield for example or other areas where you have ..

Right, if you had a trainee in your practice and you were the trainer how would you give him or her feedback about their performance?

Right, erm ..... for opportunities of self criticism I would start off with really have to see how much insight is there ... er .. see kind of how perceptive your trainee is .. er ... you have also got to be aware that .. are you effecting your own prejudices just because the trainee does it differently doesn't mean that .. it is a different .. see you probably want consensus treatment or a consensus approach .. and I don't know .. how do you set that up? Do you have practice protocols with areas that you deal with and just stick to those areas .. do you .. get some kind of standardised approach to a problem sort out with the trainers and half-day release ..

A standardised approach to assessment?

Yeah, some kind of dealing with particular problems er .. and the kind of emphasis put on the various aspects of that problem ..

I mean if you have got a person going through all the things that you usually do how would you tell them how well they have gone or how badly they are doing?

Well .. if they are doing all the usual things that you do as a trainee all they are doing is reflecting on prejudices .. so what you need is some kind of .. of gold standard assessment or .. and that is terribly

difficult because all you are doing there is reflecting the assess as prejudices ..

So I get the feeling that you miss a core curriculum or something like that?

Er ... yes .. but I mean ... I suppose it is kind of .. general practice is much more difficult to quantify I mean because it is so much more attitudal er .. I mean kind of what you say in the quality exam is not necessarily what you do and I think people are astute enough to know that .. and they pick up from a very early stage .. erm ... how you assess your trainee is how the patients react to the training and kind of what .. you know you assess the training and kind of what you .. you know you assess it kind of both from the person who is delivering the service and those who are receiving it .. er .. the people who are working with the trainee .. so you don't just rely on what you perceive or what the trainee perceives .. but kind of totally in the practice from the receptionist down ..

That sounds a difficult process to me

Yes .. I don't know where you would start .. I really don't.

Can we go back to the very beginning when you said about how you learnt as a medical student and then just towards the end of the sentence said well that is how you continue to learn now .. and I thought you were talking about rote learning and so on ..is that .. do you still learn by a certain amount of rote learning?

Erm .. yes.

What sort of subjects?

Well .. lets say very quickly the death syndrome .. I mean I had to learn some very basic facts about that the way I kind of got information was actually by writing it down transcribing it into you know note form .. er ..but no, mean it is more kicking around ideas, concepts kind of half in the trainee group and er ..I mean I enjoy the trainee group just for having a good argument really ..

You were in the focus group though weren't you? The kind of quality exam group ..

Yes .. which I actually didn't enjoy the second six months as much .. the first six months I really enjoyed it was great

Why?

Er ... well I suppose .. Roy Woodward is actually quite good at doing what he does .. which is kind of letting people kind of .. go on really .. by giving the group direction without actually seeming to he is very good at that ..whereas er Tony's job was actually going through the exam and he was very good at doing that but it was very much orientated whereas the half day release was much better at kind of let people airing their grievances and er .. I suppose there was a time when er .. I mean I did feel a bit isolated and it was good to see other trainees .. whereas in the second six months I didn't feel it to the same extent because I have got more in common with the junior partners .. and I feel .. I suppose the advantage being accepted as a junior partner as opposed to a trainee

So in the other practice you were more of a trainee?

Er ... yes .. I just felt the kind of .. er .. what did I feel? The kind of you know I was there to do a job and I was kind of .. more dogs body than trainee ..

But now you are part of the team?

Yes, it is more a bit like that though I am kind of getting a bit fed up now .. you know it is a bit like you know in terms of the way the work is distributed erm ..

Are you going to settle in practice?

I am going to do locums for 12 months, or 24 months and then decide what to do .. whether public health medicine or .. part-time general practice and develop other interests else-where ..

Thanks.

JGB3/TINA/P#STUDY8.157

PILOT STUDY NINE

27th July 1992

One of the good ways to start this is to try to get you to cast your mind back to when you were a medical student and to ask you to describe how you learnt as a medical student.

Ha, Ha! A lot of it by rote learning, presentational fact ..... erm ... usually a syllabus erm .... and it was relatively unsupervised .. already relatively ... you could call it self directed but that is a bit formalised .. yeah .. there is not a lot of supervision in what you do .. it is there and it is up to you .. get on with it and there was whether or not you got on with it at the end .. and when you didn't then you got the chance to do it again, properly! So ...

When you say a lot of it was rote learning what do you mean?

Erm .. anatomy is like rote learning .. it is like learning the phone book it is .. there are the facts .. get on with them memorise them ..

Were there other sorts of mechanisms apart from rote learning that you used?

Erm ..... yeah, tutorial groups probably the best people .. the most progressive were the pre-clinical people er .. the pathology lot .. because they do split you up into tutorial groups and they do make you go away and do something off your own bat .. erm .. but the majority of it is just presentation by lecture and .. make of it what you will ...

That is learning facts?

Yeah.

How did you learn things like skills?

Ha, ha! Erm ... skills .. probably .. it is very much a deep end process .. you learn by .. exposure .. see one .. do one that is true ..

What about attitudes?

Erm, no. Nobody has given me any particular construction on how I should ..

So how did you as a doctor become you as a doctor? How did you pick up the values and beliefs and .. behaviourism .. other things .. survival as a medical student.

Yeah, I would say it's ... the attitudes that you have .. the approach that you have to people patients when you come out of medical school is 95% derived from your personality .. and would be the same as you went in ..

And the other 5%?

Is rubbed off from the exposure to junior doctors.

Junior doctors? Right, what about the influence the consultants had on you?

Not much! Not much real influence a lot of nods and winks you know .. erm .. you don't get that much real influence in .. it doesn't relate .. what you pick up from a consultants does not much relate to the business of doing junior hospital posts .. erm .. the people but surprise surprise you pick up from other SHOs and registrars that are .. are on junior clinical patches ..

When you were a student what career path did you have in mind were you always going to be a GP?

GP. Yeah, always GP .. I was vaguely interested in anaesthetics because I liked the technical aspect of it erm ... I but as I went through the medical school thing further along the more I realised I was going to

be one of these er .. and if I tried to pursue an kind of medical career I was going to be one of these unhappy registrars .. who is just cheesed off of where he is .. what he is up to and what to do with occupational health or whatever something different in the way of ..

That sounds like a negative reason for being a GP .. I mean were there any positive reasons?

No .. that .. that just reaffirmed what I already felt .. that .. I could see people who I had most in common with were .. not suited to the hospital path ..

Now you are finishing being a trainee can we go back to that first question on learning .. how have you learnt things as a trainee? Not when you were in hospital .. but during the trainee bits when you were in practice.

Erm ... I .. again it is .. difficult not to use self-directed and terms like that .. it is much more self-directed .. it is you pick- up right I don't know about this Mrs S comes to see you points to this that or the other you know I don't know much about this and therefore it is brought to you and you directly ... you quickly learn limits ... you can go through them at the start and that is what you are going to have to do you can go through with your trainer you go through right rate yourself on this what are you going to do about this that and the other .. erm what are you going to about it .. so you can start off with a curriculum or .. a list of weaknesses or areas but that will change as you go through the process .. you know things that you thought were important you realise aren't important and things that you thought you could look up on you find that you will just have to get by and learn how to do things by experience and a little bit of .. does that feel good .. does that feel bad ..

So who has driven your learning this year?

Erm ..... trainer, self and Royal College and it's exam in the background ..

You done it?

Yeah.

Passed?

Of course!

What about patients? What role have they had in driving your learning process?

Well they have provided topics and they have exposed weakness and they have shown things that I .. I thought I was good at and I am not erm .. areas where er .. I believe that erm I'm better than expected .. I seem quite confident or they seem pleased in what I do for them.

Can you think of an example from the general practice part of your training that sticks in your mind as being an example of something you have done well from a learning point of view.

From a learning point of view?

Nobody said that this was going to be an easy interview!

Ha ..... well the things that I feel best at .. the things that always made me feel quite positive are .. having .. having spoken to patients who have come in initially very tight when they have got things to say and they want to say them and then to get them to open up and to get them to feel better about it at the end of it .. I mean it is difficult to get assess whether you do or not .. but you can get a feel of .. of whether you have done them some good through talking to them or getting them to tell you what it is you want to know or whether it is in one direction or the other ..

Have you got better at that over the year?

Mmm .. yeah.

What were you like when you started?

Erm ..... well I though I was pretty fair! But you learn .. you learn tricks and you learn cues .. as you go along .. erm .. by watching ..

Who do you watch?

I watch patients, trainer, partners erm .. I watch them pick up on cues .. I watch them listen erm .. I watch myself on video that is interesting.

Helpful?

Yeah, because erm you thing God did I really sound like that .. did I really put my head down and just mutter so and so .. so it is interesting to see your own posture and it is also interesting .. one of the things I found best about video when you are not looking at the patient .. because they very quickly forget or ignore that the video is there they .. you are looking at what they are doing that you wouldn't have otherwise seen .. or if you nip out to go and get a document or result or for whatever reason you are out of shot or out of the room and you are watching the patient behaves .. I find that interesting ..

Who else do you learn from?

.... you mean why doesn't day release feature in my list so far?

No, no I was thinking you might say watching or talking to your peers to other trainees, not necessarily day release.

No, it is not a lot particularly .. not about that .. that is very much a direct .. you can't pick that up second hand ..

What about talking about cases and problems that may come up with the day to day practice, how do you feel about that?

Erm ..... I think talking about problem cases is a good thing er .... obviously the thing about problem cases is there are more opportunities for difficulty or erm .. possibilities, alternatives, right choices, wrong choices .. there is much more to explore .. in a problem case than in a routine ..

How do you feel about talking about things that you are ..

Well I feel happy about ... that is a good thing to do because one person is never going to come up with all the angles ... so that is where the benefit is ..
Were you used to that before you become a trainee?

Before training?

No.

How did it feel when you first started that?

Erm ..... all these things involve groups of strange people in a similar position to you are ... er .. usually mildly threatening on judgmental yeah .. when you start off so initially there is er .. a sort of ... there is a bit of a pressure to it anyway ,but that soon fades off I think with most people .. erm ..

I was thinking more about the one to one when you are starting with your trainer.

Yeah I mean that was something I found difficult to start with because erm ... that was a thing that took me longest to get used to was the idea I would say right O.K I did this here and what do you think I should do here and what should be done and the answer is well .. you do what you are going to do doctor .. you know all that you need to know about .. you know get on with it .. you are the boss now and the idea of .. actually being in charge of the patients care myself and being able to do my own thing

and have my own little protocol and have my own ideas about management .. that is what is so alien because you are just used to what do we do here and you are just a technician really ..

So when does that wear off?

Well .. it took about .. I think it took me about 6 weeks but I don't know what trainer number one would say about that ..

I don't know about your trainers and I don't want to know about them.

Yeah, sure .. I mean it took .. it took longer to get out of the hospital junior mentality than it does to switch from one hospital thing to another I mean .. yeah 1st August, Fazakerley the obstetrician there and you have got to forget all that whatever you were doing before and it is all supposed .. expected to be obs & gynae from 5 o'clock this evening and then zaap you are now in paediatrics, I mean forget all the .. previous and it is all about you know ... ventilated neonates and stuff ..

And do you think you are competent now as a GP?

Competent yes ..... but not finished ..

When will it finish?

Never I don't suppose .. it is a continuous process .. it should be a continuous .. I see people who have got stuck .. and haven't progressed since sometime ago ..

Why do people get stuck?

Erm ..... I don't know .. they come of age .. yeah ..

Is it just old age?

Familiarity erm .. maybe defence mechanism .. maybe some people can't take on more ..

Some trainees have described the atmosphere, the way they feel about training as one which is more isolated and lonely than when they are in hospital is that something which you have noticed?

Yes, socially isolated ... erm .. if you are a trainee away from your home base then the whole business can be very lonely, yes .. because you are not making regular contact .. just sort of once a week with your half-day and you are dependent on those people as your .. your social outlet completely so on that .. I don't know what it is like .. some people could probably divorce there work and out of hours thing but for me if I was in a situation like that I would just find the whole experience very er ... very .. I find it difficult to separate business from social and so on ... I can't pull away .. I .. I think it is not a good thing to do .. I think no, there should be er .. that is one of the features .. that is one of the attractions of general practice .. you are part of a group of people .. part of .. of your town or whatever .. part of your erm .. patch erm ... rather than just you know .. another number who lives down the road ...

Do you feel part of the team in the practice?

Yes. It is a good practice for that .. everyone is very happy to have you and .. pull you in to see this and that and get involved and .. nothing is hidden ..

And the nurses and the practice staff there? Because again some trainees say that they find they find peripheral to them ..

No, I can imagine that yes but erm ... both of the practices that I have been at have been very enthusiastic .. all the partners have been happy to have you and involve you and so on erm .. and nothing is hidden there is .. you know and you get to do lots more ..

When you think back over the year, was it a year, yes, can you erm .. can you recall when you did your learning, when did you learn things about being a GP?

Mostly in consultation.

Really? Not in the car or in the bath or in the library?

No! Er .. half-day release course you can learn so much .. but er .. I was a little bit disappointed in its content really .. it has .. though I accept what it is trying to do I know agree with it I think it spends too much time concentrating purely on attitudes and mechanisms and the process of general practice and .. I really do think it is the one opportunity to plug in somebody who can tell you what you need to know and explain what an FP16 is can tell you all that you need for the MRCGP in plenty of time .. you are not going to find out a week before hand that you haven't got a child health surveillance ticket and you have got to go and get someone to sign it up for you and things like that .. the paper work and mechanics er .. general practice erm .. no

You see that as half-day release course rather than in the practice?

Yeah, yeah.

What else would the half-day release

Unfortunately, you see you ask your trainer who says oh I don't know a lot about that .. you had better ask your course organiser and course organisers well they haven't bothered looking particularly either because they are just you know .. exactly the same position and it is years since they did any of that ..

So how do you find out?

How do you find out erm .. that is when it appears .. oh shit haven't you done that yet?
Oh you better ring Peter Howley and do that .. you know that kind of thing it is a bit er .. I mean there are still things that I don't know about that I need to know about but I don't even know what they are so

What are you going to do?

I don't know.

How do you find out what you don't know?

That is the problem yeah. How do you?

How are you going to find out when you are a practising doctor?

Erm .. it doesn't seem to be that important actually when .... because these course organiser guys they don't seem to know what they don't know either and er .. it doesn't seem to interfere with their activities.

What about clinical things then? But clinically how do you know what you don't know?

That is erm ... that is difficult .. if you are in blissful ignorance about something .. then there are only so many ways that you can find out .. and often when something goes wrong .. wrong in " " but unless you have a mechanism for dealing with what went wrong or discovering or trying to find out before it happens what is going to go wrong er .. then there is little opportunity.

Have you?

Erm ..... myself as a trainee yes .. because I have been through a lot of cases and I have .. felt happy to discuss difficult things or whatever I felt unsure of ..

And have you come across them?

Er .. that would depend on where you are .. I mean one of the practices I have seen .. I have two approaches I mean they do have regular erm .. medical management discussion what do you do .. how do you do this how do you do it better? Erm .. I saw this boy you saw 2 weeks ago and you did that for him and .. and another practice I have seen erm .. people have their ideas about what other people are doing but they don't like to talk about it and so .. if they did talk about it there maybe nothing to change anyway but ..

If you were in that practice how would you cope? I mean the knowledge and skills base that you have now that is sufficient to last for a life time so how would you go about keeping it up to date?

Well the mechanisms of further .. further education are on the up virtually all the time .. so it is going to come .. to you whether you like it or not at the end erm ... in the mean time all you could do is .. I mean I would see the best way as ... clinical practice meetings ..

You mentioned early on about this thing self- directed learning what is that .. how would you define self-directed learning?

The trick .. the hard part of it is being pupil and tutor at the same time ...

What is learning. what does learning mean?

knowledge being able to apply them ..

For what purpose?

For whatever purpose .. it can be .. it doesn't have to be work based it can be anything ..

During the last year have you learnt anything to do with something not to do with your work?

Oh yeah ..

Can you give me an example?

