

**Explaining gender divisions of labour in
physiotherapy and radiography:
a qualitative study**

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ABSTRACT

In this sociological study, physiotherapy and radiography are examined as two predominantly female health professions. The emergent objectives of the research were to explore *experiences* of women and men within the professions and to consider and compare 'insider' and 'academic' *explanations* for the gender composition and divisions of labour in them. The research is framed within the methodological traditions of interpretivism and feminism, and uses iterative methods of data collection and analysis informed by grounded theory and analytic induction.

The thesis begins with an extensive examination of feminist and traditional literature on sex, gender and sexuality; education; work and employment; caring and professions. The literature review both informs and is informed by the detailed analysis of qualitative data from 48 semi-structured interviews and 69 postal questionnaires. The fieldwork was conducted with student and qualified members of the two professions. The coded data are compared by sex and occupation, and organised into conceptual categories and constructs. Main themes and core issues are identified as relevant to the gender composition and divisions of labour and, from this, an explanatory theoretical framework is proposed. The Nud*ist software package has been used to aid the data analysis.

The overall gender composition and horizontal and vertical divisions of labour within the two professions are seen to reflect impressions, evaluations and experiences of the 'caring', 'professional' and 'career' aspects of physiotherapy and radiography involving hierarchical, dichotomous notions and norms of gender and sexuality. These notions are variously identified as relevant to the gender composition of the professions at recruitment stages, during training, and after qualifying. In particular, caring and different types of care-work are experienced and evaluated in terms of various associations with female gender roles and responsibilities, feminine characteristics and abilities and sexuality, and linked to activities of the private/domestic sphere that use limited skills and informal knowledge. In contrast, professions and professionals and employment careers are linked to male gender roles and responsibilities, masculine attributes, activities of the public sphere, and rely on expert skills and achieved, formal knowledge. These contrasting aspects of physiotherapy and radiography theory and practice invoke different status.

The author concludes the professional status and gender composition of physiotherapy and radiography reflect the inherent gender-based contradictory status of their work and identity as 'caring professions'. Caring represents a problem for professional status at both the individual and collective level: 'caring professions' involve a contradiction in terms.

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Glossary of Terms

CSP	Chartered Society of Physiotherapy
CPSM	Council for Professions Supplementary to Medicine
DoH	Department of Health
OCPMP	Organisation for Chartered Physiotherapists in Private Practice
PAM	Profession Allied to Medicine
RG	Remedial Gymnast
RCN	Royal College of Nursing
Soc.Rad	Society of Radiographers

Part One

Introduction

'Physiotherapy'¹

is a health care profession that emphasises the use of physical approaches in the promotion, maintaining and restoration of an individual's physical, psychological and social well-being, encompassing variations in health status'.

(CSP Annual Report, 1995).

'Radiography'¹

is a caring profession that calls for considerable technical expertise. There are two branches: diagnostic and therapeutic radiography.

Diagnostic radiographers are responsible for producing high quality images on film and other recording materials which help doctors diagnose disease and the extent of injuries.

Therapeutic radiographers help to treat patients, many of whom have cancer, using X-rays, ionising radiation and sometimes drugs'.

(Health Service Careers 11, 1996).

Research Aims and Objectives

The main aim of this study is to go beyond the brief definitions above, to explore in detail what it is about the physiotherapy and radiography professions and their work that can explain the predominance of women in their membership, and the different distribution of the sexes in the various working areas and career grades of the professions. Despite both physiotherapy and radiography being long-established and moderately large health professions, there have been very few studies that have examined reasons for, and consequences of, the continuing predominance of women in health care professions and gender different career paths, beyond studies of nursing. Also, studies that have considered experiences of working in health care and explanations for specific gender divisions have rarely been based on accounts of the professionals themselves. Therefore, in this study I set out to begin to fill these gaps in knowledge by examining an under-explored area of employment, using an 'insider as expert' inductive approach.

As a female physiotherapist who trained in the 1970s and worked in the NHS for nearly 20 years, not only do I find the subject intriguing personally but I also believe an understanding of gender divisions is important socio-politically. Additionally, I see that greater comprehension of the motivations and concerns of women and men in the professions may be of value to the professions at an organisational level, especially as they strive to recruit and retain sufficient staff

¹ (for other descriptions of physiotherapy and radiography, see appendix 2)

to meet increasing demand from the NHS as it struggles to meet the rising challenge of an ageing population.

Therefore, so as to understand physiotherapy and radiography as they are experienced as asymmetrically gender-divided professions in late twentieth century Britain, I have undertaken a qualitative analysis of a series of 48 depth interviews and 69 postal questionnaires conducted with staff and students currently in the professions in a university city in the north of England. Whilst the main aim of the study is to explore and examine the complexity of 'insider' experiences and understandings of modern day physiotherapy and radiography and their gender composition, I also consider the study participants' accounts in relation to multiple theoretical perspectives on gender, divisions of labour, caring and professions. This involves reviewing a broad literature that analyses aspects of female and male education and employment generally, and health and caring professions specifically. I also refer to two descriptive accounts of the histories of the physiotherapy and radiography professions (Barclay, 1994; Moodie, 1970).

Overview and structure of the thesis

The thesis is divided into three parts and presented in 10 chapters. Part one, comprising chapters 1 - 4, provides an introduction to the thesis, the aims and objectives of the project, theoretical background and approach to the study, and concludes with details of the gender composition of the physiotherapy and radiography professions in recent decades. This part provides the context and background to the main body of the thesis, namely the presentation and interpretation of the fieldwork data. This constitutes part two of the thesis, comprising chapters 5 - 8. Part three of the thesis includes a chapter providing an overview and discussion of the main findings, and my interpretation of the specific and theoretical contribution of them. This chapter is followed by the final chapter, where I provide a brief resumé of the key findings and overall conclusions of the study, implications of the findings, and recommendations for further research.

Chapter summaries

Part One

Following this introductory chapter, I review a large traditional and feminist academic and professional literature relating to the different elements of the research topic. Because of the scope and size of the review, Chapter 2 is divided into four sections. I examine literature on: sex, gender and sexuality; gender, education and its relationship to work; gender, work and the labour market, and gender and caring professions. Reflecting the iterative approach of the research, some of the literature included relates to issues I considered prior to the fieldwork, and some reflects the emergent themes of the data analysis.

In the first section of the literature review, I consider the multiple theoretical perspectives and approaches to understanding the concepts of gender and sexuality as they link to the roles of and relationships between the sexes. These concepts lie at the heart of the research, in terms of being central to the subject and aspect of the analysis. I examine traditional and feminist accounts of the biological, social and constructed basis of, and relationships between, gender and sexuality, focussing on those which discuss the basis of gender different roles, the

hierarchical dimension of male-dominated gender relations and socio-political implications of different approaches.

In the second section of the literature review, I begin by outlining various aspects of British education and their relationship to adult gender roles and employment in the second half of the twentieth century. I look mainly at gender differences in the aims of, and experiences and outcomes from education, highlighting the general and changing socio-political context of education in the period when the study participants grew up, studied and moved into work. After outlining ideas about gender issues in subject choices, education experiences and outcomes, I focus on authors who have examined adolescent career selection and theorise in different ways about the influences on and approaches to it. As such the 'career selection' literature ties closely to the first fieldwork chapter where I examine the study participants' accounts of their career selection, and consider their relationship to the asymmetrical gender composition of physiotherapy and radiography.

Next, I describe characteristics of the labour market and discuss various ideas about work and theories of employment, focussing on those relating to gender. I outline the general employment context within which the study participants work, and show there are many contrasting ways of understanding gender divisions of labour. In particular, I examine debates about the relationships between gender roles in the home and gender-segregated employment, with both vertical and horizontal gender divisions of labour and differential status and material rewards associated with different types of work. I also consider discussions about the relative influence of work tasks and social relationships for the gender composition, social status and material benefits of different occupations, and literature that explores gender different approaches to and experiences of paid employment and 'careers'.

In the concluding section of the literature review, firstly I explore feminist and traditional literature relating to 'caring' and different types of care-work, focusing on authors who discuss the status and skills of care-work and care-workers and their associations with sex and gender roles and hierarchical gender relationships. I then review literature about 'professions', to consider various perspectives on their development, character and role, and the status of professional work and professional ways of working. In particular I examine the ideas of authors who propose issues relating to gender influence the differential status and gender composition of care work, caring professions and professional health work. That most of the ideas discussed are based on medicine and nursing research reflects the dearth of studies on physiotherapy and radiography, highlighting the need for work examining them directly.

Chapter 3: Following the literature review is a chapter about my theoretical approach to the study and details of its design and application. In the first section I start by reviewing some of the debates about knowledge and knowledge production and consider various principles underpinning traditional and feminist research methodologies and practice, before moving on to consider those directly relevant to my approach to this project. Then, in the second section, I consider my role and influence on the research process and outcomes as well as those of the study participants, describing and discussing my iterative and inductive approach to the fieldwork and evaluating the methods of analysis used.

Chapter 4: In this chapter I set the scene for the fieldwork analysis, by presenting some empirical data to illustrate the size and gender composition of the physiotherapy, diagnostic and therapeutic radiography professions. In the various graphs and figures I show how there have been some changes in recent years, that substantial gender asymmetry prevails overall, but that some areas of the professions are more 'balanced' than others.

Part Two

Chapters 5, 6, 7 and 8

In four findings chapters, as the main body of the thesis, I present my analysis of the fieldwork data from the depth interviews and postal questionnaires.

Through the four findings chapters I unpack the complex processes involved in the 'gendering' of the physiotherapy and radiography professions, to consider both overall gender composition and horizontal and vertical gender divisions. I begin with a detailed examination of the study participants' experiences of and explanations for their career selection. I identify and categorise 'factors' participants describe as important influences on their career choice and the different ways they approach career decisions. In addition to comparing accounts individually and by sex, I look at differences by profession. I also examine the participants' explanations for the gender asymmetry in their profession in relation to career selection, looking especially at shared viewpoints, and those that vary by sex in terms of content and/or emphases. Following this are three chapters in which I explore different approaches to and experiences of training, work and careers in physiotherapy and radiography and consider their relationship to gender divisions of labour within the professions. Again, I compare and contrast the participants' experiences as well as their explanations for the different career paths of female and male staff.

Part Three

Chapter 9

Following the four chapters of interpretative analysis, I summarise and discuss the main findings and their relationship to the status and gender composition of physiotherapy and radiography. I discuss the specific and theoretical contribution of the findings and their relationships to key literature.

Chapter 10

In the final chapter of the thesis I provide a brief resume of the key findings and overall conclusions of the study, consider a number of policy implications of the findings, and identify possible areas for future investigation.

Chapter 2

A review of contextual and study-specific literature

In-keeping with the inductive approach and iterative method of the research, some of the literature in the review is material I considered prior to the fieldwork, but several items I examined during and after analysing the study participants' accounts.

As described in the introductory chapter, I have divided the review into four sections. Although this means related issues are sometimes separated (and topics covered are occasionally revisited to some extent), it allows an extensive literature relevant to different aspects of the research topic and questions to be considered in a coherent, structured way. Thus I examine literature relating to:

- 1) Sex, gender and sexuality;
- 2) Gender in education and its relationship to work;
- 3) Gender, work and the labour market, and
- 4) Gender and caring professions.

Section 1: Sex, gender and sexuality

Gender and sexuality are conceptualised in various ways and mean different things to different people. In this section, through examples of several authors' work, I show some of the ways gender and sexuality are theorised, reflecting different perspectives on the organisation of social life and divisions in society. Identifying the constituent elements of different perspectives, as they seek to explain the basis and development of different roles and relationships between the sexes, makes it easier to understand the various ways gender issues and divisions in education and work are analysed and explained, as shown in the next three sections. Also, this ties directly to the fieldwork in terms of my analysis of experiential accounts of physiotherapy and radiography as gender-divided professions. As with the academic world, the study participants will be shown to talk about and understand gender (and sexuality) and gender divisions in their professions in diverse ways.

Biological and social perspectives on gender

In introductory sociological texts, gender is described as the social aspects of being biologically female or male, that 'shape how we think about ourselves, to guide our interactions with others and influence work and family life' (Macionis and Plummer, 1997, p.350): men and women have different social characteristics, attributes and traits, and this relates to their sex. With socialisation described as 'the lifelong social experience by which individuals learn patterns of their culture and develop their potentials' (op cit, p.130), it is widely seen as the foundation of an individual's personality and identity, represented by her/his patterns of thinking, feeling and behaving.

Viewing gender as a social characteristic comprising natural attributes determined by biological sex, lends support to views that recognise functionally different masculine and feminine attitudes, behaviours and roles (Parsons and Bales, 1956). Biological theorists recognise an instinctive human nature and fixed inherent personality traits, with women seen as naturally emotional and men as rational (e.g. Wilson, 1978); many identify an underlying bio-logic to the historical domination of men, asserting that culture is emerged within and developed out of human nature, such that social norms, traditions and values are inherently valid (e.g. Barash, 1981; 1982; Parsons, 1942; 1951; 1954; Remoff, 1984; Wilson, 1975; 1978).

Evolutionary and sociobiological approaches contrast with behaviourist and cognitive theories, with each varying in popularity at different historical periods, reflecting and contributing to social and political discourse on 'natural laws', social justice and inequalities (e.g. Davis, 1947; Goldberg, 1974; Harlow and Harlow, 1962; Mead, 1935; 1961; Watson, 1930 in Macionis and Plummer, 1997). Observed variations in social arrangements demonstrate the malleability of human nature, effects of different social conditioning, and consequences of isolation: these show the biological is always mediated by the symbolic for it to be social.

Sociobiology has been criticised for its reductionism and claims of universals dismissed because of insufficient empirical evidence and ideological bias. Barry (1983) criticises accounts invoking the natural superiority of certain groups (such as men), suggesting they aim to justify inequalities and the existing social order. However, defenders of sociobiology claim both sexes are valued and cite universals such as male dominance (see Kinsey, in Barash, 1981). But biologist Fausto-Sterling (1985) finds little evidence of direct, biological causation of gender different human behaviour in her valuable critique of the 'scientific' evidence about attitudes and behaviours 'tied' to hormones and reproductive biology.

Structural functionalists consider socialisation provides the link between individuals and society: the overall operations, stability and cohesion of society are seen as linked to and held together by conformity to biologically determined (gender) roles, and social and societal problems arise through deviations from biologically-based roles. Distinctive socialisation teaches appropriate gender identity and the skills needed for adult life with gender roles based in reproductive biology. Boys destined for the labour force develop their natural instrumental character, learning to be rational, self-assured and competitive, and girls destined for child rearing and family/care roles develop their natural expressive character, learning emotional responsiveness and sensitivity to others. Over generations, the division of labour has become institutionalised and gender norms and hierarchical social relations largely taken for granted as natural, which serve to control and inhibit social change (Lengermann and Wallace, 1985).

In recent decades, many feminists and Marxists challenged traditional structural-functionalist and essentialist approaches to gender (e.g. Eisenstein, 1979; Engels, 1972; Oakley, 1981; Vogel, 1983). They highlight the extent of social inequalities and how women's oppression is ignored or accepted as natural. Oakley suggests gender blindness legitimates masculinist ideology. Giele (1988) also criticises functionalism for its assumptions of a singular vision of society that is not shared by everyone: it ignores the strains and costs for individuals. Davies (1995b) highlights how the pressures to conform to gender norms present problems for both sexes.

Early feminist social scientists described gender as the social and cultural construction of femininity and masculinity, established on the basis of ascribed sex differences, with contextual differences across cultures and time (Game and Pringle, 1984; Oakley, 1981). They highlight the differential value afforded femininity and masculinity in traditional theories, and challenge essentialist assumptions of male superiority used to legitimise men's privilege and dominance.

Whilst feminists reject that the female sex and gender role is naturally inferior to the male, they vary in how they seek to challenge the damaging socio-political consequences. Some argue that gender equality can only be achieved by eliminating the cultural notion of gender itself, seeing how patriarchy rests on the subordination of women through sexuality and reproduction, as represented by traditional gender roles in sex, marriage and motherhood (Dworkin, 1981; Firestone, 1979). More recently, attempts to attach positive evaluations to what are seen as immutable womanly traits have been reintroduced: Richardson (1993) for example, considers the way forward is to 'risk difference' proposing motherhood should be celebrated as woman's key role.

Together, social conceptualisations of gender recognise cultures assign human traits, characteristics and power to each sex. Which attributes are assigned feminine or masculine varies, but some degree of patriarchy - as male superiority and dominance - is found in every society (Macdonis and Plummer, 1997). Most importantly, gender involves far more than characteristics or traits as it involves hierarchical social relations and negotiations of power between the sexes, with men enjoying greater power and a disproportionate share of most resources (e.g. Cockburn, 1988; Crompton, 1996; Davies, 1992; Flax, 1990a; Shepherd, 1996).

Works on the social meaning and differential value of femininity and masculinity have extended to incorporate notions such as gender identity and role, and the development of a subjective, internalised sense of a gendered 'self', personal identity and personality. Gender socialisation theories combine with psychological theories of development. Together they consider how attitudinal and behavioural characteristics of men and women have been developed through the *differential socialisation* of boys and girls and their *different pathways of psychological development* (e.g. Acker, 1989; Chodorow, 1978; Gilligan, 1982; Goldsmith, 1983; Richards, 1982; Sayers, 1982; Sharpe, 1976; Thorne 1993).

Gender as practices, as performance, as an idea: social constructionist approaches

A third social constructionist position has emerged recently. The existence of gender is questioned, understood instead as the name for certain activities and behaviours that have been tied to sex. The nominalist perspective sees gender as independent of sex, with both culturally defined and constructed. Butler (1990) recognises no meaningful connection between the two, and that gender should be understood in terms of performance. With many of these ideas based on Nietzsche's emphasis on 'the deed is everything', gender is a 'stylised repetition of acts'. People adopting certain behaviours or portraying a type of characteristic are simply acting in what has been labelled and become recognised as a feminine or masculine manner. Women can

therefore behave in a masculine manner but it does not change their sex. Shepherd (1996) highlights how discourses and practices of femininity and masculinity are reflected and enacted by women and men, creating and reinforcing socio-sexual inequalities.

The concept of 'performativity' is proposed to challenge 'identity politics', with Butler (1990) asking 'to what extent is identity a normative ideal rather than a descriptive feature of experience?' (p 16). Butler proposes the objective of gender studies should be to locate how sex is 'naturalised', and which discourses cement this construction, to expose how sex 'differences' are constructed and justified. Once gender is separated from identity a new agenda for gender politics emerges. Butler argues it is more beneficial to attend to the practices that contribute to sexist value systems than to the identity of the practitioners, as transforming 'identity' may not change gender relations. In recognising 'gender reality is created through sustained social performances' potentiates the development of different gender configurations to challenge male domination.

The constructionist approach marries well with the way gender is often associated with inanimate objects, abstract concepts and phenomenon. Things and actions as well as people are gendered (Davies 1996). Gherardi (1994) and West and Zimmerman (1991) see gender as a 'daily accomplishment' that occurs in the course of participation in work organisations as well as in other locations and relations. Acker (1990) urges the 'gendering (of) organisational theory', observing how gender discriminatory processes and practices in organisations are often denied and ambiguous. She suggests 'advantage and disadvantage, exploitation and control, action and emotion, and meaning and identity are patterned through and in terms of a distinction between male and female' (p 146). However, from a realist perspective she describes these processes as concrete activities involving what people do and say, as well as how they think about these activities.

Inequality or difference: political dimensions of gender

Most importantly, various writers highlight it is the political significance of gender - whether biologically based, socially constructed or a social construction - that must be acknowledged (e.g. Butler, 1990; Gamarnikow, 1978; Hearn, 1982; Oakley, 1981; Sayers, 1982).

Biologist accounts risk charges of essentialism as they allow socio-political differences between the sexes and gender inequalities to be explained in terms of a natural feminine inferiority. If biological gender differences are accepted, then eradicating social inequalities becomes difficult or even impossible (Goldberg, 1974; Popenhoe, 1993; Rossi 1985).

However, seeing gender-different characteristics and qualities as emerging from socialisation can result in women being seen as willing victims reproducing their own oppression, especially if the mother's role in child socialisation is highlighted. In a male-dominated society with a history of gender inequalities, an over-emphasis on socialisation can lead to criticism of cultural determinism as a viewpoint that aligns poorly with a positive feminist position (e.g. Wrong, 1967 in Hearn, 1987).

Nonetheless, 'no difference' constructionist approaches are difficult to sustain given the mass of evidence and experience that demonstrates 'gender does matter' (Siltanen, 1994). Women still have different problems, interests and claims arising out of their biological and social roles. The

marked division of labour in the home and labour market reflects and endorses the view that men and women continue to live in 'different worlds' and have different perspectives upon it.

Hearn suggests seeing 'men as a gender class, in terms of their power over women' (in Wetherall and Griffin 1991, p 383), and along with Ramazanoglu (1996), argues it is insufficient for postmodernists to recognise 'multiplicity' and a 'fluidity of identity' (Gutterman, 1994; Segal, 1993) if differences in power relations and sexual inequalities are ignored. Seeing power as central to any understanding of gender, Rubin (1995) stresses theories of difference must also allow for politics of solidarity. Cooper (1994) adds that positioning in the discursive framework is differentially 'accessed' according to various 'social vectors' such as gender, race, age (etc), with differential status and power associated with the different vectors. In any setting, discourses of sex makes possible the practices of masculinity and femininity. Discourses set limits on what can be said, what it is possible to say and do, and what is considered 'appropriate' (Shepherd, op cit, from Foucault, 1972). Therefore, successful women can be 'explained' as demonstrating the appropriate masculine characteristics for success, which then reinforce the dominant discourse of a superior masculinity.

Providing a useful alternative to the crude dichotomy of either biological or social approaches, Acker (1989) distinguishes between gender stereotypes, real women and men, and femininity and masculinity. She proposes seeing femininity and masculinity not as attributes that women and men possess or learn, but as 'cultural codes or representations...which pervade our earliest experiences and shape our sense of identity' (p147). Gender involves concrete activities and shapes the way people relate to each other. It structures social, political and economic institutions, more generally seen as gender-neutral. As 'all social relations and processes are gendered...(gender) shapes and is implicated in all kinds of social phenomena' (Acker, op cit, p77).

Davies (1990) sees 'femininity and masculinity are in constant reference to each other', rather than separate and complementary, and by 'assigning the masculine set a privileged status and containing, denying and repressing the feminine'...'wrench(es) apart the diversity and richness of human qualities' (p21). This aspect of gender as social relations is described as the 'heart of the 'difference debate'' (p20).

Gender stereotypes and dichotomous accounts

As well as providing scant recognition of the socio-political dimensions of gender, most sex role and trait theories rely on static, narrow stereotypes. Masculinity and femininity are presented as polar opposites, with masculine traits involving various competences, autonomy and agency, and female traits generally including nurturance, warmth and generally passivity (e.g. Constantinople, 1974). Little attention is afforded the diversity of people's characteristics and the social advantages/disadvantages associated with them (Acker, 1990).

As a consequence of dualism and stereotyping, similarities between the sexes are frequently ignored/missed and differences exaggerated (Griffiths and Saraga, 1979; Shepherd, 1996). With the perpetual stressing of differences the importance of understanding similarities is masked, facilitating the 'justification' for the differential treatment of the sexes (Shepherd, 1996). Kimmel

(1994) urges the rejection of biological 'sex role' research as a legitimate way to understand gender, as 'sex roles reinforce popular notions of the "otherness" of the opposite sex' (p 123). Importantly, it also fails to explain changes in gender relations and ignores the role of power in them (Connell, 1987; Shepherd, 1996). In light of these observations, similarities between the sexes are considered (and recognised) within the study.

Shepherd (1996) and Maile (1995) stress that discourses of gender are far more complex than a simple dualism, arguing it is essential to recognise the active construction of what are understood as manifestations of gendered identity within a complex political and economic context. Realist approaches focus too narrowly on the public-private dichotomy of gender roles and spheres, and dualism takes little account of variety within the sexes, failing to recognise that not all women are home-oriented, supportive and nurturing, and that some men are (Acker, 1990). Brannon (1985) adopts a bio-psychosocial approach to develop a tripartite categorisation of the two sexes into 'ideal' masculine, feminine and androgynous roles. Similarly, Bem (1975); Broverman (1972); and Wolff and Taylor (1977) recognise a third gender role/type, with people categorised as more or less strongly sex-typed, such that some people are understood as androgynous, displaying both masculine and feminine characteristics.

Nonetheless, Rubin (1995) concludes the notion of two distinct gender roles and separate gendered spheres remains broadly recognised and learned in terms of stereotypes. Dichotomous discourses of gender are recognised for their profound influence and will be seen as predominant within this study.

Psychological approaches to gender

Brittan (1989) suggests that 'gender identity is the subjective sense that a man or woman has about his or her masculinity or femininity', measured against social expectations and standard forms expected of men and women' (p 20). In this way, gender is experienced, rather than a material fact, social relation or personal characteristic. Gender is also discussed in terms of personality. Gender, as one component of personal identity, is established through psychological developmental processes in early childhood, as an aspect of the emerging social self, and a deeply internalised and embedded aspect of the personality, rather than something performed (e.g. Butler, 1995). Interestingly, Deem (1980) suggests that gender consciousness and sense of gender identity is less commonly acknowledged by men than women, as masculinity largely represents a taken for granted, unproblematic identity within patriarchal societies (from Tolson, 1977).

Chodorow (1978) emphasises the crucial role of mothers in the primary socialisation and psychological development of gendered personality. She identifies separate developmental pathways for girls and boys with different processes and timings of attachment and separation from mothers. She suggests these experiences result in the widely recognised gender differences in connectedness and autonomy, and which will be observed in this study. Although this work has been praised for its clarity, it is also criticised for its tendency to blame mothers for women's oppression/subordination and its implicit denigration of femininity. Consequently, Gilligan (1982) and others have utilised elements of Chodorow's analysis but sought to redress

the gender bias and tendencies towards rather fixed and pessimistic views of sex roles (e.g. Davies, 1995). Alternatively, Chase-Lansdale et al., (1995) assert families - rather than just mothers - influence children's identity formation. For example, they are seen as instrumental in promoting caring attitudes through processes such as attachment, peer relationships, pro-social behaviour, empathy, agency and self-control.

Savage (1987) reviews various studies that show how 'concepts of gender' influence children's upbringing, involving the way they are dressed, and the types and amounts of stimulation given. 'Social learning theory' recognises that conditions and relationships in a person's social environment influence personality development and gender identity. Play behaviour, hobbies and career choices are influenced primarily by parents/family, along with secondary effects of peer groups, schooling and the media, all operating within social, political and economic contexts infused with gender norms. An individual's resultant masculinity or femininity and attitudes to gender roles and status reflect and represent the different social values of the sexes progressively learned throughout childhood.

Thorne (1993) observes how experiences of school exaggerate difference between sexes. Girls and boys are often encouraged by teachers to 'do gender', competing in team games with boys set against girls. She highlights the use of heterosexual teasing and cross-gender chasing noting girls more often than boys 'cross over' to the opposite group to join their activities. She suggests boys move across less often as they experience barriers such as homophobic teasing and insults.

In contrast, Wolff and Taylor (1977) argue men are often 'highly female sex type aware' and avoid exhibiting cross-sex behaviours as they are generally associated with social undesirability; women can see positive value and desirability associated with masculine attributes, so aspire to them and are less concerned about their femininity. Nonetheless, some people of both sexes cross domain/activities and challenge traditional gender arrangements/ideologies to some degree, suggesting the possibility of less restrictive gender options. As such, gender boundaries dissolve through the gradual realisation of their social rather than biological basis (Thorne, 1993).

Savage (1987) identifies limitations in social learning theory: she asserts it explains gender stereotyping rather than development, and is flawed by inferring gender is acquired automatically, by a certain age. It also fails by seeing gender as a fixed category and pays scant attention to inequalities. Savage commends 'developmental theory' as it recognises how masculine or feminine identities represent changing ways of interpreting differences between the sexes, rather than a stable phenomenon on a fixed course. Developmental theory allows for variation and non-conformity as well as changes over time and in different cultures, with people doing unconventional things understood as neither deviant nor pathological.

Despite the emergence of theories stressing the social construction of gender, McMahon (1993) believes that a dichotomous biologically based understanding of gender persists. With 'all the attributes of men discussed in the literature spoken of as aspects of masculinity...the usefulness of the concept is generally taken for granted' (p 690). He suggests gender traits and roles have become 'explanatory clichés' in academic and popular accounts, and will be evident in the way the study participants talk about gender.