Erm .. I have learnt things about politics I have learnt things about mechanisms of telling lies and writing difficult letters !! I have had that done to me ... I have been involved with a bloke who is very good at saying one thing er .. and he writes letters to people and doesn't sign them and er .. you know denies he was ever in a place when he had a conversation with somebody else and things like that and .. so and this is a fairly responsible position - nothing to do
with medicine whatsoever erm .. but this bloke was a UK authority allegedly and erm ... he is a total er .. charlatan really and I have just interested in how somebody could get so far .. and be so accepted by everybody by doing .. such .. if you really go looking at what he does such a .. erm such a bummer ..

So you have picked up some life skills on the way?

Yeah.

Lets get back to this self-directed bit can you expand on the relationship between teacher and pupil? I mean what about the processes of self-directed learning?

new things .. to your own needs erm .. and you have to be active .. in some way erm .. learning is not a process of .. you know it is not an osmotic event unfortunately .. it is er .. it is something that requires effort .. and you have to be able to recognise when you have to put effort in and what effort is most appropriate ... and to have some mechanism whether it is formal or .. just er .. unspoken .. for assessing what you think you are doing ... is what you are doing getting you where you want to get to ..

And has the vocational training and the half- day release course equipped you for that sort of process?

It is better than anything else I have come across!!

How do you find out those things .. those stages you identify? How did you find those out, were they intuitive natural things or have you picked them up .. from discussion

You mean am I quoting anything?

Yeah, so where have the ideas come from?

I don't know .. just thinking about it now and just analyse what must be the role ..

Do you think those are ideas that many other trainees have?

Well ... you know how many people bother to go through the process of you know what am I actually doing and try to think why am I doing it and .. like this .. I don't know .. probably not ..

Is it important for trainees to do that?

Er ... well it can't do them any harm .. it can only do them some good! Well you can .. it is one of those things some people find very easy and some people find nearly impossible .. it doesn't mean that is going defect their learning does it? In you know .. it depends what your needs are ... I .. I know this isn't party line chaps but I think a lot of it is down to their own attitudes, personality and their sort of individual whether you would be able to learn and pick things up on your tod will you be able to learn to pick up the right things? I find it difficult to learn factual return acquisition of medical, physiological and scientific knowledge I find hard work .. erm .. what I think I am better at for me not necessarily anybody else and what I find easier than that .. is attitudes, skills and ... the business of communicating with people and managing people .. I find that easier .. I find that I am much happier developing that and exploring other people I find that .. sometimes can have something to offer there whereas on a scientific basis I am just a bad sponge and a lot of other people will find that so easy .. but at the same time will find interpersonal things and thinking about themselves .. whereas I am not so sure I find them hard ..

Is there a difference, can you characterise the difference in the learning process that is involved both types?

Being a sponge and being a?

The other sort of learning.

Well I don't know .. not really .. not here and there .. not without thinking about it .. ask me tomorrow!

How do you pick up these things these softer things to do with behaviour and skills? How do you they get into your system so that you start doing them?

Er .. being .. you just have to be wide awake, receptive, try and be sensitive and that is all you can do .. erm the thing that I found most helpful was to remember .. and it was easy to do I was not reminded of it was that what I was doing was in my six months was a training period .. I am not being a locum GP and it would be easy I think just to slip into that mode ..In which case you are going to just learn bad habits and not grow yourself .. and just to bear that in mind .. just have a little few prods every now and then what am I going to get out of today what am I going to get out of tomorrow what am I going to do differently .. what .. and to be able to do that .. and it is nice to know that you can do that I mean that it depends very much .. that is very much dependent on the set up you are in .. your trainer and the practice and so on how much they allow you to do that .. but erm I was very much allowed to be able to do things and I used to experiment with the way I did consultations .. I would have er .. you know relatively tight, short shift consultations, I have had a well booked thing and said well lets try being frisk and tight and .. no and be low on prescribing and be tight with the sick notes or whatever and then you know in the afternoon try it the other way .. be more let the patients have what they want and .. whatever, be more just more open and more easy going .. just play a different role and see what happens ..

What comes out?

Erm ..... you pick up on .. it is useful to learn what patients like and want and expect and how they react and they do react differently .. to different roles that you play and different attitudes ...

Which of the two extremes are you nearer to?

.... oh I don't know .. I can't .. can I answer that somebody else is going to have to watch me and say it .

Well you have been doing it .. you have got to be sensitive to your own things ..

I think I am a little bit of a softie ..

Does that necessarily mean high prescribing, high sick notes, high referrals?

No, no. Erm ..... it could be if you weren't careful about it yes .. but ... if you put good effort in then I think you can be erm .. the soft end of it you can give people what they want but without .. I mean people don't want .. they don't come in necessarily wanting .. a sick note no, I think they don't but they want to be listened to they want to be treated, they want to be deal with appropriately they want to be satisfied with what happens .. and you can do that without those three mechanical events ..

So how do you do it without giving prescriptions?

You have to identify what they want and then what they think they want and what need and agree it with them .. you have to go through a process of finding out what .. I mean there are times when I find it very helpful to ask them well what do you want what would you like me to do .. it doesn't mean that I am going to do it and I can explain to them why not er .. if I think it is inappropriate or whatever but you can .... often erm .. you know sit on the floor and with the patient and you know go through what you want and be very honest with them .. they expect you to be .. I mean there is a lot of .. erm .. mystique there is you know 5000 years of voodoo and medicine men .. in you know there is a lot to cultural expectation I mean people can their doctor and some people can't stand that .. some people loath it .. some people are highly dependent on it .. erm .. so you can't just say I am going to play this role all the time .. it is not going to work .. you have to move up and down the scale depending on who you see and what they want and what you think they want .. you are not always going to get it right .. you know and they go off and the are not happy with it and they blatantly haven't told you what they wanted to say or maybe they have decided that they are just not going to say it to anybody today or .. whatever ...

To finish would you be able to define the characteristics of a good trainee?

has to be .. oh I don't difficult isn't it where to start ..... the main danger .. lets do it another way danger not to get the most out of it is to get stuck in a rut regarding the position of the job all the hospital jobs I have had have been has been zero training .. they are called trainee posts but I never noticed it happen O.K? Erm... no to any significance and it would be just so easy to come in and slot into another .. job

Do you know trainees like that?

No. I don't think so .. I mean I don't know what people get up to .. in their surgeries and things but that would be .. that is what I would see as the danger .. that would be the easiest thing to do is to come along and take as little extra out of it as you do .. er ..

So that would be a base line?

Yeah.

What would be a good trainee or even excellent trainee? We are stuck with that question aren't we?

Erm .... I know what the Royal College would say!!

I am not interested in what the Royal College unless you happen to believe what the Royal College would say.I mean have you got in your mind an image that you have seen that you respect as a trainee or look up to or you can say oh you know he has done pretty well that one ...

There are .. of the things that have impressed me have not been people who have grown from a medical point of view or from knowledge or .. their ability to talk to people .. because erm .. well you go to the half-day thing you might know three of those people out of ten from before from some other place, some other time .. it may be more than that and it is therefore difficult to see if they have moved I mean because you see them on a regular basis it is difficult to know their training anyway so it is not something you actively go and think about while you are there how is you know is Phil getting better than he was I mean it is not one of the questions that you ask yourself erm .. but I have seen people become very erm politically astute and know so much about the ins and outs of medical politics and finance and the .. the difficult indefinable things like what makes for hard work in general practice and what doesn't erm .. there are people who I have seen where I have come across you have seen how that all taps they know exactly .. what makes general practice work from purely a work load and admin. and money and they have got it all tapped they know all the angles, know what the BMA is trying to do or what they say they are trying to do and they know all the political undercurrents ..

How many of them?

Two or three .. two I would say ..

You mean they have looked into the woodwork of general practice?

Yeah, and I just don't know where they have got it from .. and that is the thing that is the thing that disturbs me about it .. where did they find that? How do they know .. where was I supposed to find out? That is something that is passed me ...

O.K. Thanks.

JGB3/TINA/P#STUDY8.157

PILOT STUDY TEN

19th August 1992

What experience have you had so far then?

Right, I have done medical surgical house jobs, I then did a one general medical rotation in Mersey Region and I signed on for a 2 year general medical rotation in Manchester .. and it was sort of I mean original intentions through medical school and house jobs and first year SHO had been to try and pursue a medical career and I hit the books pretty hard and went for the part 1 examination er .. initially from sort of firm expectation of passing but er .. unfortunately my marks levelled off around 60% and the pass mark didn't seem to come down! point 1's point 2's point 3's so after about the second or third attempt I thought hey, I know I physically can't get any more any more information that is coming in is knocking stuff out and my marks really plateauxed and then I started looking around .. signed on for a casualty .. bit of the rota to get some extra breadth and after the third attempt with a magnificent 62% .. the pass mark being 62.8% I er .. oh dear, where do I go from here and that is really what decided I had a talk to the .. my brother who has been a firm believer in general practice since ... the year dot who sort of saw this as an eventual move for me I had a talk with .. the consultants whose opinion I respected .. erm .. and they were pretty much of an opinion but one of them asked me a very pertinent question .. if you do go into general practice .. what will happen in ten years time when you sit back and say what if and so I decided I had to attempt part one in Britain a full number of times .. just answer questions if I had left an attempt .. I suppose I saw it as I had to close a chapter .. in my life and sort of start again ..

That would hurt ..

Mmm .. not a great deal .. depends really if you regard yourself as being average ... I mean I didn't regard it as a fail .. I felt I just had to accept I was average ..

Why general practice and not surgery ... or pathology?

I didn't er .. I like people .. I like the chatting side .. I like patient contact that ruled out most of the other .. erm medic options or failed medic options as people still label them er.. I wouldn't have been happy in radiology I wouldn't have been happy in pathology er .. duration of training or anything didn't initially .. enter the equation and then my wife got pregnant and I have got a baby daughter so that that then appeared there but .. I don't want to feel that I have wasted the time I spent in hospital .. I mean I picked up a lot of good honest clinical skill which obviously don't get measured in a multiple choice but .. that sort of thing I wanted something I could build on .. and really general practice seemed to be the way forward ... my brother was doing a very hard sell on be your own man, be your own boss tailor a practice to suit your needs .. flexible working hours you would have a home life which had been significantly absent while studying for part one ... and it looked appealing so I sort of signed on for a years trainee .. really just to see .. put my nose in it not initially fully committed but after the first two or three months and shaking things down I realised it was where I want to be .. which I am quite happy about for the first time in a couple of years ..

So how long have you been doing general practice?

I have been doing it since er.. first of February ..

Right, have you got a practice to go to?

Yeah.

What about er .. whilst you were talking I was thinking about public health medicine you ruled that out when you said that you were interested in contact with patients ..

Well I wouldn't say public health is totally against patient but a lot of it is statistical epidemiological in .. I mean I considered the options and being honest er public health or political medicine is the only effective way of treating people .. rather contentious statement that sort of mass population exercise is the only thing through history that has really shown any good you know lots and rather realistically a lot of doctors do is buying time for illnesses that either get better or palliating the incurable erm .. there is

very few what you would regard by strict definition as wonder cures erm .. but it seems the emphasis really is on prevention .. and I think that if you wanted and could get that same sort of feedback you could would make more .. of a positive benefit in public health medicine .. but ..

And why can general practice do that?

You can get involved in that aspect er .. and certainly quite active in the political sort of public side with child protection registers and the sort of CHS and politically active but I .. it doesn't leave me happy .. it is an area that you know I am fairly basically boring I am happy talking to patients .. sorting them out getting on with them as a person I find that that is you know more satisfying to me er .. I don't have any strong intentions of leaving my mark on the world ..

How does learning about talking to patients in general practice differ from learning about patients in hospital?

Well I mean it is a whole radical approach I mean hospital .. I never realised it until I got into general practice but in hospitals the patient has been prepared virtually they have been selected from the mass of general non-specific complaints they have been directed ... in with some degree of thought whether appropriately or inappropriately but certainly always with good intentions to what they regard to the knob of their points by the time you see them in hospital all the important questions have been asked a significant number of times and the patients themselves although they have not had the training they are aware of the right answers and have been refined to virtually pour out the tail as you are taught at medical school .. you know a well primed patient will virtually give you a history of present and complaint past medical history, medication, social history and allergies doctor .. er.. whereas when they arrive in the door in general practice I mean it could be absolutely anything I mean they feel it is a doctors problem because they have come to the doctor .. I mean it certainly covers a far wider range of things than I have ever come across ..

So what is the GP's job then?

Er .. well the GP's job is exactly what you want it to be which is the beauty of .. of the situation erm ..

What do you want it to be?

Er ... it is a high between .. sort of thing ..I like to measure end point I mean the method in between .. hospital there is a lot of place on it if you do this by the books by the numbers follow these order these tests do this you will arrive at a solution for a patient where as I mean general practice is very much if the patient is happy at the end of the day and if my end point patient satisfaction that may involve medical reasons .. it may involve social reasons .. it may just have involved a ten minute chat about something .. but providing the patient is leaving happy I feel I have contributed ..

Right, go back to this learning question .. learning to be a hospital doctor and learning to be a GP .. can you characterise the difference, if there is one?

Erm ... there is a whole shift of emphasis hospital doctors .. whatever specialty there is a .. a role model .. an ideal a nature to which you are taught to conform .. erm and we all recognise it the surgeons will put up with far more volatile tempers in the juniors .. because rightly or wrongly the common perception of a surgeon is as a rather arrogant outward going person or whatever where as the physicians tend to regard themselves as being scholarly and they tend to sort of frown upon spontaneous outbursts and are thought to be very quiet .. very sort of modulated to express your opinion with regard to your knowledge but you know it is always in a polite manner and you know do not repeat consultation with the examiners .. they do not like it .. whereas the surgical sort of teaching goes if you know you are in the right you tell them .. er .. and that .. that wins for them and so I mean

What about practice though?

Er .. you know that is there is an idea whereas the general practice it is a lot different .. it is a lot .. more .. you are a person you have a certain amount of input from jobs you have done you have formed your own ideas and you will get a different amount from the training and everyone's end points seem to be

different .. but there is more a lot more of you are not coming out to be judged against a pass fail line you are coming out to be judged as you know being the best doctor you can be .. and I think that's that's the beauty of a general practice option .. er .. I have discovered that I feel quite badly about competing in the distinction pass fail line but I can be very happy working towards my own personal goal .. you know to be as good in an area as I can be .. and then it doesn't matter if Dr X is better or Dr Y is worse it is not a hierarchy thing but it is very much a personal reliance and personal satisfaction ..

You mention .. how would you define learning?

Very awkward er .. it is one of these things you don't know you either know a pat description er .. which in hospital practice tends to be the acquisition of knowledge .. er .. or you ... sort of take it into a sort of broader context and it seems to be more .. experience .. you know I think that is the learning that seems to stick with me how .. I like the book work side of things I have had to put some applications into areas that I have not really come across since undergraduate days so I have done a bit of that but far in the way the of the easiest thing is to be handling the patient and finding out what worked and what didn't and that sort of feedback of personal experience seems to be the way to learn ..

Did that happen in hospital?

No, it was very sort of disjointed in hospital er .. the first couple of jobs were all three month jobs er .. with consultants that felt three month review was a very soon review er .. the jobs in Manchester were better I was around for 18 months so I got some sort of idea of ... but it .. it is very regulated hospital contact people either come in as if urgency sick which is "excusable" or they are farmed out through clinics through varying periods of time and there is a definite sub-population of six monthers my God I can't cope with this woman bring her back in six months when we have all moved on .. consultants see the same names coming up they don't want to take them and delegate them to the juniors sort of thing .. whereas in general practice er .. we operate an open door system at the practice .. anyone who wants to be seen on that day is seen on that day in the next available surgery so it is quite a shock to realise you have accurately diagnosed candidate to someone you are giving them treatment but they are back later that afternoon wanting to know why it hasn't worked now .. so that .. that initially was very awkward situation because you think well why did this patient expect this to work so soon? and then you realise that you know maybe I didn't communicate the actual intention of treatment and then you look back at the hospital and you realise that perhaps these consultations have been happening all the time with your level of work it is just that there has been some poor GP picking up for statements you have made in the hospital because the patient is rationed to see someone else in three months so that was a shock

You mentioned shock a number of times particularly about the transmission from hospital sort of into general practice .. can you expand on that again?

Er ... it is I found it .. I would regard myself as being a very confident person but I actually found it very daunting er .. more than I probably would have admitted in the first three months there .. there was initially it was a very sort of lonely place .. I mean hospitals are always fairly active .. you are out and about on your corridors between wards .. you meet people .. you can chat to friends, colleagues informally say about Mrs X with Y and she wants an answer and I haven't got a clue and they say well have you tried ... you know A B or C and you go right, you have got a clue where as after the first couple of weeks of introduction and sitting in you are sat loose in this surgery with patients who are coming in .. now some of them are easy .. you can categorise them into problems you have been used to dealing with .. and you through them out the door very happy having dealt with them in the hospital manner er .. some of them are problems that you don't know where to start and when you feel confused the patient tends to leave confused .. and so after a while you have managed to work out a few routines, hospital routines and then after the first couple of months you suddenly realise that has been very obviously a transition period you know .. you have not moved the patients ongoing care you have solved an acute problem "episode" and that .. your actual behaviour is going to have to change to do more ongoing role er ..

Is that the source of the difficulty?

I think it is .. you get very good in hospital at managing problems I mean you are "standing" but particularly in hospital depending how well you have handled the you know acute emergencies the

pressure .. whatever .. whereas .. I mean you don't get that type of pressure in general practice but it is more insidious you know the patients keep coming back until they get what they want and if you patently haven't supplied it or even worse .. been able to find out what it is you feel ... you have not moved on .. and I think we all like to feel we are making progress or at least recognise patients in who we can't make progress ... I think that was .. it is that sort of realisation .. I mean .. you have to accept a level of failure .. both on failure to meet patient's expectations rather than .. outright failure you have to accept a level that sometimes the problem resides with the patients .. that there demands are wholly inappropriate for what you would regard as medical care .. sometimes the problem lies with yourself .. you do not possess the faculties or skills to deal with the patients problem .. sometimes it is just .. the two of you haven't hit it off .. it is purely a communication problem ..

What words could you use to describe this feeling that you got at the beginning of general practice?

I think isolated has got to be the first one .. I mean you feel very alone .. er ..

Nervous?

Well .. worried I mean there is a lot of worry er .. and I mean a lot of it is .. is suddenly doubts in your ability .. I mean you sort of .. they walk in the door and you think well I knew what to do with this .. person two weeks ago in a nice clean hospital wearing a white coat .. with a huge lab and x-ray facilities available 24 hours a day .. why do I find it suddenly so difficult to decide now looking at the patient? I think .. you get used to learning and operating in a certain state of .. physical change and you know .. just the change of job .. er even in hospitals where everything else remains virtually the same .. that produces some anxiety and then to suddenly change and be out of hospitals .. I mean first of all there was the thing of doing something you would never ever .. attempted before or maybe done a few locums but .. I mean that .. but suddenly there is this continuity of care .. and a realisation that when you eventually find a practice rightly or wrongly the current expectation is that that is for life and you may have to arrive thirty years of contact to patients with problems .. and that comes as a .. a little bit of worry ..

When does it go, this feeling of isolation?

Erm .. I think when you are happy in your environment I think once you have .. you have become used to the circumstances .. once people have gone out the door with treatment come back in again it is nice to know they got out and they are alive .. and you suddenly realise that you have not actually killed anyone yet! .. so I think that happens and then I think you .. you narrow your expectations and that .. other staff in the practice .. talking to the receptionist .. the practice nurse this and that sort of fills a social gap or .. and plus your relationship with your trainer .. takes off er .. well rather defines itself to er .. rather you know er .. an acceptable level of whether you .. like them or hate them .. at least you find a working level for much the same way as you find with a .. with a consultant ..

Do you find it easy to talk about care to people at work?

Er ... yeah, I mean general .. there .. it is fairly easy to say .. but the problem sort of comes in that you can only present what you have seen .. and .. there is such a breadth of subjects that I mean .. I mean people come in with questions which initially appear to be rather sort of .. you know blind shots in the dark that you have not gone into .. but .. you know once you go to the database and you have baring you why does Mrs Smith keep coming back with a recurrent belly ache and you know .. and the question sort of comes well what does Mr Smith do .. and when it turns out that Mr Smith is an alcoholic who beats her up her actions become .. you know I mean it is ..

How would you characterise the way you learn in general practice about general practice, is it possible to compare that to the way you learnt in hospital?

It .. there is a lot more learning by example in general practice .. I think you are .. you are shown .. not consciously I mean in hospital you are .. you receive a conscious training this is the way to do a liver biopsy .. this is the way to do this but in general practice you get .. when you are sitting in you get to see how .. someone else is doing you pick up points from .. your trainers behaviour .. you suddenly realise that is a nice way .. it has got out of that situation that I would find awkward .. how did they do

that or .. he has made a pigs ear of that I would have done it differently remind me never ever to do it like that .. and for Gods sake not to tell him because he would get upset sort of thing .. er .. and I think you learn from that .. plus how .. how you get better when you first step in as a trainee you seem to attract .. not all the wrong sort but all the most fickle patients people come to you who aren't satisfied with er .. with the practice's handling of their case now .. very few people actually had as far as I could see when I started any genuine grievance about it .. it was mainly a personality thing and looking back there are people that seemed to go habitually to the trainee whoever the trainee is they follow a pattern of multiple attendance until if you find the key that you know .. not cures them but turns off their particular problem .. I don't know whether you stop taking interest as someone cynically suggested or .. whether they having found out more about you don't find you as interesting from the point of view of watching a young doctor .. and in a way it seems to settle down ..

Lets stick with this learning thing I mean how do you describe yourself as a learner?

Erm ... I find learning fairly easy .. I mean I find .. my sort of visual and verbal learning to be better I mean I always found it easy to be shown to do something it was in there to read a manual er never quite had the same sort of things .. I mean I think I like the .. the example approach and I think I like .. being a fairly rigid person I think I like some sort of rules and I think look analytically at things to say what are the rules that are running this situation .. I think I like to form a little scheme in my own mind of ... you know why did he say that when you know and learn a sort of structure semi-formally ..

What about new learning methods because presumably in general practice you come across this one to one teaching thing and learning in a group and maybe other things I mean how do you react to those new systems?

Er ... one to one teaching was .. was fine I mean that . there is a fair amount of that in hospitals not usually as extensive but I mean most consultants try and spend five or ten minutes at the end of the ward round with someone from the team .. but you know more of a concession to I am a teaching consultant rather than a genuine desire to teach I mean once you are used to the stress of that when someone is actually doing it for a genuine impart information rather than to be seen to be imparting information that is not as stressful .. er .. group teaching that was .. a .. a totally new experience I mean that initially was incomprehensible I mean normally when you are taught in groups in hospitals it is some person who has prepared a lecture a group of you come there and if you are interactive you are only interactive with the lecturer or through the lecturer on points that someone else has raised I mean even that is a very sort of stratified relationship .. the idea is sitting down in a room with people and generating an outcome with no input and interacting with everyone at once er .. seemed horrendously er .. unworkable I didn't know where to do or what to do so I mean that then inititially was stressful ..

How did you cope?

I found a book on it .. er .. Josephine something or other working with groups .. a very ancient orange book .. more on the sort of internal mechanisms of groups whether you are a star or a recluse or a joiner or a contributor or . once there was a frame of ..

Did you go off and find that yourself?

It was in the practice library .. er you find a lot of .. that is the other thing you learn in general practice the solution is usually always close at hand it is really worth working through the library because I mean the library's personal to the people in the practice and it is a very good source of information .. you know you are in trouble if there is five shelves of ENT because you know nothing on it .. this there was a shelf and a half of psychology psychiatry so that was obviously my trainer's interest

Did other members of the group read that book?

Er .. I showed it them because I thought it would be unfair not to er although the first week it was nice .. go in and I now have an inkling to the operation of this group .. er .. that .. that helps because then once you had a frame work and you knew .. initially there is a sort of reluctance you sort of want to sit there and see what everyone else is doing and then you realise that .. now you know how it works you are perhaps best just forgetting everything and just getting on with it as you are .. er and if you fall into the

groups that are regarded as destructive unfortunately you have got to accept that .. so ..

What would be the characteristics of a good learner a good trainee?

..... er .. I think adaptability has got to be the first one .. it is not too bad in a single practice but .. certainly in listening to trainees who .. are in group practices and have had sessions with more than one practitioner er .. they initially as I did I suppose tend to look at it as finding a universally applicable solution and to come across three or four different people giving you three or four different solutions to the same .. problem is .. is very frightening I mean I think you are very used to .. of there being a right way and a wrong way and it is very hierachial in hospitals you know a consultant has a right way to do it another consultant has a wrong way which you are forbidden from doing .. until you work for the other consultant and I think you get more used to that sort of thing whereas all of a sudden you are faced with a .. an infinite variety of options you can do .. within very broad limits .. you can do what ever you want to the patients .. the only sort of external constraints are the general medical council and .. really the sort of pharmacology side of thing the er you would be frowned upon for treating depression with Trimethodene but ..

Any other characteristics apart from adaptability?

. .. er .. I think self motivation is important I mean .. a lot of it is getting up, doing things for yourself er .. taking what you have learnt that step further erm .. trying to apply your conclusions to yourself and .. I think you have got to be able to look at yourself critically as well .. I mean it takes a lot of courage to realise that you are not the best thing .. I mean we all view our lives as we are the hero in this long running model and we are the good guy that are going to come out on top .. you have got to sort of wind back a bit and suddenly realise that if you were viewing the history of medicine you are actually probably only going to be bit players you know .. er .. I think that .. that was also a sort of stress er .. in the early days it is still a bit of source of stress now because .. everyone has got areas of themself you don't want to go on .. er .. and I firmly regard myself as being someone who has to talk too much in medical company .. I don't like it but I recognise it .. I think ..

Why?

Well that is the habit er .. I think that part of me says you are not that bad a doctor and everyone else should know it and I think there is a lot of justification in that you know ..

But why?

I don't know .. seeking peer approval .. instability .. I mean .. you don't like to look at that aspect of yourself .. on the other hand it doesn't work if I don't say anything .. er .. I don't feel I participate fully and certainly on the occasions I have tried to remain absolutely quiet the ball doesn't get rolling so .. I have got to be prepared to put my foot in it to start people .. either laughing or crying whatever you know .. so ..

What do you think of yourself as a learner .. I mean are you somebody who goes off and learns things by yourself unrelated to mercy or you know do you .. in general practice as a life as a profession I think not so as a specialty ..

Mmm, I learn about lots of things .. I do .. er .. I do like learning, reading, integrating er ... in my teens I was a terrible reader I mean literally anything good bad indifferent er that sort of input ..

What about that word integrating what does integrating mean?

In terms of?

You said integrating .. learning, reading, integrating ..

Well, there has to be a purpose of everything you do .. I mean that is a basically you know there is a purpose behind what you are doing .. erm .. there is no purpose to reading the whole BMJ from cover to cover .. er .. just reading it you do it for a reason you either do it to go into the master and say aren't I a

clever boy I have read this week's BMJ you either do it to look through for areas you have problems to see where they see where you do it to look through for problems you have got with patients to see if there has been an advance but it is very sterile it is useless it is dead if you don't take areas on .. and say you know this is of importance to me and the way I practice erm .. and the beauty is you know if you try hard enough you will find a justification for virtually anything you do via instinct or whatever er .. you know coming back to sort of the early discussion about public health versus medicine er .. the BMJ ran a fantastic paper with a meter analysis of salts which has been the sort of boot bear of the last 20 years and that basically arrived at the conclusion we would be far better off telling people actually the public health measure forbidding people to put it into food or pickling or canning processes ... that would achieve more effects in terms of reduction in stroke and perhaps heart disease and all the tablets we had ever peddled so I mean .. you know that was quite nice because then you can really turn around and say to someone you are overweight, you drink too much you eat too much salt.

It depends on whether you want a population focus or a person focus ..

Well that .. that is the beauty of the whole sort of thing I mean you can't say to any one person and there are person 20 stone that will live until 75 and there will be people 9 stone that will be dead of an infarct at 20 but you know you have to try and handle in the broadest context people as a group erm it is the only way that gives you a .. a sort of a working background you have to recognise people are individual but because of that you can't treat people as individuals .. there isn't the time on a list size .. and that is perhaps wrong but there isn't the time on a list size to run through every single personal variable about a person to give them an entire risk ..

Isn't there?

No!

You have to read Jeffrey Marchies book!

Which is this?

Jeffrey Marchies book about managing 4000 patients and on a ten minutes appointment list ..

No, no I mean I am not saying that you can't handle people effectively but .. but the point is that no matter how much they believe that they would have to fall into general categories to start with you can't walk into a patient you can't analyse them in a second ... but purely for convenience you group people ..

.... work out which learning method that you have come across so far you like most ..

Er .. learning method I like most ..... I can't think ... I like the group work a lot .. I think that provides .. different aspects .. it is a forum for you to air views and see how other people react .. it is the sort of GP equivalent to the hospital mess .. it is you know if you can take away the sort of hierarchical aspect of the consultant watching over you I mean you could .. express views on management in the mess and see what your mate said I mean that sort .. of thing keeps you in touch with the broad design of practice .. erm .. the only problem with an individual route is if you take an individual route there is a problem if you follow it pig-headedly you will diverge the huge tangent from where the majority of the work lies ..

How should you assess people in general practice?

... er .. the best way .. although sort of the best way I have seen muted is the sort of er random video tape of consultations ...

Why is that a good way? Doesn't it upset people?

Well .. examinations written, clinical whatever .. rely to a strong extent on anxiety and stress motivation if you are a type of person that can get hyped up and perform better .. you perform out of all proportion in examinations they are an entirely artificial situation to daily life or daily practice you can't maintain that level of anxiety in a surgery I mean it is exactly the same panic attack principle you know I mean you try

and maintain that .. that level of being on edge for an examination and after the first four and a half days you would be a nervous wreck or on speed I mean there is a level of practice .. if you are being assessed at a level that you can't sustain ... indefinitely ..

How can you assure the public videos is enough to rely upon?

Well ... that is awkward but what you would have to do is set up a couple of black boxes with 5000 hours of tape or a timer ..

How many hours of surgery does one doctor need to be taped?

Well ... you fall back then into your statistical mode and you say you would look at the tape you would look at the number of consultations you would examine 20 doctors consultations rating good, bad, indifferent etc. er .. you would find out from them what was the minimum number of consultation or time to gain an accurate representation of those 20 doctors and then you would apply it to the population as a whole ...

And what about the content of consultation?
The statistics of that is actually quite easy but what about the content?

Does content matter that much?

Well how do you rate performance of any consultation? When you are looking at these consultations and someone is going to have to look at them to rate them what do you rate? How do you do it? How do you pass or fail them?

You can .. you can apply certain .. I mean the art there is a distinct art of consultation communication skills so you can mark people on their body language .. mark people on their interpersonal relationships with er ... you can mark people on the .. you know the extent of their history .. I mean there are within pretty broad measures you know there are defined acceptable lists for all of these .. the problem is purely one of scale and there are without thinking probably within the region of thirty different areas of the consultation you could analyse everything from you know whether you are in a confrontational position .. relaxed position, disinterested position .. I mean there is a huge variability of it ..

Does that matter?

Erm ..

TAPE STOPPED

PILOT STUDY ELEVEN

25th August 1992

What experience have you got so far of training?

I .. I have done er two casualty jobs adult casualty and paediatric casualty and geriatrics, psychiatry and my trainee and I am just about to start my last post which is obs and gynae ..

Oh, so you have done a whole 12 months in general practice?

Yeah.

Oh, brilliant and does that finish at the end of July?

Er no it has just finished now ..

Just finished.

Yeah, I have got a weeks holiday so I am going to finish at the end of the week.

Fantastic. Have you done the exam?

No I haven't.

Are you going to?