Feminist perspectives

Socialist feminists such as Pollert (1996) support the pragmatism of materialistic theories and approaches to gender. Like Acker (1989), Pollert sees gender as integral to all social relations and argues for analysis embedded in the substantive material analysis of social process, proposing a 'feminist historical materialism'. She rejects 'dual systems approaches' in a rigorous critique of 'patriarchy' and the tendency for it to be coupled with capitalism.

Patriarchy

The concept of patriarchy is debated widely, with increasing disagreement about its meaning, application and utility. Some refer to 'patriarchal capitalism' (Hartmann, 1979; 1981; Hearn, 1982; Witz, 1992), and others 'capitalist-patriarchy' (e.g. Eisenstein, 1979), reflecting various 'theoretical refinements' that consider relationships between gender and capitalism. Through an ill-defined use/overuse of the concept 'patriarchy' many analyses tend to move away (and I suggest backward) from an interest in understanding the social and psychological processes involved in the construction of masculinity and femininity and the political practices and structures that produce and reproduce gender inequalities. They blur the task of explanation with description (Pollert, 1996).

Walby (1986) suggests patriarchy and capitalism are related but not always at the same time or in the same place. She suggests that rather than women's subordinate role in the household determining their position in the labour market, it is capitalism's drawing of distinctions between the sexes that confines and subordinates women in the household. Later she added that discourses of masculinities and femininities are struggled over in the paid workplace and the state, as well as learnt 'privately' by individuals (1990).

But Pollert (1996) argues that Walby falls into abstract structuralism suggesting 'Inferences are drawn about the role of 'patriarchy' from viewing organisational policies from the outside, with no evidence about the consciousness and experience of the male actors inside, who were allegedly constructing this system' (p 644). She considers Walby slides from propositions about 'men's interests' and the 'interests of patriarchy' and imprecisely attributes historical developments to 'patriarchal forces' without indicating whether the term denotes social groups or structural dynamics.

Pollert (1996) stresses gender relations have to be analysed in lived experience, whereas class can be conceived abstractly in a mode of production: they are two different types of social relationship. The mediations between class and gender are complex and the focus changes - depending on what you are looking at and asking - with gender sometimes in the foreground, sometimes class. There is a social dynamic in its construction and possibilities of change from the tensions and contradictions in experience. The experience of female oppression in wage labour shapes women's exploitation, their exploitation alters their oppression.

Pollert looks at the process of intermeshing and proposes theories embedded in empirical interrogation to address the relationship between agency and structure, with a return to the action-structure relationship of Marx (also Crompton and Sanderson, 1990). She recognises the

material existence and experience of gender and suggests materialist approaches open up 'agency', so actors and process enter the picture. Consciousness, identity and subjectivity are acknowledged as much as material forces. Importantly, the connections and mediations between individuals and wider economic and political process are kept in view.

Sexuality

In addition to literature on sex and its relationship/s to gender, discussions about sexuality are of direct relevance to this study. Like gender, human sexuality is theorised in biological and social terms, as well as through social constructionist approaches.

The many ways of studying sexuality reflect different theoretical perspectives and paradigms. Villanueva (1994) suggests one approach is to ask what society understands sexuality to be, what individual men and women feel and believe about sexuality, and examine how they behave. Another is to analyse sexuality as it has been constructed through scientific, academic research. A third approach is to study social institutions to examine social policies in relation to their influence on men and women's individual lives and their sexual identities.

Although the first major studies of sexual behaviour were conducted by biological rather than social scientists (e.g. Kinsey, 1953) significant social influences were found, with sexual behaviours patterned and evaluated by factors such as class and geographical region. Whereas most academic studies see sexuality as socially structured (e.g. Jeffreys, 1990; Mackinnon, 1987; Mitchell, 1975; Weeks, 1981; 1989), most 'common sense' accounts tend to highlight biological origins and naturalistic aspects. However, few problematise 'normal' sexuality - as heterosexuality - or recognise the central significance of gender in the social structuring of sexuality and its relation to wider gender inequalities, for example in employment (Adkins, 1995). McIntosh (1981) and Rich (1983) stress heterosexuality should not be taken for granted as the 'natural manifestation of sexual relations'.

The traditional view of (male) sexuality as an innate biological drive has been challenged (Freud, 1977; Reich, 1989), and sexuality is now more commonly seen as something shaped and developed through day-to-day interactions throughout life, involving the picking up of cues from social, cultural and historical circumstances (Savage, 1987).

In recent decades, the notion that human sexuality is hugely symbolic and social has been increasingly recognised (e.g. Savage, 1987; Stone, 1977). As such, sexuality is widely seen as a largely social phenomenon, meaningful because we endow it with meaning, and with endless meanings given. Humans use sex for social as well as reproductive ends, as expressions of love, as a means to establish bonding, and as an expression of manliness/womanliness and maturity (Macionis and Plummer, 1997). Although some writers focus on sexuality in relation to sexual orientation, activities and partners, and erotic desire, most see sexuality as separate from, but related to sex and gender, to consider sexuality in far broader terms. For example, Savage stresses how sexuality involves 'self concept', 'self-worth' and power.

Some regard sex, gender and sexuality as linked, with various debates about the relationships between and direction of association, whereas others see them as separately constituted. Oakley (1974) emphasises that relations between the sexes are not always sexual. Savage (1987)

recognises connections between sexuality and gender identity but no 'inevitable link'. McKeighen (1978) suggests sexuality has an effect on gender identity, being especially important in bolstering masculine identity in societies where genital sexuality for men is particularly important. In contrast to men, women supposedly derive and sustain their feminine identity from other things than physical-sexual functioning, such as through appearance and dress, and feminine roles such as domesticity and caring (in Savage, 1987).

Whereas Acker (1990) describes sexuality as 'part of the ongoing production of gender' (p251), Mackinnon (1987; 1989) suggests that sexuality constitutes a set of social relations through which gender inequality is produced, and as actually constituting gender. Mackinnon suggests 'the moulding, direction and expression of sexuality organises society into two sexes', seeing the social as intrinsically sexual as the whole gender system is sexualised: the sexual objectification of women is the central social process of male domination.

Savage (1987) notes how the interpretation of behaviour is often ambiguous and depends on circumstance and context. Sexual intentions therefore need to be especially clear, as sex and power are often linked because of the association of men with social dominance, control and prestige. Also, Western cultures generally deny men ways of expressing emotional needs except through sex, and especially through genital sex. As such, sex legitimates touch and masks the needs and desire to receive (or express) tenderness. One downside of this is that once touch becomes synonymous with sex it precludes non-sexual male physical contact, which can provide problems for male carers and patients. Savage's observations will be shown to correspond to the difficult experiences of male physiotherapists and radiographers with 'hands-on' care-work in this study. She also observes how images and labels for nurses are often sexual, with female nurses variously described as angels, battle-axes and sexual turn-ons. Male nurses are also subject to sexualised images that generally incorporate homosexual dimensions, demonstrating the conflation of masculinity, sex and (hetero-)sexuality. These kinds of association and stereotypes will also be highlighted in the study, with both involved in explanations for the gender composition of caring professions.

Homosexuality

Increasingly, narrow dichotomised stereotypes of male and female sexualities and sex-linked behaviours and attitudes have been challenged (e.g. Hite, 1977; 1981; Rich, 1983; Richardson, 1984). In recognising social and political as well as sexual aspects of sexuality, Rich sees it in terms of a continuum and not just as two types or polar opposites. She proposes the notion of the 'woman centred woman' who may have a heterosexual sexual relationship, but in all other social, occupational and personal aspects of life is female-oriented. Thus women who choose to work in a female occupation are seen as woman centred, especially if they do so to actively avoid male harassment and authority (as mentioned by some women in this study).

Despite increasing acceptance of and liberalisation of laws against homosexuality, 'homophobia' is still widespread (Macionis and Plummer, 1997; Weinberg, 1973). Connell urges the demythologising of gay men as lacking masculinity, whereby sexuality is again conflated with gender and sex. 'Masculinity' is important to many gay men, as is 'femininity' to many lesbians,

and gay men can be just as sexist as straight men and oppressive towards women (Morgan, 1987, p192). Importantly, Brake (1982) observes how masculinity, whether hetero or homosexual, is privileged compared to femininity, as 'patriarchy' - as the 'exercise' of male dominance over females (Walby, 1986) - provides the general conditions for men to exercise power, irrespective of particular situation or lifestyle. Even gentle men benefit from gendered social relations as patriarchy is to the advantage of men in general, and to some degree cuts across class, race and sexuality. In this way masculinity, whether homosexual or heterosexual, is socially constructed maleness, and structured around the exercise of gendered power. Kelly (1988) suggests sexuality is structured by power imbalances between men and women and organised in ways where male dominance is 'accepted' as 'normal'.

The 'problem' of homosexuality can be understood in terms of it representing a stigmatised attribute (from Goffman, 1990). Stereotypical, simplified and prejudicial ways of thinking about people serve to problematise encounters for the stigmatised and legitimate avoidance of them and discrimination (Albrecht et al., 1982). In addition there is a tendency for the attribution of other characterisations beyond the specific difference: deaf people are seen as stupid, black people as athletic and rhythmically musical, and gay men as sensitive and effeminate. As an 'invisible difference', homosexuals may choose to conceal their stigmatised sexuality, but then feel anxiety through the constant risk of discovery. Taylor and Field (1993) suggest that some 'closet' gay men over-compensate and adopt an aggressively macho stance in an attempt to hide their 'stigmatising condition'.

Conclusion

In this first section of the literature review I have considered a diverse range of sociological and psychological literature about sex, gender and sexuality, highlighting strengths and weaknesses of biological, social and constructionist perspectives.

I have highlighted how biological theories of gender and sexuality are criticised for their empirical inadequacy and masculinist, hetero-sexist bias, and illustrated a number of alternative theoretical 'blends'. These emphasise, to varying degrees, the primacy of psychosocial influences on gender (and sexual) development and identity and the socio-political values associated with different roles. I have shown that ostensibly social conceptualisations of gender sometimes incorporate, even celebrate elements of biological difference. And interestingly, despite increasing recognition of gender in terms of hierarchical social relations and political power, and extensive criticism of biological determinism, dichotomous approaches to gender different traits and gender stereotypes are seen to prevail in popular and academic discourse. This point is of particular significance to this study with my analysis of the participants' accounts and the ways they talk about and understand gender and gender divisions.

One contribution of constructionist theories of gender and sexuality I have highlighted in the chapter is the way they take the discussions down a different track, moving away from debates about the relative contribution of biological and social influences on gender role and identity, to question the reality of gender. Arguably, by understanding gender (and sexuality) as ideas

sustained through 'performance' potentiates the development of different configurations to challenge male, heterosexual domination.

But in terms of my understanding of gender and sexuality and its relationship to my approach to the study, I conclude that gender and sexuality are more than ideas or social constructions, and recognise the material existence and experience of gender 'out there'. And, as Pollert (1996) stresses, gender relations have to be analysed in lived experience. I see Acker's (1989, 1990) perspective on gender as 'cultural codes' and 'concrete activities that shape our lives' provides a pragmatic route through a complex theoretical maze. I also take heed of Davies (1992) who urges persuasively that 'we must abandon the concept of gender attributes...and talk instead about gender relations, as enacted through the daily organisational practice and as about power' (p 230). I therefore understand gender and sexuality as lived material experience involving hierarchical social relations and negotiations of power. This emphasis on social relations is also shared by Flax (1990b) who sees that 'gender, both as an analytic category and a social process, is relational' (p 44), and Cooper (1994), who highlights the pervasive power dimensions of gender relations, whereby gender and sexual relations involve positions that are unequal in terms of social status, economic value and political power.

Despite taking a realist approach to gender with regard to people, I recognise how notions of gender are extended to inanimate objects and abstract concepts, but note that associations invariably retain some notion of gender as a status position in a social hierarchy.

Having examined various theoretical perspectives on gender and sexuality and different approaches to studying gender divisions, I now move forward to review a range of literature examining gender issues in education and their relationship to gender divisions in employment. Firstly I consider the aims of education for girls and boys, examining changes in policy and provision in recent decades; I then focus on authors who highlight gender different experiences and outcomes from education, and examine literature on the career selection process.

Section 2: Gender in education and its relationship to work

In this section I consider how approaches to, and experiences and outcomes from education have changed in recent decades. This is important for the study as it provides background information about educational policies and practice during the period when the study participants were school and/or college students, and 'explains' the different experiences and outcomes from education of girls and boys and their relationship to gender divisions in employment.

Context and Background

Although 'marked changes in the status and economic role of women' began after the second world war, their nature and implications for girl's education and its relation to women's employment were not examined (Hanson 1992). Even those explicitly concerned with the best interests of girls, actively promoting their need for a good education, still took a traditional approach to women's position in society (e.g. The Women's Group on Public Welfare, 1962, (WPGW) cited in Hanson, op cit). Marriage, the home and children were the main responsibility of women, and domestic science and home crafts were advocated for every girl, although by the 1960s the growing trend for women to also have paid employment was increasingly supported. Although 'proto-feminists' approved of women who efficiently combined paid work with marriage, home and family, they did not challenge traditional gender roles nor the unequal status and opportunities for women and men (Banks 1981). As such they represent attendants at the birth of 'superwoman', expected to manage multiple roles successfully (Kelly, 1991).

Only in recent decades have gender differences in schooling and educational achievements been problematised (Deem 1980). Up to the 1970s essentialist understandings influenced official policies (e.g. Newsom 1948; 1963), with women as caring, home-oriented and interested in domestic life, and men as outgoing, scientific and mechanical. Gender-different schooling was viewed as the best preparation for girls and boys' different futures (Crowther, 1959), with the domestic world as women's priority. This objective contrasts with recent years, with education supposedly preparing all children for the labour market, regardless of their sex. With regard to the project, it is important to recognise that the older study participants were at school during the 1950s, 60s and 70s.

Tripartite, selective education

Until the 1970s, single sex grammar, secondary modern and technical schools were the norm (Jeffcoate, 1984). Boys and girls were separated from the age of 11 and grammar school places depended on passing the 11+ examination. However, results were 'adjusted' to offset boys' lower achievement and ensure sufficient boys benefited from the more advantageous grammar education. Widespread concern about boys' 'underachievement' led to explanations being sought, with most studies explaining girls' successes in relation to earlier 'maturation' (Douglas, 1964; Thom, 1987; Vernon, 1960). In stark contrast, the tendency for girls' performance to drop in their late teens was never seen as a problem warranting equivalent attention (Douglas, 1968).

Different values attached to girls and boys' education resulted in many girls' grammar schools having little or no science provision and few specialist teachers (WPGW, 1962, in Hanson, 1992).

Female teachers mainly taught younger children, with older children instructed mainly by male teachers. Most senior posts were filled by men and women heading departments mainly taught 'feminine subjects' (like domestic science), except for a few heads of science in some girls' schools. Messages about the role and status of women and value of girl's education were explicit (Deem, 1978).

Co-education and comprehensive schools

In the early 1970s, the Labour administration instructed their education inspectorate to examine curriculum differences for girls and boys (HMI, 1975). This period was also marked by the passing of the Sex Discrimination and Equal Pay Acts (1975) and founding of the Equal Opportunities Commission in 1976, together expected to substantially impact on many areas of social life, including education and employment. This represents the period when most of the qualified study participants were at school.

The development of the coeducational, comprehensive school system was anticipated to extend and equalise opportunities for girls (Levy, 1972). Nonetheless, it was soon apparent that girls, even though located with boys and in a non-selective system, were not experiencing the same education as their male counterparts (Deem, 1983). Different social interactions within the mixed classroom, between staff and male/female students and between students, continued unequal experiences (Delamont, 1983). Channelling of girls towards lower status, stereotypically feminine subjects, and lower levels of teacher support and attention were identified as important components of girls' inferior educational experience. Disadvantages also related to boys' behaviours and teachers' stereotypical attitudes and expectations of both sexes' future roles and responsibilities, and experiences of these will be identified in the study.

As such, experiences and outcomes from schooling relate to more than subject choices and the formal curriculum. The 'hidden curriculum' is widely acknowledged to serve and reinforce the disadvantaged position of girls, with feminist authors referring to the nature and influence of 'gender codes' and 'gender regimes' in school. Gender codes and regimes and their relationship to occupational segregation are just as relevant to middle class and academic pupils as to working class and non-academic ones. Middle class girls experience influences directing them towards subjects and skills useful for middle class occupations such as teaching and caring professions. The curriculum is therefore hugely political, as influences of class, gender and race together contribute to experiences in and after school (Riddell 1991; 1992b).

Interestingly, since moves towards coeducation, several groups with very different ideologies have campaigned for a return to, or increased availability of, single sex education. Some feminists suggest girls do better in single sex schools, whereas religious groups oppose mixing on 'moral' grounds. Feminists such as Arnot (1986), Bryne (1978) and Kelly (1981) highlight the problem of 'sexist norms', especially in science and maths, working against girls' achievements and made worse in mixed education. They suggest if more girls get science qualifications, women's careers can move away from gender-stereotypical patterns more easily. Others assert girls develop more self-confidence if not exposed in adolescence to boys' male chauvinism

(Delamont, 1984; Stanworth, 1983), with Kenway and Willis (1990) suggesting girls' low self-esteem influences their educational and later achievements.

Shaw (1992) argues that girls' single sex schools may place less emphasis on sex role stereotyping than mixed institutions, and girls see stronger, more positive female role models in single sex establishments. These experiences shape beliefs and aspirations about what is appropriate and achievable for women and is an experience that will be identified in the study.

Despite anti-discrimination legislation, the women's liberation movement and the mixed comprehensive, most accounts of education from the 1970s to mid 1980s identify limited improvements in girls' experiences. Supporters of coeducation are challenged for their naïve expectations and inadequate recognition of the deep-rooted nature of male dominance (Riordan, 1990). Schools continued to provide the setting for widespread informal discrimination, particularly potent at the level of interpersonal relations, and maintained their impact on academic achievement and subject/work/life choices (Delamont, 1990; Stanworth, 1983).

Relationships between education and employment

Schooling influences attitudes to work and the gender division of labour persists. Buswell (1991) notes half of all employed women work in three 'service' industries, and work mainly in lower grades in all occupations. The welfare/caring professions comprise 69% women and this proportion is exceeded only in catering, cleaning and other 'service' jobs, where more than half work part-time (New Earnings Survey, 1987). 2001 national census data reveals a virtually identical gender distribution, and also highlights how only 12% employed males work in these areas (Labour Force Survey, 2001). As most occupations are predominantly female or male they become associated with feminine or masculine traits as defined by current culture.

Nonetheless, Buswell (1991) stresses how connections between gender, school subjects, academic achievement and the segregated labour market are far from straightforward. She describes how culturally based notions of gender are played out in the identification of young people themselves, and shaped by friends, family and other external influences, including those involved in education and employment. Each carries their own understandings of gender-appropriate knowledge, behaviour and work. Complex relationships between gender, education and work are also noted by Deem (1980) and Wolpe (1978), with numerous influences on life chances relating to developing gender identities and the differential status of female and male gender roles.

Attitudes to and behaviours in education

Many writers have highlighted the various ways girls (and boys) 'manage' contradictory social messages in education: up to the 1980s girls were noted for 'quietness' (Stanley, 1986), 'invisibility', Stanworth (1983) and 'ultra-femininity' (McRobbie (1978). These attitudes and behaviours are said to locate girls (and women) in traditional, subordinate positions (Buswell, 1991).

'Feminine' images and culture contained within media messages rarely glamorise academic success but generally promote ideologies that idealise and promote heterosexual romance and

marriage (Buswell 1991; Rich, 1983). McRobbie (1978) suggests it is via attempts to assert femaleness that many working class girls resist middle-class aspects of schooling, to adopt strategies at odds with cleverness. These strategies work against girls making 'male subject' choices and thereby limit employment opportunities. In addition, peer groups are major influences in adolescence, affecting decisions about personal behaviour, attitudes to education and subject choices. 'Informal messages' clash with 'official' messages about equality and achievement, and consequently many girls opt for femininity rather than academic achievement and reject the chance of better employment opportunities.

Nonetheless, Devine (1994) emphasises the extent of class differences, showing how middle class girls with parents in professional employment are often pro-education like their parents, tending to concentrate on school work to optimise exam successes, and choose subjects in relation to their ability to open up employment options and facilitate access to good quality careers (also Arnot, 1986; Bryne, 1978). Several participants in the study were from this type of background and will be shown to have approached education and employment in this way.

Subject choices as channels to jobs

Many school subjects are associated with gender characteristics, influencing the numbers of females and males 'choosing' to study them, which in turn reinforces the gender image (Buswell, 1991; Delamont, 1990; HMI, 1980; Kelly, 1981; Stanworth, 1983). Different subject choices and successes then constrain employment options, with three times as many boys as girls studying physics in the 1980s, and 90% of entries in technical subjects from boys (Central Statistical Office, 1987).

The main focus of 1980s government research relating to gender and education has been physical science and mathematics: government would like to improve standards and numbers and are concerned that girls' involvement remains lower than boys. Arguably, governments' interest in science reflects the benefits of a skilled workforce to industry and the economy as much as to concerns about gender equality (e.g. Matters for Discussion 13, Girls and Science, 1980, HMI 1980).

Despite various policies and campaigns in the 1980s to get more girls into science and technology (GIST) and other non traditional areas, changes have been both limited and slow (Kelly, 1981; Whyte, 1986). The slow effect of campaigns is related to the notion of science as masculine (Byrne 1993; Harding, 1986; Kelly, 1981). This identification arises partly because of the personnel involved with science - as teachers, students and industrial scientists - and because science laboratories are 'male arenas'. Associations of science with rational, objective attributes are commonly linked to male stereotypes such that boys are motivated to achieve in science as it confirms their developing sense of masculinity whereas girls see it as incompatible with femininity.

Despite critiques that challenge the reality of 'masculinist science' (e.g. Gross, 1998), it is widely acknowledged and of relevance to this study that the status associated with different subjects varies: the high status of science is explained by its connections and role in the broader world, in the prestigious industries, occupations and professions. Arguably, the low status of subjects involving interpersonal, social, communication and caring/'expressive' skills relates to their links

with domestic, unpaid work and the range of semi and unskilled jobs involving similar tasks: they are widely seen to rely on 'natural' or socially acquired female abilities, rather than taught technical skills and rational, theory-based knowledge (Smith 1992).

Kessler et al (1985) suggest the gender construction of skill relates to both sexes' experiences, choices and outcomes in and after school. Schools both construct and reinforce boundaries between what is acceptable, appropriate and valued in terms of masculinity and femininity, and these distinctions continue in the labour market.

But even if girls study and succeed in science this does not guarantee them high status jobs: educational qualifications are not entitlements to occupations, as definitions of skill and terms of employment are governed by other factors and prejudices of the outside world (Gaskell, 1992; Hussain 1981). Hussain highlights that in the long term, subjects and occupations tend to lose status as more girls take and succeed in the subjects or do the jobs that use them. Also, the nature, role and organisation of jobs often changes, with many science-based occupations experiencing 'deskilling'. Computing started off as a high status, technological, masculine job but keyboard operating is low status and mainly women's work (Cockburn, 1983). Various authors suggest the status of medicine and other health professions has changed in relation to their changing gender composition (e.g. Crompton, 1991).

Vocational education and employment segregation by gender and class

Purvis (1985) suggests British schooling for the working classes has always been vocational in orientation. For girls this has meant preparation for domestic/family care and employment involving the same skills. Despite advances in education this trend has continued to the modern day, with most girls and young women studying subjects using 'domestic', 'caring' and interpersonal skills. Cockburn (1983) suggests 'gender codes' in classrooms spell out the relative importance of paid and unpaid work and promote the differential definitions and values of masculinity and femininity prevalent in the workplace (also Felstead, 1996). Felstead (1996) also observes how vocational courses reproduce class and sex-based segregation of the workplace, with males separated from females and the more privileged from the less privileged: they prepare young adults for the different types of jobs in the different sectors of the labour market, appropriate in terms of both class and gender.

Silverman and Brennan (in Gaskell, 1992) consider 'vocationalism' should mean education for work in its broadest and most humanistic sense. They suggest a dichotomy between academic and vocational education is philosophically inadequate and socially pernicious and see attempts to divorce academic from practical studies are destructive to education generally. They argue the separation of theoretical and practical education contributes to class and gender distinctions and inequalities that permeate the workplace, echoing the sentiments of Cockburn (1983). Iphofen (1997) also observes hierarchical assumptions relating to knowledge and competence that value scientific theory over humanistic approaches and practical skill. Changes in physiotherapy/radiography courses and qualifications typify this separation and involve higher status being associated with theory than practice, practical skills being distinguished from scientific knowledge, and timetables reflecting the separation of theory and practice by having formal lectures distinct

from practical lessons. In recent years allied health professional courses have moved into higher universities such that scientific theory now dominates the degree course curriculum.

While 'new professions' such as engineering have provided an important route of social mobility for working class males (Gerstl and Hutton, 1966), 'self-made women' (Hakim, 1991) in the technical and caring professions are mainly middle class women who have benefited from improvements in school and the expansion of higher education. Consistent with this study's participants, evidence from the British Class Project (Marshall et al, 1988) suggests women in the service/professional class are generally better qualified than men, and if there was 'less room at the top' relating to women's 'family role' reasons, the competition for high level positions would involve two unequally qualified groups, with women as the more able, higher qualified contestants. Currently men are advantaged by the absence or departure of women from the workplace, and less able men can succeed in careers. This advantage is especially strong in female majority occupations, such as physiotherapy and radiography.

Recent changes

In recent years, more girls from all social groups have started taking 'academic' options, suggesting a gradual trickle down effect into education from an awareness of improvements in job opportunities for women with qualifications. Attitudes towards women at work and in careers, and expectations of education began to change in the 1960s and children of that generation are the parents of 1980s and 90s' children. Arguably, the increasing number of girls leaving school with A levels and continuing onto higher education relates partly to parents' changing attitudes to education and female gender roles (Felstead, 1996; Social Trends, 1993; 1998).

Recent data show girls outperform boys at GCSE, and now surpass them at A level (Social Trends, 1993, 1998), reversing their adolescent slump in attainment observed in earlier decades (Jeffcoate, 1984). From 1970 to 1990 GCSE successes rose for both sexes, but the figures for girls rose more than for boys. For 1995-6, those leaving school with 2 or more A levels comprise 20% of boys as compared to 23% of girls (Social Trends, 1998).

Notwithstanding gender differences, many more pupils left school with qualifications in the 1990s than the 1970s (Social Trends, 1993). In HE, the number of students rose considerably in the 1980s and early 90s, but the most significant changes occurred in the rising number of female students. By 1995-6, there were slightly more female university students than male, compared to more than double the number of male to female students in 1970-1 (Social Trends, 1998).

Higher education

Even amongst girls who do well in school and graduate from higher education, most work in typically female occupations, especially in the health, education and the public/service sector (Acker, 1994; Chisholm and Woodward 1978). The female participants in this study are therefore typical of academically successful girls.

Devine (1994) highlights how careers advice/information can be particularly limited in single sex schools, such that traditional female careers and courses are often all that are suggested to girls (Arnot, 1986; Bryne, 1978). With most single sex schools in the independent sector, middle class

girls interested in science often 'choose' caring rather than scientific professions by default. Conversely, male scholars are seldom directed towards caring professions, instead encouraged to consider engineering medicine and other scientific degrees and careers.

Acker sees that educational trends are bound up with economic, demographic, technological and political ones (in Gaskell, 1992). She considers economic changes the driving force for changes in women's increased participation in higher education, even though persistent ideologies about gender traits still influence female students' predominance on care and service related professional courses. This links directly to explanations for the gender composition of physiotherapy and radiography. With the dramatic decline in mainly male, working class, manual jobs, more jobs are now in the female dominated, service sector (Webb, 1989 in Acker, 1994; Social Trends, 1998); whether boys' attitudes, teachers' approaches and careers advisors' information on school subject and career choices will adjust in relation to the same economic/labour market pressures said by Acker to influence women's education and choices is discussed infrequently, and different status issues and consequences are involved.

Education and career decisions: voluntaristic, socially constrained or pre-determined?

Banks et al (1992) consider how choices and dilemmas, described as 'critical pathways', open up in adolescence. These pathways provide the foundations of adult attributes, roles and identity. Of interest to this study is the way the authors recognise how past experiences, opportunities, beliefs, attitudes and values relating to social and cultural group, class, gender and ethnicity, combine to shape aspirations and present or limit opportunities. They connect the growing and deepening sense of self with the making and shaping of careers, and identify the particular significance of gender identity to career decisions.