No, no. At least not until I am a principle anyway.

Oh, that is interesting. One of the first questions I usually ask is to ask you to cast your mind back to when you were a student, when you were a medical student and to try to describe the ways in which you went about learning then ..

Erm .... mainly it was just er .. I mean attending the lectures and reading through the lecture notes and just reading around anything I don't understand but er ..

How do things stay in your head?

Er .. mainly through re-writing them er .. I would summarise my notes and summarise what is in the text books and just condense them down really to jog my memory rather than having great volumes read ..

Right, and was that the same process right the way through the five years?

Yeah.

Did things change at all when you started seeing patients?

Er .... really that was .. then I would start to read around patients that I had seen rather than just reading a section on a certain disease I would just read around the patient I had seen so I understood er .. what was relevant to that patient ..

What about talking to other students did that play a part in your learning?

I think it helps you to judge how you were doing whether you were doing enough work er ..

Did you do much talking to others?

Oh, yes.

Are you a sort of sociable person?

Yes.

Did you train here?

Yes.

That makes a difference. Did you find working in groups of students any easier or any harder than working alone?

I tended to work alone.

Why?

Er .. because I think we all worked in different ways and we all worked at different rates ..

Right. What would happen if you came up against something that was really difficult to learn? I mean physiology or something like that.

Er .... I don't know I mean really I would just keep going through it .. on my own ..

Right. so it was just reading and reading?

Yes.

Right so you wouldn't go to others to talk about it?

Not really, no.

What about talking to consultants and junior doctors about problems did that come into it?

No.

So it was really a matter of you getting on and bashing through it? Does that .. how do you feel about how that went as a process?

Was that successful?

Erm .. I think perhaps I should have asked for help more if I was struggling rather than just battling on my own rather feeling as though I ought to be the one who is sorting it out .. er ....

And what about now as a trainee? How have you learnt in the past year? In general practice is it the same or?

Again .. it is reading around problems that cropped up and also if I had problems I would save the cases until the end of the week with my trainer and go through any problems that I had saved up really and er .. discuss better ways of going about solving the problem ..

What sort of problems?

Er .. mainly the needs of management of clinical medicine problems or er ... oh just practical problems .. how do I go about doing this you know .. sometimes it would just be for reassurance that I had made the right diagnosis and had done the right thing .. er ..

And how did you know when you didn't know something?

Erm ..... I don't know ... I think quite often you get a sort of nagging sense of doubt that says you haven't quite got on top of the problem and perhaps you ought to know more about it than you do and if

the patient keeps coming back and you know you are not winning ..

Any other ways of finding out things like that?

Erm ...

It sounds to me that the way in which you learnt things was dependent on what came through the door .. is that more or less the way it was?

Really, yeah.

Have you thought about any other ways of getting to know things I mean if stuff didn't come through the door that you needed to know about how would you know about it?

Right er .. we did have a couple of well quite a few set tutorials at the beginning of my trainee year we would pick a subject and go through it .. but er .. I didn't find that quite as useful really I prefer to apply things to patients that I have seen because I remember it better then.

Right. Was that different to when you were a student or just ...

Well when I was a student I was more inclined to read up a subject ..

Right, what, just to compare being a student again to being a trainee is there a difference in the purposes in learning? You know reasons for learning?

Yeah, I think when you were a student it is just purely to get through exams you know the relevance doesn't matter to you much as long as you get through your exams .. but now you know you are having to use what you learn .. and you can see the relevance of it .. you know what is important and what isn't ..

Right are there any other differences between learning as a student and learning as a trainee?

Er ..... I think you are more willing to share problems and ask for help ...

Have you had any difficulty doing that?

No, no not at all.

Do you find it easy to talk about your management of cases to somebody else?

Yes, yes.

What about feedback of how you are doing .. have you had much feedback about how you are getting on?

Erm .. I have but I like it er .. I like it to happen more often I think .. and I would like my trainer to be a bit more critical as well because I think that he could have criticised me a lot more than he did and I think I would have found it helpful.

Right, do you find assessing yourself easy?

Erm ....

Judging how well you are doing?

I don't think I find it easy particularly ..

Do you do it?

Yes.

Why is it difficult?

Well because you again you have this nagging doubt that you don't know that you are making a mistake it .. you need somebody else to point it out to you .. you know for instance referrals .. I don't know if all my referrals are appropriate I would like somebody to sit down with me and go through my referrals and say well you needn't have referred this one ...

What is going to happen when you are a principle because presumably that is still going to be there isn't it?

Mmm well I am hoping that I am er .. reading the letters that come back from the hospital I might be able to judge which were appropriate and which weren't and then gradually with experience I would be able to .. to change ..

But that would be judging your opinion against that of the consultant .. is that ideal? Is there any mechanism we could put in place to help that? Because what you are saying is not unusual is it?

Maybe if you could have a sort of meeting with other principles er .. like the half day release where you can just discuss cases perhaps ..

And on the half day release do you compare referral rates or prescribing rates or ..

No.

Would that be helpful if you did?

Yes, yes I think so.

Why don't they do it? Because quite often trainees say that when they are talking in this situation one particular chap said he would love to know how his prescribing rate compared to others he really thought it was much too much he just didn't know he just felt it was but he had never really got around to talking about it .. if it doesn't happen now as a trainee I don't know when it is going to happen in the future. Can we go back to the beginning of the trainee year when you first went into the practice can you remember what that felt like?

I would say I was very vulnerable really er .. not having the back-up of registrars and senior registrars and not having access to x-rays you know immediate blood tests, nursing staff you know you just had your black bag, you know your stethoscope and that is that .. it was quite uncomfortable at first.

How long did that last for?

I would say about a month or so .. no, I feel a lot more confident about it now ..

Are there any areas of discomfort, uncertainty?

Er ..

Any things that make you say oh, no I really don't want to deal with that?

Erm ...

Are there sorts of patients that make you feel ..

I think it is elderly patients living alone where there is nobody to look after them you know if they are in hospital they have the nursing staff there and you know they probably don't want to go to hospital and it

is sort of judging whether or not you want to persuade them to go or leave them where they are ... it is sort of dilemmas like that where you know what you would like to do for the patient but they don't want to do it and you have got to strike a balance ..

Are there any .. can you remember in your trainee year any things that have gone particularly well in terms of your .. your learning for a trainee?

Erm ..

Something you are particularly proud of?

had no experience of obs and gynae and I am quite pleased with how I have come on you know I feel quite comfortable doing obstetrics and gynae now ..

And that is next is it as well?

Yeah ..

What about things which haven't gone so well? Have you got any criticisms of a year?

Er ....

I mean could it have been organised better or .. you mentioned the assessment thing about giving more feedback I mean is there anything else like that?

Er .....

Maybe in other words I could say how would you do it differently if you were a trainer? How would you organise the trainee year differently if you were a trainer?

Er ... I think I would just like a bit more assessment because although my at the end of it all said you know he was pleased with the way it had gone .. you know a lot of the time, most of the time I was just on my own and he never actually saw me with patients or er ... I mean the only way he could really assess what I was doing was feedback from patients who went to see him or just looking through my notes er .. I mean I wasn't videoed which wasn't really his fault because the video recorder had broken down and .. that would have been nice er .. and perhaps half-way through .. at the beginning I sat in with him and watched him with patients I think it would have been nice to have another week of doing that sort of half-way through just to refresh my memory of how he does it and .. you know how where I am falling down or perhaps he could have sat in with me .. I don't know er ..

Have you said that to him?

No, I didn't ... er ..

Is there a trainee group available to you when you are doing obstetrics?

No, er ...

Did you get an opportunity to do any reading?

Yes, yes.

And did you do as much as you wanted to?

Yes I think so.

What about a project, did you do a project?

No.

That was from choice?

Yeah.

Can you take your mind to something else .. can you categorise or classify you could say define what your vision of perhaps the ideal trainee is, somebody who is really going to be a success as a trainee you must have seen a few now have you? What are the characteristics of a good trainee?

Er .... I mean somebody who is quite adaptable and can change from being a hospital doctor to someone who sees the patient as a whole and er .. he can build up good communication skills er ...

Well what about a bad trainee? If you were sitting on a selection committee and you saw half a dozen trainees how would you identify the ones who are good or bad?

Well people who strike me as bad trainees are usually people who are very .. are much more hospital orientated and just see the patient as a case you know a medical case which er .. needs this type of treatment and don't take into account what the patients wants and their circumstances you know the family and don't sort of adapt things to fit in with that particular patient .. er ....

This is one of those tough interviews isn't it?

Yeah.

Have you had any difficulties with getting access to books or journals and that sort of stuff? Are you confident with the way that you use journals and books and can seek out references and that sort of stuff .. I mean if somebody gave you a problem would you feel confident of being able to solve the problem? Without taking advise?

Er ... I don't know I probably would need a bit of guidance er ... really the only teaching about reading journals was from medical school when we had to do projects then .. er ..

Would it be useful to have that sort of advise as a trainee?

Yes .. I suppose it would be er ..

Nearly finished, an even tougher question than all the others now .. how would you define learning? What is its purpose and what is it?

Er ... I think it is just er ..... just being able to improve and change and to continue making progress .. er .. and again sorting out what is relevant and what isn't and just being able to make use of knowledge .. er ..

People talk about general practice in terms of knowledge, skills and attitudes and you can see how knowledge is acquired and skills are often a matter of just seeing and doing and practising aren't they? What about attitudes and values how do they transpose in general practice?

I think if they are not there to begin with it sort of points out to you er .. as to what your attitude should be and if you make the effort and try to see the patients in that way you will be rewarded by the patient responding to you and perhaps your attitude might change when you see that you know er ...

And that depends on someone pointing something out to you?

Well not always .. if the attitudes are .. if it is not there to begin with er .. or I suppose you can discover it yourself if er .. the interview doesn't go particularly well and you could think about why er .. and perhaps try a different approach next time ..

And replay the thing in your head?

Yeah.

PILOT STUDY TWELVE

25th August 1992

What experience have you got of general practice and medicine so far?

Er .. you mean from the last six months?

No. What have you done since ...

Erm .. I have done you mean hospital jobs?

Yeah.

I have done er, urology, medicine as an SHO er .. orthopaedics, casualty and .. I think that is it.

Have you got any postgraduate exams?

Er .. .no, not yet.

You have not done the MRCGP or DCH?

Er I was going to go for the MRCGP in the second six months ..

And of general practice you have done how much?

Er .. six months

And you are just starting your second six months now?

Yeah.

Are you in the same practice that you were in?

Yes.

A good way of starting this is to ask you to go back to when you were a student to regress you to when you were a medical student and ask you to think about how you learnt then how you learnt things as a medical student. Can you tell me what you did. What processes you went through to learn as a medical student?

The .. the basic lectures?

How have things got from the lecturer or from the book into your head and how they stayed in there?

I suppose by sort of repeated reading and er .. sort of going over everything again and again and again until it was engraved ..

Was that the case all the way through medical school or did it vary at all?

Interesting things were I think learnt spontaneously .. if it had an interesting label stuck to it .. it stuck you didn't need to read through it again and again ..

Why?

I don't know presumably because it was labelled .. and it was easier to retrieve ..

Can you analyse that a bit more? Why was it interesting to whom was it interesting?

To me. You know to .. things that were of a personal interest .. you know a little interesting facts .. just

things that I find interesting they seem easier to retrieve although are usually irrelevant!

Did you find that was a feature of your learning that you are quite good at learning things which were not perhaps mainstream?

Erm ... again it was all based on whether they were interesting or not if it was uninteresting no it was as hard if not harder ..

It sounds to me as though you are talking about facts mostly what about er .. skills? How did you learn skills?

Again by sort of repeated er .. performance ..

And attitudes?

That was usually from peers er ...

How do you learn attitudes from peers?

Er .. your attitudes towards working conditions are attitudes towards professional attitudes ethics so I suppose from that point of view that was mostly in me already .. I just didn't know where it was er and I don't think it was particularly changed by lecturers it was changed more by er .. just peers and you know the way I felt about things ..

How did peers influence the way you think?

Now that is a hard one!

It is easy so far!

Er .. the college exam will be a doddle after this!! I can't think .. I suppose it is well most of it is er .. I couldn't really say how er .. how they influence you .. er .. I suppose it is by comparing ideas and er .. you know just interaction you know that is the group that you had the most interaction with and you know you voice your own opinions and they voice there's and .. and you come to some middle ground and base your practice on that ..

Right, well we have talked about knowledge a bit and we have talked about skills a bit and we have got a bit of attitudes beginning to think about .. what role did patients play in learning as a student?

Er ... do you mean apart from being ..... ?

Well were they anything else?

Er ... I suppose er .. you tend to develop attitudes based on patient types er ... you don't want to but you do ..

Would you give me and example?

Er .. I suppose I am I have a particular belief about er private patients er .. I find it quite offensive to have to deal with private patients on the NHS er .. and a few in particular that were quite demanding and unreasonable .. well I thought er ... that was a particular one ..

And how do they make you feel?

Erm ... I suppose a little bit annoyed at the er .. inequality of the system it .. you know when they take the best beds in an NHS ward it seems to .. you know it gets me a bit ...

Is it there fault?

Er .. no, no but I realise that er .. you know I mean I didn't treat them any differently er ..

Now that you are coming up to learning about general practice in general practice and perhaps compare how you are learning now with the way you learnt as a student is it possible to do that, to compare?

I think it is quite different really er there is less well virtually no feeding of facts and it is .. it is more of an apprenticeship I think ..

So what is an apprenticeship?

It er .. it allows you to go along as you meet the vast diversities of er .. of situations .. you may have to deal with them as .. as you hit them .. and with trainer guidance ...

Are there any other things that are different between learning as a student and learning as a trainee?

Erm ... sort of like appearance erm ... so there is a lack of er ... you know the feed round to er detemper or to er .. improve your ideas ..

Do you feel more alone then?

Er .. I suppose you are on your own, yeah ..

But do you feel that way?

Er .. not at the moment .. not .. no, no.

So do you feel independent?

Yeah.

And you are confident in that?

In most things, yeah ..

What about er .. other trainees on the half- day release course? I mean they are peers aren't they?

Erm .. that is the one place that I have found the half-day release course useful .. that is how I found it rewarding to me ..

Because?

Because of the interaction with peers .. you know discussing ideas .. I have had some good discussions in this six months ...

Talking to peers is about discussing ideas is it about anything else?

I suppose er .. an exchange of facts and experiences and you can er .. I suppose reduce the number of er .. new experiences that you have to go through by listening to somebody else's .. and er .. from that point it is quite useful ..

What else do you do in that process of working with peers?

Erm ... I suppose we er .. I suppose it is useful for individual research as well .. er .. yeah .. the way it is working at the moment well research on the programme like the mental health act and so on .. and then present that to the others which was quite useful ..

Individually doing that or doing it as a group?

Er .. a bit of both depending on what the subject is .. if it is a big subject we all do a bit ..

So it is like a mini project?

Yeah ..

Are you doing a project in the practice?

Er .. yeah, I have started that .. yeah.

What are you doing?

Er .. I have set up a diabetic clinic following up through auditing at the end of the year ..

Oh great, is that interesting?

Yeah, I have got a bit of an interest in endocrine and er .. diabetes erm .. and I was an SHO in medicine and I had to do a bit of that .. and I did some work on it as a student, diabetes and pregnancy so er .. it just follows on ..

So how are you finding out about setting up a diabetic clinic?

Erm .. I suppose partly from the er .. the diabetic .. the general practice magazines er .. partly from er .. my own experience

Within the hospital?

Yes, although it is a different set up er .. I think the er .. the royal college produced a book on diabetes which I have been reading through so .. that is quite useful ..

Would you regard yourself as being pretty good at like solving problems like setting up a diabetic clinic or finding out how to manage coma or all sorts of things?

I think if I get my teeth into something I can organise it yeah ..

Would you say you were as good as or better than or not as good as the average trainee?

I don't know .. that is er .. that is a difficult one without er ..

I know but try to do it objectively.

Probably average.

Average? What would make you better?