With girls' increasing success in schools and participation in further/higher education, many feminists now examine the continuing trend of gender different choices and success in school subjects, and consequent effect of channelling girls into 'traditional' female jobs and lifestyles, generally associated with social and material disadvantage. Many focus on aspects of the curriculum, with marxist feminists highlighting the ways schools not only serve a capitalist society but a patriarchal one as well, whereby 'the outcome of the schooling process continues to be a sexually segregated workforce in which women are trained less, paid less and promoted less' (Hannon, 1979).

Of particular relevance to this study is Gaskell's valuable interactionist study of the associations between gender, education and work (1992). She describes how young people embark on journeys to adulthood and considers how channels, choices and curricular options challenge or confirm social positions, self perception and identities.

Gaskell (1992) and others observe (e.g. Acker, 1994; Banks et al., 1992) that people often believe in their freedom of choice, responsibility for, and rationality in choosing subjects/courses and careers. Similar to what will be shown in this study, Gaskell's respondents gave 'good reasons' for their decisions and rarely acknowledged structural factors or gender based influences, focussing on other personal characteristics and interests.

But in contrast to what will be shown in this study, Gaskell's respondents rarely thought the influence of parents, teachers and careers personnel significant, although useful sources of information. Most felt powerful enough to disregard suggestions incompatible with their own plans or interests. Although teachers and parents often commented on choices, their opinions rarely affected decisions. Gaskell's findings also differ substantially from those of Devine (1994) who found choices of subjects and degrees leading to careers in science and engineering significantly influenced by parents, teachers and careers advisors. Although discouragement was rarely sufficient to dissuade confident students, Devine suggests pupils less certain of their ability or generally unsupported 'fall by the wayside'. Similar to findings that will be shown in this study, Devine reports female interviewees recalling how, as girls with an interest and ability in science, they had felt pressured to choose vocational courses and teaching or health care careers, rather than pure science or engineering degrees/occupations. None of her male interviewees recalled these pressures.

Despite the individualistic emphasis of her study participants, Gaskell interprets their choices within the historical and socio-cultural context, acknowledging the interactions between human agency and structure. Unwilling to explain actions and choices as the over-determined outcome of social and economic forces, she proposes a 'social reproduction' scenario whereby occupational choices are usually 'realistic', where 'conscious, rational, self-preserving calculations help to reproduce gender segregation'. Choices are not predetermined or imposed but made on the basis of perceptions of what is thought best personally.

Devine (1994) also urges caution against overly voluntaristic interpretations of choice, highlighting how girls in single sex schools often experience a more supportive, positive environment in which to study than in mixed schools/classrooms. Devine concludes 'rational choice theories' are simplistic, ignoring the way complex economic and non-economic influences limit options and affect decisions. She challenges Hakim who attaches great importance to individual preferences and active decision-making, relating gender-different choices to different levels of 'commitment to the labour market', with women generally having less than men. Hakim (1991) asserts women's choices are key determinants of labour market behaviour and patterns of gender segregation, and that women share responsibility for the persistence of gender segregation as it reflects their own preferences and choices - in education and in the labour market - with changes taking time to impact on employment.

Devine (1994) argues that people do not plan their education or careers in highly calculated, tidily planned ways. Young adults are not fully aware of the career implications of their decisions, although recognising that some choices provide wider or narrower career options. Most course/occupational choices are based on perceptions of interesting and intrinsically rewarding work and, to a large degree, the appeal of many occupations relates to gendered imagery which incorporates notions of status and gender appropriateness.

In their various analyses Acker (1994), Devine (1994) and Gaskell (1992) all consider choices cannot be interpreted in purely individualistic terms, proposing that a range of concepts and frameworks are needed to 'make sense' of course/career decisions. Individuals' explanations

need framing within the context and culture of their family, school and workplace where choices are made, with attention to wider socio-political contexts of education and the labour market.

Although different authors tend to favour structural or voluntaristic explanations for gender different subject choices and careers, Crompton et al (1990) commends a more balanced approach, arguing that demand and supply are inextricably bound together and that a strict dichotomy between structure and agency ignores the complexity of interactions between them.

As motives and decisions are grounded in social contexts they are therefore social in character. Decisions are not made in isolation with 'actors behaving as atoms outside a social context, nor do they adhere to a script written for them... Attempts at purposive action are instead embedded in concrete ongoing systems of social relations' (Granovetter, 1985, p 487), which are all 'gendered'. To acknowledge the social dimension of women's preferences and plans does not imply they are 'over-socialised agents' who exercise no choice but recognises decisions are shaped and patterned by the social circumstances in which they are formed. Opportunities therefore vary for different women (for example by class and ethnicity) such that individuals have different resources, power and control, which influence their pursuance of preferences and plans (Devine, 1994).

Conclusion

From this selective review of education literature, I have shown that changes in education policy and practice have not resulted in radical changes in gender-patterned subject choices and gender-divided employment despite some influence on educational achievement. As Buswell (1991) recognises, the processes of subject and occupational identification are subtle and complex, and changes tend to happen slowly.

Importantly for this study, this literature shows that understanding how and why subjects, skills and jobs are gender-divided involves seeing femininity and masculinity in terms of active social processes involving differential status and life chances. Crucially, empirical data show that attempts to influence and alter traditional subject choices in isolation do not change girls and boys sense of identity, role or ambition, nor significantly alter their futures. I have reported various authors who conclude this is because complex cultural ideas on femininity and masculinity and gender-appropriate employment choices are not only reflected, created and modified in education but also influenced and constrained by the broader socio-cultural and economic context within which school and career decisions are made. Nonetheless, a range of views on the pace and potential for change are highlighted, with Acker (1994) and Gaskell (1992) stressing that gender-patterned educational (and occupational) choices and outcomes are neither inevitable, unavoidable nor unalterable, as their basis is social rather than biological, and therefore have the potential for change, even if difficult, resisted and slow.

Having considered a selection of literature that highlights gender aspects of education and their impact on employment divisions, I now move on to review a body of literature focussing on gender dimensions of work and gender divisions in the labour market.

Section 3: Gender, work and the labour market

Having considered various gender aspects of education and their relationship to gender divisions in employment, I now discuss literature that examines gender dimensions of employment directly. This literature is important for the study as it helps identify various processes and structures that generate and sustain gender segregation and inequality. I aim to show that underlying the occupational structures of industrial capitalism is the constant equation of sex and gender, in which the two are conflated and form distinctions in all aspects of work, including employment patterns, career opportunities and earning levels.

Curthoys (1988) stresses 'how unnecessary, damaging and historically specific is our present organisation of human labour. The situation...is not a 'natural', inevitable or permanent one. Only childbearing is inevitably the province of women: the rest is what human society makes it. Yet the sexual division of labour is a feature of nearly all human societies' (p 32). She suggests 'it is necessary to understand just why...and how it is so...if (gender inequality) is to be ended', and supports 'the feminist assault on the sexual division of labour' (op cit, p 40).

Although both sexes work, women's is very different from men's: women do most unpaid work in the home, but both sexes work in paid employment. Feminists describe women's 'dual roles' in the 'private and public' spheres as the 'double-edged nature of women's oppression', with many women replicating the functions they perform in the household in low paid, low status jobs. Because of the way 'women's work' spans both domains, masculinist concepts of work as outside the home, in the labour market, for pay, need redefining.

The late 20th century context: gender inequalities and patterns in employment

Many studies show substantial and persistent gender inequality in the labour market. Despite various achievements of the women's movement; improved outcomes from education; anti-discrimination, equal opportunities and equal pay legislation, and the era of 'post feminism', women are still:

earning less than men (e.g. Beechey and Perkins, 1987; Central Statistical Office, 1998; Ryan, 1996; Siltanen, 1994);

participating less in waged work than men, taking more career breaks and working 'part-time hours' in the labour market (e.g. Dickens, 1995; GHS surveys, 1992 in Arber and Ginn 1992; Hakim, 1987;1996; Martin and Roberts, 1984);

segregated into a narrow/limited range of occupations (e.g. Buswell and Jenkins, 1994; Cockburn, 1985; Hakim, 1996);

excluded from access to labour market resources such as *skills and training* (e.g. Cockburn, 1983; 1987, 1991; Phillips and Taylor, 1986; Witz, 1990; Witz, 1993);

having unequal/limited access to promotion/career ladders (e.g. Atkinson and Delamont, 1990; Evetts, 1994; Kanter, 1977; Powell 1988; Thornley 1995), and

experiencing *sexual violence*, through rape, harassment and assaults at work. These are often highlighted as a central feature of gender relations in the workplace (e.g. Adkins, 1995; Collinson, 1989; Kelly, 1988; Russell, 1984; Stanko, 1988; 1990).

From the 1970s to the 90s various changes in the distribution and numbers of men and women in the British labour market emerged along with other social changes (Crompton and Sanderson, 1990). From 1971-92 the number of jobs in manufacturing fell by nearly half, such that by 1992 only one-fifth of employees worked in manufacturing and three-quarters in services (Central Statistical Office, 1993). There was an overall decline in the number of male employees and rise in female, and an increase in the proportion of gender-mixed occupations, with 28% mixed occupations (defined as 25-55% female). Whilst 70% women work in female occupations, there are 63% men in male occupations, with more men working in female occupations than women in male (14%; 9%) (1991 Census, in Hakim, 1996).

By the 1990s, women constitute nearly half of those employed (10504 thousand females; 11253 thousand males, in 1992), but over 50% of female employees work part-time (Central Statistical Office, 1993). Most women have discontinuous employment, with many entries and exits from employment, representing a less intensive record of employment in the 1980s than in earlier decades, and challenging the popular and feminist notion of women's 'increased attachment to the labour force across the lifecycle' (Main, 1988 in Hakim, 1996). Several female participants in the study had this intermittent pattern of employment.

The greatest growth in employment recently has been in part-time work and most of the lowest hours 'unprotected' jobs have been filled by women: female part-timers outnumber male part-timers by 4:1 and represent approximately a quarter of all employees in over 5 million jobs. Although the number of part-time male employees has risen, especially from the late 1980s onward, only 9% of men worked part-time in 1994 (Dickens, 1995; Labour Force Survey, 1994 in Central Statistical Office, 1998). Nonetheless, the number of male part-time workers has doubled from 1984-1997.

The occupations where women work have changed little in recent years, with 81% of employed women in service sector occupations by the 1990s (Adkins, 1995; McDowell, 1991). However more women work in professional, associated professional and technical-managerial and administrative jobs, with 33% in 1997 compared to 29% in 1991. With the continuing shift away from craft-related manufacturing occupations, 20% of male employees work in those jobs in 1997 compared to 24% in 1991. Alongside these changes there has been a small increase in the numbers of men in service occupations (such as physiotherapy and radiography) (Central Statistical Office, 1998)

The gap between average female and average male earnings has stayed fairly constant from the 1970s to the 1990s, with a median of £230 female and £300 male weekly earnings in 1994. Reflecting the higher proportion of women in lower paid occupations and part time jobs, a larger proportion are at the lower end of the income range, with one-third earning less than £190 compared to 13% of men. In terms of higher incomes, nearly 75% of men earn over £230 compared to 50% of women (Central Statistical Office, 1995). In 1995, salaries for physiotherapy

and radiography graduates were very close to average female earnings at £12386 per annum, with most of those employed in the NHS earning below average male earnings but a small number above reaching £25750-28119 at the top managerial and teaching grades (Society of Radiographers, 1995). However in terms of earnings and grade varying by gender, in radiography, 35% of the highest positions are filled by women compared to 83% of staff overall and 85% in the bottom two grades (Department of Health, 1994).

Whilst employment trends show a 'slight shift in the gender order of post-fordism' (McDowell, 1991), most changes are quite limited. Adkins (1995) concludes the continued concentration of women in certain occupations and part-time, low paid jobs means it is still important for employment research to focus on the significance of gender.

Changing approaches and theories of employment

So whilst there is substantial evidence of continuing gender divisions of labour, many theories are proposed to explain employment patterns and ways they could or should change. Whereas some traditional and Marxist studies are gender-blind, others rely on biological and functionalist perspectives of gender difference and roles. Some writers consider economic aspects of gender divided work and how women's oppression in the home and workplace interrelate; others examine how government/management policies expand or restrict opportunities. Feminists disagree as to the relationship between domestic and paid work, with some emphasising how the domestic role restricts (women's) employment opportunities and others seeing women's labour market position as responsible for women's confinement and subordination in the home. Indeed the utility of 'separate spheres' for understanding work has itself been questioned (Glucksman, 1995).

Through the 1970s and 80s, feminists increasingly recognised that women's employment was inadequately and often inaccurately studied within structural-functionalist and Marxist labour process approaches (e.g. Barron and Norris, 1976; Braverman, 1974): they used masculine conceptions of work/workers and focussed on manufacturing industries, where few women work. Women's employment was generally viewed in relation to a male-defined norm, with women's position and situations evaluated in terms of deficiencies and deviations.

Feminists, cultural/neo-marxists and socialists moved away from traditional macro-approaches and structural theories of capitalism as well as from studies of male employment and occupations; increasingly, small-scale ethnographic studies examined employment experiences (e.g. Cavendish, 1982; Pollert, 1981; Westwood, 1984). Many still focussed on manufacturing and manual occupations but women and white collar and professional occupations were increasingly studied (e.g. Gamarnikow, 1978; Marshall, 1984; McNally, 1979; Partington, 1976). The growing trend for qualitative research has continued through the 1990s, with particular employment contexts examined to shed light on the general nature of gendered work relations (e.g. Adkins, 1995; Davies, 1992; Devine, 1994; Gaskell, 1992; James, 1991; Siltanen, 1994).

Hartmann (1979; 1981) sees 'autonomous patriarchal relations', as well as relations and processes of capitalism, influence the form and nature of the labour market, producing gender inequalities within it. She asserts the labour market is the major social site where the material base of patriarchy is secured, through men's control of women's labour. 'Patriarchal agents'

'outside' the domestic sphere exclude 'women from access to economically productive resources' such as skills and training, and from jobs paying 'living wages'. Hartmann's (1981) work marks a break with those highlighting gender divisions of labour as outcomes of capitalism alone and with radical feminist approaches stressing the domestic sphere and reproductive role as the basis of women's position (e.g. Daly, 1979; Firestone, 1979).

Walby (1990) has defined patriarchy as 'a form of social organisation in which men dominate, oppress and exploit women', and theorises patriarchy in terms of six overlapping and changing structures, namely paid work, the household, the State, violence, sexuality and culture. She sees that, in the West in the 20th century, there has been a move from 'private patriarchy' - where men regulated and controlled women's lives in the home - to 'public patriarchy' where the State and labour market shape women's lives (in Macionis and Plummer, 1997). Walby concludes the control of women's access to wages is the key explicant of women's oppression, seeing 'patriarchal relations in paid work keep women as unpaid labourers in the household' (1986, p55). In this approach it is the drawing of distinctions between the two sexes in capitalism that confine women into a subordinate domestic role, rather than women's subordinate role in the household determining their labour market position. Walby (1986) and Hartmann (1981) see other gender inequalities as secondary to the control and exploitation of women's labour.

Cockburn (1983; 1985; 1991) also highlights active strategies taken by male-dominated trades unions, professional associations and universities to block women's progress in employment (also Allen and Leonard, 1976; Walby, 1986, 1990; Witz, 1990).

Compared to early marxist-feminism, dual system approaches highlight the significance of men's actions for gender divisions (Curthoys, 1988). But Adkins (1995) highlights the tendency to conflate material with economic aspects, and by emphasising access to wages, other important issues such as sexuality are widely neglected.

Some critical theorists' analyses of gender divisions of labour focus on the causes and consequences of changes in patterns of segregation; others consider how the extent in different jobs should be interpreted. Some look at different jobs and contexts to compare women's position and the organisation of employment and social reproduction (e.g. Connell, 1987; Crompton and Sanderson, 1990; Crompton, 1996; Dex et al., 1993). Others focus on specific industries, occupations, countries, and time periods (Adkins, 1995; Crompton and Le Feuvre, 1992; Shepherd, 1996). Horizontal segregation is seen as a window on hierarchical gender relations. Hakim (1993b) sees the most interesting areas of study are the increasingly gender mixed occupations where traditional patterns are breaking down.

Acker (1989) contends the labour market is fundamentally gendered and gendered labour market practices are deeply embedded. Within occupational hierarchies, patriarchal relations affect who takes what jobs and the construction/value of the job itself. Acker (1994) considers the division of labour contributes to the reproduction and reinforcement of gendered power relations and sex-differentiated roles and responsibilities. Together the vertical and horizontal divisions of labour reflect and reinforce essentialist notions of a subordinate, nurturing femininity such that for males

to do a job involving stereotypically female tasks, or be in a subordinate position to women is deemed sexually deviant.

Rather than identifying the influence of patriarchal or male dominated social relations, traditional functionalist analyses suggest women choose low level, part-time jobs to manage employment whilst primarily fulfilling their primary role. They do not acknowledge the different opportunities for high status and pay associated with men and women's employment and careers (Crompton, 1991).

In contrast to those feminists who highlight the labour market as the main source of women's disadvantaged position, many others see women's domestic role is responsible for it (Gamarnikow, 1978; Pollert, 1981). Many authors highlight the impact of women being expected/expecting to do most (unpaid) domestic work for 'justifying' pay inequalities and male employees claims for 'breadwinner' wages. The dominant ideology of the female domestic role ensures female dependency on a male partner's income and male employment therefore needs to be secure and well enough paid to provide for 'the family'. Consequently it is foolish for men to forgo higher wages for the domestic role, and women to provide the main family income, and individual decisions to go against dominant gender role ideologies are therefore not real options for most people. Indeed, Siltanen (1994) observes that many women earn 'component wages' insufficient to support a single adult household at a minimum standard of living. Gender role ideologies, segregated and unequal employment opportunities are therefore linked and, importantly, reinforced by significant material consequences.

Women with 'dual roles' have problems with employment: whilst responsible for the household and care of others, 'women are not free wage earners', so cannot compete in the labour market on equal terms with men (Arber and Ginn, 1995; Cockburn, 1991; Glover and Arber, 1995; Glendinning, 1992; Mies, 1986). Pateman (1988) neatly sums up the situation: 'women cannot become 'workers' in the same sense as men...the employment contract presupposes the marriage contract...the construction of the 'worker' presupposes that he is a man who has a woman...to take care of his needs' (1988, p131). This type of explanation will be evident in the study.

Cockburn (1991) proposes it is the specific construction of women as both subordinate and as domestically defined workers that explains their particular place and exploitation in the labour market. Women as a sex are defined firstly as housewives and mothers, and secondly as waged workers, regardless of their particular job, employment circumstances or class (Delphy and Leonard, 1992). Controversially, Hakim (1996) adds that many women commonly define themselves in this way.

Siltanen (1994) discusses increasing ambivalence amongst feminists about the male breadwinner/female home-carer division: increasingly the weakness of empirical evidence and tendency for over-generalised and static interpretations has been highlighted (e.g. Hakim, 1996; Glucksmann, 1995). There are differences between women, by class, age and ethnicity with educated, middle class women in 'good jobs' and men who do domestic/family work. Glucksmann asserts the notion of separate spheres is both unhelpful and artificial and

emphasises interactions and connectedness, with work tasks and relationships often indistinguishable from 'non-work activities'. She illustrates her argument with the example of 'caring' in paid employment (p 63).

Nonetheless, regardless of the direction and precise nature of the relationship between home and labour market, the ideological notion of gender different roles remains influential for gender divisions of labour, with participation in both family and paid employment producing 'feminine dilemmas'. If women work in the home they often feel they are 'letting the side down', not taking advantage of employment opportunities won for them, yet if in paid work often feel they are failing in their domestic/maternal 'feminine' role. Many women are exhausted by their efforts to combine and excel at both: being pulled both ways in 'dual roles' limits women reaching their full potential and leaves many feeling frustrated and with a sense of contradictory consciousness (Pollert, 1981).

Gendered jobs: tasks and workers

Although Siltanen (1994) warns against the dangers of reifying associations, Buswell (1991) suggests most occupations traditionally employing mainly one sex are associated with stereotypical masculine or feminine traits, and become increasingly ideologically and materially inappropriate for the opposite sex. Jobs and labour market arrangements are therefore resistant to change: equal opportunities policies in education and employment and shifts in attitudes to gender roles and responsibilities do not produce rapid changes. Indeed Buswell and Jenkins (1994) and Walby (1990) suggest equal opportunities policies reliant on qualifications or time-served often exacerbate rather than lessen problems and represent indirect sex discrimination. They aid 'public patriarchy' by legitimising masculinist criteria of merit and ability requiring total commitment to the organisation. The emphasis fails to take account of women's other 'outside careers' such that they are effectively subordinated within the workplace.

Acker (1990) sees jobs are 'gendered' in terms of both the tasks involved and the people that do them. However, this gendering involves 'ideal types' or norms of masculinity; jobs are not abstract spaces filled by disembodied people. She challenges traditional analyses for their 'organisational logic that presents (jobs and workers) as gender neutral' and argues that the concept of a job assumes a 'real worker who is male, whose life centres on his full time, lifelong job, while his wife takes care of his personal needs and his children' (quoted in Davies, p.50, 1995). Links between paid employment of the labour market and the unpaid work of the domestic sphere assume a 'particular gendered organisation of domestic life and social production'.

Of direct relevance to this study, Daniels (1987) asserts the closer paid work is to the activities of nurturing, comforting, encouraging and facilitating interaction the more likely it is to be seen as a natural role for women as an expression of their character, and a predominantly female occupation. With demographic changes and the rising number of community-based sick and elderly, there has been a growing need for people to look after them. With care-giving and domestic work widely seen as unskilled, women's work, these low paid jobs have mostly been filled by women (Daniels, 1987; Glendinning and Millar, 1992).

Pringle (1989) looks at the gendering of jobs and examines strategies men use in the workplace. She concludes the status of a secretary is not just defined by the skill of the work tasks but by the sex of the worker. Men trivialise and undervalue secretarial skills and knowledge, and the work is sexualised. She concludes sexuality and femininity are key to constructing women's jobs as subordinate.

The interdependence of gender ideology and practice is explicit in situations when individuals take jobs considered sex-atypical, forcing people to evaluate self-concepts, occupational identities and workplace social relations (Vogler, 1994; Williams, 1989a). Although there is variation between societies and across time, certain job choices are felt inappropriate for one sex, with stereotypical descriptions of work tasks and workers used to justify the status quo. As occupations confer public social identities as well as material rewards, most people find it more comfortable to choose occupations/roles congruent with sexual identities (Cohn, 1985; Hakim, 1996; Matthaei, 1982; Williams, 1989a; Witherspoon, 1988).

Game and Pringle (1983) see masculinity and femininity are produced in relation to each other through work, with changes in the labour process obscured by the continuing division of labour. They highlight the ways work is gender-differentiated via several axes - as skilled/unskilled; heavy/light; dangerous/safe; dirty/clean; varied/repetitive; interesting/boring; mobile/immobile - but that machinery/technology can lead to either masculinisation or feminisation in different situations and industries. Enduring gendered images of tasks/occupations, such as those of engineering as dirty/heavy/tough - as masculine - lead people to recognise them as unsuitable or difficult for women (Evetts, 1994). Conversely, Oakley (1986) refers to the persistent caring image and qualities of a 'good nurse' replicating those for a 'good woman', making nursing work inappropriate or difficult for men. Importantly, these views are shared by both sexes (Newton, 1987).

Some authors argue that segregated employment is reinforced by media stereotypes showing the sexes in different types and levels of jobs, with women largely shown in secretarial, clerical and subordinate health professional roles usually assisting or caring for others, reliant on natural abilities (Bridge, 1990; Glover, 1984; Hornig Priest, 1996). The impact of this imagery will be shown as widely recognised in the study.

But Siltanen (1994) warns that analyses of occupational differences by sex can become as distorted as those of sex differences: attempts to categorise tasks by gender and characterise sex-typed jobs are impossible and ultimately pointless. Simple polar opposites and macro statistics do not address the complexities and nature of work and work relations adequately (also Adkins, 1995). Highlighting how jobs are often gender skewed rather than mutually exclusive - physiotherapy and radiography, for example - Hakim (1996) and Siltanen (1994) also stress increasing heterogeneity in employment. With some jobs predominantly female in some countries, but mixed or predominantly male elsewhere or at another time shows how 'gendered jobs' are socially constructed.

Siltanen (1994) suggests the popularity of arguments about the 'gender construction' of jobs is a retreat from the limited utility of those focussing on women's 'dual roles'. These highlight

family/domestic roles and circumstances as explanations for employment divisions, but there are too many exceptions for these explanations to fit (also Hakim, 1996). Siltanen asserts *perceptions of the gender appropriateness of tasks* are less significant influences on occupational segregation than issues of *hours and pay*, citing Bielby and Baron (1984) who recognise gender as a very inefficient screen for attributes required for jobs' tasks. Siltanen highlights the ability to support a family and the sociability of shift times as most important. Like Hakim (1996), Siltanen stresses the increasing diversity and complexity of women's employment experiences, relating this to many variables. They highlight economic inequalities and how different employment opportunities and experiences and domestic responsibilities vary by class, race, age and life-stage (etc). Siltanen argues for detailed research that considers particular examples of occupational segregation. Women and men often work in segregated employment environments and aggregate patterns from large-scale surveys tend to underestimate the degree to which women and men work separately and for different rewards/pay, even within the same occupation.

Curthoys (1988) also cautions that notions of gender different abilities, separate spheres and gender different family roles fail to explain vertical segregation within the labour market adequately. Explanations for 'female occupations' often refer to the 'extension of the traditional female domestic role', and suggest traditional ideologies simply pass from pre-industrial to industrial periods. This is said to explain why women now do jobs that were previously based in the private/domestic sphere. Curthoys sees these explanations have limited utility as several modern occupations have little or no equivalence to jobs in earlier times, and many 'women's jobs' have nothing to do with domesticity, childbirth or childcare, with many women in jobs involving retail and clerical skills and new technologies (also Hakim, 1996). Importantly, some jobs have 'changed sex' over time with, or after, the transfer from the private to public sphere (e.g. female, lay, informal health care → male, medical, institutionalised health care) (Ehrenreich and English, 1973; Gamarnikow, 1978; Pinchbeck, 1969).

Contributory factors to gender divisions in employment

Militancy and pay claims, access to training and evaluations of skill

Some writers explain job segregation and pay inequalities in relation to men's (often militant) demands for higher wages than women, and capitalism's exploitation of a sex-divided workforce. The segregated workforce is related to the uneven development of capital and its uneven rates of exploitation. Others link women's low pay to their predominance in low skilled jobs involving limited training, whilst others stress women's lower participation in and 'commitment' to the labour market. Some suggest the evaluation of the skill of an occupation relates to its gender composition (Crompton, 1996; Hakim, 1979), with masculinist constructions of skill and continuous full time careers combining to impede women's access to higher pay (Cockburn, 1985). Awareness of this will be demonstrated in the study.

Phillips and Taylor (1980) suggest men have pushed more than women for recognition of skill, motivated by a desire to 'retain the dominant position within sexual hierarchy'; others highlight how task definitions, struggles for recognition and rewards for status are themselves gendered (Cockburn 1981, 1983, 1985; Phillips and Taylor, 1980;1986; Witz, 1990; Witz and Savage,

1992). Although employers, unions and arbitrators generally define jobs and tasks as skilled/unskilled without acknowledging the gendered dimensions of their evaluation, the worker's sex is often implicitly incorporated, with women the root-source of a job's low status (Cockburn, 1985).

The construction of skill is often based on the length of training and breadth, complexity and control over the tasks involved, with autonomy generally found in non-fragmented occupations (Cockburn, 1983; Phillips and Taylor, 1980). 'Exclusive' skills obtained from apprenticeships and advanced education programmes, along with 'seniority rules', restrict entry to occupations or promotion through career hierarchies: they also bolster claims to high wages (Rubery, 1980; Witz, 1990, 1992).

Significantly, many female occupations involve a range of complex tasks but these are rarely recognised as 'skills', especially if they are seen to rely on 'natural' female abilities such as caring, patience or fine dexterity, or the emotionality associated with the private feminine world. Few involve lengthy apprenticeships or provide top level qualifications (Adkins, 1995; Davies, 1995; Hearn, 1987; Pringle 1989; Smith, 1992).

Also, it is observed how, historically, women lacked the political organisation to get education and accreditation mechanisms established and faced resistance when they tried (e.g. access to universities/medical degrees and self regulation (Witz, 1992). Generally, women have been less involved in trades unions than men, although moves to encourage participation in recent years have demonstrated this was not through disinterest (Cockburn, 1985). Without accredited 'skills', as the recognised routes to career structures with prospects and status, low wages in jobs without prospects are almost inevitable consequences. In the process of being gendered, skills derive differential statuses. This reflects a perspective that will be seen as directly relevant to physiotherapy and radiography.

Gender and technology

Acker (1990) and Cockburn (1985) highlight how technology has been an important element in gender divisions of labour. Connell (1987) suggests men are expected to be technologically competent as a part of hegemonic masculinity. But importantly it is not the presence of technology that explains the sex of the worker, but what is done with it and for whom (Cockburn, 1985). Jobs involving technologies and technological knowledge at professional and practical levels are sharply differentiated by gender. Many women work in technological, scientific and computer-related jobs but most work in low status, mundane and repetitive jobs, or in 'service occupations' that operate technology (Ball and Stock, 1992; Benston, 1983; Greenbaum, 1976; Zimmerman, 1981).

Reporting only 8% females in science, engineering and technological professions, in contrast to over 85% of radiographers (in the 1980s) Cockburn sees how long term appropriation of technology by men relates not to their technological knowledge or technical skills, but to gender aspects of power and power systems. Hacker (1989) also describes how technology and science has been harnessed to (male) domination: it is not that one sex has an innate monopoly of technological skills, although claimed (by male workers) at various times, in various occupations.

In literature of direct relevance to this project, Cockburn and Witz (1992) assert struggles for power often relate to ownership, control and developments in technological production. Within early medical x-ray work, radiologists focussed claims on having 'exclusive rights' to control the access to and interpretation of radiographs, not the operation of the machines (Witz, 1992). With its increasingly subordinate, service role, Witz argues it was patriarchal gender relations rather than technical equipment that influenced the rapid feminisation of (a semi-professional) radiography.

Gender and sexuality in the workplace

Although some authors have explored relationships between sexuality and gender in work relations (e.g. Adkins, 1995; Adkins and Lury, 1992; Pringle, 1989) most have examined sexuality within explicitly sexual forms of paid work such as prostitution and pornography (e.g. Delacoste and Alexander, 1988). Most studies have seen the labour market and sexuality as separate, and even where a dynamic is recognised they are usually presented as overlapping or coexisting rather than interacting and inter-relating. Nonetheless the importance of sexuality for gender divisions of the labour market is increasingly acknowledged, with an interaction between sexual and employment relations highlighted.

Most analyses do not consider how sexuality contributes to the construction of gender divided employment situations with differential status. But Adkins (1995) focuses on the processes through which power relations between men and women in employment are constituted, and clearly demonstrates that sexuality itself has a bearing on the formation of gender divisions in employment. She demonstrates how recruitment, regulation, behaviours and appearance of female and male workers are differentially sexualised and evaluated, involving elements with no direct relation to ability to do job tasks.

Surprisingly, although Adkins highlights the importance of sexuality in segregation she does not discuss how it can restrict men from working in 'female occupations', as suggested by Hugman (1991). Adkins also highlights how women in service industries often experience harassment from clients and co-workers and get little support from management. Unwanted sexual attention is so common it gets seen as an everyday part of the job that women have to accept and becomes almost invisible (Thomas and Kitzinger, 1994; Wise and Stanley, 1987).

Whilst Cockburn (1981) recognises the material dimensions of women's oppression are not purely those of 'greater earning power and property advantage' (p. 43), and observes the extent of sexualised practices in the labour market, she generally ignores how they contribute to men's material advantage and the processes of segregation in employment. Neither does she relate the sexual objectification and harassment of women at work to the power of men, and its role in segregation. However, Cockburn suggests sexuality is 'harnessed by employers and organisations for profit', through uniforms and images of idealised female attractiveness, noting how workplace culture is actively and pervasively heterosexual (1991, p150).

Cockburn (1991) and Pringle (1989) separate coercive from non-coercive heterosexuality, such that sexual harassment represents the negative side of organisational sexuality, used for the appropriation of power. They recognise positive sides to workplace sexuality, for both sexes, for

sociability and pleasure, and see sexualised relations as negotiable and flexible for women, rather than inherently imbalanced. This optimistic perspective will be shown as shared by study participants. Cockburn and Pringle's analyses contrast with radical feminists who see a continuum between coercive and non-coercive heterosexuality, and the difficulties with any clear distinction. Stanko stresses 'the configuration of gender, power and sexuality poses particular problems' within work (1988, p.93), and the practical reality for women in the male-dominated workplace involves few real choices or alternatives. Most have to either take the sexual banter, unwanted attention, wear the sexy uniform or leave (also Adkins, 1995; Kelly, 1988). Various writers suggest women are routinely sexualised as part of the job when working in traditional female occupations, and particularly within the service sectors, where their sexuality becomes a part of the product or service. Importantly, women experience sexual harassment in both male and female dominated occupations, although its forms vary (Adkins, 1995; Offe, 1985; Urry, 1990). Although female harassment may not be a frequent or equivalent problem for male minority employees with their dominant social status (Carothers and Krull, 1984), Curthoys (1988) argues the oppression and struggles of many men must not be overlooked in the process of examining women's negative employment experiences.

Whereas Stanko (1988) sees segregation and sexuality as separate entities, with sexuality reproducing economic divisions rather than producing them, Mackinnon (1979) sees sexual harassment as both productive and reproductive, operating together as a 'potent' combination. Sexual harassment, in all its guises, promotes employment practices that disadvantage women, contributing especially to segregation. Ferguson (1984) and Pringle (1989) conclude cultural beliefs and values relating to sexuality impinge on work experiences and divisions.

Masculinist management

Forbes (1996) suggests masculinity is institutionalised, having become embedded in structures embodied in the workplace. Organisational equality policies are rendered ineffective by the practices of discourses of masculinity at the individual level. Those working at the top maintain inequality through the generalised 'preference' for the 'masculine' and devaluing of the 'feminine'. Milkman (1987) emphasises the importance of management in shaping gender relations, concluding 'male management' is the predominant influence on gender segregation in employment. The ongoing predominance of male managers and employers advantages male employees and reinforces a construction of women as ancillary to men. With male-defined models of management and careers unchallenged by experience, and 'ideal' leadership qualities involving stereotypical masculine attributes, unsurprisingly management is seen as more suited to men and more get appointed.

Egalitarian mission statements may be promoted but if traditional practices continue unchallenged then little significant will change. Many aspects of material reality need attention to implement 'real and enduring change'. But transformations of deeply entrenched attitudes and practices are difficult, as 'where there is power, there is resistance' (Foucault, 1978, p95). As Cockburn (1991) highlights, men do not give up their privileges without a fight.

Where attempts have been introduced to retain women and/or encourage re-entry after maternity breaks, problems associated with traditional career models remain (Thornley, 1995).

Recognising the financial and skill wastage arising from women leaving the labour market, particularly in the caring professions where labour shortages are major concerns, have not resulted in substantial questioning of the view that long-term continuity is pre-requisite for promotion (Davies, 1990; Jones and Causer, 1995). Despite increased recognition of the gendered career, management generally still takes male experiences and definitions of career as normative (Sheppard, 1989). Women are still presented in terms of a 'deficit model' with the tendency for victim-blaming and inattention to structural obstacles and the active resistance of men to women's advancement (Acker, 1990; Cockburn, 1991), exposing the dynamic relationship between power and gender (Hearn et al, 1989; Savage and Witz, 1992).

Women's career choices and employment experiences have resulted in various strategies being developed to deal with them (Crompton and Le Feuvre, 1992; Kanter, 1977). Many women do not accept masculinist career discrimination and have actively developed, negotiated and challenged the limiting and limited normative frames of reference in employment organisations. Career definitions and experiences can and have changed (Evetts, 1994; Hurrelmann, 1988). With women themselves contributing to the gender processes within organisations, specific configurations of particular career models emerge over time in different occupations and organisations. However, despite some changes and flexibility in notions of career, the overall picture for women is of career difficulties and active resistance to change (Cockburn, 1991; Davidson and Cooper, 1992; Hearn et al, 1989).

Female managers and styles of management

Arguably, both sexes, but especially men, dislike having female bosses. Professional women are reported to be just as unenthusiastic about female managers as professional men are (Hakim, 1996). Female managers are unpopular as they go against sex role stereotypes, and feel uncomfortable, as they are unfamiliar. Most women, as well as men, accept the validity of traditional models of gender role and characteristics, and generally accept social hierarchy, and represents a viewpoint that will be identified in the study. Goldberg (1993) suggests women accept male dominance in public social relations because it is congruent with private heterosexual relations. Management positions are consequently seen as problematic for women (Evetts, 1994; Hearn et al, 1989; Savage, 1992).

Although prone to stereotyping, gender different management styles are highlighted by several writers (Broom and Williams, 1996; Davidson and Cooper, 1992; Powell, 1988; Rubin, 1995). It is often claimed that women are 'by nature' non-hierarchical, democratic and inclined to consultative 'listening management', team working and shared decision-making. Although some industries have been keen to promote the softer, feminine style, this 'caring' type of democratic management is not universally popular and sometimes seen to demonstrate women are not capable of leadership.

Lindley (1994) highlights how gender hierarchies of management are emerging, with low power associated with (female) front line, professional management, dealing with employees on a day to

day basis, whereas senior 'real management' develop company policies and manage the business. Changes in management attributes represent 'new contours of sex differentiation'. In recent years, more female managers in the NHS have been appointed than previously, but most work in lower management grades dealing with clinical and personnel matters. For example, in radiography there are 71% females at the long established Superintendent 1 grade and 37% females at the newer District 1 level (Department of Health, 1994), and few women work as executives for NHS Trusts.

Men in female-majority occupations: welcomed or resisted

Acker (1994) suggests male-dominated gender relations explain why some women question or resist male entry into traditionally female employment areas. Men invariably disrupt existing work relations, and a 'male take-over' of administrative control, even when still in a minority, generally results (London, 1992). However, Nuttall (1983) suggests that rather than identifying this as a 'male take-over' more often it is a 'female give-away', with many women assuming subordinate roles in mixed situations, and some welcoming the material and status benefits that tend to accompany men in an occupation (also Cockburn, 1985). Although some women in exclusively female occupations achieve management positions of (relative) power, being 'exclusive' reinforces stereotypes about natural abilities and roles, and perpetuates problems of low pay and status relative to male occupations. Nuttall's interpretation will be shown to correspond to that of several participants in the study. However some 'women centred women' prefer to 'seek their own space' in women-only occupations regardless of the material-financial disadvantages, as this provides an alternative to the everyday male harassment and domination that is part of mixed gender relations at work (Goffee and Scase, 1985; Rich, 1983). A few study participants will be seen to identify this as a (minor) factor in their career decisions.

Employment careers: gender different barriers and opportunities

Within the context of employment, 'careers' relate to increases in responsibility and pay and involve achieving promotions up career ladders through career structures (e.g. Slocum, 1966; Wilensky, 1960). Traditional conceptions of career measure commitment to the labour market by continuity of service, with penalties incurred from career breaks, without reference to how this results in gender discrimination (Acker, 1990).

Women's career difficulties relate to cultural and structural barriers in organisations and women managers have to actively manage the supposed contradictions between their gender and occupational/professional identity. Women face difficulties gaining workplace training to build up skills and a track record to enhance reputation. Many writers refer to women having to shatter 'the glass ceiling' if they are to reach top positions (e.g. Davidson and Cooper, 1992; Evetts, 1994; Kelly, 1991). In contrast, men are on a 'glass escalator' upward, especially in female majority occupations (Hugman, 1991; Mills, 1989). This situation will be recognised widely within the study.

Labour market commitment: career breaks and part-time hours

Women are widely acknowledged to participate less than men in the labour market, as both intermittent and part-time workers. Increasingly common is the 'bimodal employment pattern' that contrasts with previous patterns of female employment, where many women used to leave the labour market in their early or mid 20s - on marriage or for child rearing - and fewer re-joined in their 30s and 40s (Hakim 1979, 1997). Career breaks - anticipated or actual - are often portrayed as organisational problems and signs of low levels of ambition and work orientation (Seccombe and Ball, 1992; Thornley, 1995).

Some argue that whilst ever women have babies and primary responsibility for child-care there will be career disadvantages for all women through *expectations* that they may leave for maternity-related reasons. Such perceptions contribute to discriminatory recruitment practices and unequal access for women to promotion, often excluded from resources that facilitate advancement (Atkinson and Delamont, 1990; Cockburn, 1981, 1985; Savage, 1992). Examples of this will be highlighted in the study.

Women's career commitment is often assumed to be lower than men's, but this is based on over-generalised expectations (Carrier, 1995). Many studies on 'career' focus on women's family and work conflicts with little attention to male family-work conflicts (Acker, 1990). Acker warns that discussions of 'career' often assume all women are married, with family orientation foremost. The association of women with childcare ignores how men are parents and have responsibilities to children. A lack of ambition is invariably discussed in relation to women, as married, as mothers. Ambition is rarely discussed in the same way for men, instead assuming 'man as breadwinner' always wants to work continuously and earn the highest family wage. Hakim (1996) recognises this as an obligation and discriminatory pressure for men, socialised to work full-time in paid employment, with (middle class) men expected to build up a career and increase earnings throughout their adult lives. She adds that the small number of 'new men' who take career breaks to be full time parents and 'house-husbands' experience even more problems and lower status than women. Not only do they have no recognised role and an ambiguous status, but also their careers are penalised more than women's are, as their jobs are not protected by maternity legislation.

But Deem (1980) questions gender differences in commitment. She stresses job opportunities and a desire to go/stay in the labour market need to be considered alongside the 'promise of fulfilment' from domesticity. There is little point staying in paid jobs if they provide poor wages or have bad working conditions: to be a full-time wife and mother can be a positive choice, with many women enjoying more autonomy and responsibility at home than in the workplace.

Part time employment

Whether part-time and 'twilight shift' jobs have developed in response to demand from women, shortages in labour supply, or to keep labour costs down is contentious. Some recognise mutual benefits, but Arber and Ginn (1995) and Dickens (1995) suggest many women's 'double shift' of paid, often part-time, employment and unpaid domestic work is a burden, not a real option or

positive choice. Crompton (1991) sees the trends show women's primary responsibility remains in the home, 'working' for the family, whilst reflecting the changing needs of employers in a struggling economy. Ryan (1996) adds that most new jobs are part-time and often temporary, having replaced full-time and secure jobs, such that the changing gender composition of the labour force reflects the deteriorating quality of jobs and continuing exploitation of modern capitalism. Most part-time jobs are routinely classified as unskilled, with low wages and poor conditions and few provide 'career opportunities' (Dickens, 1995; Glover, 1994; Glover and Arber, 1995). Despite legislative equality of opportunities and the improving education of women, careers remain difficult because of masculinist conceptions of career requiring full-time hours (Acker, 1990). Nonetheless, Crompton (1991) highlights how more women now work in full time, higher qualified jobs than in previous decades, referring to the bimodal employment profile of many middle class professional women.

Hakim (1996) describes part-timers as a very conservative, traditional group who see themselves as housewives first and as 'secondary workers', with men having the primary responsibility for earning income. Hakim contrasts the work orientations of 'secondary earners' and 'career women', and suggests the former generally prefer to work part-time in female-dominated occupations accepting the sexual division of labour. 'Career women' seek personal development and fulfilment, competing on equal terms with men, challenging the sexual division of labour and the sex stereotyping of jobs that constrain occupational choice. However this analysis does not allow for the reality of ambitious career-oriented women within female occupations such as physiotherapy and radiography, who will be evident in this study.

Some commentators see part-time jobs and 'twilight shifts' provide women with the optimum combination of domestic and paid work (Crompton, 1991). Watson and Fothergill (1993) see part-time work can be 'the best of both worlds', stressing how part-timers can be as committed to their jobs as full-timers. But Swiss and Walker (1993) describe part-time work as the 'worst of all worlds', with Dickens (1995) identifying the 'Cinderella status of part-time staff. They highlight problems for professional women who can't progress to higher grades if they are not full time, and identify widespread career frustration and pervasive 'glass ceiling'. The need to be a 'superwoman', combining professional and family life, means only a few 'exceptional' women can reach the top, and most have to juggle and make sacrifices in both areas of life. Consequently Swiss and Walker do not consider the problems for middle class professional women substantially different to those for working class women. The barriers of pregnancy and childcare affect all women as a 'material wall', regardless of education, qualifications, financial situation or area of employment.

But those who recognise the ability for some to 'buy themselves out of the maternal' contest the shared problem for women. Carrier (1995) reviews several studies on family status and career situation for educated, professional women, concluding many can afford to 'reconcile efficiently a demanding career and family life' (from Thoits, 1987). Murrell (1991) argues professional women do not have to make the 'heart-rending choice between a career and a family: under most circumstances they can have both'. Different career issues and experiences for female and male professionals are generally recognised, that also vary with the gender composition of the

occupation. Different issues emerge for women as minorities, such as in the military, to those in female-majority professions (Chandler, Bryant and Bunyard; 1995). Female teachers are seen to 'fit better' into paid work than those employed in clerical jobs (Althausser and Kalleberg, 1981). However, despite a higher re-entry rate amongst teachers than clerical workers, most go into part-time jobs with its negative effect on career development. Consequently, most senior teachers are male even though teaching as a profession is predominantly female (Glover, 1994). This echoes the position of male staff in female-dominated health professions, such as those in this study.

Conclusion

In this section of the literature review, I have referred to a range of reports that highlight that despite some changes, substantial differences between female and male positions and experiences in employment persist. I have examined a diverse selection of academic and management literature to consider how and why vertical and horizontal gender divisions of labour develop and continue, and the influences on and barriers to change.

I have considered various debates regarding the influence of the breadwinner and domestic family role, and the problem of dual roles for women's employment. In addition to exploring literature that considers the impact of gender different family roles and responsibilities on gender patterns and types of paid employment, I have also examined the work of authors who have considered how work tasks and occupations are differentially identified, evaluated and rewarded in terms of gender. The utility of the notion of separate spheres for understanding gender divisions of labour is discussed, with tasks and relationships (such as caring) seen as common to both spheres demonstrating the blurring of boundaries.

I have also explored how the structure and organisation of employment and careers serves to disadvantage women, and shown how male-dominated management promotes the interests of men and reinforces ideologies of leadership qualities as male. The problems of sexual harassment and male resistance to female advancement, and their restrictive impact on women's employment and careers have also been considered. However, restricted choices for men - expected to work full-time and continuously in the labour market in 'masculine' jobs - are also acknowledged, such that both sexes can be seen as constrained by prescriptive gender roles and stereotypical characterisations of abilities and interests.

The conclusions of this section lead directly on to the final part of the review, where I consider literature looking at care-work as predominantly women's work, and the development, gender composition and divisions, status and professionalisation of occupations entitled 'caring professions'.

Section 4: Gender and caring professions

In this final section of the literature review, I explore some of the ways caring, care-work and professions have been conceptualised and studied, focussing on gender. I consider discussions regarding explanations for and consequences of caring being predominantly women's work, and examine the development, gender composition, status and professionalisation of health occupations. Referring to management studies of 'professions allied to medicine' (PAMs) and social histories of physiotherapy and radiography, I consider sociological notions of 'semi-professions' and 'professional projects' and the 'professional predicament' of 'caring professions' such as physiotherapy, radiography and nursing. I also examine their positions in relation to medicine in the gender divisions of health care.

Following an extensive literature search on gender, health professions and caring it became clear that little 'critical work' has been written about physiotherapy and radiography as gender-divided professions. With a few notable exceptions (e.g. Hearn, 1982; Hugman, 1984, 1991; Larkin, 1983; Witz, 1992), most of the prolific literature focuses on medicine and nursing (e.g. Scambler, 1991; Turner, 1987; Walby et al, 1994) ignoring the role and contributions of others, or inferring that all health care professions are the same (as nursing).

Traditional approaches: gender blind or gender assumptions

Although much writing on care addresses an association with women and femininity, some accounts are gender blind, with authors failing to acknowledge the sex of (most) carers or problematise the relationship (e.g. Barclay, 1994; Broom and Williams, 1996; Lynch and Perry, 1992; Stock and Seccombe, 1991). Many take-for-granted 'women as carers'; 'carers as women', and 'femininity of caring', with approaches informed by biological determinism, or reliant on an 'oversocialised concept of woman' (Hearn, 1982; Schott and Badura, 1988; Simpson and Simpson, 1969 cited in Hugman 1991; Wrong, 1967). In studies of professional health care, authors generally identify doctors as male and other staff as female, unless referring to problems, exceptional or confusing situations (e.g. Walton and Mclachlan, 1986).

Whilst some policy documents and management reports acknowledge women are the majority of care-providers, they also generally invoke essentialism. Motherhood and maternity leave or complete departure after a few years 'service' are often assumed, with reproduction and gender role conflated (e.g. Buchan and Pike, 1989). Therefore many studies examine recruitment problems, 'severe' staff shortages and problems of 'high wastage'; part-time employment; discontinuous careers, and low promotion rates in caring professions in terms of women's low labour market commitment and dual roles (Seccombe and Ball, 1992; Meager et al., 1991). They rarely consider alternative gender role arrangements, and instead focus on ways to improve 'retention' by encouraging more mature and ethnic minority women to train, and increase 'returns' through child-care facilities; part-time hours; job shares, and flexitime (e.g. Bebbington, 1994; Buchan and Pike, 1989; Meager et al., 1991; Opportunity 2000, 1994; South West Thames RHA, 1988). Policy recommendations carry ideological assumptions of women's primary orientation to the family into management reports.

Part-time employment and job sharing are quite recent and limited developments in physiotherapy and radiography, and NHS professions generally (Seccombe and Ball, 1992; Stock and Seccombe, 1991). Masculinist notions of full time, continuous careers persist with women's progress still limited by management perspectives that see career breaks and part time seniority as problems (Thornley, 1995). Whilst 82% NHS staff are female, only 64% of NHS managers are (Jackson and Barber, 1993). With part-timers often excluded from seniority discriminates against women, as women are the vast majority of them (Equal Opportunities Commission, 1990). Of women who achieve senior management positions in the NHS, 96% 'choose' to work full time (Jackson and Barber, 1993). More generally, women are presumed to welcome part-time work as an 'opportunity to balance domestic and career commitments, unconcerned about pay and status from higher-grade employment (from Ward, 1979 in Buchan and Pike, 1989).

But Jackson and Barber consider it unnecessary to insist on senior staff working full time, as professionals are qualified, autonomous workers and therefore do not need continuous supervision (also Beardshaw and Robinson, 1990; CSP, 1996). They also challenge the traditional view of women's disinterest in 'careers', highlighting that many leave the NHS not their profession, for jobs with better pay and conditions, or to work abroad. Many NHS physiotherapists move to the private sector or combine two part-time posts (Buchan and Pike, 1989).

Common to all the caring professions is the high proportion of short careers, with many quitting within 5 years (Bebbington, 1994; Borikar and Goodban, 1989; Meager et al., 1991; South West Thames RHA, 1988). This contrasts with pharmacy and medicine as health professions employing more men, although the career paths of women in these groups resemble those in therapy and nursing professions (Allen, 1992; Royal Pharmaceutical Society, 1991).

Nonetheless, proposals to encourage male recruits to ease staffing problems are not forthcoming, so strong is the gender association of caring with women.

What is caring?

Reflecting the wide use of the term in public and academic discourse, the 'care literature' reveals many different conceptualisations and definitions, with Hugman (1991) noting how the idea carries 'numerous multidimensional and ambiguous meanings'. Significantly for this study, caring is discussed as activities and tasks, and as emotion, attitude, approach and type of relationship. There is both doing and being caring. It can be work, reflect a personal commitment or obligation, a social or moral position, be labour or love, or the 'labour of love' (Graham, 1983). In being associated with feelings, commitment, morality, altruism and 'the gift', some authors question the compatibility of payment and employment contracts with care (e.g. Fox, 1993, Rushton, 1980). Significantly, caring work and relationships are also seen to involve power and hierarchies of control, especially with regard to institutional and professional care, and these involve gender, race and class dimensions.

Of particular relevance to this study is Davies' useful distinction between care-giving, care work and professional care (1995). Although Davies applauds feminist scholarship on gender issues in 'care-giving' she notes how care-work has been given less attention, representing a more

'intractable topic'. She notes how many feminists retain essentialist assumptions of caring as feminine, failing to unpack the notion of gender different pathways of psychological development and socialisation as they relate to 'cultural codes' of femininity and masculinity, and ignoring how or what is involved in the *construction* of low status, feminised caring contrasting with the high status of masculine work. Their approach also obstructs the potential for change. Referring to the important examination of Weber by Bolough (1990), Davies concludes all caring is devalued by its association with 'the feminine', highlighting how femininity is set against a privileged masculinity involved in a 'public world of agency, of action and greatness', but highlights how this is 'a world devoid of...nurturance and care' (p.32). Femininity is deemed inferior, as it is not part of the 'civilizing process...lacks that discipline and constant struggle...for development of the intellect...It is concerned with the day to day, the practical and the pleasurable' (p.34)

Rutman (1996) highlights how care most often is women's work, regardless of whether it is paid or unpaid. Wharton and Erickson (1995) observe links between women's paid and family emotion work. Daniels (1987) suggests the closer women's paid work is to caring the more likely it is to be seen as a natural expression of women's character and style, and devalued. Low skill is often associated with caring abilities through not requiring formal or advanced education, but some authors argue that caring involves complex interpersonal and technical skills and knowledge (Smith, 1992; Thornley, 1995). The point is that although caring for people is not easy, involving many skills, they are seldom recognised (Adkins, 1995). Cockburn (1988); Smith (1992) and Witz (1992) highlight how men have actively devalued and deskilled caring tasks and occupations in their attempts to demarcate and differentially evaluate skills by gender. Importantly for this study, essentialist ideologies of gender different abilities are seen to damage the status of care work (Smith, 1992; Sullivan, 1994). Nonetheless, caring and support networks are widely recognised as crucial for both mental and physical health and overall well-being (Leininger, 1981; Triant, 1997).

Many writers emphasise connections between public care-work and private care-giving. Not only are most informal carers are women but many are also employed as low paid care-workers (Graham 1983; 1984; 1991; 1993). Rutman (1996) highlights how the social construction of women's roles as care-givers is a central feminist theme, citing Daniels (1987) and Oakley's (1986) view of caring as an example of women's 'invisible' work and Lorber's (1994) observation of the prevalence of societies with gendered expectations and practices relating to nurturing. Finch and Groves (1982) consider how several female occupations involve care activities previously done by women in the home, and others observe how caring tasks are seen and portrayed as women's work around large areas of the developed world (Canals, 1992; Dahl, 1992). Arber and Ginn (1995) consider relationships between work in the public and private spheres, suggesting a gender 'hierarchy of obligations' blurs the boundaries between informal and formal care-giving (also Glucksmann, 1995; Qureshi and Simons, 1990).

Whilst many societies have assigned caring roles to women through stereotypical, essentialist ideologies about feminine abilities, historical studies show the gender-based divisions of labour in western institutionalised health care are quite recent. Several studies have indicated there was minimal involvement of men in healing before the late 17th century (Ehrenreich and English,

1973; Hearn, 1982). This confirms the social rather than biological base of the original and ongoing cleavage, and will be shown in this study as of relevance to the gender composition and work of physiotherapy and radiography, past and present.

Hearn (1982) suggests that non-economic areas of social life where women dominated historically were not under capitalist control yet contributed to social 'reproduction': they became targets for male domination through professions. Professions began to perform tasks formerly performed within the family, with the management of health and illness becoming the concern of the medical profession, which within that era was exclusively male. In work of direct relevance to this study, Hearn observes how the hierarchical, gender-based polarisation of curing and rationality, and caring and emotionality, emerged with the development of subordinate female 'semi-professions' working for and under the control of medicine, the 'established' male profession. The distinction relied heavily on dichotomised ideologies of a complementary femininity and masculinity, with women in the 'semi-professions' still involved primarily with social-emotional tasks, caring for patients and supporting doctors. Hearn describes the development of professions as a patriarchal process.