Erm .. I suppose mundane things er .. become a bit .. I go into auto-pilot and sort of miss the miss anything that deviates from the usual path .. you know if I er .. if I see a patient and I have to make a phone call er I tend to forget to write in the notes afterwards .. things like that .. you know but er .. I suppose we can all do that ..

Well lets go back to applying that same principle to finding out about things I mean if we take like the diabetic clinic and you regard yourself as .. as average in terms of problem solving how could er .. your ability to problem solve as a learner be improved?

I suppose by discussion with the er .. the trainer .. but they haven't set up a diabetic clinic themselves so .. that is why I am setting it up .. erm .. peers who are working within diabetic clinics er .. and you

know as I say the literature ..

Go back to when you started as a trainee .. can you remember how you felt at the beginning of your six months?

Well .. it was erm .. it was a sort of feeling of relief .. a feeling of relief that I was out of hospital .. it er .. you know that was four years three years er .. into the final stages and this was the pleasant time ..

Were you looking forward to it?

I was, yeah.

Well what happened? I mean did it stay good or were there bad bits?

Erm .. it was all right for a while but er .. I don't know er .. I found that there was a lack of er .. support .. which er .. and then I found that I .. myself developed attitudes towards the trainer and things but er .. I mean it is hard still .. you know

What sort of attitudes?

Resentment I think.

Was that because of the style of teaching or because of ..

I think the lack of it .. and the style yeah .. and the sort of attitudes towards what I was doing here as a trainee .. I found that disturbing ..

Did you feel part of the team?

No.

Did you feel put upon?

Yeah.

And has that resolved?

Erm ... it comes and goes .. we have talked about it and erm .. it goes for a while and then it comes back .. and ..

Are you being put upon by comparison to other trainees?

I think so, yeah.

But you have had discussion with your trainer about it?

Yeah.

Are you confident it is going to be solved or ..

Erm .. not really .. but er .. we will see.

Some people describe er .. and you have mentioned it but when they go into their trainee they feel more isolated or .. alone .. that is something that you have presumably noticed when you mention lack of peer is that feeling still there?

Erm .. I don't know I suppose you adapt quite quickly er .. I think I have adapted to it quite well you know you just go on about it in a different frame of mind really .. not expecting the support ..

Have you got to a stage when you think this is the way you will be when you are a principle? Or is there something else you have got to do before you get there?

How much more have I got to learn?

Yeah, sort of.

Erm ... I think I have got more to learn about the organisation .. er .. rather than the er .. the patients side of it .. the medical side of it .. er .. but hopefully that will come in the next six months ..

Right, is there anything else apart from the organisation that is outstanding?

Erm .. not really er .. I suppose personal organisation .. organising myself .. that is important er ..

In terms of what?

In terms of er .. practicalities .. note keeping, remembering to do the various bits and pieces that you have promised .. er .. phone calls you know those sorts of things ..

So it is a time management course thing?

Yeah.

Yeah, I have done one of those and it was actually terrible ..

I try to avoid them!

Can you define a good trainee? What are the characteristics of a good trainee?

A good trainee? Erm ... willing to learn er .. willing to take a part .. but I think it is important that they don't allow themselves to be put upon er .. I think that for the future trainees .. and for the sake of er .. of teaching .. I think that it is easier to learn as an equal than it is as er .. as a junior er .. there is nothing worse than coming out of hospital as a junior .. er .. having been abused for three or four years to be treated again as er .. you know as a house officer .. and I think that puts a barrier up to teaching .. and you know .. it certainly put one up with me to learning ..

It is very difficult isn't it when it is there?

Yeah.

Well what about the characteristics of a bad trainee are there any others or are they opposite to those?

Er .. I suppose it would be the usual ones of any doctor .. not being trustworthy .. not being medically competent .. er .. not really particularly interested in learning .. I think you have got to go in with an attitude that you want to er .. pick it up and at the end of the year you want to be fit to be that partner .. to take your full part ..

Can I ask you the hardest question? How do you define learning?

Erm .. I suppose it is the er .. the constant extension of your knowledge and skills er .. in our job to the benefit of your patients and yourself ..

You dealt with that one easily, well done, thank you! You have stoned me now, I am running out of questions to ask you! Thinking about what you have done so far can you remember an episode of learning that has gone very well for you? Something that you have been proud of?

Er ... particular events?

Yeah.

Er ... do you mean ones that involve particular things that I have learnt in general practice as oppose to what I have done?

Yes. If that is easier.

I can't really think of any at the moment .. er ... I suppose there was one incident where er .. I was called out to see a patient at night ... er .. I arrived, did the examination and within two minutes he had collapsed .. and passed at least half a pint, maybe a pint of blood it was tail end and I had no you know no support then, not haemasol or ventalins or nothing .. and .. I suppose I had learnt a new way of you know pacifying the situation er and I suppose keeping him going until the ambulance go there he ended up lying on the floor with his feet on the toilet er.. and trying in that situation when you yourself don't feel particularly calm because you don't have your usual instruments and tools to er .. and you know trying to maintain a face and calm the relatives who were obviously distressed and the patient who is dyeing .. that was interesting ..

How has that sort of situation made you feel .. afterwards?

Good I suppose .. a bit of a rush really you could say ..

Some GPs actually try to minimise the activities they do by carrying the minimal amount of prescription you know the stethoscope, the prescription pad, the pen .. that is it that is their kit you know you get to that stage, you go from the orange bag full of every single emergency piece of equipment to the .. to nothing you know .. O.K .. I have had quite enough of this now, have you had enough of this? Have you got anything else you would like to say around the issue about oh no, what about assessment and feedback and that sort of stuff how do you feel about er .. talking about cases and the management of cases to others?

I quite enjoy it actually, I enjoy finding out what others would have done in the same situation and .. and their description of their patients and what I would have done in that situation .. quite useful particularly in areas where I am not very confident not great you know like ENT and ophthalmology and

How do you recognise you are not very good in those or not great in those recognise it? I suppose that er .. having no answers at the end of my think when I er .. when I see the patients .. How do you know how well you are doing as a doctor?

Er .. currently I suppose by patient feedback although that is not terribly reliable, apparently by your mortality figures but again that is not very reliable either .. I suppose it is your own satisfaction of what you have done .. you know you feel that you have done the job properly and the chances are you have .. you know if you feel there is doubts ..

Do you have a process of self review?

Yeah, constant .. er if there is something I find I am grey in I try to read up about it or find out from somebody else .. you know or contact the experts and get their opinions er ..

And would you say that you are good at identifying areas where you are not so good?

Er .. I suppose it comes down to that doesn't it whether there is other things that you know you are confident in and other things that there will be the things that I don't know about, I am not confident in and .. but everything else is all right, I think I can usually identify where I don't know ..

Right, and do you feel that you are being prepared sufficiently well with all your training so far for the sort of learning and commitments you are going to need to do for a trainee and learning as a principle? Because you are painting a picture of a different sort of learning in general practice than that what you were used to in medical school I mean are you adequately prepared for carrying that on without the training?

I think to some extent I am doing that now anyway er .. but that is something else ..

O.K. thank you very much.

JGB3/TINA/P#STUD12.258

PILOT STUDY THIRTEEN

26th August 1992

A good way to start is to tell me what experience you have had so far, in training since you have qualified.

Er ... no er .. since I actually qualified no training at all, no hospital bar a possible exception when I did some anaesthetics and I did the diploma of anaesthetics and I was taken under the wing of one of the senior registrars but apart from that and apart from general practice has been different .. hospital er .. no, nothing at all.

What jobs have you done?

Oh, I did a year of anaesthetics straight after qualifying .. I have done obstetrics and gynaecology for six months I did geriatrics for six months .. er .. what else have I done .. casualty for six months paediatrics for six months and now I have done general practice

And how much general practice have you done?

I have actually done nine months because I have had a .. an enforced break ..

Can you er .. cast your mind back to when you were a medical student?

Mmm

And try to remember how you learnt things then? And talk to me about those? How did you learn as a medical student?

Erm .. the best way sort of to learn things was by repetition .. was by reading things over and over again .. and then .. discussing those things back with other people who are learning the same things that I was learning.

So you are a social sort of learner or a solitary learner?

Solitary followed by a little bit of social at the end ..

Which was more important?

Solitary.

Was that the same all the way through or did it change?

Never changed.

Did the patients make any difference to the way you learnt?

Er .. Yes because it was much easier to remember if you had seen someone .. if you seen .. someone with a collection of problems or it is easier to remember an event than it is to writing on a page ..

Right, so how did you relate learning perhaps to a patient with heart failure on a ward, how would you learn about heart failure when you saw the patient?

Er .. hopefully I would know something about it before I had seen him .. I mean I would still have done some reading before hand and then .. all the examining er the patient and talking to the patient that would bring out all the things that hopefully I knew anyway or had .. had read about and would bring to the surface a lot of things that you know were at the back of my mind after I had read about them .. or alternatively the other way around is I would see a patient with a collection of minor symptoms, problems, feelings and then go away and read and go aha .. they have got these, yes they have that .. so it worked both way rounds ..

Did you have any difficulty with studying?

No, I am quite obsessive when I study ..

Right, are there any highlights that you can remember, things that went particularly well as a student .. things that you have enjoyed learning?

Erm ... I was happier once we were on the wards, once it was more practical and I could learn by events .. er .. rather than just book work.

Do any events stick out in your mind as particularly memorable?

Er .. gosh .. all collections of things .. usually erm .. a say a patient with a particular problem and the things you had to do for them and the signs and symptoms they had .. but there were lots of different problems I couldn't pick one just out of all of them ..

Right, can you remember anything that sticks out in your mind as in particularly bad?

Yes er .. failing an exam for in the pre- clinical year despite my best efforts .. failing an exam ..

What did you fail?

Erm ... biochemistry ..

Oh, right, why did you fail that?

I don't know I don't think I knew enough .. I hadn't done enough .. I did very well afterwards because I hadn't done enough the first time .. so I did extremely the second and the third time around because it was divided into three .. er .. I think I probably just hadn't done enough myself ..

And you moved to general practice training? How have you gone about learning during your nine months?

Erm ... it has changed recently because I am studying for the MRCGP now and also I am on my own .. at home and so it has gone back to learning on my own again .. however, before that erm .. studying mainly by erm .. once again incidents that have happened er .. seeing patients with particular problems again erm .. and then going and reading up about those problems or discussing them with somebody else afterwards and going down all the avenues that those problems would bring up ..

It sounds as though it was the patient who drove the learning?

Yes, I would say so ..

Would you say you had a plan of what you were going to do over the time you were a trainee?

No.

It really just depends on what comes through the door?

Mmm, to a certain extent .. erm .. I had a list of my for myself of .. all the things I wanted to cover but I wasn't saying right .. I am going to cover this this week or that that week it was .. as it arose because .. I found it easier to er .. learn about it and remember it

And what has happened now you are learning for your exam?

Erm .. now I am back .. with books .. and also with people who have taken it before but also on my own again ..

And you have got a plan now?

Mmm ..

So it is more structured?

Yes, it always is .. when I am left to my own devices it is much more structured ..

Which do you prefer?

Er ... it is difficult to say .. I find following what I make myself do harder ... than er the sitting at home saying right .. I am going to do this I find that actually a lot harder work than .. doing this as they come up naturally in the course of things ..

So why do you do it? If you think it is hard.

Because .. I know in the past it has been effective .. and it does make me remember things .. and after a fashion I am sort of limited at the moment on how I go about learning things .. because of the family circumstances ..

Well why are you doing the exam?

Erm .. because there are a number of reasons .. first of all I think it makes me do a lot of work in reading which I think is relevant in general practice anyway .. regardless of whether I did the exam or not .. I think a lot of the content that you have to do for it is relevant and I honestly don't think I would do it if I wasn't going to do an exam at the end .. secondly er .. I feel that .. there is a source of competition still .. maybe .. possibly not as much as it was ... er .. and I .. anything that gives me an extra edge over anyone else has got to be a good thing .. and also I would like in the future to be a trainer myself and I think I would be better erm .. in a better stead to be a trainer if I done the exam ..

Will doing the exam make you a better doctor?

Er ... I don't think so .. no it might make me better at actually being a partner but I don't know that it is going to make me a better doctor ..

What would make you a better doctor?

Er .... the things I find that have hopefully made me a better doctor er ... having video consultations being able to see myself and discuss things er ... I .. I have to say that I have had a number of problems with my trainer and I think if I had had a different trainer I would be able to look at this in .. in a different way .. erm .. but having people not criticise me but .. comment on .. on what I do er .. and also discussing cases as they come along either problem cases or random cases er .. but I think the videos have really helped in terms of er .. I don't know .. I suppose .. allowing me to see how I treat other people because I think a lot of being a good doctor is er .. actually getting people to tell you things and realising what actually they really want to tell you and .. and an enormous amount of that you .. you can't get out of books .. you can only get it out of seeing yourself and bashing it backwards and forwards with .. with somebody else ..

So I get the feeling that you haven't had enough feedback about how you are performing?

I had lots of feedback ..

But was it in the way that you wanted?

Awful, no.

How would you have liked it to have been?

Well .. as I understood it feedback was supposed to be non threatening .. and .. I reached a stage .. I hopefully .. I am passed it now but I reached a stage where I have always been fairly sort of confident some people say over confident not in so much my abilities but just in life .. in general and er .. I think

that my trainer didn't like this .. and so I have always enjoyed going to work enjoyed the patients and I have really really enjoyed especially when I started general practice and I got to the stage where I didn't want to go to work .. I though that I couldn't er .. that I was obviously terrible .. and er this was all brought about not .. I don't think it was my trainers fault .. I just think she just has a set way of doing things and maybe my attitude and the way I work just .. she couldn't she couldn't correlate the two er .. and .. she was very threatening constantly bringing up examples without any back up which in subsequent .. I followed up examples that she would have brought up and it would turn out that I wasn't wrong or I hadn't done something terrible but I never got that back .. I got the really awful bit and then I never got anything back .. and I found it really very difficult and then because I got pregnant she used that as an excuse .. I obviously couldn't concentrate .. my hormones were up the shoot I obviously .. the whole thing was just .. but then it was saved by another partner being I suppose a shoulder to cry on .. er .. and sort of going through all my feelings about problems I was having and er .. and positively helping me with positive suggestions and positive criticism and that I could cope with I mean I have been criticised .. obviously I have been criticised by other people .. I mean everybody is but er .. it was the way it was done .. I mean I can take an awful .. I can take an awful lot of criticism or .. or comments or anything as long as it is done in the right way but it really did bring it home to me the difference between negative criticism and positive criticism ..

Do you think you experience is unique in general practice? Do you think other trainees go through similar or ..

I would like to think that all the other trainees don't go through problems and certainly the trainees that I have met haven't had such .. er .. knocks of their confidence .. but I can't say that all the trainees I know have had easy times but I think some people are more approachable than others ..

Whilst you were in sort of emotional domain conversation is it er .. I suppose the generalising thing .. is it .. er any evidence to suggest that learning about general practice is more than an emotional event than learning in hospital?

Yes I think so er .. as much as .. you get to know your patients so much more .. you are much more involved in their lives erm .. in hospital somebody will come in with a condition and you will treat it, hopefully, and they will go home better er .. you don't really get to know people where as in general practice .. er .. you do get to know people and a lot of people come in with emotional problems even if it is not the thing they really think they are coming with er .. and .. you are much closer to things ..

Yeah. So can you cast your mind back to when you started being a trainee and sort of follow it through some months and describe what might have happened to you as a person?

Erm ... I think .. I started off not confident .. not particularly confidently erm .. with sheer panic every time a different patient came through the door thinking oh my goodness I don't know what to do with this one .. but after that passed I then settled into a more confident phase of er .. thinking this is O.K. .. I am thinking erm .. nothing too awful has happened and enjoying the patients really .. enjoying the things that came in .. enjoying seeing people again and being part of peoples lives I suppose .. that was followed by a terrible loss of confidence er .. of I obviously don't know what I am doing ..

Associated with your trainer?