Over time, and in all care contexts men are in the minority and generally engaged in different types, roles and amounts of care work (Hugman, 1991). Nonetheless, Arber and Gilbert (1989) argue that male carers make a larger contribution than is often recognised. They see men as 'forgotten carers' and challenge the over-generalised and stereotypical view of 'carers as women' although recognising men do less personal and intimate care in both spheres. The tradition for female carers and notions of 'caring as feminine' are reinforced by women *tending* to have better skills at caring than men. But many authors emphasise this is because girls experience different developmental pathways to boys, with lifelong socialisation at home and in education preparing girls for subservient, expressive, caring adult roles (e.g. Chase-Lansdale, Wakschlag and Brooks-Gunn, 1995; Gaskell, 1977; 1992; Lobban, 1978). Girls see their mother and other women as carers and learn that to be a 'good woman' is to be a good mother/carer/wife (and vice versa) such that a caring role confirms feminine identity (Lorber, 1994; Oakley, 1979; Savage, 1987; Swift 1991).

Through experiences of childhood, both sexes learn to recognise the different values and gender associations of different types of care-work done by women and men. Increasingly, in recent years, the association of caring with femininity has been problematised, such that a gender distinction between caring *for* and caring *about* people is recognised by many, mainly feminist writers. Caring for people is associated with femininity and linked to the low status of care-giving tasks, and occupations providing care. Later in the thesis, the study participants' evaluations of different types and ways of caring in physiotherapy and radiography will be identified as gender-based and important elements for explaining the divisions of labour in these professions.

Caring for and caring about

James (1989; 1991; 1992) suggests care-work can best be understood in terms of it incorporating 'care as organisation + physical labour + emotional labour'. Importantly, gender associations become explicit when the different elements are recognised. Ungerson (1983) argues it is

important to address what and who is involved in doing caring tasks and asserts caring 'about' and caring 'for' are more appropriate distinctions of the different types and ways of caring than the type and extent of commitment. She questions the emphasis on 'commitment' recognised by Mayeroff (1972) as the crucial element of professional caring, stressing differences between caring for a person and caring for an idea. Whilst he emphasises the moral, intellectual and emotional character of people who care, Mayeroff's more traditional approach tends to ignore gender and status divisions within care-work. Distinguishing between 'love and labour' also highlights the significance of gender to the different ways and values of caring (Graham, 1983). Graham considers how feeling concern, taking charge and providing help represent very different aspects of caring.

'Commitment' in caring is also considered in relation to emotional relationships and gendered social obligations. Substantial differences in relationships between care providers and recipients in formal and informal care situations are noted, with commitment particularly ambiguous in informal contexts such as the family home. When kin are the providers of long term care of elderly, physically disabled and mentally ill spouses and other relatives, the notion of duty can be tested to its limit (Bayley, 1973; Hicks, 1988; Oliver, 1983). Whilst care-work (and professional care) involve contractual obligations at least these are time-limited and paid. Campbell (1984) suggests the employed care relationship may be less complicated than care-giving as it is based in a more neutral 'skilled companionship' rather than a socio-sexual contract.

Care as physical labour

Caring work that involves physically looking after, helping or doing another person's daily living tasks is often described as 'tending'. In addition to the tasks involved, Hugman (1991) highlights *where* it is done as well as *who* does this type of care: tending is done mainly by women - as mothers, wives, home helps and nurses in the home and in the labour market. Men, in both settings, do 'tending' care-work tasks far less often.

'Tending' is associated with a 'feminine world' that deals with 'the mundane, the day to day', and 'the body', and its devaluation is argued to stem from a contempt for qualities culturally identified as feminine, and to the inferiority of activities associated with the base emotionality of the private 'natural' world (Bologh, 1990; Davies, 1992). Of specific interest to the study is the way tending tends to represent the lowest status and least skilled care work.

Physicality

In contrast to 'tending' care-work, more men work in areas involving physical control, for example in psychiatric health care services (Dingwall et al, 1988). This is commonly related to the potency of male stereotypes regarding strength and authority (e.g. Savage, 1987). It is also recognised that caring for sick people often involves using considerable strength and physicality. Handling and lifting people is strenuous, especially when disability or pain limits independence (Smith, 1992). Also, a lot of the equipment involved in modern health care is large and often awkward to manoeuvre. Yet despite the need for strength, stereotyped as a masculine attribute, most physical care-work tends to be subsumed within tending work and 'activities of daily living' and involves feminised notions of personal-domestic oriented work (Ungerson, 1990).

In contrast to tending, using movement within remedial exercises represents an essentially active way of caring, involving ideas of agency and instrumental effect, as well as linking to notions of fitness and sport. Whilst these various elements are stereotypically associated with men and masculinity and are the areas with more male care-workers, there are still substantially more women than men employed in physical therapy (see figure 3a, p.123). Explanations for this pattern of employment are absent in the literature, but explored in this study.

Emotional labour: care-work as people work; care as social interaction

Referring to the work of Urry (1986; 1990) and Offe (1985), Adkins (1995) contends the social interaction between provider and user is an integral part of the care/service 'product', and two types of service employee emerge in people work: those with minimal contact with service users and those with a lot. Although Adkins questions naturalistic and stereotypical assumptions about women as caring and pro-social, good communicators, she sees notions of gender attributes are intimately bound up with the different types of service work and relationships.

Even though caring is recognised as physically arduous, the Equal Opportunities Commission have recognised that it is the emotional demands of caring which take the heaviest toll. Similarly, Graham (1984; 1993) recognises 'mental strain' as a 'particularly common side-effect of caring', and Schott and Badura (1988) consider how the physical, social and mental effects of care-work combine and accumulate to damage well-being.

Beliefs about women having expressive abilities and an orientation to or concern 'for others' feelings' (Bologh, 1990) are reinforced by the predominance of women working in areas involving emotional care. Of direct relevance to the gender divisions and experiences of students and staff working in physiotherapy and radiography, Hugman (1991) observes how most male health professionals work in areas of less emotional intensity, are intermittently and briefly involved with people, and work with those less physically and emotionally 'dependent'. He writes that this is related to 'the problem for men with emotions' (also Dominelli and McLeod, 1989; Hanmer and Statham, 1988).

Broom and Williams (1996) suggest providing personalised care is generally the *raison d'etre* for doing physiotherapy, but highlight how obligations and expectations of staff to conceal their emotions when caring for others involve personal costs. These costs need tackling at all levels (O'Neill, 1988; Williams, 1989b). Although emotional stress dealing with patients and their families' expectations and needs is an almost inevitable part of the job, it can result in physical and/or mental exhaustion, or 'burn out'. Junior doctors, therapists and nursing staff working directly with patients are 'the blotting paper for a lot of extremely strong emotions' (Firth-Cozens, 1987; Maslach and Jackson, 1982; Schuster et al., 1984; Scully, 1980). In addition to burnout from patient care, Broom and Williams recognise emotional stress increases in struggles for improved remuneration, recognition and status, exaggerated in 'political fights for territory' and resources. Interestingly, they do not consider gender dimensions in their discussion. Chandler et al. (1995) suggest emotional survival often depends on an optimistic denial of (gender) discrimination and individualising of problems.

Ungerson (1987) highlights the personal and emotional costs of care-giving to staff, and the way gender dimensions are often ignored. Smith (1992) identifies how the emotional labour of care, emotional labour costs, and carers as emotional labourers represent key areas for discussions of the gender politics of health care and professional education. Smith sees nurses' experiences of professional socialisation incorporate notions of vocation, altruism and dedication, and considers how nurses learn to cope with the strains of providing emotional support to patients. As emotional labour, this work requires emotion management. Care-workers learn to manage the emotional demands of their work and maintain a 'sense of self' through suppressing their feelings and adopting a 'public self' and professional manner (from Hochschild, 1983). Bolton (1997) stresses how this means care workers have to be able to present a 'variety of faces' to manage the many elements of the job, relating for example, to what the task is and who is being dealt with (from Goffman, 1984). Smith also identifies contradictions between theoretical 'models of care' and realities of practice, with inadequate recognition of the burden of emotional care on nurses (also Bolton, 1997; Oakley, 1986).

Smith (1992) recognises individuals' caring styles change over time, with students going through substantial personal emotion work and developing styles and strategies to cope. To survive, nurses learn 'feeling rules' influenced by the styles of senior staff, but inadequate support and supervision increase the personal and material 'costs of care' and ultimately lead to many quitting their profession.

Smith concludes that although the 'nursing process' approach formally recognises emotional care, it is still largely invisible and remains undervalued (in Taylor and Field, 1993). Yet sensitivity to the physical and emotional needs of others and the gendered Nightingale notion of 'vocation' represent enduring images of nurses and remain the main messages of promotional materials (also Hearn, 1982; Oakley, 1986). The devaluation relates to assumptions that women as the emotionally competent sex naturally know how to care for people: as a natural ability it requires no formal education, involving neither expertise nor skill.

Emotional care and sexuality: the detached professional

With health carers touching 'patients' a lot more than strangers touch in broader society, as well as being involved with emotionally charged situations, professional behaviours and styles are interpreted as coping strategies to compensate for the stresses and contradictory feelings of staff and patients. Significantly for this study, Jourard (1971) sees the detached 'bedside manner' as a strategic reaction to the intimate nature of much health care work, where the private world of 'primitive' emotions has been brought into the rational and 'civilised' public world (Davies, 1995). The detached manner has become a key characteristic of the professional demeanour, as a way of coping with the emotional and physical closeness of health care work, although presented as a way of reducing patients' anxieties. The significance of this for gender different approaches to care-work and experiences of physiotherapy and radiography work will be highlighted in the analysis.

Importantly, intimate or sexual dimensions of the health care interaction can produce anxiety for either party and require staff to manage their own emotions whilst providing emotional support. Linstead (1995), sees 'service, caring and a mild but overt sexuality as parts of the demands of

emotional labour' and links this to the ideas of Hearn and Parkin (1987); Hearn et al. (1989), and Hothschild (1983), that see sexuality involved in typically feminine work such as caring. Adkins (1995) suggests it is the sexual dimensions of emotion work along with the sexualisation of women and the work they (tend to) do, that generally undermine the expertise and status of 'service' professionals.

With nurses' successful 'covering' of emotions, learning to smile as an element of their professionalism, sexual overtones are obscured. The caring professional demeanour is described as 'faking it in good faith' by Hopfl and Linstead (1991) and as 'the honest con' by Watson (1993, in Linstead 1995). But Anthony (1994) suggests this emotion management involves the sexual exploitation of the 'performer' by the organisation, as acceptance and sensitivity to others' feelings get seen as part of the job and the carer's efforts to contain the sexual dimensions of the relationship go ignored and unrewarded.

Touch: physical, emotional and sexual aspects

Literature on touch has direct relevance for the study and both physiotherapy and radiography. Montagu (1978, in Savage, 1987) describes touch as the earliest functional sense in all species and, in gendered terms, as 'the mother of all the senses'. Referring to theories of psychological development, Feltham cites Jourard (1971) who observes cultural and individual differences in the use of touch with girls touched more than boys by their parents and until later ages, and women generally touched more. The amounts of touching also vary by 'type', with Western women using 'expressive' touch more than men (Savage, 1987). Argyle (1978) describes how people learn boundaries for touch through picking up cultural rules set within specific cultural settings.

Savage notes how common idioms in speech - 'to rub someone up the wrong way, to be touchy, I am touched by your concern' - reflect the emotional significance of touch. A connection between emotions and physical contact is highlighted by Barnett (1972a; 1972b) and Goodykoontz (1979), with Feltham (1991) seeing touch as an important part of communication in nursing, helping to form bonds between people.

Watson (1986) and Feltham (1991) observe how touch can infer acceptance and support, as well as be used instrumentally, as is the case in much physiotherapy and radiography practice. They acknowledge variations by culture, age, context and sex but ignore issues of gender and sexuality for the use and acceptability of touch in health care. Massage is promoted simply as 'a formalised systematic form of touch to promote comfort and healing' and 'therapeutic touch' as a 'conscious helping use of hands to restore health' (from Krieger, 1979), with Feltham seeming to presume all carers are female who provide generally acceptable touch, or that professionals are asexual.

Nonetheless, Feltham recognises touch is rare outside of intimate relationships and that inappropriate touch leads to an invasion of 'personal space' and decreased well-being. This is related to a universal 'territoriality' (Hayter, 1981). Feltham concludes health care workers need to be careful and remember how much *individual* patients vary, but in focussing on individual differences fails to flag up gender dimensions as *generally* significant and neglects power dimensions of health care relationships, with patients in generally vulnerable positions.

Unlike Feltham, Savage (1987) highlights the unequal power dynamic, exemplified by health professionals referring to 'patients' rather than 'clients'. She stresses how touch must be used discriminately, and that professionals must recognise their potential for causing emotional distress regardless of benevolent intention or instrumental purpose. Referring to intimate, personal, social and public zones (Hall, 1966) Savage notes how unwelcome intrusions into personal and intimate space is disconcerting. Being subjected to inappropriate, excessive or inadequate amounts of touch whilst vulnerable can damage confidence and make it harder for patients to cope with the whole experience.

Savage emphasises how the social acceptability of giving and receiving touch varies by gender and age. Whereas Savage suggests elderly people tend to be touched by care workers less than young, other writers argue the opposite, seeing it as easier for staff to touch old people because less sexual tensions are involved (Barnett, 1972; Goodykoontz, 1979). Perhaps the different conclusions can be explained if the types of touch and sex of carers are distinguished, as well as the sex and age of recipients. Dolan (1985) suggests people of all ages need touch, regardless of their sex and health status (also Leininger, 1981).

In western cultures, male touch is invariably associated with sex and power rather than care and concern, relating to men being raised to deny or hide their emotions. This explains why touch is more difficult for male carers as physical contact remains widely seen as a male display of sexually-based emotion. However, in addition to the problem of sexual ambiguity for male carers with female patients, Stoltenberg (1993) sees same-sex touch and emotional displays between men as problematic, because of men's fear of other men's judgement - collectively and individually - within the context of hetero-sexist social norms. Concerns about male touch and emotional involvement will be demonstrated widely in the study.

The sexual connotations of touch have particular significance for the physiotherapy profession, originally set up in the 1890s as a reaction to 'sex scandals relating to massage' (Barclay, 1994). Nurses providing massage wanted to distance themselves from brothels and massage parlours and set up the 'Society of Trained Masseuses' to 'make massage a safe, clean, and honourable profession for British women' (p 7).

Care as organisation; care with status

Importantly for this study, variations in involvement in different types of care-work are related to both the sex of the worker and the status of the occupation (Hugman, 1991; Porter, 1992; Ungerson, 1983; 1987, 1990). Overall, those involved in the organisation of care are afforded higher status than those delivering it, which is reflected in greater economic rewards. Detached caring is seen to require intellectual, organisational and leadership skills, commonly associated with masculine characteristics and achieved knowledge, and valued more than natural or socially acquired (female) abilities in 'hands-on' caring (Davis and Brook, 1985; James, 1991, 1992). Jobs involving these 'superior' characteristics are consequently suited to men. Whilst some explanations for the gender composition of care occupations and disproportionate number of men in management identify how men are natural leaders, others stress gender different developmental pathways and socialisation into different roles (e.g. Bologh, 1990; Chodorow 1978).

Hearn (1987) and Phillips and Taylor (1980) see caring professions developed out of and are based in interpersonal and domestic skills. It is the gendered status of these skills that devalues them as 'semi-professional' work. Care-work looking after people's basic physical and emotional needs is distinguished from rational, functionally-specific, science-based professional health work producing an objective effect. Mental labour is afforded more prestige than physical, and giving directions is more prestigious than following them because of patriarchal values that value rationality, dominance and power.

Although Hugman (1991) recognises how the differentiation of interpersonal and instrumental caring is often understood as gender-based, he concurs with Graham (1983) who urges caution with this interpretation. It tends to under-emphasise the implications this dichotomy has for the power of men over women through an unproblematic association of women with the caring expressive role and men with leadership (Hugman, 1984). Both authors stress there is nothing inherent in the connection: echoing the views of Rutman (1996) and Lorber (1994), the associations represent hierarchical social constructs.

Intrinsic and extrinsic job satisfaction

Smith (1992) suggests assumptions about women's psychology and their relationship to family and employment roles often link to ideas about women deriving fulfilment from serving others. Through gendered ideologies of care it is taken for granted that caring is something that all women can and want to do, for love rather than as labour, which facilitates the low payment for care work.

But assuming women do care-work solely for intrinsic rewards, deriving job satisfaction from vocational rather than material sources, is demonstrably wrong: Davis and Brook (1985) and Rutman (1996) see it is simply an excuse for the relatively low salaries of caring professionals. That many women, including those in this study, seem to accept low pay instead reflects low expectations and a response to a reality imposing primary family responsibilities and low pay offers on women (Jackson et al., 1992). With both normative and structural barriers preventing women from working on the same terms as men, and limiting their success in terms of achieving high salaries, prestige and positions of responsibility, women have redefined success by stressing personal satisfaction rather than external rewards (Buscherhof and Seymour, 1990 in Bland, 1994). Whilst this represents a coping strategy that limits feelings of frustration, it becomes a problem for remuneration as it reinforces links made between femininity, vocation and altruism.

Rutman (1996) reports that receiving respect and recognition for the knowledge and skills involved in care work are central to caregivers' feelings of powerfulness, personal fulfilment and job satisfaction. The importance of these 'rewards' will be highlighted in this study. Conversely, powerlessness and dissatisfaction are felt when excluded from decision-making and when input or effectiveness is ignored or undervalued. Significantly however, value can be demonstrated by financial remuneration, with self-esteem raised by making a decent living, which again will be shown within the study.

Low pay reflects not only the low status of caring tasks but relies on understanding women's subordinate position in the workplace in terms of a primary domestic role. Tiffany and Lutjens

(1993) assert that although female occupations are generally paid less than male, and the higher the female percentage the lower the wages, in care-work there is the added problem of inadequate, masculinist evaluation tools, with the unrecognised skill and knowledge of caring exacerbating poor pay awards.

Although challenging, varied and interesting work, and the 'opportunity to work with people', and be 'part of a team' are widely cited as *reasons to join* various health care professions, in support of these ideas about the importance and sources of job satisfaction are studies that report *reasons to leave* involve predominantly extrinsic factors. These include dissatisfaction relating to poor pay and working conditions, poor career opportunities and difficult working arrangements (Bebbington, 1994; Borikar and Goodban, 1989; Chartered Society of Physiotherapy, 1998; Jenkins, 1991) and will be demonstrated in this study.

Gender as an issue for/in professional status: past and present

Although gender has been widely recognised as an important political and 'professional issue' within nursing and social work (e.g. Clay, 1987; Gamarnikow, 1978; Simpson and Simpson, 1969), its significance for physiotherapy and radiography has rarely been addressed. The professional bodies have tended to uncritically accept or ignore gender issues in the 'sponsored' accounts of their development and history (for example Barclay, 1994; Moodie, 1970), and most sociological studies have tended to focus on medicine and nursing (Scambler, 1991; Turner, 1987; Walby, Greenwell, Mackay, and Soothill, 1994). Up to the 1990s there has been little engagement within physiotherapy and radiography with debates about relationships between gender, power and professional status, that consider how some professions are lower status, 'semi-professions' *because* they are female-dominated, caring professions in subordinate positions to the dominant (male) medical profession (Dex, 1985; Etzioni, 1969; Hearn, 1987; Phillips and Taylor, 1980). Instead the importance and value of caring for people and its association with femininity has been highlighted.

Although scientific knowledge, continuing education and professional development is now widely advocated, up to the 1970s this approach meant professions such as physiotherapy and radiography were promoted as ideal employment for educated women as they could utilise pre-existing caring abilities and quickly develop them into employment skills, before they married and left the labour market to fulfil their primary domestic roles and responsibilities (Barclay, 1994; Palarm, 1995; various Physiotherapy journal articles).

In her social history of physiotherapy and 50th year celebration of its Chartered Society, Barclay (1994) mentions that although 'not bastions of feminism' 'women always predominated' in physiotherapy. Despite this she celebrates the disproportionate and 'substantial role' of the 'meagre numbers of men' in advancing the profession. Although massive changes in physiotherapy's professional role, status and relationships with medicine through the century are described, Barclay ignores gender as an aspect of the conflicts between consultants in physical medicine and physiotherapy highlighted by Larkin (1983). Instead, Barclays uses a gender-blind 'process' approach to professionalisation (Wilensky, 1964).

Although radiography was initially a mixed occupation that emphasised the skilled use of scientific equipment, the extent and importance of caring for patients and assisting radiologists was increasingly emphasised by the profession (via the Society of Radiographers) as it became increasingly feminised in the 1920s and 30s (Witz, 1992). Promotional documents highlighted (female) radiographers helping patients in stressful situations, and assisting (male) doctors with the diagnosis and treatment of disease. The hierarchical relationship between radiographer and radiologist is exemplified by its description as 'friendship tinged with deference to the chief' (from Radiography, 1952, Witz, 1992). Similar to physiotherapy, the helping elements of radiography work have significant associations with stereotypical feminine attributes such as caring, as well as with subordinate, support roles, described elsewhere as 'adjunct positions' (Adkins, 1995; Saks, 1990; Tancred-Sheriff, 1989; Young, 1981).

The significance of gender for professional status and the changing gender composition in 'medical' radiography is barely considered by Moodie (1970) in his 'commissioned' account of the first 50 years of the Radiographers' Society. He simply notes the change from a mixed profession to female predominance in the early years of radiography (Moodie, 1970). He does not link the change to the prohibition on reporting or diagnosing from radiographs by lay personnel, as argued for by radiologists (Larkin, 1983). These changes not only de-skilled radiography, but also involved the promotion of the (female) caring nurse-radiographer in a medical assistant's role.

From then male hospital radiographers experienced ambiguous positions in the medical division of labour with their subordination to medicine and senior nurse-radiographers. This involved a 'double dislocation of the patriarchal ordering of occupational roles and authority relations' and was resisted by male radiographers keen to 'resist the tide of feminisation'. They highlighted the key skills in radiography as technical (not nursing/caring), and that the profession relied on their masculine affinity with, expertise, and responsibility for the technical innovations and intelligent knowledge and use of radiography equipment (Witz, 1992). Both Cockburn (1988) and Witz (1992) observe how male radiographers' legitimisation of their presence and claims to superior positions relied on similar discursive strategies claiming equivalence of technical competence and masculinity found in various other work settings, which continue to the present day. These claims will be highlighted later in the study.

Despite the significance of claims to skill, Witz (1992) suggests inter-occupational relations are the primary influence that precipitated the feminisation and subordination of radiography rather than struggles over the relative importance and gender associations of the technical and caring work, with the patriarchal ordering of occupational roles and authority relations reflected in the gendered professional hierarchy. In accord with findings of this study, Witz refers to the way males have long been assumed to hold superior positions, referring to the way male radiographers are 'always thought to be a doctor by a patient' (from Radiography, 1937, in Witz, 1992). Witz (1992) suggests writers such as Larkin (1983) and Moodie (1970) understate the role of patriarchal inter-professional relations in their discussions of the medical division of labour.

What are professions? Who are professionals?

Like caring, 'profession' is a much used term, with many contrasting conceptualisations. Traditional functionalist approaches to professions (e.g. Parsons, 1954) describe their emergence in relation to the increased rationalising tendencies of broader society from the 18th century. While 'trait approaches' identify the distinctive characteristics of professions (e.g. Carr-Saunders and Wilson, 1933; Goode, 1960; Greenwood, 1957), Vollmer and Mills (1966), and Wilensky (1964) examine the processes of professionalisation, inferring that any occupation on reaching the recognised 'end state', can claim the elevated status of 'profession'. In contrast, Carr-Saunders (1933) distinguishes between 'established' and 'semi-professions', with the former based on the theoretical study of a particular area and prescribed norms of behaviour, and semi-professions involving the acquisition of a technical skill. This approach precludes some occupations from ever achieving full professional status (also Freidson, 1970b).

Although varying features of professions are emphasised, the most common ones are skills based on theoretical knowledge; the provision of education and training; testing of members' competence; limited entry; organisation; a code of conduct and altruistic service. Some, especially early 20th century accounts, emphasise the importance of the 'service ethic' in terms of benefiting both the individual client and a general good (e.g. Marshall 1939). Crompton (1987; 1990) highlights how many professions have proclaimed their value in terms of 'institutional altruism'.

Johnson (1972) critiques trait and process approaches for ignoring the power of professional groups, seeing professionalisation as a strategy of occupational control, whereby professions use institutionalised means to control occupational activities. Johnson attempts to demystify professional expertise, stressing the relations between class structure, the state and professions. He distinguishes between professions' structures of power. The 'collegiate structures' of medicine mean power is exercised by members themselves, who collectively define the processes and outcomes of their work. Johnson contrasts the power of the medical profession to 'mediated professions', such as caring professions, where power is exercised (and diluted) through a mediator - for example medicine and the state regulated system - between the occupation and the service users.

Other critical accounts focus on the relationships between science, education and skill, and the rise of professions alongside increased industrialisation, rationalisation and bureaucracy (Davies, 1995; Larson, 1977; 1979). Larson stresses the key dimensions of the professional project are to secure links between education and occupation, and between knowledge and power. Witz (1992) applauds Larson for treating the goal of profession as a concrete, historically specific project, whilst stressing the role of training in universities as the arena where the link between market and knowledge is secured. Freidson (1986) discusses how professions seek to control a market for their expertise, translating 'scarce resources into social and economic rewards'.

Freidson (1970a; 1970b) highlights how the medical profession achieved state recognition enabling it to self regulate and from this social structuring of professional dominance gained control of the medical division of labour (also Hearn, 1982). With the knowledge, skills and work of

other health professions dependent on medical knowledge and bio-medical model of cure, their professionalisation is obstructed by the lack of an exclusive formal-rational knowledge base and area of expertise, and predominance of 'people work' associated with female abilities and emotions. Caring is contrasted with medical knowledge as masculine, intellectual and scientific, representing a classic example and outcome of dominant andro-centric ways of thinking about knowledge (O'Brien, 1989).

Freidson contends the crucial factor of medical dominance is doctors' control of admission and referral of patients (also Larkin, 1978). Medicine's control of other groups limits their claims to autonomy, self-regulation, professional identity and status (also Berlant, 1975; Larkin, 1978, 1983; Turner, 1987).

Closure strategies limit numbers in an occupation, increasing market value and social status, with professions as elite occupations. But in comparison to class, there has been far less attention to the role of gender to professional closure, power and status, with only a few authors explicitly considering gender dimensions of professions (Parkin, 1974 1979). Crompton (1987) stresses how seemingly individualistic exclusion practices incorporate collective elements: credentialist strategies are often overlaid by gender exclusion at a collective level. Crompton suggests closure tactics not only limit numbers and elevate status, but also result in the sex-typing of occupations/tasks as they 'crystallise' as recognisable 'functionally differentiated entity', contributing to a gendered professional hierarchy (also Murgatroyd, 1985).

Davies (1995) stresses 'thinking about gender' exposes how the professional ideal is 'forged with the tools of a gendered culture' with the 'elevation of mastery, control and technical rationality' (p 184). She notes how expertise deriving from a formalised training based on science is a central claim of professionalism, with professional knowledge gained and 'owned' through substantial and enduring effort. In applying scientific, cognitive knowledge via expert, learned skills, the professional 'makes a difference in the world', whilst remaining detached, impartial and objective. Importantly, emotions are kept at a distance, seen to taint the exercise of autonomous, professional judgement and instrumental action, such that 'caring values get lost when brought into the public arena and professionalised' (Davies op cit, p 144, with quote from Waerness, 1992). Davies concludes the values embedded in profession reflect a masculine project with the 'professional profile' an implicitly male one (from Glazer and Slater, 1987).

Witz (1992) also sees the notion of profession as gendered, asserting it is necessary to 'gender the agents' of 'professional projects' and locate them within the structural and historical parameters of patriarchal capitalism. Witz highlights how most discussions of professional strategies neglect female occupations' professionalisation strategies and under-emphasise the active role and participation of women and female professional groups 'jostling for position' in occupational hierarchies.

Rejecting the masculinity of profession, Witz (1992) examines modes of closure to discuss different strategies used in female and male professions to develop and promote themselves and the opposition and successes experienced.

Although Hearn recognises the patriarchal processes in professionalisation, he sees professional control as patriarchal control and retains the androcentric bias of the ideal-typical construct of profession, reliant on essentialist ideologies of gender traits. Hearn thereby precludes women or female occupations from engaging in professional projects.

Semi-professions

The notion of 'semi-profession' is probably the main discussion area linking professions and gender, although perspectives on it vary considerably. Witz critiques it as inadequate and flawed, concerned that women are described as 'a brake on the extent to which occupations can professionalise', and subordinate position of semi-professions related directly to the characteristics of women within them (in Simpson and Simpson, 1969). Women are seen to lack motivation, ambition and intellectual mastery (sic); incapable of exercising authority or organising themselves constructively because they are too emotional and irrational; unable to think intellectually about problems, and more concerned with non-work matters than task-oriented workers. Therefore women/semi-professions are best suited to subordinate positions in relation to men/professions and ideally suited to the handmaiden role.