Yeah, erm .. which was then followed by .. feeling a lot better after another partner intervened er .. feeling a lot better and more or less getting back into the not cozy feeling of it is O.K. I can cope with it I am not too terrible erm .. but getting back to the .. more of a challenge and enjoying the patients as they came in and the work in general ..

And the majority of the learning that has gone on has gone on inside you as oppose to you and other people?

Erm .. mm .. difficult to say I would say .. up until say the last month .. well it was before then anyway but erm .. there was quite a bit of learning that went on between me and other people .. other partners .. not necessarily my trainer but other partners erm .. but now I would say that because I am back on my own again I .. it is much more concentrated er .. and a lot of learning now and will be going on just in me

Some people describe their arrival in general practice as one of becoming isolated compared to the hospital experience ..

Oh, I didn't feel that at all .. no, I mean it wasn't just the other doctors .. the whole practice was always very welcoming and it is not .. it is not a very small practice and it .. it was er .. it is just medium size .. it is just right it is not too big to be impersonal it is not too small to there being nobody there erm .. and I never felt isolated ..

Some described the transition from hospital training to general practice training as er .. a shock because they go from being very much independent to some extent but within a hospital sort of environment to a situation on which they are on a one to one relationship with another doctor be it adult otherwise erm .. and then also put into a group in half-day release course and that comes as quite a shock to the thinking process ..

It is quite a shock in that it is a total new way of thinking .. nobody tells you to think about the patient really when you are in hospital not really .. you think about their condition but you don't think about how they feel .. you know how they might be feeling sat on a ward all on their own .. nobody tells you that I mean hopeful you will figure that out for yourself erm .. and it is a shock in that as I said before I have never really had very much teaching before .. admittedly I haven't been on a scheme .. I picked it out myself but er .. yes it is a shock actually getting some teaching but it .. it wasn't an unpleasant shock .. I was very lucky in that a number of people in the group that we were put in I already knew anyway so it wasn't a .. being thrown in with a lot of strangers so I knew them anyway erm .. and it was a pleasant shock I think ..

Whilst we are talking about learning in hospital and seems to be learning about knowledge and skills to some extent but coming into general practice is learning about something else isn't it?

It is learning it .. there is a lot of knowledge but after a fashion I think you would hope by the time you have got there that you have picked up the knowledge going along in jobs that you have done .. it is a lot of learning about .. I don't know .. learning about people's feelings .. interactions of people erm .. and .. how things work together .. be it between doctor and the patient or the doctor and the rest of the staff .. or how the staff in .. there is a certain obviously of management .. time management, people management erm .. also .. a much broader concept than just obstetrics .. or ..

So what sort of learning is that? When you are learning about interactions and that sort of stuff ..

Erm .. I suppose the way I have learnt things like that is just the by osmosis just .. I don't know erm .. I don't know how to put it er ..

So what happens to you as a learner in this process of learning, feelings, other people that sort of stuff?

I don't know what you mean.

Well when you are learning a set of facts they just stick in your head and you are still the same person but when you are learning about erm talking to people, asking people about their feelings does something happen to you?

I think it has to. I think you would be very heartless if it didn't erm .. hopefully you become more aware of other people's feelings .. more aware of what is going on in them .. but they are not just the person that arrives in front of you .. they have got a whole background, a whole life behind them .. erm .. obviously not getting everybody's life history who walks through the door but being aware of picking up clues about it .. becoming more considerate ..

So what is the result on the trainee?

Erm ... making them a better doctor I would hope ..

Do you become different people in some way?

..

If you memorise the .. you know the nerve you don't change ..

No, you don't.

But when you have been through six months of general practice I mean ..

I think my perspective on things changes .. trainees perspective has to change erm .. that er .. I don't know how to put it into words .. but just your whole attitude to other people erm .. I don't think I could sort of breeze through life quite in .. quite the same way as I usually do or rather I had done in that when people say things or do things I take it in more erm .. and if I felt .. I don't know I wouldn't act on it more .. even in my own life ..

Does anyone ever tell you about this before you start general practice training?

No ..

Would you regard yourself as being er .. more or less the same or better than other trainees in your stage? Try to be objective about it.

I wouldn't say I was worse .. I don't know whether I am better or the same ..

What could be done .. what would you do or the others do to make you better?

I think one of the things that would help me to actually know if I was any better or any worse would be to go around to the other practices that the trainees were in .. and see how they work.

Right, and you haven't had the chance to do that?

No, erm .. and just see how they .. how they function, how they work er .. and I think that would give me an idea .. I have been able to sort of see in respect to some of the other trainees in that we have done videos erm .. and brought them into the group

Terribly artificial ..

It is very artificial erm .. and it is very arbutary as well because you look at one consultation .. erm .. but having said that there is one person in our group who I would say I possible am better than .. just in terms of .. I don't know .. not in terms of knowledge, it is not knowledge it is just an ability to communicate with other people ..

So what makes a good trainee then?

Erm ... you need somebody who principally is receptive erm be it to .. I learnt new ideas from staff .. I mean you are taking on a lot of new ideas that you won't have come across before erm ... somebody who can communicate well er .. yes you can teach communication skills to a certain extent but it certainly helps a lot if you can do it to start off with and one would hope that by the time you got to this stage you would have but I don't think so .. erm .. you need somebody who is going to be able to listen .. not just communicate themselves but you need somebody who is going to be able to sit back and .. and listen as well because I think half more than half of the information you get out of people is .. during assignments .. erm .. you need someone who is going to listen to other people's ideas not try and dominate the whole scene .. I mean one of the things is you are working in a group everybody has their own ideas about what they want to do .. and you have got to be able to er .. listen to other people's ideas .. you can't just have your own .. I mean you can have your own but you have got to be able to receive and be able to take on board other people's as well ..

I this something that people come into vocational training or an ordinary trainee equipped with or is there something that a lot have got to learn?

Well .. I think it is a bit of both .. I think you have extremes of .. of both erm .. some people will have to teach I suppose how to communicate and get on with others and absorb others ideas and what have you more than others .. some people just naturally do it very well ..

Mmm a pretty soft answer that really! Hardest question, how would you define learning?

Erm ... .. learning .. is a process of improving yourself .. in terms of knowledge .. erm .. interactions of other peoples .. er .. absorbsion of ideas .. er .. I put knowledge first I am not sure that is the most important thing really .. but it was the easiest thing to say er .. and it is a process whereby you have to change with things .. with either facts or experiences .. er .. that you come across .. they have to bring about a change in you ..

Would that definition have changed do you think than the one you might have given you if I had asked you when you were an undergraduate?

If you had asked me when I was an undergraduate I would have just said learning was about absorbing facts .. and regurgitating on them ..

When did it change? When did the great conversion happen?

Well it certainly wasn't in hospital! It was .. it was erm .. probably about 3 or 4 months into general practice ..

Right, in what way?

I think it was gradual .. erm .. just the gradual coming to terms with er .. the different way of teaching and realising that I was actually taking things in and .. the things I was taking in were changing the way I was .. I was practising medicine I suppose in terms of my reaction to people and what I did with emotions .. both mine and the patients ..

Will the process of learning ever stop?

I hope not ..

Will your definition change again?

Almost certainly but I don't know how ..

How will you continue learning when you are a principle?

Erm ... I think you need to continue to have feedback .. I personally think you need to continue to do videos .. occasionally ..

By yourself or with others watching?

Erm ... you need to have quite a lot of faith and trust in your fellow principles to do this but ideally with somebody else watching .. I don't think you can be hard enough on yourself or .. objective enough on yourself .. you need to be able to discuss it with somebody else .. erm

Why videos?

Because, although they are artificial .. first of all if you do them often enough I don't think you feel as artificial about it as you should .. it is a way of being a fly on the wall and seeing how you would do things er .. another way of doing that is by having people sitting in with you ... but I find that absolutely horrifying .. I can't stand that at all ..

Roger Neighbour suggests having a second head ..

Mmm, I just I can't stand having anyone in the same room er .. and I think learning will also carry on in a certain respect in some of the work with myself again .. reading journals, keeping up to date .. changes but then again I think coming back and discussing that in a group or with somebody else is a much better way of reinforcing it and actually keeping it in your mind ..

Last question, what is the purpose of a GP?

Er .. oooh you have saved the best until last! Erm .. the purpose of a GP is .. I must say first of all .. not because I think this is the most important but it is because it is the first thing that came into my mind is .. providing health care and advice to the patient .. also .. and that health care really extends to mental health, emotional health .. erm .. I think it also is in providing health advice? erm .. and it is not just that .. it is social as well erm .. you don't just treat the illness that comes in as time goes by .. you learn about peoples families about social problems they may be having .. I think it is also the GPs job! It is also the GPs job to look out for peoples social welfare as well as just their health ..

So the GP has got to prevent as well?

Mmm

Are GPs trained in all those things?

Undoubtedly not.

Ha ha! Finished. That is quite enough!

JGB3/TINA/P#STUD13.268

PILOT STUDY FOURTEEN

26th August 1992

The easiest way to start is to describe your medical experience to date, what jobs you have done and that sort of stuff.

Right, started off at St Andrew's Medical School, Manchester er .. and then I went and did most of my jobs at Stepping Hill Hospital in Stockport er .. I did a house job first in medicine with Dick Fineman and a second job in surgery with Peter England and then I got on the Stockport VTS and I did paediatrics at Stepping Hill, er .. gynae at .. no medicine again at Stepping Hill, gynae .. obst and gynae Stepping Hill and then I went to Buxton and did rheumatology and rehab and then I come to my current practice and now I am a trainee there and ..

Right, Stepping Hill is not on a rotation is it?

No, no. Erm .. I have been under the care of you know of .. Manchester erm .. and only acquired a mantel of .. of Liverpool from doing .. being at this practice .. my trainee practice and even having done that geographically it was much better to continue .. at the .. at the Stockport VTS day release course which is two minutes walk .. drive away from where I live and er .. and I knew a lot of people on it ..

So you go to day release?

Yeah, that was what that is ..

Right. Cast your mind back to when you were a medical student .. can you describe the ways in which you learnt how you went about learning as a medical student?

Yeah, hit and miss and DIY! I mean to .. to think that .. I must say I get cross when I talk about it .. it makes me very upset er .. there was lectures .. which were O.K .. pre- clinical and clinical .. pre-clinical lots of lectures .. some of which were very good .. some of which were you could have perhaps learnt from a book but it was quite .. quite good .. there was always an unrealistic expectation going all the way through medicine that everything you learnt you will need and that everything you forget it is going to be terrible you forgotten and it takes you up until about now to realise that this is absolutely nonsense and that you have to have a general idea and know when to go back .. into your books and when to know when to carry on .. know what your limits are ..

So how did you actually learn on these things?

Well I sat down ... I suppose I should also say that I am dyslexic or was in the past .. and that had caused some problems at school er .. which required active parents to take an interest .. a bit more support and just allowing myself a bit more time to learn .. er then I had to learn to read .. all this sort of stuff .. you know good vocabulary but not able to read .. in medical school that just seemed to mean that there was a lot of .. a lot of work .. erm .. things were an effort to .. to cram knowledge into my head .. I always found that there was just so much going on that things that I enjoyed learning I could learn easily and things that I really hated I couldn't see a point to .. end up having to set my whole time up because I had to get through to the exams but .. they weren't all well they had no relevance to you ..

What was the purpose of learning as a student?

To get to the next stage .. I mean I would think that with the knowledge that I have got now there are a few things that are very useful .. but most of it not a great deal of use at all .. just like pharmacology it could have been really really useful .. and they taught a whole load of stuff .. that was completely out of date, principles that aren't terribly important .. you know but you need that to get the exam ..

And knowing what you know now how would you feel when the pharmacology cut??

I would make it all cut .. make it all relevant .. I would make it in the same way as anatomy .. like there is lots of things like if you are going to be a surgeon you might need to know lots of things in detail .. if you are going to be a physician you still need to know about things .. procedures that you will do and I

would probably .. I would make it more practical if you are a GP it would be nice to know when you are doing your minor surgery .. what structures you are around it is nice to know .. I would make it such that

How would you do it?

In my .. in my .. you have to have a basic knowledge .. there is a basic data base that you need .. I mean I remember .. there are bits and pieces that I remember .. I remember being told about er paralysis and various things as we were in .. anatomy lectures because that was interesting .. that all of a sudden it was relevant that the nerve run and .. a regular group and .. and then there is the part in the leg the classical butchers injury where they slice through the femal artery you know and .. bits and pieces .. I know that you can't have it all like that but if you have got a fair few snippets of things and you have got a realistic .. you have always got a realistic base .. then it is good .. I mean another good example .. some people found that dissection was the bees knees .. it was a complete waste of time .. I enjoyed it .. it was a social activity .. but I mean you also couldn't see what was going on .. you couldn't see .. it would be much better if somebody dissected one out and you could go and look at it .. and play around at the same time .. that is all that is and oh it goes through there .. oh I see now .. you don't need to spend four hours dissecting away .. you know to see your hand eye co-ordination .. I would rather practice it playing tennis or snooker or something ..

You mentioned what you called a good lecture earlier on .. what was a good lecture?

I think that is probably .. well that is a million dollar question isn't it? It is a rare thing .. it is ... there are different styles I mean there is a cardiologist in Manchester who does his lectures are excellent .. and he really keeps .. he is a classic .. he is an old school sort of person and he keeps you on your toes and he goes you! at the back what is the answer to this question .. there is a bit of an excitement .. a bit of tension in there and he has conveyed lots of useful information .. he is not droning on telling you about this .. is the most important thing .. I like somebody to give you some structure .. why is this important for you to know and then this is what you need to know .. there is .. often in medical school there is a big problem between people telling you .. you are now a big boy .. you shouldn't be spoon fed .. and I am spoon fed you know spoon feeding you .. but more than that completely abdicating any responsibility for you .. I mean I consider my MB I mean a lot of people from Manchester it is MBCHDDIY I .. if I had been a foreign student paying money I would have been at the Dean's office every day saying excuse me where is my four thousand or how many thousand pounds going because no quite sure that I have had a single penny's worth of effort ..

So what would be different? I mean how would you have made it different to get value for money?

I would have had people interested in .. I would have had .. a pre-sector .. I would have had people valuing .. you see another thing people in medicine you are always being told to question, understand why you are a scientist .. and if you apply those principles to your education .. to most of the educational process you can say well why are you telling me that .. and you have got to know it because you have got to get to the next stage so that is a none starter .. erm .. always ask questions because it just makes life difficult because they are not interested in helping you .. because people are .. say they are bothered with their own .. their own problems and being a teacher isn't their number one category .. that is a big difference to vocational training here .. I suppose to extend that to move into the clinical arenas .. my experience of clinical medicine I have had a couple of people who have taught me an awful lot .. we had a chap who was a real old school .. I am going to show you how to do neurological examinations and it was a voluntary extra class for those that wanted to go .. and he was brilliant .. it was you don't hold the patella hammer like that you hold it like you are going to hit somebody with it right and you put the foot into exactly this position not that position this position and you go away on one another and you practice and he goes around and he says well it is not bad but you could try and do it like that .. and show you and you would think gosh .. the end of an hour doing that I knew .. I had two years of clinical medicine and I knew ..

I looks to me as though you are describing the difference between personal and impersonal learning ..

I think perhaps ... that is important yeah ..

Now that you have done your general practice training what is your learning like now then?

I have learnt .. I have managed to simulate a whole forte of information now that my ..

What is the process?

Well I .. I have been very luck .. what has happened is that I have had a day release course which is extremely well structured .. goes through .. I am not much into person orientated learning in its widest field .. they know the sorts of things that trainees have found to be useful over the course of the year and with the feedback from previous courses they know that there is a certain amount of core knowledge which would be fun or useful to apply and they go about giving it you in nice bites where you don't they don't just give it you you participate in acquiring it but they don't say go away and read about it which is the classical teaching method of I am not going to teach you .. go away and read about it ..

But how do you participate in learning about things?