Witz (1992) is not only critical of the characterisation but also of the notion of semi-profession, challenging its ongoing influence despite the widespread rejection of the functionalist paradigm of professions from which it originates. Ostensibly critical accounts incorporate essentialist, traditional conceptions of women's role and character to explain the high devotion/low power of caring and social service professions (e.g. Rueschemeyer, 1986), yet depend on an androcentric notion of profession. Witz identifies a 'machismo theory of professionalisation' that infers a semi-profession can only attain full professional autonomy and status if more men join (e.g. Hearn, 1982; Parkin, 1979). Conversely, Carpenter (1977) suggests more men enter an occupation if it is seen as professional and involving competences and 'virtuosity': an occupation becomes 'ripe for male capture' (p180).

Caring professions

Although the socio-political significance of gender divisions is widely ignored within traditional literature, a few writers have discussed the predominance of women in caring professions and generally related this to the work tasks. Mocellin (1988) suggests that whilst occupational therapy has explicit connections to the feminised domestic sphere through its focus on 'activities of daily living', even the more technical aspects generally have a feminine element. In physiotherapy, massage and exercise are associated with femininity and sexuality through intimacy and emotion. Also, as much physiotherapy involves helping people reach their full capacities and independence through rehabilitation, this resembles the maternal roles of nurturing, education and support (Barclay, 1994). In radiography, the need for gentleness to deal with 'fragile broken limbs' and the ability to 'care for the unconscious and those in pain' have been associated with femininity (Witz, 1992). These associations will be identified in the study.

Alternatively, Witz (1992), Hearn (1982; 1987) and Hugman (1991) highlight inter-occupational relations rather than tasks for understanding the gender composition of caring professions. They were women's occupations from the outset through male medics involvement in their

development and organisation, managing and controlling the work. Medicine exerted definitional power over the boundaries of the emerging caring professions through access to resources and legitimacy unavailable to women. As such patriarchal relationships restricted the space for the growth of health care professional roles (Witz, 1990; 1992), and the areas women secured were those they could secure *because* they were women - areas of emotionality, reproduction, child rearing, service - modelled on the domestic world and position of women (Hearn, 1982).

Although Hearn (1982) suggests the caring professions provided career and professional opportunities for middle class women, like Witz (1990; 1992) he sees their struggles for full professional status as power struggles between the sexes. They involve 'a history of feminist action within patriarchal structures - divided and ruled by men - with different aspects relevant in different occupations and instances, but overall sharing a gendered history of struggle' (Witz, 1992, p 191).

Health professions and the state

In the UK, legal frameworks restrict the rights of non-medical health professionals to prescribe and diagnose in favour of the rights of doctors to do this. Thus legal statutes ensure the power of one profession over another. This subordination of the caring professions shows how professions are 'embedded in patriarchal social structures' of the state although enshrined in ostensibly neutral legal statutes (Cawson, 1982; Hearn, 1987; Walby, 1986; 1988).

From the outset doctor-led regulatory councils shaped health care towards the medical led, technical and curative oriented, hospital-based system typical of the modern day. Arguably, the patriarchal power of medicine over physiotherapy and radiography has changed little since the start of the Council for Professions Supplementary to Medicine and state registration in the early 1960s. Doctors have controlled the NHS at all levels of administration and fostered their positions of dominance through subordination to medical authority and limiting clinical autonomy of other groups (Taylor and Field, 1993). Medical managers dominated decisions on training, staffing and pay levels and conditions of service for groups such as physiotherapy and radiography.

Nonetheless the establishment of the CPSM was a 'most important step in the whole history of radiography in Britain', as it marked the end - on paper - of the master-servant relationship to medicine (Moodie, 1970, p70). The Registrar to the CPSM stressed 'supplementary does not mean subordinate' (in *British Hospital Journal*, 1968) claiming the state's recognition of the professions' responsibility to run their own affairs meant the beginning of full professional status. However, physiotherapists and radiographers continued to be regulated so they could only assess and treat symptoms, with work obtained from medical referrals containing directive prescriptions.

Davies (1995c) suggests old notions of professions and professionalism should be rejected, as they are based on 'a set of collective illusions' (from Stacey, 1992). Medicine's firm belief in the exclusive character of their superior knowledge and entitlement to legally protected status means they, as a group, put 'profession before public' and fail to match up to the 'service ethic'. These beliefs make them defensive and restrictive about 'terrain' and contribute to arrogance. Davies asserts doctors need to relinquish their authority to govern and recognise the contributions of others, and abandon notions of rights to control other occupations. Concurrently, non-medical

health professions should seize the opportunity to redefine 'profession' in ways that incorporate and value their skills and contribution.

Professionalism

Of direct relevance to the findings of this study, professions are also discussed in relation to ways of working, with codes of ethics and norms of behaviour reflecting an ideology that espouses universalism and exclusivity of expertise (Hearn, 1982). Interestingly, the professional ethic has been described as 'gentlemanly reasonableness' (Duman, 1979), thereby demonstrating an implicit masculinisation of professional behaviour. Professionals are portrayed and promoted as authoritative detached experts, rational and objective, applying a code of ethics that denies the intrusion of irrational (feminine) emotions. As Davies (1995) stresses, the vision of professional behaviour reflects a masculine perspective although presented as neutral, fair and equitable.

Hearn (1982) highlights how caring professions have conformed to the dominant paradigm incorporating the masculinist notion of professional behaviour, highlighting how the development of a more professional base makes the professions more attractive to men and strengthens claims to status. Certainly a strong emphasis on detached gender-blind professionalism has been advocated within physiotherapy and radiography courses, with students experiencing a professional socialisation that shapes and obliges them to conform to professional norms of behaviour (Theodore, 1971). Despite a universalistic professional ideology that problematises and claims to rise above emotion, (which Davies highlights is tainted by associations with a stigmatised femininity), Evers (1981) and Taylor and Field (1993) highlight how despite claims to equality of treatment - as 'good professional practice' - professional carers' attitudes are affected by factors such as gender, age and ethnic background to influence clinical relationships and practice (Jeffery, 1979; Kelly, 1982; Lorber, 1975; Smith, 1992; Stockwell, 1972).

Inter and intra professional relationships

Porter (1992) observes how gender influences relationships between nurses and doctors and relates this to issues of power. But the increased number of female doctors has not substantially reduced problems as power differences between the two occupations continue, and credentialist justifications for domineering behaviours are often provided. However, hierarchical professional relationships have become more complex, which is linked at least in part to the changing gender compositions of different health professions and power is seen as an increasingly significant factor in relationships between male nurse managers and female workers, be they nurses or doctors. As such Porter concludes popular stereotypes of doctors as male-dominant and nurses/therapists as female-subordinate are simplistic and misleading, which will be shown in the study.

Thornley (1995) observes how relationships between doctors and nurses are influenced by both gender and professional identity and socialisation, with effects on teamwork and tensions between occupational boundaries. She suggests professional identity/socialisation is more influential in health care interactions and hierarchies than gender socialisation. Consequently, professionally learned attitudes and behaviour are considered the primary influence on day-to-day

experiences of inter-professional relationships and practices rather than gender. This perspective will also be demonstrated in the study.

Thornley's conclusions contrast with Stacey's (1989) observations of the medical profession. Stacey saw medicine operate and control as a distinctly gendered (and class based) institution, describing the General Medical Council members as polite but patronising towards other occupational groups and to herself as a female lay member.

Mackay (1989) also sees gender 'fundamentally affects the way nurses are seen and see themselves' whereby features of nurses are firmly separated from features of the system within which they operate (Davies, 1995). Although Mackay concludes faults lie in both nurses and the system she sees gender as a powerful explanatory factor for the 'bitchiness', criticisms and complaints of one nurse against the other. Whilst Mackay recognises exhaustion from the type and extent of work provokes such behaviour, Davies critiques Mackay's interpretation of bitchiness as a gender attribute. Rather than emphasising the contextual and structural features of society and employment that consistently denigrate women and (nursing) work, Mackay describes bitchiness as an example of 'gender talk'. Instead Davies sees contextual aspects - both local and societal - affect relationships between staff, tending to disenchant and pitch individuals against each other as they internalise their 'discontents'. Davies' more sympathetic interpretation of 'bitchiness' between women is of particular interest to this study, and will be referred to in the analysis.

Claims to high status: managerial and clinical autonomy

The period when the study participants left school, qualified and have been working in physiotherapy and radiography coincides with the time that has seen the decline in the social position of the medical profession and of 'professionalism as a social force'. Changes are attributed to many influences, internal and external to medicine (Network Editorial, 1999). Contributory factors include the changing nature, role and relationship of professions to the state and bureaucratisation of doctoring, as well as the emerging influence of other health professions and 'new managerialism'.

Managerial opportunities within non-medical health professions are discussed by various authors. Viewing managerialism as a 'pre-cursor to full professionalism', Hearn (1982) considers improved autonomy in non-medical groups provides the basis for the entry of men into the caring professions which also enhances the status of the occupation. Smith (in Taylor and Field, 1993) highlights how more male nurses arrived along with a rise in 'nurse managers' and growing 'professionalisation'. As such gender issues are seen to emerge in any discussions of power, management and professionalism (p220-201).

Hearn suggests the growth of 'new managerialism' in the NHS provides the possibility for senior PAMs/nurses to rise within the hierarchy alongside the decline of medicine's current position of overall control. Hearn observes how medicine and management are locked into difficult battles over authority and control of health care and how these can work to the advantage of other professional groups (also Cousins, 1987; Davies, 1990; Hancock, 1989; Ralph, 1989).

Davies (1995b) suggests the organisation of work and masculinity of organisational life has changed in recent years, with a 'backlash against a celebration of masculinity' within 'new managerialism' (p170). She challenges the gender-blindness of most discussions of 'new managerialism' seeing binary gendered thought as central to understanding bureaucracy and professions, and many of the problems and 'discontents of nursing'.

In accord with this study, Jolley (1989) and Davies (1995a) observe growing opposition to the low status of semi-professional identity and increasing 'drive for professionalism'. Increasingly various health care professions have made 'appeals to 'virtuosity' in their 'pursuit of excellence' and professional status, and claims to a unique body of knowledge and skills represent attempts to increase clinical and organisational autonomy. Such claims to expertise and competence have been based in 'scientific research' and retained traditional notions of profession and professionalism.

At different times and in different ways, PAMs have stressed their exclusive areas of expertise and campaigned for self-regulation and state registration. They have lengthened the training; produced their own educators and assessors of training and practice standards; raised entry requirements; moved to theoretical university-based courses and degree level, and worked to develop and promote scientific, evidence-based practice. As the first (mainly female) graduate health profession Bebbington (1998) notes how speech and language therapy has long emphasised its scientific base and produce a professional journal utilising scientific discourse, seeing the scientific 'public face' as crucial for professional status and credibility.

Health care professions also use various legalistic strategies to demarcate their territory and claim an exclusive sphere of influence. Fournier (1997) identifies the importance of 'claiming knowledge as your own' in the construction of professional boundaries. She interprets the 'extended role', promoted in radiography and nursing, in terms of shifting professional fields and boundaries and relates this to the differential status of tasks and knowledges 'owned' by different professions.

Blakemore and Symons describe 'a rush for qualifications' since the late 1980s (in Taylor and Field, 1993, p202). With the professional bodies pushing for graduate entry, moving out of hospitals and technical colleges into the university sector, and the growth of higher degrees and empirical research demonstrates how formalised knowledge is associated with achieving high professional status (Davies, 1999). Physiotherapy and radiography now have Research Development Groups, Professional Advisors and a Register of Therapy Researchers advocating a 'culture of evidence based practice' to 'develop its knowledge base', and commend a 'practitioner-scientist approach' as appropriate to a clinical profession, leading to the 'explication of its craft knowledge' (Mead, 1996; Robinson, 1996). A 'body of knowledge is integral to the future', as an 'important long term goal', with expertise, academic education and research 'the way forwards' for individual and collective professional development and autonomy (CSP, 1996; Dubbey, 1996). A higher profile and scientific research can 'earn the profession the recognition, respect and rewards it deserves' (Cogan, 1996; Gray, 1998).

Recruitment and retention

Media images are seen to influence perceptions of caring professions and their status and affect recruitment (Barkley and Kohler, 1992; Dahl, 1992). But representations generally involve outdated and stereotypical images of health and illness, health professions and institutions (Bland, 1994; Fox, 1993; Savage, 1987). Nonetheless, the potency of media images has led many employers and training organisations to produce material they think likely to promote their profession and increase recruitment from groups they wish to encourage to join (Buchan and Pike, 1989). These influences will be referred to often in the study.

Buchan and Pike (1989) suggest enhancing pay may improve recruitment into PAMs, but consider enhanced training opportunities and career structure improve recruitment, retention and returns and help morale more effectively in the long run. Flexible approaches to hours and grading are also viewed as helpful, with experiences of pharmacy and nursing cited as evidence (IMS, 1989). Buchan and Pike recommend better publicity to improve professions' image and profile and conclude non-pay initiatives are generally as effective as pay rises, perhaps assuming intrinsic satisfaction are women's priorities and preferences, with low pay and status as lesser concerns.

Whereas 'academic' girls were previously often encouraged towards teaching and caring professions, Bebbington (1994) reports they tend now to be directed towards accountancy, medicine and law, with many young women interested in professions with a high status image. Despite better pay and conditions she concludes the status of nursing is not improving, and critiques the continuing emphasis on intrinsic aspects of the job in recruitment materials (also Firby 1990, citing Williams, Soothill and Barry 1991).

South West Thames RHA (1988) suggests two main reasons for the higher proportion of males recruited in diagnostic than therapeutic radiography: firstly, there are better pay opportunities in diagnostic work - seen as more important to men as 'breadwinners' - and secondly, the caring image - as feminine - is stronger in people-centred therapeutic radiography as compared to the masculine image of predominantly technical work in diagnostic radiography. These explanations will be shown to correspond with those identified in the study.

Although the importance of realism in the images and text of promotional materials is emphasised by various authors, its impact is recognised as far from straightforward (Buchan and Pike 1989). Newton (1987, cited in Evetts 1994) highlights how images of work as dirty, heavy and physically tough and as unsuitable for women are confounded by the fact that many women do such work in health care. Echoing Hearn, Hugman and Witz, they stress the more significant image relates to the role and relationships with patients and doctors rather than the tasks, with social values of gender roles influencing perceptions of jobs' gender and value (status). Consequently, the undervaluing of women's work in health care applies as much to occupations involving technological expertise (such as radiography) as it does to those requiring more 'nurturing' skills as in nursing (Cockburn, 1985, Oakley, 1993; Rees, 1992). It is positioning within the health care social hierarchy that is crucial for the gender composition of the workforce.

Men in caring professions

Despite the persistent female majority, some men do join caring professions. Whilst explanations for the numbers entering are disputed, with Carpenter (1977) stressing it depends largely on the extent to which the tasks overall are seen as women's work, it is widely recognised that most men in health care swiftly move up through the ranks and away from patient care (Hancock, 1989; Hugman, 1991; Petchey et al., 1996; Williams et al., 1991). Hugman notes the disproportionate number of male health care managers replicates many other predominantly female occupations and considers ideological and material constructions legitimate the trend. He suggests horizontal and vertical divisions in caring professions represent 'gendered segmentation rather than a clear bifurcation' and equates the caring occupations to an internal dual labour market (Hugman, 1984). He stresses it is important to ask why there is a relative presence of men in some areas and an absence from others and suggests the differential proportions mainly relate to:

a) reasons for career moves varying by sex; b) social attitudes as to which jobs are suitable for each sex and which they are better at; c) gender different training opportunities and education patterns; d) men still being seen as primary wage earners, and e) gender different attitudes to and involvement in collective identity (for example in trade unions and professional organisation) which influence employment policies and practice.

Mills (1989) argues men's experiences in caring professions 'cannot really be seen as a form of marginality' as they tend to get to the top management positions, even though many start with lower qualifications than their female counterparts (also Marshall et al, 1988). The availability of a promising career is argued to enhance the appeal to men (and offset negative female task associations), providing a relatively easy career and professional occupation to men otherwise unable to succeed so far. Explicitly sexist appeals highlighting the potential for men to become managers have been identified and criticised in nursing recruitment campaigns (Carpenter, 1977, p180 on the Salmon Report in nursing). However, Rider and Brashear (1988) are uncritical of male recruitment drives into occupational therapy, echoing the positive view of male recruitment in physiotherapy as a way to achieve a balance although concerned that equal opportunities policies apply for promotion (Equal Opportunities Working Party, 1996; Harvey and Newman, 1993).

Gender and career moves

Howe (1986) emphasises how caring for the chronic sick and elderly, mentally ill and disabled are the specialist areas afforded lower status, often seen by both sexes as less skilled, attractive and prestigious. Taylor and Field (1993) describe them as the 'cinderella services' struggling both for funds and fair recognition and, significantly for this study, these are the areas with the lowest numbers of male staff. However Taylor and Field link the negative associations of such areas and low status of their staff to the predominant bio-medical model of the medical profession (McKeown, 1979). This model leads to the prioritisation of areas treating acute illness at the expense of care of the chronic sick and the devaluation of care workers. Taylor and Field suggest if effective health care was measured in terms of benefit to well-being rather than treatment of disease then the case for 'cinderella services' would be helped and the status of its work and staff enhanced (p54). They do not consider implications for the gender divisions of labour in these areas. Yet, and as indicated above, and within this study I will argue, these reflect the implicit

gender associations and various experiences and amounts of personal and involved caring involved in different clinical specialities and different career grades. These factors contribute to the varying percentages of men work in the different clinical areas within physiotherapy and radiography (see chapter 4 for details of gender divisions within the two professions).

Davies (1995) sees the devaluation of care as feminine influences both horizontal and vertical segregation by sex: both divisions reveal how traditional notions of leadership qualities, professionalism and caring are gendered as masculine and feminine (and differentially evaluated accordingly). Some writers describe male career moves in terms of them experiencing and avoiding 'cognitive dissonance', in this instance relating to the incompatibility of masculinity and caring (Festinger 1957; Hayes 1993). Others see male career patterns involve the resolution of ambiguous positions relating to the 'dislocation of the patriarchal ordering of occupational roles and authority relations' when they work in subordinate positions in predominantly female caring professions (e.g. Witz, 1992, p190-191). Savage (1987) suggests career moves relate to the preservation of self-concept. Doubts about any aspects of the self as a sexual being can undermine self concept such that working in a female-dominated environment can affect a man's self-concept (and vice versa).

With the potency of gender ideologies of care there can be role identity problems for men and these often link to questions around sexuality: you can't be a nurse/carer if you are a heterosexual man (Game and Pringle, 1983). With care work - physical and emotional - constructed around women's femininity and sexuality, male carers are in an ambiguous situation: the career choice to do/stay in front-line care puts a man in a position of some cost, by risking his public and private masculinity (Kadushin, 1976). In managing this situationally sustains patriarchal perceptions and 'normal' social-sexual relationships, and thereby counters the threat of ambiguity (Parkin, 1989). A commitment to caring does not sit easily with patriarchal masculinity: consequently, both psychological and social pressures may explain why men go into 'authority positions'. These various psycho-social explanations for gender dimensions of career moves will be considered within the study.

Some authors suggest that inferences regarding male carer's homosexuality are reinforced by the effeminate image of care-workers' uniforms. The stigma of appearing effeminate is seen as a factor obstructing male recruitment into caring professions (Hugman, 1991; Savage, 1987, Smith, 1987). Relatedly, Witz et al (1998) see physical appearance as a vivid manifestation of emotional labour within service work, describing gender issues within their discussion of 'aesthetic labour'. Links between a sexualised image of uniforms and status will be referred to in the study.

Savage (1987) highlights how images are not only ideological but also material. Wilson (1999) argues that physiotherapists need to recognise uniforms are not just about hygiene but reflect and confer power and influence, which Szasz (1982) also recognises and refers to as the 'tyranny of uniforms'. With uniforms seen as a label, Wilson notes how various occupations have changed their uniforms to both mirror and promote changes in role and status, concluding plimsoles and crimplene trousers obstruct physiotherapy from attaining high professional standing.

Other materialist explanations for gender distribution within health professions highlight the influence of different levels of pay and opportunities in the different specialities, career grades and employment sectors. Pay is commonly seen as a bigger concern for male than female staff, often linked to traditional gender roles and the persistent male breadwinner role, and although pay levels have generally improved in recent years, PAMs remain *relatively* low paid forms of graduate-level, professional employment. Nonetheless, full-time earnings for all grades are above the average national *female* wage (Society of Radiographers, 1995; Central Statistical Office, 1995).

Hearn et al. (1992) suggests as professional carers in the NHS pursue careers constructed within traditional models requiring continuity and full time 'commitment', there are disproportionate numbers of men in top positions in female dominated occupations. With many women leaving for family reasons, men become the experienced elite by default rather than because of stronger ambition or higher ability (see Marshall, 1988). Importantly the successful male is then unlikely to see the traditional model as flawed as it has served him well and so he tends to continue working with it, often in an influential management role.

Male career moves are not purely the result of socialisation and individual ambition but relate to the common experiences men share from the construction of masculine careers and stereotypes about masculinity and gender role (Hearn, 1987; Williams et al., 1991). Morgan (1987) and Walby (1986) link the patriarchal structuring of masculinity to men's position in caring professions. The institution of family and hierarchical arrangements of the state, professions and employment provide the general conditions for men to exercise power, irrespective of situation or lifestyle. Ideologies of masculine roles (such as the breadwinner role) limit options and pressurise men to act in certain ways and undermine challenges to conventions. This explains the male colonisation and takeover of privileged areas in the caring professions (Donnison, 1977).

Yet despite their 'enhanced careers', more male than female physiotherapists report gender discrimination at all stages of their career, (Equal Opportunities Working Party, 1996). This may reflect their sense of social pressures to conform to a prescribed gender role/career path, with a narrowing of options within their profession. These perceptions will be identified within the study.

The status of caring professions: gender-based contradictions

Whilst Hugman (1991) describes 'the professionalisation of caring (as) the masculinisation of caring' (p187), Davies (1995) highlights how the caring professions have generally attempted to move away from quasi-domestic and personal caring work to focus on higher status scientific, instrumental practice. Caring professions have not attempted to change their image and upgrade professional status by promoting their caring work in terms of masculine attributes. The devaluation of caring relates to it not being seen as skilled *and* as being feminine, so that care-work whether informal care-giving, care work or professional care is low skilled, low status, women's work.

Raven (1995) sees how demands for autonomy and professional status are manifest in nursing's attempt to be seen as scientific. But Raven suggests established professions typically claim 'head, heart *and* hand' within their claims to cognitive, moral-communicative and pragmatic

competence. Previously, nursing prioritised moral competence as the nucleus of nursing models, but this has been superseded by credentialism and a focus on evidence based practice. Raven (1995) and Hayne, Moore and Osborne (1990) argue nursing will lose its claim if it becomes dominated by a 'rationale of outcome' where 'tasks done' are seen as the main defining criteria. They argue the professionalisation of nursing can only progress if it can demonstrate claims based on the combined competence paradigm, whilst also claiming autonomy and exclusivity.

Davies (1992) concludes that caring professions themselves differentiate between virtuosity and skill and caring, with the former associated with masculinity (and privileged), and caring associated with femininity and nature (and devalued). Professionalism still operates according to masculine visions and this is the 'professional predicament' of the caring professions. They are located in a male world that does not value care and in organisations that are imbued with that same masculinity. Davies also describes this as 'the conundrum of care' (p 20).

Other writers and professional leaders interpret care and professional discontents and frustrated claims to full professionalism very differently. Sullivan (1994) urges a 'reappropriation of the caring tradition' for the improved professional status of nursing, suggesting it has 'thrown out the baby with the bathwater' in its rejection and problematisation of caring. The promotion of caring and person-centred approaches is favoured as a more positive way to enhance the status of caring professions. Hayne, Moore and Osborne (1990) argue that without a clear moral basis, practitioners will be seen as 'only technically sophisticated practitioners of skills', only knowing *how* and not *why* they act. They extol the virtues of nursing, its organisation and delivery of work as an *alternative* to the bio-medical approach and system rather than as *inferior*. Sullivan emphasises the moral, social and intellectual value, importance and complexity of care, arguing the extraordinary qualities of strength, perseverance and creativity required in caring for people need exposing so as to become valued. Consequently there is a need to formalise the *acquisition* of caring as skill, highlighting that it is not just learnt through experience and socialisation. Notions of professionalism need to broaden, to recognise 'practice' as well as abstract knowledge and scientific theory.

The alternative approach, appealing for occupations such as nursing, physiotherapy and radiography to be valued as both *scientific* and *caring*, may seem a reasonable and logical strategy for improving professional status and identity, but Davies suggests it fails to recognise that it contains a fundamental flaw and inherent contradiction. Crucially, the claim pivots - and ultimately fails - around masculinist conceptions of value, such that there is an inherent gender-based incompatibility of profession and caring. Simply celebrating and promoting caring avoids the political significance of gender, and depends on society being 'concerned with caring'. Hayne et al and Sullivan's liberal feminist approaches infer that higher status can be achieved simply by caring professions shouting louder about the crucial value of caring.

Interestingly, in the study it will be shown that few participants identify the potential for improving professional status via an enhanced caring, despite most highlighting the value they personally attach to caring, especially at the start of their careers.

Conclusion

In this final section of the literature review, I have considered a broad range of ideas relating to various aspects of caring professions. By examining traditional and feminist academic and professional literature on the different types, ways and values of caring, care-work and professional care and theories of professions and the processes of professionalisation, the central significance of gender for any understanding of the status, gender composition and divisions of labour within physiotherapy and radiography has been demonstrated.

Within the literature reviewed, several authors have considered topics and issues especially close to this study area. Of particular interest are those examining gender and sexual dimensions of hierarchical distinctions between: work caring for and caring about people/ideas; expressive and instrumental touch; subjective emotions and objective rationality; social and scientific knowledge and skills, and their relationships to the work content and organisation, social and economic status, and gender composition of different health professions. One of the most important influences on the study is Davies (1995), who discusses how the 'femininity of caring' is in conflict with the 'masculinity of profession': the problem for the professionalisation of care-work is described in terms of a gender-based 'binary of competence and caring'. The low professional status and 'discontents of nursing' stem from this 'conundrum of care'. Referring to the 'cultural embarrassment of caring', Davies highlights how caring is something devalued as feminine (from Benner and Wrubel, 1989), and that masculinist visions engender bureaucracy and profession in 'organisational life', to dichotomise care and competence. Together these obscure both the reality and potential for successful professionalisation of care work. Whilst based on nursing research, Davies suggests her interpretation applies generally to other health care professions. In this study, in addition to considering the findings in relation to Davies' work, I examine how the theoretical insights of Hearn, Hugman, James, Savage and Ungerson (and others mentioned within this review), apply to physiotherapy and radiography, in terms of the experiences of students and staff in the professions and their gender composition and divisions of labour.

Having considered literature relating to the different elements of the research topic, I now proceed to describe and discuss my approach to the research, the fieldwork methods and analysis, and the extent of gender divisions within modern day physiotherapy and radiography. Together with the literature, this provides the theoretical framework and empirical basis for my analysis of the fieldwork, where I examine experiences of training and working in physiotherapy and radiography and explanations for the asymmetrical gender composition of these caring professions.

Chapter 3: Research Approaches and Project Design

Section 1: Methodology

As indicated in the introduction to the thesis, the main aim of the study is to explore the ideas and experiences of physiotherapists and radiographers regarding the gender composition of their occupations so as to discover understandings of and explanations for it.

In the next two sections I consider issues of ontology and epistemology, particularly regarding naturalistic, feminist and postmodern critiques of traditional and positivist paradigms of knowledge production. In the first section I discuss debates about methodology and relate them to the design of the study and my choice of methods. Following this, I discuss the study in terms of my application of the methods, considering participation and experiences of the fieldwork and process of analysis.

The research design

As an example of 'interpretive interactionist' enquiry (Denzin, 1989a), I have conducted the study within a naturalistic perspective, using analytic induction in (predominantly) qualitative methods, informed by grounded theory methodology (Glaser and Strauss, 1967; Keddy et al., 1996; Strauss, 1987; Strauss and Corbin, 1994; Wuest, 1995). The fieldwork involved semi-structured depth interviews and postal questionnaires, conducted over an 18 month period. My approach is feminist.