It is somebody puts a problem forward and you talk around it a bit .. they talk to you they give you the broad outline of a theory .. management or of learning styles or .. of give you an example we talked about I was doing exercise and we might have a chat about it .. and it is pretty painless to acquire and you have been given the right levels of information because if you just read it in a book there is going to be a book about it it is going to take you .. ages to read through it all .. you won't be able to get the background and there will be somebody will be bogged down whereas you can often summarise what you say oh the meaning of this book which is so big is often one or two sentences and if you understand that as a basis then you can understand everything going on around it ..

There seems to be a concept between er .. you as an individual wanting to learn things and saying that you do it yourself and this things that erm .. somehow you still want people to give you things ..

Well I .. I don't see that as a conflict .. if I am being educated I am being educated I am not .. I am on the receiving end of some education now .. I can .. then if you are living and breathing you are receiving data all around you .. the whole plan about learning is feedback and if you don't get any feedback you don't know that you have learnt you don't know what you don't know you don't know why you don't know it .. I mean I .. I coach tennis and sure I can say here is a tennis racket and off you go .. I know that if I just left them they would be hopeless and it would take an awful long time .. I know that I can tell them to do one or two things and if they have not got it right I could say well think about it like this what would happen if you know you .. just take you were going to take a big swing at me and try and hit my head off do that and they get the motion right and you would say that is the motion .. what does that feel like? .. think about that and they think right I understand what you meant now .. I understand the feeling right lets go on and try something else .. that is being taught .. that is being led through .. you are not spoon fed because you have to work as well if you don't want to .. in my knowledge if you don't want to think what it feels like to swing properly if you are not prepared to concentrate and you don't want to be there you won't know .. but if you do it just saves such a lot of time and I can say look don't worry about actually exactly how you hit the ball just where do you start your follow through from because you are starting too far back .. and it is all going wrong from there ..

How would you define learning?

How would I define learning? Right, well .. learning

Big chance!

Yeah, I don't know what the MRCGP answer to that is .. but learning

I don't think there is one is there?

No, no .. well there is good and bad learning and there is accurate and inaccurate learning .. er .. and just learning is the acquisition of new data and new skills .. but to make it useful learning you want it to be as stream lined as possible and you want it to be helpful information .. back to clinical medicine do I really know how to put a chest drain??? in I don't know .. I have got away with putting in quite a few chest drains but I don't honestly feel that .. well I probably do know that but think of a .. management of a heart attack a classic example management of a heart attack for a house officer just comes on the

scene ... manages it or appears to manage it O.K but at each stage in the management a teacher would could say to him why isn't it appendicitis what .. why isn't it more realistically why isn't it oesophageal spasm .. why isn't it ..... angina you why isn't it ..

So how does that help with learning?

Because at the end of it he knows that he can deal with a common heart attack he knows .. knows what he is doing why isn't it cholecystitis but at the same time he knows ... well he knows what it is because he also knows what it isn't whereas I can go along and because I most heart attacks are just heart attacks they are not cholecystitis and they are not er .. pancreatitis because that is uncommon you can just say right there is a chap come in GP said he has got had a heart attack so I am now going into heart attack mode you know just .. you don't need to be .. you don't have to have a brain you just have to have a tick sheet and that is how you work as a house officer ..

What do you think in general practice?

You need the opposite .. you need to know what you are up to you need to know well is it a heart attack you need to know well in some ways it is more simple in general practice you just have to know is this patient unwell is this patient well do I .. can I manage him have I got the range of skills to manage him in general practice ..

How about management of the anxious patient?

Well ... I mean yeah that is difficult ..

How do you learn about that?

By doing but by talking to .. what other options have I got what are you going to do about it in a hopefully in a theoretical basis before you start .. so you have got some ideas of the treatment options you have got ..

Why is learning about the anxious patient different to learning about the management of a heart attack?

Er ..... I am just having a little think .. it is in many ways it is similar but one of the crucial ways is that ..

Methods differ don't they? You have chosen a different method.

I am not sure that I have actually I have ... I thinking about the individual patient that you can make a real mess up of the .. of the individual anxious patient by giving them the wrong advice and the wrong treatment and sending them to hospital inappropriately ..

So how do trainees know how to do it properly?

That is experience isn't it .. I don't ..

Well you see you define learning as the acquisition of data and skills and I am just wondering whether or not there is something else in the equation .. data facts skills skills and in general practice they talk about this other thing don't they called attitudes .. where does that come from in the picture?

Right well I mean that is an awful .. I probably don't mention that a great deal because ... I think I am quite good at that and I am not quite sure where that has come from .. I haven't had to work on that ..

Well how am I going to get in on that area?

Well I mean I know .. I .... to me it has been on the same level of acquisition as punctuation .. have never learnt I didn't really need .. I have been brought up to speak English fairly correct so when I stop and think where is punctuation I know where things go .. a level of social awareness which has undoubtedly been prude and altered dramatically through coming into contact with how many thousand people I must have talked to as in a doctor patient relationship ..

So you think it is a sort of passive process that goes on unconsciously?

For sure there is a big um to that but you can make a big difference to it .. you can I mean a large amount of our day release course has been looking at that .. attitudes .. the psychological overlay of everything .. and but again a lot of the same principles are .. important .. you have to be given feedback of where you are going and you have to be given options or allow to formulate options with somebody experienced to know whether you are going in the right direction ..

How do you feel about getting feedback?

I don't mind getting feedback .. again in exactly the same way as by the bedside .. your classical possible classical description of medical student and my experience is you go up .. you don't know what you are doing because nobody has told you .. you don't .. you know that the medical book is this big and that you have hardly read any of it so as far as you know there is a vast wealth of diseases which you don't know exist .. this patient had had all of them and you put your hand on her tummy and it .. you get shouted at and somebody says why isn't it some obscure thing which is this consultant's pet which you don't need to know about and you think oh my God what am I doing I don't know why isn't it that .. it is not done in simple terms what .. back to the attitudes are you cross .. does this patient make you cross .. are you .. you feel compassionate .. do you think this patient is happy with you .. do you think this patient is anxious ..

Who says that to you .. who says ..

Well you can say it yourself but to start with if you are being taught .. you will maybe video somebody ..

What is the difference between teaching and learning?

Well if you are being taught somebody else is helping you learn .. I mean just sitting .. just giving somebody a tennis racket and a ball they will learn how to play tennis .. but they are not being taught how to play it .. exactly the same .. I learnt I spent an awful lot of time trying to fathom out for myself heart sounds I remember doing this sitting down in the books thinking there must be a way of doing this properly .. of knowing what I am listening for ..and I spent days sitting there and trying to get books together and the first and second halfs are splits and it just got horrendously complicated .. I went and I saw somebody who took an active interest in me as a person who .. the fact that I didn't know what was going on wasn't immediately a message of huge failure .. said have you tried it like this and they said put the stethoscope here and listen for this and if that is there it is probably this murmur and put the stethoscope there and it there is a system and in half an hour .. I learnt an almost foolproof system which I had been trying to teach myself for two years .. I mean that is medical education unfortunately to me is swimming around not knowing what the hell you are doing and getting upset with yourself losing your compassion .. losing your ability to just picture what patients are sublimeral erm .. every day social interaction between you and a patient you loose all that when you ...

Why do you get so cross about it?

Well because .. because I feel like I wasted about three or four years of my life .. I really feel that strongly .. I was really keen when I came down from St Andrews I really was is going to be my last year in medical profession that is why I am cross .. I have enjoyed general practice and I have enjoyed my training this year so much that my career is now going to be as a GP ..

When you are a trainer how are you going to do things differently with your trainee?

I would probably do them very similar to the way my trainer done them ..

So what would you do?

Well again ... it is difficult because it is an interaction .. you have to have some idea of what your trainer .. what competence your trainer has got because if you got a completely incompetent trainee then you have to be a lot more directive er .. with how you are going to help them because they won't .. they just won't be confident that this is just anxiety and it isn't .. but if you have got someone who you think is

fairly good and knows what they are doing and hopefully you have been able to select people from your interviewing system .. give ..treat them as individuals give them valued .. allow them to .. give them respect erm .. self assertiveness .. let them be assertive ..

A lot of trainers say they do that and the trainees say that that is not how they feel .. how do you it then? How do you make someone feel they are respected?

Well ... that partly depends on your own social skills doesn't it .. I mean you're talking to me here I feel accepted you have not been critical I have got and I feel I have got things to say and if you don't like what I am saying then it is all right it doesn't matter .. but that is you have to help somebody .. you might have to help somebody to get that attitude .. you have to .. don't look .. I .. I have not felt that I am the trainee in my practice ..

Do you feel part of the team?

From day 1 I was .. I had so much feedback I had been able to .. the feedback I have had has been formal tutorials to start with 2 or 3 a week .. which is quit a lot ..

How is that feedback? What is the feedback within the tutorial?

It depends what you are doing like to start with it might be just sitting in with and watching what is going on and then they say well what did you think about that and whatever I want to generate to talk about they will .. and er .. and even more importantly we have .. lunch in the surgery together .. everyday .. we do the mail .. it is only small there is two partners and myself so .. do the mail get that out of the way .. I have got a whole load of things that went on in my morning surgery that I was able to deal with but made me think about the things and I think I wonder if that is the way they would have done it and i wonder if I missed something wrong there .. or I wonder what I should do next and I was able to give that back straight away and say I saw this person and I really wasn't sure what do you think I should have done? and then I remember to start with we got into this classic .. this classic they wouldn't give me an answer .. but I know you don't want to tell me what to do .. I don't accept that you doing this means that that is the right way I just want to know what you would have done because at the moment I am not quite sure what GPs do do so unless you tell me .. pitch it in the right way I .. I am .. I just don't know where to start ..

So they were doing the what do you think?

Yeah, ie not providing me any actual feedback and as soon as they start providing me feedback I can say well I did that what how else could you have done it and they say well yeah I could have referred them but do you think that would have been good ..

Have they told you how well you are doing?

Yeah. I have regular appraisals .. formal appraisals .. but as I say it has been quite .. I have really enjoyed it everything has gone very very smoothly and they have just not really .. we have not actually had to address any major errors or deficiencies either way I .. but then again I .. if I felt that there was a major deficiency that is an opportunity for me to say .. I think that er ..

How do you know what you don't know?

Somebody has to tell you .. you have to be taught it .. in terms of yeah .. I mean you will know .. you will know sometimes that you don't know something .. because you get a patient and you get a problem and you think I don't know what to do .. but that is .. what I was trying to say about the heart attack you don't know that it .. if you have got away with it once it doesn't mean that it is the best way of doing it .. because you are just simply unaware .. oblivious to the fact .. in general practice you are oblivious to the psychiatric aspects of a patient it is a fact that he is anxious .. and if you get away with that the first time you reinforce .. and you learn that you don't need to pay any attention to a person's ..

So what about CME when you are a principle?

Right, right .. Again I mean ..

There is a dilemma isn't there?

There is I mean it is a big change .. it is er .. there is young principles there is .. that is hopefully being in a practice where by you can say to your partners .. what do you think .. how do you manage this .. well I do this there is lots of .. well there is the formal journals which you say don't need that .. not in the exam any more a lot of them are really stodgy and ... erm there is .. I mean there is loads of education .. I mean there is reps that talk to you about products .. you have to be very aware but as long as .. you are getting new ideas new data that you can .. can evaluate for yourself .. it is like learning that .. it is that skill of evaluating for yourself what is going on .. whether I am happy to .. to treat a patient in general practice or .. whether I am not .. whether I am happy to take these facts on board or I am not ..

Where does that separate though?

I don't know ..

Is it there now?

Yeah ..

Has it always been there?

I think it probably has for myself, yeah .. I think one of the things I have had to learn is to value my own opinions more strongly ..

That is because of the DIY thing?

Yeah. I did .. I mean that is one of the things why I was going cross is because confidence .. just down to nothing .. I .. I didn't .. I find it difficult to learn but I think if I .. I enjoy general practice I went into it because hospital medicine was out of the question and everything was too difficult but I think if I had been taught how to do medicine .. it is not that difficult and .. if they had actually taught me things in a .. in a way that here is the knowledge that you need and now you can wrap all these things around and .. I think I would have learnt an awful lot in those .. in the year .. in my undergraduate education and then in my clinical practice I wouldn't have just .. done things to get through the day ..

Does general practice have a kernel of knowledge?

Yeah .. oh it does .. I mean in some ways it is easier because it for the reason we have said that I haven't had any .. the attitudes and just talking to somebody who thinks they have got an illness .. an organic illness shall we say .. and you decide that through talking they haven't but you talk to them and you are a human being with them I get better so in some ways they have had an illness and they are better from it but you haven't had to .. I haven't necessarily had to use a lot of knowledge .. I haven't had to think ABC therefore he has got this disease and I need to do this and this and this test and then the treatment is this under this circumstance and watch out for this side effect .. I can talk to .. and that is something that I feel I can do as an individual .. I am always looking for ways of doing it better and .. if you say do you think that patient was happy with the consultation yes/no well if he was probably the answer is O.K and if he wasn't well what did I do that contributed to that ..

So what is the purpose of the GP?

Er .. oh blimey ... yeah .. patient .. is an interface between high tech medicine and low tech er .. he treats common ailments, provides some medical information to patients .. and people who have a very minimal medical knowledge I mean that is something that you forget just how little people do have er .. and they think blah .. blah and therefore I have asked to have some baser syndrome .. and er just going to the GP and him saying well no, you have just got flu is reassuring helps this er .. purely sociological aspects .. there is actually detecting serious long term problems to peoples health - diabetes, asthma, epilepsy .. managing those and organising referrals of you know people with hernias, people with cancers to try and get them sorted out by other people in the medical field ..

How does a doctor in general practice differ from a doctor in hospital? In terms of personal characteristics .. you know if you had a group of doctors together could you spot the GPs?

Well I don't know but .. again .. I feel that .. that the medical process of .. I feel that .. my current exposure to general practice shows that .... that GP education is concerned with education ..

As oppose to?

Well being taught, learning, acquiring information how could I have done something better .. and what went wrong there ..

Some people would call that training.

All right well I haven't had any training up until now then ..

Well with medical school some people call that instead of it being a medical education they call it medical training and then when you come into general practice you go into medical education ..

Yeah sure .. well that is because in my case I didn't have anything before then so .... there shouldn't be a difference but there is and I think a lot of people like myself wouldn't stay in hospital because I am not prepared to put up with rubbish from people .. er ..

It is there loss and our gain though isn't it?

Sure, yeah .. but I mean I .. you can er .. hang around in a situation hoping that you will get something out of it if you think you are onto a loser the best thing is to .. move

You done the exam?

Yeah.

Did working for the exam alter the way you went about learning in general practice?

Er .. yeah that is interesting .. it became a bit of a drag .. er .. you sometimes felt that you were .. missing out on the experience because you were doing the exam but .. at the same time it made you aware of a lot of principles that are important in general practice that you might have gone and played tennis or gone and just enjoyed yourself erm for that time instead of learning ..

Was it worth while?

Yeah .. well it was certainly worth while I mean I passed it er .. yeah it was I mean again I had .. it depends who is teaching it has got such a broad syllabus .. that unless you have got someone to guide you as to what it is actually about and what are the rules to passing it .. you can get rather stuck .. it probably would be of use to your own interest .. our day release course is very well organised and in actual fact is quite relevant to the exam a lot of the ideas that are going around and they were ideas that we were talking about you know management dealing with people counselling skills that is the rough sort of estimate of what we learn .. when we started a lot of people were thinking well I want to learn about dermatology in general practice, I want to learn about .. which is their hospital based knowledge in a .. pupil centred approach we would have gone off and learnt about that then it would have been such a waste of time and if by chance we would have stumbled upon this way of learning near the end everyone would be going oh no I wish we would have learnt this earlier .. and that is partly what happened in the course there was lots of dissatisfaction to start with .. people were getting a bit fed up that we weren't learning about ophthalmology and dermatology in general practice and then people got into general practice a bit more and found out a bit more about really what it was actually all about and people then thought well this is my study time I want to get this exam at the end of it some of it seems to be quite relevant and then we did .. then we went on a course of how to pass the exam it was basically the course on it and all of a sudden er we realised that all these so called arty type of ideas and concepts .. which people thought would help you get through the exam and you realise that that was the exam and that .. that if you approached the problems of general practice with those sort of

ideas you .. just from learning general practice you should get through the exam ..