To acknowledge the 'researcher as human instrument' (Miles and Huberman, 1984) and reflect my active part in the project, I describe myself in the first person rather than as 'the researcher'.

Studying gender

Gender affects both the research process and its outcomes. As well as being the primary focus of the research, it is a personal characteristic of the participants. Research suggests the way people communicate, behave and respond to each other is significantly influenced by gender (Cornwell, 1984; Measor, 1985; Oakley, 1981; Scott, 1984b; Tannen, 1990), reflecting attitudes, beliefs and experiences (Ajzen, 1988), and that studies openly exploring gender issues are often met with negativity (Whyte, 1986). Consequently, both the participants and myself will have been influenced by each other's sex throughout the fieldwork, perhaps most obviously, in the interview 'research relationship' (Padfield and Proctor, 1996).

Ways that gender influences the research, relate to issues of power, rapport, confidentiality and disclosure in 'research relationships' as well as to the involvement of a 'sensitive topic' such as sexuality (Jourard, 1971; Lee, 1993; May, 1991; Morrison and Burnard, 1997; Renzetti and Lee, 1993).

In addition, the study has been conducted within a 'feminist research' framework. Not only have I analysed through a 'feminist interpretive lens' (Grant, 1993), but also, gender infuses the whole project. As Grant suggests, women's experiences only become a part of feminism once the 'feminist interpretive lens' is applied to them.

As a feminist, female researcher, working with female and male participants, I believe the experiences - of all the participants - and outcomes of the project are different from those that would have resulted from research by a man, or by a non-feminist woman. As Hanson (1992) notes, women need to make a conscious effort to pursue a feminist perspective. Similarly, Grant (1993) stresses 'feminist is not synonymous with women'. I believe I have been sensitive to and followed lines of enquiry different from those which men, and non-feminist women, may have pursued. The study would probably not have been conducted, or been very different, if I had undertaken it before I developed a 'feminist consciousness'.

My decisions and actions throughout the project have been fundamentally influenced by my sex and gendered background and experiences, my gender awareness and feminist perspective and socialist politics. These constitute the 'background assumptions' and values I carry into the study as my personal 'conceptual baggage' which I cannot offload (May, 1991). However, in making this 'baggage' explicit I aim to minimise hidden effects on the analysis.

Feminist research as 'on' or 'for' women?

It has been widely recognised within feminism for well over a decade that it is insufficient to adopt an additive approach to redress the multi-layered imbalance of traditional research that represents male interests, men's reality and privilege. This approach is encapsulated by the catchphrase 'add women and stir', used widely to describe developments in feminist research in the 1970s. Whilst women becoming a part of the academic scene was crucial, increasing 'visibility' was only ever one stage in the feminist project. Indeed, as Hanson (1992, p 79) astutely comments, 'a danger to be avoided is that of giving women a face but not a voice', in line with Duelli Klein's (1983) observation that simply increasing the number of studies 'on' women could represent a danger rather than an advance for women, particularly if male-defined parameters are left untouched. Such research may exaggerate sex differences and help promote androcentric views. Instead feminist research needs to be 'for' women.

Davies (1985) warns that by focussing solely on girls and women may single them out only to relegate them, and that 'the reciprocal impact of the sexes needs to be remembered' if research is going to benefit women rather than underline their marginal status (pp 90 - 91). Additionally, Leyland (1987) highlights 'the latent effect of seeing feminist research as being exclusively about women's lives is that it allows things male to go uninvestigated almost as though the idea of the male-as-norm were not being questioned' (p 42).

As such feminist research is identified for its political nature as it aims to be 'instrumental in improving women's lives' rather than simply being studies about women. In this respect the study is undertaken with reference to the emancipatory feminist goal of reducing gender inequality through understanding its causes and characteristics, so as to be able to challenge it.

Rich (1983) suggests that as long as 'excluded groups' remain 'without a voice' they remain without power or influence, asserting that what traditionally has been identified as 'neutral and objective' knowledge and 'value-free' research is simply another name for 'male subjectivity'. By not only acknowledging but also promoting its political dimension, feminist research confronts traditional research paradigms, with their claims for science as the production of value free,

objective knowledge (see Harding, 1987). Feminist research can therefore be contrasted to that described as 'factual' (May, 1993).

Notions of objective, value-free research involving detached and impartial analysts have long been the accepted measures for valid and reliable modernist research, with its growth of positivistic, scientific methods and techniques. However, what is seen as valid scientific research is also founded on the recognition and acceptance that scientific methods enable the truth about reality to be accessed legitimately as the result of 'Enlightenment' (Popper, 1982). In terms of ontology, a 'realist paradigm' assumes the objective existence of an apprehendable reality representing a 'true' state of affairs (Guba and Lincoln, 1994). This modernist view is now subject to criticism from postmodernism.

Feminist Research Issues, Critiques and Approaches

Masculinist bias

Feminists highlight erroneous claims to neutrality and objectivity within traditional paradigms that deny the partisan nature of research which involves masculinist bias and subjectivity. May (1993) sees traditional research is presented as neutral but perpetuates unequal power relations as it represents values and interests of dominant groups.

A useful summary of bias in traditional research has been developed by Eichler (1988). She recognises it as a complex, multi-dimensional phenomenon, identifying several forms of male sexism contributing to a range of problems². May (1993) describes them as the 'traps of male-stream research' (p17):

Despite recognising the elements of bias described by Eichler, I echo Morgan's (1981) observation that this concern is not solely the concern of feminist research. It is a concern of good science. However I agree that 'good feminist research' is characterised by both the promotion of sex equality and rigorous scholarship and this is how I have approached the study.

A feminist method?

Increasingly, it has been recognised that there is no firm consensus regarding a 'distinctive feminist methodology' (Hanson, 1992; Harding, 1987). For example, Stanley and Wise (1993) consider there are only 'feminist ways of utilising methods' although 'feminist ontology, epistemology, methodology and method are inter-linked...[They] cannot be independent of the others as they are all mutually informed'. Gelsthorpe (1992) observes, 'feminists have expressed methodological preferences, some of which are more obviously in sympathy with feminist aims, but as within different disciplines, there has been no widely acknowledged consensus on methodology' (p 217).

² 'androcentricity' - research takes the 'male as norm' and female as 'other' or deviant;

'overgeneralisation' - a study deals with one sex but presents findings as if applicable to both;

'gender insensitivity' - when sex is ignored as an important variable;

'double standards' - applying different standards and judgements to similar behaviours and characteristics of women and men;

'sex appropriateness' - assigning human attributes as more appropriate or important to one sex;

'familism' - assumes 'the family' to be uniformly affected when an event may have different consequences for different members; and

'sexual dichotomism' - treating the sexes as discrete social/biological groups instead of two groups with many similar characteristics.

Yet interpretivist qualitative methodologies and the one to one 'depth interview' method have become widely associated with feminist research, seen as the 'key tool' for increasing understanding about people's lives (Oakley, 1998). Graham (1984) considers interviews the principal means by which feminists seek to achieve the active involvement of participants in the construction of data about their lives (p115). Oakley (1981) proposes that interviewers (should) give something of themselves if they want participants to volunteer details about sensitive topics and not simply use them exploitatively.

Frequently, within texts on research methods and methodology (both feminist and traditional), women are assumed better at depth interviews - as researchers and researched - quickly building trust and rapport, being good at talking openly and in detail about their experiences and feelings, through a common experience of gender discrimination (Measor, 1985; Oakley, 1981; Padfield and Proctor, 1996). Interviews with men - especially by women - are contrasted in 'form and quality'. Scott (1984b) observes different power relations between the sexes such that men often attempt to take over and/or test the interviewer. Men also tend to separate out work, home and personal lives in contrast to women who see them as connected. Padfield and Proctor (1996) conclude gender has a greater influence on the interview process than other social, occupational or personal characteristics.

Whilst recognising these issues, I believe there is a danger of essentialist stereotyping, stemming from an understanding of gender as characteristics rather than relations. This is both common and persistent in the academy, even within feminism and produces a problem of research folklore (see Finch, 1984; Oakley, 1981; Scott, 1984b). I contend women as a group are not necessarily better skilled in communication than men as a group and some people prefer to keep thoughts and feelings private *whoever* is asking questions.

Recently, discussions regarding disclosure - and problems for communication in research more generally - have emerged. Some researchers suggest indirect contact via postal questionnaires or the more diffuse relationship in group interviews and focus groups is better for personal disclosures for both sexes (e.g May, 1991; Padfield and Proctor, 1996; Triant, 1998). This ties into Atkinson et al's (1990) observations regarding people's preferences to disclose to 'strangers on a train' than to those with whom they have a relationship. However Morrison and Burnard (1997) recognise disclosure is influenced by the role of the individuals, their personal characteristics, along with the context of the situation and setting (p.164). Cornwell (1984) also emphasises how the setting affects interview exchanges, such that home-based interviews can lead to 'private disclosures', whereas those in public venues tend to involve 'public portrayals'.

Pollert (1996) supports the use of qualitative research for a feminist-informed, materialist sociology of process in 'feminist historical materialism'. But methods need to be chosen in relation to their ability to answer the questions being posed: 'it all depends upon what you are trying to do' (Miller and Dingwall, 1997 p14). If depth and detail and 'why?' questions, involving interpretations as understanding of experience are sought, then quantitative methods are inappropriate. Conversely, if a research question involves identifying the extent of a relationship between phenomenon, then a qualitative study would be pointless.

Recently, Oakley (1998) has written about 'the feminist case against male-stream methods' and favouring of qualitative methods. She concludes methodology is itself gendered and that one of the chief functions of the quantitative-qualitative dichotomy is as an 'ideological representation'. The association is therefore not only constraining but also counter-productive, as it is based on a flawed rationale. I support Oakley's proposal in favour of 'rehabilitating quantitative methods' and integrating a range of methods within the task of 'emancipatory social science'. This recognition of the potential for quantitative methods to fit within feminism endorses my choice of 'mixed methods'.

Harding (1987) notes that arguments about methods and methodology are often complicated by the confused use of terms. Nonetheless, various authors have moved beyond ideas about what feminist knowledge might look like, to see that research may more or less conform to feminist aims and principles (also Ramazanoglu, 1992; Stanley and Wise, 1990). Feminists broadly share views on traditional knowledge at the epistemological level, with both the form and content considered inadequate (see Eichler, 1988; Harding, 1987).

Other key issues for feminist research involve acknowledging 'who can know?' and how knowledge is produced and verified. Whilst I do not accept the traditional approach that takes the 'male as norm', I reject the feminist standpoint perspective that suggests women are more valid knowers of social life than men, developing a bond of empathy and communicate better through common experiences of disadvantage in womanhood. Nonetheless, I acknowledge gender differences in ways of communicating and inter-relating which I have considered within the fieldwork and analyses (Coates, 1993; Fishman, 1990; Spender, 1980; Tannen, 1990).

It is essential to remember both men and women 'do gender' and research needs to consider both sexes and gender relations. Research needs to examine the actions of women and men. hooks (1984) suggests feminism 'does not privilege women over men. It has the power to transform in a meaningful way all our lives....when we cease to focus on the simplistic stance "men are the enemy" we are compelled to examine systems of domination and our role in their maintenance and perpetuation' (pp 25 - 26).

Scott (1984a) emphasises it is crucial to understand 'how men "do" sexism' to establish the sources of social power. The nature of social inequality, its origins and how it is maintained and reproduced needs analysis so it can be challenged (Cockburn, 1991). Whereas gender was defined in traditional and early feminist literature as a list of stereotypical traits and characteristics (eg Oakley, 1981), we can learn more about gender by studying what participants construct as appropriate relations, actions and attitudes for the two sexes and on how a 'sense of gendered subjectivity' structures life (Shepherd, 1996).

In other words, for research to be feminist does not mean men should be excluded. Indeed Segal (1990) asserts feminist interest in men and masculinity is 'part of the search for an exploration of men's power over women', revealing 'the ways material advantages are brought to certain men and expenses to women through maintenance of male dominance of structures of power' (pp 60 - 61). (also Morgan, 1992).

Thus investigations into gender relations as they affect social, political and economic life are needed. Yet although it is increasingly recognised that both sexes 'do' gender, it is still relatively new for gender as relations to be studied. Studying 'the systematic construction of masculinity and femininity that is little, if at all, constrained by biology, is very recent' (Harding (1987)p.6).

Feminist approaches: an overview

As indicated above there are many ways of thinking about knowledge. Harding (1987 pp181-189) identifies six main issues within the feminist critique and concludes three main approaches to feminist research have developed, with substantial tensions in-between and shifts across, relating largely to the 'transitional nature' of contemporary culture and society. The issues she identifies are:

Who can be a knower? (only men?); what tests beliefs as 'legitimate' knowledge? (only tests against men's experiences and observations?); what kinds of things can be known? (can subjective truths, especially those of women, count as knowledge?); about the nature of objectivity (does it require point of viewlessness?); about the relationship between researcher and researched (must s/he be dispassionate, detached, impartial, invisible?); and, what should be the purposes of the pursuit of knowledge? (information for men/women?),

and the feminist approaches are:

'feminist empiricism', which aims to correct the problems of traditional sexist research - as bad science - by attending to issues of method and methodology, especially regarding prejudice and bias, the lack of representation and involvement of women;

'feminist standpoint', which emphasises the unique and special vantage point and perspective of women as superior knowers and makes claims for a more illuminated, complete and less distorted understanding of social experience that sees the 'everyday world as problematic' (see Flax, 1986; Hartsock, 1985; Smith, 1987). This highlights the communicative and emotional abilities of women developed through a common experience of discrimination, which heightens awareness and produces a more valid understanding of social phenomenon. Importantly, the standpoint is not something that anyone can claim, but an achieved 'consciousness' developed through intellectual and political struggle against the ruling gender. It is distinguished from a female 'perspective'.

The feminist postmodernist approach to research is the third category described by Harding: it challenges 'enlightenment assumptions' of modernist science and questions the whole epistemological project. It emphasises differences between women, the importance of context and the problems of 'discovering truth' and 'grand theories' that categorise and generalise (Flax, 1990a; McNay, 1992; Nicholson, 1990). Such theorists are deeply sceptical about any generalisations and universalising claims for reason (Harding, op cit).

But the risk with postmodernism's abandonment of all generalisations and categories is nominalist ontology and individualistic politics. This would entail the self-destruction of feminism through an 'ideal of endless difference' and an acceptance of 'abstract individualism' (Bordo, 1990; Hartsock, 1985). Hartsock warns postmodernism dangerously invites the abandonment of theory. Marxists suggest postmodernism - and poststructuralism - is also a recipe for essentialist and reactionary

thought and political stagnation. Therefore, feminism still needs to acknowledge a collective socio-political identity such as gender, and research, as social, needs to demonstrate and challenge the various ways and means that inequalities are manifest across society.

But Nicholson (1990) and Fraser (1992) argue postmodernism does not demand the elimination of all 'big theory', much less theory per se. Instead it argues for the situation/situating of theory within its particular context. However, this is not simply a matter of identifying locality and difference 'for its own sake' but represents 'locale' in terms of contestation and negotiation (Probyn, 1993). Arguably, Fox's (1999) recommendations for reflexive, collaborative and transgressive action-research challenge critiques of postmodernism that allege conservative, a-social tendencies and paradigmatic acceptance that 'anything goes', as all explanations and understandings of the world are 'constitutive of difference'. Although all understandings are accepted as 'of equal value' through a rejection of one version being privileged over another, this does not mean all observations are morally or politically acceptable.

Whilst supporting many elements of postmodern critiques of knowledge production, I prefer the pragmatism of Melia (1996) and Miller and Dingwall (1997) who emphasise researchers should 'get on with it' and stop being 'epistemologically squeamish'. I also concur with the political concerns highlighted by Bordo (1990), Di Stefano (1996) and Hartsock (1985) regarding the continuing strategic importance of a collective sense of 'womanhood' and research that demonstrates general - albeit varied and contextualised - experiences of gender discrimination so as to provide 'evidence' to expose and challenge 'patriarchal inequalities'. Instead of 'risking relativism' (Hartsock, 1985), I recognise the need to accept the general basis of modernist science but move away from its androcentric perspectives to place gender at its centre. I therefore emphasise the influence of strategic factors in my choice of a naturalistic approach for the study, whilst nonetheless seeing many late and postmodern discussions regarding generalising and context, 'truth finding' and 'reality constructing' as important. I see the debates represent tensions between the postmodern and naturalistic perspectives rather than as completely incompatible, oppositional differences and absolute positions.

Before proceeding to describe the study, I review some bases of modernist science and discuss different perspectives and applications.

Modernist Science and Knowledge Production

Positivist and naturalist approaches

Traditional modernist researchers propose it is only possible and legitimate to make general propositions about the world from scientific methodologies of observation and inductive reasoning about particular phenomenon. Thus positivist science asserts subjectivity and bias produce distortions, as 'mere experience' downgrades data and theories developed from interpretivist methodologies (Brink and Wood, 1998; Woods and Cataranzo, 1988). 'Soft' methods are unscientific attempts to find out about the world.

Epistemologically, the various critiques of positivism see *all* knowledge as socially constructed, including the mechanisms of its creation and the theoretical framework within which it is

developed. As such all research is carried out 'through the medium of the researcher': everyone carries her/his accumulation of attitudes, values and expectations into the research situation, influencing the choice of topic, methodology, methods and analysis, plus the dissemination and application of findings (Burgess, 1984;1985; Purvis, 1985). Within studies of social life, there is an unavoidable relationship between research participants that contributes to the process and its outcomes. This observation provided the *raison d'être* for 'naturalistic' research and, later, is an important element in postmodern thought. As such notions of the 'researcher as human instrument', 'engagement' and 'reflexivity', and the production and value of authentic or 'mediated' knowledge have emerged as key discussion points in the 'competing paradigms for social research' (Guba and Lincoln, 1994) of 'late modernity' and postmodernism (Denzin and Lincoln, 1994; Erlandson et al., 1993; Fox, 1999; Nicholson, 1990; Steier, 1991).

Naturalistic methodologies have become more prevalent and increasingly supported within the academe. The methods acknowledge and incorporate the active, instrumental role of the researcher within the knowledge creating process. By the 1990s, naturalistic studies, mainly using diverse fieldwork methods have become commonplace as compared to earlier decades where project funding - indicating establishment approval - was granted predominantly to positivistic studies using quantitative analyses of survey data and structured interviews (see Burgess, 1985; Bryman, 1988; Triant, 1998). However, there has also been an increasing number of studies using both qualitative and quantitative methods, showing a decline in absolute support for one over the other. This development has particular resonance for this study (see later sections on mixed methods and analytic induction).

Doing social research: language as an expression of reality

Erlandson et al. (1993) discuss the relationship between language and the construction of reality, noting how the 'Whorf hypothesis' (Whorf, 1956) claims 'the language we speak determines what we experience, and in turn is driven by the categories we construct to make sense of the world we experience' (p22). Arguably words enable the construction and communication of experience because they classify it, although Hayakawa (1978) stresses that at the same time they also shape/distort and compress experience by simplifying and stabilising it (Erlandson et al., 1993).

Within a realist ontological paradigm, naturalistic researchers assume human beings must operate within realities they themselves have constructed, whilst the constructed realities of no two human beings are identical. Researchers have to develop and verify shared constructions for the meaningful development and expansion of knowledge. But although we think in words they can never say everything about anything, as our ability to interpret and share experience is limited to the capacity of our constructions (Furth, 1969; Richmond, 1970). Language is a cultural phenomenon that provides links with people in the same culture and with people across cultures.

This makes it particularly difficult to communicate with those who have no shared constructions and makes it important for researchers to attempt to share the constructions of those being investigated. Although shared constructions can never be identical, there must be some compatibility for anything to be communicated/understood (Erlandson et al., 1993, pp23 - 24).

In this study my physiotherapy background provided a lot of shared constructions with the participants in terms of work and training experiences, terminologies and language (etc).

These discussions about language and the construction of shared meanings starkly contrast with ideas of empiricists who argue that 'facts speak for themselves', where scholars are technicians who concentrate on improving technique. However this does not make research less biased and more pure, but means presuppositions about human life remain hidden whilst still influential.

'Facts...do not speak for themselves and theory is everywhere..' (Plummer, 1990, p 122, cited in May, 1993, p 22).

Human as research instrument: reflexivity and engagement

Within naturalistic (and especially feminist) approaches to social research, 'engagement' is highlighted as a key feature of the research process and influence on the knowledge(s) 'produced'. As such, all knowledge is seen as mediated. Rather than problematising subjectivity and researcher involvement, naturalistic approaches acknowledge the inescapable human element, identifying the 'human as research instrument' (Miles and Huberman, 1984). To varying degrees, the contextualised, mediated and provisional nature of knowledge is emphasised, resembling elements of postmodern thought, although still holding onto the notion of there being an explainable reality 'out there'.

Whilst it is now widely accepted that research involves social processes, the extent to which they are made explicit or seen as problems varies. For example, involvement is discussed by Miles and Huberman (1984) in terms of its 'potential for bias and fallibility', and 'a serious flaw to address'. They see the centrality of the researcher at every stage as both a strength and a problem and urge rigorous, open and systematic enquiry to minimise problems. Rigorous and systematic methods aim to control 'the randomness of the social world', so as to minimise prejudicial human element as far as possible (Melia, 1996; Miller and Dingwall, 1997).

Steier (1991) considers researchers being part of what is produced/researched goes further than a simple effect on context, process and relationship. For him, researcher involvement is integral and reflexivity essential. Myerhoff distinguishes between being reflective (in showing ourselves to ourselves), and reflexive (as conscious of ourselves as we see ourselves) with both crucial in and for research (in Turner, 1981).

Lipson (1991) suggests 'the best and richest data will emerge from a situation where the informants trust the researcher', seeing the gaining of trust as essential to 'success' in research. But Dingwall (in Miller and Dingwall, 1997) considers it a great mistake to assume 'greater informality' and non-exploitative, democratic research relationships get researchers nearer to more authentic knowledge than that obtained by remote and structured approaches (e.g. Oakley, 1981). This 'myth of authenticity' and positivist misconception infers it is possible to access a 'real self', if only researchers 'try hard enough to do it right'.

The fact that language is a social medium and the interview a social situation means that the self presented to the interviewer is an artefact of the encounter, and this is the same for all methods. But Dingwall (1992) challenges the postmodern 'romanticist' who takes this further, to assert there is no 'real self' and thus perhaps no 'real world', as 'plasticity'. This involves an existentialist view

that suggests we can make of ourselves and our worlds what we choose, emphasising voluntarism and agency to the exclusion of structure. It leads to endless relativism and frustrates the rationale for research as attempts at meaningful knowledge production that has any practical or general application.

Marxist critics of post-modernism assert that focussing on social relations in terms of individuals' actions and the fluidity of shifting subjectivities/identities makes it impossible to explain the material and structural context and constraints of society and their impact on the political character of social life (OUP, 1985; Heartfield and Lee in Wolton, 1996; Ryan, 1996). The growth of 'identity politics' and social constructionist research is challenged for its fragmentary effects, its nominalism and emphasis on intertextuality that blurs distinctions between reality and representation (Stanley and Morgan, 1993).

Ryan (1996) suggests authors such as Connell (1995) treat society as the outcome of personal life, rather than personal life being the outcome of society. Being preoccupied with personal relations excludes any deeper investigation of the way society is ordered and reproduced. With society seen as the sum of interpersonal relations such gender theorists cannot see the possibility of social change (Ryan, op cit).

In her discussions about data analysis, Melia (in Miller and Dingwall, 1997) urges a distinction between method and methodology if only to save researchers from 'climbing dizzy philosophical heights from which to fall'. She asserts that postmodernism tends to have become something of an excuse for taking a rather loose approach to research methods (Miller and Dingwall, 1997, p27). Similarly, Clavarino et al., (1995) oppose 'methodological anarchy' arising from the rejection of 'prescribed formulas' of modernist perspectives (also Buchanan, 1992).

Melia is concerned that if sceptical, postmodernist critiques are taken to their ultimate conclusion, then research becomes impossible, asking 'if the world is only discourse and narrative without structure or context, how can we make sense of, for instance, interview data?' She concludes researchers communicate the view(s) of informants within general, 'second order' frameworks and emphasises how analysis involves interpretation that goes beyond raw data as it draws on 'cognate work and thinking' to see the case as an instance of a more general process or institution' (in Miller and Dingwall, 1997).

Melia argues the postmodern relativist and contingent position means never getting to 'the bigger questions'. Seeing the challenge for researchers is 'to convert 'sense data'...into an explanation of the situation' (from Becker 1958), she concludes postmodernism tends toward 'methodological paralysis'. She urges 'a pragmatic approach and to do what is plausible' (p35). This seems eminently sensible advice and informs my choice of a naturalistic approach.

With regard to discussions about the 'human as research instrument', reflective and reflexive researchers, I conclude both modernist and postmodern perspectives contribute useful ideas about 'engagement', albeit in different ways. I recognise and accept my role in and on the process, and do not attempt to eliminate or quantify its effects.

Qualitative Research

Qualitative research, which most commonly - but not exclusively - is 'holistic, naturalistic and realist', is based on the premise that knowledge about humans is not possible without describing experience as it is lived and defined by the actors themselves (Polit and Hungler, 1993). Filstead says (in Walker, 1985 p12) to gain insight into complex social phenomena it is necessary to get 'insiders' perspectives and not reduce them to one-dimensional units. This provides the main justification for primarily choosing qualitative methods in this study as I seek depth, richness and 'fuller insight' (May, 1993) that acknowledges the variety and complexity of social experience and understanding.

Qualitative research is widely described and discussed, with writers emphasising theoretical issues and practical aspects of various methods. Many consider the different aims and relative merits of qualitative and quantitative methods, whereas others focus on practical, political, moral or ethical issues associated with specific methods, topics and settings (eg. Bryman, 1988; Kvale, 1996; Marshall and Rossman, 1989; Robson, 1993; Sim, 1989; Smith, 1990).

Atkinson (1995) is concerned that too many texts on qualitative research 'pull together types and categories [of methods and techniques, classifications, perspectives and typologies] that are in different orders of generality' (p.120). Usefully, Denzin (1989a) pulls them together under the heading of 'interpretive interactionism', where the interactionist researcher 'interprets the worlds of problematic lived experience of ordinary people to the reader' (p7). In this way Denzin continues Wright Mills (1959) project of the 'sociological imagination' to allow the examination of 'private troubles of individuals to be connected to public issues and public responses' (in Miller and Dingwall, 1997, p28), thus highlighting the 'social engineering' and political potential of qualitative research. Yet qualitative research still tends to be described as soft, subjective and speculative, and contrasted - often negatively - to quantitative research as hard, objective science.

Qualitative analysis is described simply by Hornig Priest (1996), who suggests 'finding patterns in qualitative data can be like listening to music: similar themes are found in different forms'. Riley (1990) provides a number of 'handy hints' to facilitate the practical management and thorough interpretation of qualitative data, suggesting, for example, using colour coding, note-taking, thematic sorting and summary writing. Silverman (1993) discusses observation, textual and documentary analysis and interviews and considers analyses of interview data more reliable than those of observational data. He claims procedural and analytical techniques and standards provide 'reliability', and (in Miller and Dingwall, 1997) challenges tendencies towards relativism, seeing the need to 'sort fact from fancy' for analyses to be taken seriously.

The interview method

Research interviews provide rich sources of data about experiences, opinions, aspirations and feelings and involves interpreting communication records derived from an interactive encounter described as a 'social dynamic' (May, 1993). Structured, semi-structured and unstructured methods are identified as the three main types of interview. Which is chosen relates to study aims, type of research question and also to the perspective on knowledge production, although the types often overlap or are mixed in their application (May, 1993). In addition interviews can be

individual or group sessions, face to face meetings or telephone conversations; some are one-off encounters whereas others involve a series of rendezvous. These differences affect the relationship between participants and the data produced.

Some writers also distinguish between formal and informal interviews, whereby they may be fully planned in advance or more spontaneous, but Melia (1996) is anxious about the adequacy of informal interviews. Deciding which method is most appropriate relates to understanding the effects of the varying amounts of structure on comparability and standardisation, flexibility and researcher control. Structure is achieved through preplanning questions and using a standardised interview schedule. This planning links to whether the researcher is utilising a positivist and naturalist approach and the control s/he wants from directing the lines of enquiry covered within the encounter. Additionally, the type, order and content of questions - open or closed, factual, descriptive, exploratory, explanatory, probing, personal, focussed, general and/or hypothetical - influences the type of data, as does the context and length of meeting. Importantly, unstructured and group interviews still have a focus, but this is controlled far less by the researcher, influenced by the respondent/s frame of reference and points of view. Nonetheless, these interviews are not chaotic as 'conversation rules' and norms of social interaction still apply.