So the attitude between general practice and the exam is quite strong in your belief?

Yeah, yeah I think it is.

Should it be done as a trainee or as a principle?

Er .. oh well who knows .. I mean .. it makes you learn as a trainee it makes you read things which people probably wouldn't do if it wasn't there .. I don't know .. I actually .. one of the other things from my pre-clinical training is that there weren't enough exams .. er .. exams have got two roles and the role which I think is missed most often is that .. it reflects on who is teaching you and if you cock up in your exam every time .. if every person who comes under your control fails abysmally somebody somewhere ought to be saying why aren't they any good ..

Should there be exams in continuing medical education?

Well that is a good question isn't it .. I got asked that in my exam .. it depends on who is doing the marking and why they are marking it and what they evaluate you on ..

Well I mean one of the things that you have said and one of the things that other people have said is that they need an exam as a motivator for them to do things that they wouldn't usually do and you suggested for an example on of the alternatives to reading books and journals would be to play tennis and the usually human state is to go and do something like that rather than doing work .. in the absence of exams and 25 years of professional unsupervised practice one does sort of raise questions about whether there are any motivators for maintaining up to date .. I was wondering what you thought of that.

Well there is but the .. it is difficult we are a profession .. we are supposed to do that in some ways it is quite insulting and damn insulting to suggest that we don't even if it is true ..

History suggests it is true ..

Yeah .. what do you do if you fail the exam .. you know ..

Remedial training ..

Well yeah .. but is that actually feasible or is that just .. what are your patients going to think if they find out that their GP needs remedial training .. you know .. you would be terrified ..

So is that a good enough reason to not do it?

It is .. it is a reason the other reason is .. what as we talked about earlier .. in my undergraduate life what was the point of those exams ..

It is different in undergraduate ..

Why? That is because you defined it as different it isn't if you say it is just an exam ..

If in CME terms it is to maintain professional standards and protect patients from incompetent doctors ..

Well why .. why do we learn stupid things in undergraduate education if it is not to provide ..

I can't defend undergraduate ..

Well no but it is .. the idea surely is you can't be a competent doctor unless you know the ins and outs of the prem cycle ..

(tape stopped)
JGB3/TINA/P#STUD14.268

PILOT STUDY FIFTEEN

27th August 1992

Can you tell me the jobs you have done since you have qualified?

Yeah, er .. first job was house officer post for a year at the Royal, then I went from there to SHO Royal Casualty for six months, then I went to .. well I did my obstetrics separate from my gynae .. obstetrics first at oxford street 3 months and then three months gynae at the Womens .. went from there to six months GP traineeship at Netherley Health Centre .. then I went from there to Alder Hey Paediatrics, six months casualty but split with Myrtle Street then I went from there to Sefton General, Geriatrics six months and then to Woolton House Medical Centre as a trainee.

So you have seen the world?

Yes, yeah!

You are not from Liverpool?

No, not originally.

Erm .. can you cast your mind back, this is where it starts getting difficult .. can you cast your mind back to when you were a medical student? And try to think about the ways that you learnt things then? And tell me about them?

Er .. I was never very fond of lectures .. er .. to be honest .. I attended them and I took notes .. but I didn't feel that that was my best way of learning .. er .. the things I learnt most from I think was actual bedside teaching .. with er patient er to examine and be shown things with and then talked about either in front of the patient and then going away afterwards and discussing it amongst yourselves and having a tutorial in that manner ..

How did information, go back to the lecture bit, how did information that you took down as notes get from the notes into your head, what was the process of getting it stuck in their?

If something was .. I suppose .. I mean I do tend to get bored easily and I suppose if I got bored and drifted off then you know I would miss out bits of the lecture in that way so if the speaker was entertaining and if there was you know a clinical element brought in like slides or something .. something more than just someone talking at you for an hour something visual .. something that I could er .. remember .. yes definitely ..

Well what about when it came to revising for exams what happened there?

Erm .. I used text books a lot and a variety of text books as well as my lecture notes and things ..

Right .. and have you got a picture of how the information is stored in your head?

Yes .. I mean I tend to remember things in lists .. or visually ..

Can you give me an example of a visual memory?

Erm ... well I can remember a particular slide of a lady with cyrotoxicosis or something like that and you know you could remember all the key features by .. looking ..

Right, so that seems to cover the facts bit so how does learning with patients at bedside differ .. how did that information stay in your head because you couldn't learn that as a list ..

No, no again .. I think it was more the level of concentration identifying a person rather than just .. reading about a list of facts and I find it easier to remember if you are relating it to a person you can remember what this person had ..

So what were you learning?

Well you were learning the .. the facts but by er an overall method by the .. but it just it seemed to gel easier together if you could actually picture a patient with congested cardiac failure .. and you knew that they had swollen ankles etc ..

What else did you learn from talking to patients as a student?

Erm .. well the patients side of things erm to identify more with them as a person ..

Did you?

Erm .. I think so .. I used to enjoy talking to patients so that was one of the things that I liked most about it and again that helped me to remember the actual medical facts because I could remember the people rather than ..

Thinking back now to when you were a student what do you think the purpose of learning as a student was?

Well the purpose was to learn the facts the medical background and knowledge ..

In order to?

In order to practice medicine in the future ..

Now as a trainee .. well I mean you have done your training thinking about the training in general practice part of the training you have done how have you learnt during that 12 months experience?

Well I think that was much more geared to communication and dealing with people and your medical knowledge was already, hopefully, in their and then you could learn to apply it ..

But how did you do it .. how did you learn things during the time .. nobody said this was going to be easy!!

Erm .. it seemed to be mainly by a process of sort of simulation really .. just osmosis .. just seemed to sink in from the various things you attend and ..

Well what drives the process then?

Well I suppose you do .. you have got to want to learn things ..

Well what makes you want to learn things then?

It just .. just to practice my job better ..

Right so what is the purpose in learning in .. well how would you define learning now?

Erm .. learning is a process by which you seek to increase your knowledge ..

To what purpose?

To er .. improve your overall capabilities ..

And has that definition changed since you were a student if I had asked you the same question when you were a student would you have said the same thing?

Erm ... I think so ..

In general practice people talk about knowledge and skills but they also talk about attitudes, values, beliefs and things your definition of learning has talked about the acquisition of knowledge so how did you find out about attitudes and values, beliefs and soft things like that?

Well .. I suppose it is knowledge and experience .. it comes with time ..

It is not a check I am just trying to find out how the process works .. so how do you find out about professional things .. about how to behave and that sort of stuff?

Well .. experience .. mixing with your colleagues erm .. talking with your colleagues and others ..

Are you a good mixer with others?

Yes. I would say so.

Do you find it relatively easy to talk about your management of cases with others?

Yes. That is something I do quite a lot ..

What about in group work, how do you behave in a group?

Erm .. I tend to do a lot of talking in a group and I sometimes er .. think that maybe I should shut up and let somebody else have a go ..

And do you?

Yes, because I do tend .. I can't stand it when there is a silence and I have always got a thought about what .. erm .. I would like to say so I always end up saying it ..

If .. er .. I just ask you to be very objective about things .. comparing yourself to other trainees would you say you were worse than, better than, or the same as trainees all other trainees in terms of your ability to solve problems?

Erm ... that is a difficult one .. erm .. I would say I was reasonably good compared to my colleagues .. I can think of a lot of people who I would say were probably better than me but er ..

Would you say you were better than most?

Well I would say I was reasonably good ..

Right so what would characterise the difference between you and somebody who is not quite as good and you and somebody who you recognise as better what is the difference?

Well I think .. it is important to be able to communicate with people and I think that there are a lot of .. even general practitioners and trainees who find it difficult to communicate or .. to express themselves and just to get on with other people .. erm .. I think I am quite good at that .. but I accept there is a lot of people with better knowledge and more experience than me perhaps .. a wider range of experience .. certainly with more factual knowledge .. I am sure there is a lot of people with more knowledge from a medical point of view ..

Are facts important in general practice?

It is fairly important .. you have got to have the .. the background ..

As important as hospital?

No. I don't think so ..

Are there aspects of general practice which are more important?

Much more .. yes I think the most important is to be able to communicate and liaise well with your patients and staff and colleagues ..

What is the purpose of a GP?

Erm .. the purpose of a GP is to be an easily accessible erm .. experienced er general doctor who the patient can go to and discuss problems without fear of wasting their time or .. and get good advice and their problem either solved or referred to someone who can solve the problem for them ..

Has the training that you have done got you to that stage?

Erm .. I think so .. I hope so ..

Have you got a job to go to?

Yes, I am staying on as a partner at Woolton ..

Oh are you? Great.

Yeah, so I am very pleased ..

Have you done the exam?

Not yet, no, so I am going to do it next time myself and one of my partners are doing it ..

Why haven't you done it this time?

Well .. I .. I suppose I chickened out really, I thought about it and I should have done and I didn't but erm .. I am going to do it next time .. we have got the entry forms ..

Right, how are you going to prepare for that?

Erm .. I will have to do a lot of reading, I will have to go through the journals at length and .. I have had some help off one of my colleagues who has just taken the exam .. erm .. I would like to go on a couple of courses if I could .. erm .. and I would like to attend at day release which I have just finished they actually run evening courses for those who were doing the exam and I .. I went to those this time and then didn't do the exam .. so I would like to go to those again because I .. that was definitely useful ..

Why do you want to do it?

Erm .. I feel I should do it .. I feel it is good experience ..

What is the pressure on you to make you do it?

No, there isn't any really I mean I don't need to do it .. but I feel I should do it .. well I suppose I would like to think that erm .. I mean it is wrong to say it is a judge of whether or not you are a good GP but I would like to feel to myself at least I could do it .. at least I could get it .. and .. we have got two others with it in the practice and one of the others is taking it so I thought I would take it as well ..

Once it is done that is it for exams isn't it?

Erm ... if I am being honest then yes it probably would be .. I want to do my DRCOG and I am entering that as well er .. again I should have done that before and I haven't but erm .. yes I don't think there is any more that I am going to take after this ..

And why do you want to do the DRCOG?

Because I like the obs and gynae side of things again it is something I should have done earlier and never actually got around to erm .. I like obs and gynae I want to develop that side of the practice

anyway and I feel it would be useful ..

But why do you need the exam?

I suppose to prove to myself that I can do it ..

Can you ... erm .. think back over the 12 months of general practice training and try to recall any episodes or events or activities that you thought went particularly well in terms of your educational experience?

Well there is a lot really .. erm .. we video consultations have been very useful .. both doing them myself and watching other people's and us discussing them afterwards .. er I did some video tutorials as well again that was quite interesting ..

Why then why are they highlights? What was interesting about them?

I think the interesting thing is that you think at the time that you are doing everything .. you are exploring every avenue that you could think of at that time but then when you actually sit back objectively and watch it with other people and you hear what other people say then it gives you a whole new prospective on it .. and you think .. oh, I never thought of that .. I will think of that next time ..

Will that happen when you are a principle?

I hope so, certainly I feel as if I think more broadly certainly much more in depth about things than I do when I started in general practice ..

Why? What has brought that about?

Erm .. from the .. the training I have had .. and discussion with trainers and the other partners in the practice .. other trainees both at day-release and in the practice itself ..

You have identified a highlight. can you identify the opposites. any low-lights. and bad bits things that haven't gone so well or haven't sat comfortably in your way of doing things?

There has been a couple of patients for instance that er .. I felt I hadn't managed properly and when I discovered I had been worried I knew I had probably made a mistake and I had discussed it with my colleagues and er .. we agreed! It could have been handled better and ..

That is inevitable though..

That is right yeah and those do though even now still stick in my mind ..

I still remember mine!

Yeah!

Great medical disasters! Some people describe the transition from being a hospital doctor to being a GP trainee as erm .. an emotionally difficult task ..

Erm .. not for me it wasn't really because I mean I loved it I mean I was desperate to get into general practice and I mean while I wouldn't say the other jobs were a means to an end I am delighted I did them and I needed the experience they gave me and I see that even now .. from having done Alder Hey since my last GP stint and geriatrics as well actually to be fair I feel that you know I would have benefited from having done all of those jobs before GP .. but I mean I .. now, I loved it .. I was delighted to start as a GP trainee ..

Some of the emotional things the words they used are things like isolated erm .. and lonely erm .. and unsupportive not feeling part of a team .. where those any of the things that you experienced?

Erm .. the two practices I was at were very different .. very very different erm .. the first one I wouldn't go so far as to say I felt isolated or lonely .. but I certainly didn't feel as close to my colleagues as I did in the second practice and felt almost as if sometimes as if I was actually a burden .. erm rather than a useful edition to the practice but .. erm ..

But that wasn't the same in the second practice?

No, no. Very far from it and quite the opposite I mean the support the good feeling and the comradeship between everyone in the practice ..

So do you think the feeling in the first practice was a function of the practice?

Now I do, I didn't then ..

You blamed yourself?

Yeah, I thought perhaps that I wasn't up to scratch ..

When was the last time someone told you how well you were doing as a trainee?

Erm .. well I mean it was constant at erm my end .. my last practice ..

They were telling you how well you were doing?

Oh, yes and if you managed a patient well everyone would say .. or if you picked something up that no one had seen everyone would discuss it and say if a patient complimented you to another doctor then they would say .. Mrs so and so is very pleased and she wants to come and see you again ..

And did that process then include the opposite as well they were able to tell you where you should improve your work?

Yes, yes but again erm .. it was always very pleasant we would just discuss things .. and we discuss things that the partners might have done that had gone wrong so everyone felt totally equal .. it was very relaxed and you didn't feel under pressure ..

Is that process done on a formal basis or is it informal all the time? I mean did you have times when they sat down and they said right you are going to do this ..

No, it was done mainly informally although we did have set times for discussion of topics like that ..

Right, and who drove the process of learning?

Erm .. I think we both did both the trainers and the trainee because we always said if there was a topic we wished to discuss we would all discuss that then but if we said well we will just talk about anything today .. we would just see where the discussion lead.

Right, how do you know what you don't know?

Erm .. I think to the extent I do realise my own short comings and I knew if I needed to brush up on certain areas erm .. I suppose the thing that brought it home was when a patient comes in and you realise you don't actually know much about the condition that they have got and then I would say .. you know lets talk about migraine or whatever at the next tutorial..

So that is reactive?

Yes.

Did you have any internal process for planning ahead?

Erm .. well we had a timetable in the practice ..

Yes but do you have?

Me myself? Erm .. not as such ..

Leads into CME doesn't it now?

Yes. Erm .. not as such although as I say I always knew there were things I wanted to discuss at some point ..

I mean once the DRCOG has gone and the MRCGP has gone in three or four years time and you are sitting there in the practice, the same practice, the same patients and so on .. what is going to happen to you? How are you going to keep going?

Erm .. well I mean I hope that I would keep abreast of current events anyway .. erm .. keep reading journals and so on .. because that is quite important for me anyway to keep my knowledge going .. erm .. I mean I would like to think about becoming a trainer one day .. erm .. in a few years .. so I hope that that would then .. keep my .. learning process going ..

Yeah, with somebody else there to stimulate it?

That is right yeah.

I think I have finished. Do you have anything else to say about the process of teaching and learning in general practice? You know when you are a trainer how will you do things?

Erm .. I would .. I would try and keep things very much as they did at my last practice because I think the thing that made me learn most there was the fact that I did feel so relaxed and at ease with them .. and you didn't feel under pressure .. you didn't feel that you had to shine or you had to do something so you could just take it easy and sit back and relax and learn ..

Is that a report that other trainees have made about the same practice?

I think so .. well they did to me before I went anyway ..

So it is something they do in that practice that creates that atmosphere?

Yes.

Well that is great isn't it? How would you create such an atmosphere?

Well I would hope that erm .. we would just sort of generate that atmosphere in the practice anyway because we are quite friendly and .. open and talkative and .. you know so I would hope that that would be .. I think the thing is as you say not to create formal atmosphere not to be a sit down and we will do this now it is sort of you know .. take things as they come .. take it easy ..

Thank you.