The interview approach also relates to the comparability of data from one case to the next, although naturalistic researchers emphasise how both the content and context of interviews is always variable. Semi-structured interviews often involve using a preplanned 'thematic guide', with 'probes and invitations to expand on issues raised' (Fielding, 1988 p 212). In this way the interview discussion resembles other more naturally occurring conversations. The mixed format enables some standardisation and comparability (through collecting base data and fixed variables) but also depth and variety - as richness - through flexibility, clarification and elaboration of respondent-led commentary.

Interview techniques are often described rather mechanically and naively, sometimes including impractical and even undesirable recommendations as 'recipes for success' (May, 1993). Concern over the 'tensions between subjectivity and objectivity' and the 'problem of bias and prejudice' lead some authors to recommend researchers adopting a 'conscious partiality' (Mies, 1983) or 'self-conscious awareness' (May, 1993). As such the need for rapport and trust for disclosure, and the practical demands and constraints of objective scientific enquiry remain in opposition (Gearing and Dant, 1990), with Cicourel (1964) suggesting interviews tend to be assessed as either 'successful' social encounters or 'reliable' sources of data.

However, many feminist researchers challenge the problematising of engaged interview relationships. Disengagement is seen as 'a masculine paradigm' (Oakley, 1990). Oakley sees interviews should be a two-way dialogue, as rapport and disclosure are improved through the engagement of the researcher. Finch (1984) emphasises how researchers, especially in home-based interviews, should be 'friendly guests' rather than 'official inquisitors', respectful of participants' time and co-operation, as both an ethical and theoretical consideration (May, 1993). However Malseed (1987) urges caution, suggesting some feminists' characterisation of a textbook 'standardised interview' are exaggerated and built on crude sexual stereotypes.

Data validity

Interview researchers need to establish whether participants have used direct, relevant knowledge or experience, or beliefs and opinions derived from indirect sources, to answer questions and discuss issues. Also, it is important to consider whether an 'interpretive gap' may exist, whereby there may be confusion as to what a question means; similarly, memory loss can preclude informed responses. Crucially, participants will inevitably use selective memory to recall and reflect on past events and may explain their actions through a re-organisation and rationalisation of events: accounts will invariably involve an attribution of meaning and may invoke some degree of nostalgia. Also in order to maintain an intact self concept and positive self identity, participants may exclude certain details or reject some lines of enquiry, perhaps finding topics stressful or too private to share. Thus interview data reflect both a presentation of self and explanations about a topic (Harre, 1988), with the precise use of words and topics indicating the relationship between the person and what is being said. Researchers therefore have to decide how far to probe participants to disclose more, which ultimately involves making choices relating to her/his ethical values. Whilst coercion is generally unacceptable, researchers are commended to approach difficult or sensitive topics indirectly and carefully, appearing non-judgemental and reassuring and by sharing private information of their own in return. Repeated assurances of anonymity and confidentiality are also seen to encourage disclosure (Hoinville et al., 1987; May, 1993).

Hostility, silences and embarrassment can arise in any social encounter, including interviews. With care, these situations can be avoided or at least defused. Hoinville et al., (1987) emphasise the need to be respectful and allow time in which to build rapport and establish trust for 'free flow of information'.

Participants' co-operation is also recognised to be influenced by their understanding of the process (Moser and Kalton, 1983). They need to understand what is expected of them, support the research aims, and feel comfortable with the researcher. Importantly, cooperation needs to be acknowledged explicitly, which helps build motivation and maintain interest. As volunteers, participants also need to feel respected and able to opt out of the study at any time.

Interviews as data; interviews as accounts

Various discussions about interviews relate to theoretical questions about the production of knowledge, the status of data, distortion and accuracy. Thus interviews can be seen as nothing more than constructed 'accounts' with no validity beyond the internal situation, involving Mills (1940)'s notion of 'vocabularies of motive' whereby interpretations of actions, events and relationships are seen as representations, rather than as 'a truth'. But as Gilbert and Mulkey (1984) observe, by going beyond one case, naturalistic researchers identify shared understandings and discourses, through observable regularities and features in different accounts. Kvale (1996) suggests that from the contrasting epistemological and ontological perspectives of modernism and postmodernism, an interviewer can be understood as a 'miner or traveller' but both necessarily involve notions of 'conversation as research'. He describes the

process as 'meaning condensation, categorisation, interpretation and generation of meaning at different levels'.

Melia (in Miller and Dingwall, 1997) considers the status of semi-structured interviews and data, noting how they involve 'seemingly natural conversation'. 'Interview talk' is produced through the interaction, reflecting the theoretical ground symbolic interactionism rests on, namely the assumption of the 'intersubjective construction of social reality'. Thus the interview is seen either as a '*presentation of self*', or as '*a means of gaining insight*' into a world beyond the interviewee's story, as a 'handle' on a more complex set of ideas than those ostensibly spoken about or presented' (p34). For Melia, analysis goes beyond the face value of the text, such that interviews provide an index to the world beyond the story. Consequently she suggests life can be understood by asking questions about it (also Berger and Luckmann, 1966; Blumer, 1969; Garfinkel, 1967; Mead, 1964).

Concurrent data collection and analysis

In recognising the active researcher involves acknowledging interpretation occurs during interviews, as part of the process itself, with researchers contributing to the form of interview conversations. In a semi-structured interview, a researcher may use a standardised interview schedule but also picks up cues and informally directs the meeting as it proceeds, choosing which issues to discuss and amount of detail (May, 1993). Most importantly, both participants constantly negotiate their way through the social interaction, actively involved in 'defining the situation' in an 'interpretation of meaning' (Goffman, 1984).

Some researchers write interpretative notes immediately after interviews, when memories of the sessions, off-record comments and personal feelings are sharpest. These 'debriefing' reflective notes represent 'analysis in the field' (Bogdan and Biklen, 1982; Bryman and Burgess, 1994). Various other informal 'records of thinking', for example those written during the gaps between interviews, demonstrate the ongoing interpretive process.

It is away from the fieldwork site after the completion of data collection that the more formal, observable and distinctive process of analysis proceeds. Although classic grounded theorists suggest step by step analysis and sampling 'until theoretical saturation of each category is reached' (Strauss, 1987) in the real world it is often logistically impossible to fully analyse each interview before returning to the field (Bloor and Venters, 1978).

Notions of good research: ethics and values, 'validity and reliability' and 'trustworthiness' of qualitative research

Concerns about greater bias and problems of subjectivity in qualitative research reflect the potency, tenacity and spread of the fallacies of value-freedom and objectivity in traditional positivist paradigms and quantitative, statistically tested methods. The traditional perspective does not recognise research as socially constructed, regardless of method or methodology, with all decisions dependent on and affected by values and background assumptions (May, 1993). Instead, the supposedly superior standard of quantitative research is asserted via the positivist criteria known as validity and reliability, broadly equating to the truth value and extent of generalisability of findings.

Ethics

Research is also approved and judged with reference to 'ethics', as standards of right and wrong conduct in research practice (Barnes, 1979). Research ethics committees consider some studies for approval prior to them being undertaken (for example, in health care research involving 'patients'). Punch (1994) advises 'before you go, you should stop and reflect on the political and ethical dimensions of what you are about to experience' (in Denzin and Lincoln, 1994), emphasising the importance of assessing the potential for harm. Other considerations include consent, deception, confidentiality and privacy. May (1993) highlights distinguishes 'deontological' and 'consequentialist' approaches to morality in research, with the former involving formal, universal codes or principles, covering issues such as freely given 'informed consent', and the latter concerned with prevention of harm or offence and the protection of privacy (Douglas, 1979; Punch, 1994). But Plummer (1990) stresses researchers do not adopt either one or the other type of approach, but elements of both.

Measures to assure confidentiality need to be explained during recruitment and restated at the start of interviews or on the front of questionnaires, thus helping to develop a trusting relationship. Data should be anonymised and interviews treated as private and confidential. No-one, apart from the researcher, should have access to named data nor details of identification systems. Organisational information about dates and locations of fieldwork and 'informal' notes must also be kept secure.

Punch (1994) emphasises that fear can result in a reluctance or refusal to be 'open': respondents may resist divulging certain types of information, especially if it can be traced back to them in the future. Whilst confidentiality of disclosures can be assured, Oppenheim (1992) recognises that researchers cannot always guarantee to what use their findings are put. Although individual and personalised harm can be prevented by anonymising data, the consequences of research are much harder to control once they reach the public arena.

It is hoped that in this study, with its sample of health professionals, an understanding of the concepts of confidentiality and trust will already exist, as elements of professional standards of behaviour. However, personal feelings regarding their importance may vary considerably and are not presumed on the basis of the participants being 'professionals'.

Whilst the topic of this project does not involve discussions of illegal information, it involves opinions, experiences and attitudes in relation to sex, gender, sexual and occupational identity. It involves discussions relating to personal, moral and social values and as such represents a sensitive research topic (Lee, 1993; Renzetti and Lee, 1993).

Guarantees should result in participants feeling confident enough to open up about their experiences and share points of view. This can involve emphasising how there are no right or wrong answers to questions about feelings, ideas, attitudes and beliefs based on personal experiences (Morrison and Burnard, 1997; Smith, 1981). It is generally recognised as important for researchers to appear non-judgemental and avoid closing down topics of discussion or lines of enquiry through appearing shocked or looking critical. Nonetheless this can pose problems if researchers also wish to promote integrity within research practice, wanting to avoid deception

through presenting an artificial persona. Warwick and Pettigrew (1983) consider research involving 'deception and manipulation ultimately helps produce a society of cynics, liars and manipulators and undermines the trust which is essential to a just social order' (p58).

Researchers need to find a balance, with personal values and ethical standards assessed in light of their possible impact on closing down data sources and effect on achieving study aims.

Issues of power and control are also important. A friendly, non-judgemental approach can help sessions flow; listening rather than interrupting lets participants set the pace and establish the amount of detail they wish to divulge. This echoes feminist ideas on the potential for control, exploitation and empowerment in research and relates particularly to the different status, power and gender of participants.

I see it as inappropriate for ethics to be considered separately from other research issues. I consider ethical considerations central to all concerns about high quality research and not a discrete part of a project that can be ticked off a 'things to do' list. As an active, reflexive researcher doing naturalistic social research, responsibilities and ethics are essential integral parts of the entire process, rather than 'add ons' (Mead, 1968 cited in Steier, 1991), and the values guiding ethical decisions should be acknowledged explicitly, with transparent clarity for public, social accountability (Ravn, 1991). Indeed Kirk and Miller (1986) suggest that validity is built through the continual process of reflexivity, informed by an appreciation of ethical issues.

Trustworthy research

Chenitz and Swanson (1986) note how qualitative researchers commonly avoid the terms reliability and validity. Instead, many consider it more appropriate to demonstrate 'trustworthiness' (eg ; Erlandson et al., 1993; Guba and Lincoln, 1981; Lincoln and Guba, 1985; Marshall and Rossman, 1989; Robson, 1993). Nonetheless, Erlandson et al., (1993) suggest 'detailed transcription can increase the reliability of qualitative data and the validity of its analysis', retaining the old terminologies (p16).

Erlandson et al. (1993) identify four criteria of trustworthiness: credibility, transferability, dependability and confirmability. They emphasise the importance of detail regarding the setting or 'context'. Marshall and Rossman (1989) say the goal of credibility is to demonstrate that the inquiry is conducted to ensure the subject is accurately identified and fully described. Again reverting to traditional nomenclature, they suggest researchers state the parameters of the 'settings, population and theoretical framework' to gain the equivalence of validity.

Lincoln and Guba (1985) discuss how 'member checks' also add to credibility, seeing how providing interview summaries to participants for verification, and researcher codes, categories, terms, taxonomies and conceptual framework for validation, provide confirmation of accuracy. Such techniques seek to demonstrate correspondence between researcher interpretations and the participants' own descriptions of their social world. This process fits closely to Schutz's ideas on checking for continuities between scientific and common sense thinking referred to as the 'postulate of adequacy' (Schutz,1967). However, Bloor (1983) considers this is not essential although it demonstrates an effective corroboration of a scientific proposition. Nonetheless doing even minimal checkbacks can be problematic involving several practical and political difficulties,

some of which I detail later in the chapter. Most importantly I see these ideas relate to questions about the ownership of and responsibility for research and its conclusions, involving discussions about whether they are collaborative products or individual interpretations. I believe projects should be collaborative, but the final conclusions must be the researcher's responsibility. As Steier (1991) writes: 'why do research for which you must deny responsibility for what you have found?' (p10).

Additionally, the ability of a researcher to 'pass' as a member of the study population has been identified as another element for establishing credibility, described as 'member validation' (Bloor, 1983). This links to the idea that better knowledge is produced when research participants 'share constructions'(Erlandson et al., 1993).

Lincoln and Guba (1985) and Marshall and Rossman (1989) emphasise the need to explicitly present the theoretical framework to improve 'transferability value'. Lincoln and Guba (1985) refer to this in terms of the more positivist notion of 'generalisability', which Marshall and Rossman (1989) see as a problem involving the traditional concern about 'external validity'. They suggest, because of 'the difficulty of generalisability to other settings' findings only apply within strict limits. Importantly, and in contrast to traditional methods, the responsibility for generalising lies with others who wish to do this rather than with the researcher: this is the essence of transferability. However, providing 'thick description' in an open, transparent analysis and explicit 'audit trail' enables readers to apply conclusions elsewhere if and when they deem appropriate, as well as help improve understanding of the findings (Lincoln and Guba, 1985). Consequently Charmaz (1990) considers qualitative analyses can be adapted to changing conditions.

In addition is the concept of dependability which involves acknowledging the world as continually changing, contrasting with the static, positivist view. The idea of 'timeless texts' is seen as inapplicable (Denzin and Lincoln, 1994). Arguably however, dependability echoes the traditional ideas of replicability and reliability and the aim to get beyond individual, idiosyncratic interpretations. Dependability involves seeing that no situations are ever identical and research participants develop and change through the research process. Consequently, even if the same people and same questions are asked, a later study will not provide the exact same results (May, 1993).

Nonetheless, detail and openness is again recommended for 'dependability', along with the making explicit of the researcher's 'personal baggage'. This aims to minimise hidden effects of an individual's background and perspectives (Lincoln and Guba, 1985). Indeed Duelli Klein (1983) states how it has become almost fashionable to state one's biases in 'Introductions' (p92) with researchers urged to provide details about themselves and the research process as well as comprehensive results and analysis in research reports.

This is very similar to the recommendations for confirmability, which closely mirrors the positivist notion of objectivity. Regularly writing a reflective diary encourages careful reflection on the process, as well recording details of study development (Lincoln and Guba, 1985).

Erlandson et al. (1993) refer to the importance of dependability and confirmability and their relationship to transferability and credibility, also commending an explicit 'audit trail' and full

documentation. Thus external checks can be carried out to trace conclusions back to their sources and not based on biased analyses or limited 'slices of the data'.

Whilst I support the notion of trustworthiness in terms of making research meaningful, open and explicit, I have some misgivings about transferability as highlighted by Marshall and Rossman (1989), seeing how they tend to revert back to the 'holy grail' of positivism. Whereas attention to credibility, confirmability and dependability illustrate the significance of the process and make outcomes more meaningful, obsession with generalisability represents adherence to traditional aspirations.

Indeed I observe apologetic tones within many discussions of trustworthiness. Dingwall (1992) observes how numerous guidebooks propose 'recipes for success' that infer researchers can access truth, if only they do things properly. Such authors commend a full declaration of details and an 'owning up' to 'limitations' that arise out of the social character of the process and its participants. But, these often appear as admissions of weakness relating to naturalistic research having an innate frailty.

As such the 'myth of authenticity' and ambition to produce uncontaminated, objective and generalisable truths seems to haunt many naturalistic researchers. In discussing the 'limited claims' for external validity many who have ostensibly 'embraced' naturalistic methods as 'generating understanding' show their true colours: they see fundamental flaws in the knowledge produced. Postmodern researchers highlight how modernist research denies difference and ultimately 'seeks to define and compartmentalise' and continues to aspire to produce overarching theories (Fox, 1999). It is from the different views of generalisability that the tensions between naturalistic and postmodern critiques of positivism are perhaps most striking.

Fox (1991) sees modernist researchers concerned about limited external validity devalue their work because of their problem with contingency and confuse formal and rational rationality (from Brubaker, 1984). In contrast the postmodern position asserts all knowledge of the world is partial and relative, local and contingent. By postmodernism's 'celebration of difference' (Haber, 1994) no place, setting or time is privileged over another as all are equally significant: grand theory is rejected.

Thus whilst the 'myth of authenticity' and holy grail of positivism is well recognised, it remains common to much qualitative research. Many seem reluctant to give up on their modernist perspective and naturalistic approaches, concerned about relativism and the fear of weakening claims to useful and widely applicable findings. However, Fox (1999) proposes collaborative, reflexive and transgressive research in 'the postmodern mood' to escape the 'continuing crisis of modernism', emphasising the mediated, contextual and contingent nature of all knowledge.

'Analytic induction', case studies and small samples

Mitchell (1983) observes how the 'case study approach' has varied in popularity from the 1930s to the present day. In sociology it lost its appeal from the late 1950s to the 70s, which Mitchell relates to computer technologies making complex and time-consuming analyses simpler and more reliable, and to the growing sophistication of mathematical theories which enabled statistical

claims from smaller samples. Qualitative studies, although not necessarily entitled case studies, have recently increased in popularity, as indicated by the extent of writing on qualitative research.

Mitchell (1983) proposes seeing 'each fieldworker who presents a study of some 'people' or another....is in fact doing a case study', but highlights significant 'confusion between the procedures appropriate to make inferences from statistical data and those appropriate to the study of an idiosyncratic combination of elements or events which constitute a 'case'' (p188).

Many modernist researchers using case study methods claim they can draw legitimate inferences and formulate propositions about the nature of social and cultural life in general. Such claims rely on 'logical' rather than 'statistical inference' involving 'analytic induction' (AI) which contrasts with 'enumerative induction' (Znaniecki, 1934). AI is based on the belief, along with empiricism, that we can make links between a collection of facts concerning social life to arrive at theories. It involves generalising by abstracting whereas enumerative induction abstracts by generalisation. May (1993) distinguishes AI from hypothetico-deduction, describing the former as research coming before theory, so as to examine a particular aspect of social life and derive theories from the resultant data.

In AI the researcher abstracts the concrete characters essential to the case and generalises them, presuming that as essential, they must be similar in many cases. Selected cases are then examined to illuminate formerly obscure aspects of the general theory. Going on to examine 'further cases' is justified by recognising 'there is always something to learn about individual data: concrete reality....is an inexorable source of new knowledge' (Znaniecki, 1934 p 250). So several iterations, with alternate cycles of data collection and analysis, are not a 'mere supplement to pre-existing knowledge' but a way of extending and refining it. This is how I have conducted the study, with distinct interview phases and the parallel use of a questionnaire. Importantly, the ongoing development of the analysis concurrent with data collection involves the alternation of inductive and deductive reasoning, whereby later fieldwork is informed by preliminary analyses.

From a modernist perspective, the important point about the different forms of case study is in the extent to which they justify generalising from the single instance. This links to the 'explanatory power' of samples involving 'typical'/atypical, 'illuminating' and/or special cases and recognising influences from context and setting as well as participants' characteristics. 'Typicality' involves where the particular set of events selected for investigation is similar in *relevant* characteristics to other cases of the same type.

The *essential* point for case study research - and detailed qualitative studies generally - is its claim to the 'validity' of its analysis rather than to the representativeness of the events/sample. As Goode and Hatt (1952) emphasise, the case study is 'a way of organising social data so as to preserve the unitary character of the social object being studied' (p 331). Therefore, the case study can be seen as a detailed examination through which the analyst exhibits the operation of some identified general theoretical principle (Mitchell 1983, p192). As such it is essentially heuristic, as a manifestation of some general abstract theoretical principle. Hence I consider this study can be seen as an 'extended case study' analysis. I have used 'purposeful sampling' to access respondents with personal knowledge and detailed understanding of the phenomenon

under investigation, as a social group in a specific contextual framework, each with relevant characteristics. Participants are selected because they enable detailed 'how' and 'why' questions to be considered, rather than test theories.

Most importantly, I recognise the value of a study's extrapolation depends not on the typicality or representativeness of the case/sample but upon the cogency of its theoretical reasoning. My criterion for sampling is based on explanatory power: recognising the significance of the 'atypical' or negative case and that 'illuminating', exceptional and 'special cases' facilitate the discovery of theoretical connections.

In contrast to quantitative studies where the required sample size for good 'statistical power' can be calculated (Fox and Mathers, 1997), there are no such rules in qualitative research. Instead you are looking for quality and a range of responses for information-richness. Nonetheless Patton (1990) believes that by using the directed power of a small, purposive sample and not attempting to over-generalise, fears about the inadequacy of a small sample size can be allayed. Most importantly, an adequate rationale must be provided for any sample, detailing how and why it was selected.

Through purposive, 'theoretical sampling' the 'human as research instrument' increases the range of data exposed. The researcher's 'theoretical sensitivity' is used to identify emerging themes that specifically take account of contextual conditions and cultural norms. 'Information-rich' cases and attempts to access a 'maximum variation sample' to facilitate the 'saturation of categories' to refine the developing, emergent theory (Lincoln and Guba, 1985). Thus people with direct, personal knowledge of the phenomenon being researched have been selected specifically because of their informed and particular experience. Sampling atypical, extreme or 'deviant' cases helps reach a range of potentially different perspectives to stretch and refine analysis.

Therefore for the study a higher proportion of men than in the general population of health professionals were recruited, to extend the analysis regarding their perspectives as minorities. To achieve 'maximum variation', I include people from a wide range of clinical settings and specialities, different ages and lengths of service and various types of employment contract.

Despite the rationale and methods described above, many modernist qualitative researchers question the validity of generalising findings. Instead many aim to maximise discovery of the heterogeneous patterns and problems that occur, but limit their findings to the particular context studied. I suggest this shows confusion between data and theory. Focussing on the uniqueness of context and person-specific data ignores the different levels of generalisability claimed for different theories, such that I recognise general processes can apply in general terms beyond the case. Consistent with Eckstein (1970); Glaser and Strauss (1967) and Gluckman (1961) I suggest theories involving third level, abstract conceptual constructs can be seen to work or 'fit' and this is how the conclusions of this study are presented.

Mixed methods

Increasingly, hypothesis-testing using inferential statistical analysis is undertaken after qualitative studies have 'generated' a theory to test. Qualitative methods represent the initial steps to inform the development of items to include in a quantitative survey. The combined phases are often seen

to produce superior research, perhaps favoured because of the supposedly more systematic methods associated with the quantitative phase and incorporation of positivist methodology (see Erlandson et al., 1993). However, the reverse order is also found: a survey may identify preliminary issues, which are then explored in depth. The quantitative stage establishes the existence or extent of a general pattern and the qualitative method provides richness of detail (eg Bifano, 1987, cited in Erlandson et al., 1993; Fielding and Fielding, 1986).

Arguably using both qualitative and quantitative methods within a single project suggests one approach is not considered superior to the other; instead they provide different types of information and address different types of question. Importantly Erlandson et al., (1993) emphasise not only is it incorrect to assume naturalistic research paradigms are qualitative but also that 'the crucial point is not the order of the methods but whether they are designed to reduce or expand the constructions of reality being considered' (p37). They reject the narrow 'discovery role' for the naturalistic researcher suggesting that verification is just as much a concern.

Naturalistic researchers can use quantitative methods, as the selection of methods depends on the research questions and study aims. Miller and Dingwall (1997) see mixed methods do not indicate methodological confusion or diffidence in study design, but identify better validity from qualitative interviews and 'reliability' from quantitative survey data. As such they discuss mixed methods in terms of internal and external validity: using mixed methods promises both depth and breadth, detail and generalisability. 'Mixed methods' are increasingly favoured because it is increasingly recognised as inaccurate to assume qualitative and quantitative research are polar opposites or aligned to a particular theoretical perspective (also Oakley, 1998).

In large scale, long term projects it is increasingly common to have several alternate cycles of qualitative and quantitative methods. In some studies there is a mix of data collected within a single phase, with open-ended questions generating qualitative data in predominantly quantitative surveys. A mixing of methods is used in this study, although the survey provides data for a descriptive rather than inferential statistical analysis, as the sample is too small for a legitimate use of probability tests of significance and association (Foster, 1998).

As indicated above, one reason given for using mixed methods is increased validity through 'triangulation' (Denzin, 1989a). Because of the strengths and weaknesses of different methods he commends the combination of methodologies. However May (1993) suggests Denzin's 'prescriptions for triangulation' often read like a 'positivist desire to mediate between sources of data in a search for some 'truth'...' (p130).

Techniques for improving validation are also discussed by Bloor (1983). He stresses validation in terms of reliability cannot occur through replication, as 'reality shifts' (Erlandson et al., 1993), although social life contains 'elements' which are generalisable across settings. It is this that provides the 'possibility of the social sciences'. Conversely, as other elements are particular to certain settings the predictive power of social science is limited. 'Triangulation' and 'member validation' are commended as the main techniques to enhance social research findings, instead of replication as typified by the test-retest approach (Emerson, 1981).

Whilst 'methodological pluralism' aims to elevate validity through confirming findings discovered by different means, Bloor (1983) emphasises that a researcher is not strictly looking at the same thing nor asking the same questions if using a different method: mixing does not really test validity per se. Nonetheless, different methods can usefully expose different aspects of a phenomenon and highlight greater depth and breadth. I capitalise on this in the study, aiming to access different details from the different research relationships and types of questions in interviews and questionnaires.

In this study, both data-sets have been analysed independently and together, and initial analyses have informed later interviews. Whilst the main method is qualitative interviews, the questionnaire is not rated as inferior. Instead it is a secondary data source, supplementing and extending the analysis. Some of the survey questions are open-ended, providing further qualitative data, whereas others are closed, providing quantitative data. The qualitative questionnaire and early interview data inform the question areas considered in the later interviews. Also, the closed questionnaire items establish 'base data' about the participants and demonstrate the characteristics of the sample to facilitate comparative analysis. Usefully, obtaining this information via the survey frees up time within the interviews for discussion of the substantive issues.

To some extent the postal survey can be seen as providing some degree of triangulation of the interview findings. But I suggest the benefits of triangulation often claimed from mixed methods can be misleading, over-emphasising superficial consistencies and ignoring or understating differences. I recognise comparisons of two data-sets can present a very partial impression and aim to interpret differences and apparent contradictions as well as similarities. 'Negative' and extreme cases demonstrate different perspectives and reflect the complexity of social life rather than being problems for theory-building from clearly compartmentalised and tidy impressions of uniformity and predictable patterns (Guba and Lincoln, 1981). Multiple realities are problems neither of relativism nor theory. Arguably it is only by incorporating the abundance and diversity of data that a 'hypothesis' can be convincing and legitimate. In addition I see the integration of all participants' viewpoints as an ethical issue of rigour, integrity and honesty, rather than strictly relating to the adequacy of research methods or theory per se.

Kidder (1981) describes negative case analysis as the 'systematic and continuous revision and refinement of hypotheses until all known cases are accounted for'. Within qualitative research this involves depth and detail rather than breadth and spread. Nonetheless how far 'the fit' has to go is contested. Guba and Lincoln (1981) suggest that for 'real world' research a 'good proportion' is substantial enough, whereas Kidder (1981) pushes further towards 'zero exceptions'. This latter position seems both overly rigid and unrealistic as it represents a yardstick equivalent to the perfect statistical test result of 0.001 probability. I adopt Guba's notion of 'good proportion' indicating exceptions and the size of a proportion to infer the strength of a finding.

The questionnaire method

In simple terms, the purpose of a questionnaire is to measure some characteristic or opinion of respondents, and generalise findings to the broader population (May, 1993). The survey gathers information 'to learn something about the larger population from which the sample is drawn' (Ferber et al., 1980, p3).

The justification for generalisation is based on statistical probability theory. This makes it possible to ascertain the extent to which a sample is representative of the wider population. There are parallels between the ideas behind questionnaires and positivism, especially with regard to causality (Hage and Meeker, 1988). Ackroyd and Hughes (1983) describe factual, attitudinal, social psychological and explanatory types of surveys - and questions - where in the latter two, relationships between attitudes and behaviour are examined and in the last, researchers seek to test hypotheses.

Like interview research, questionnaire analysis relies on people reporting what they actually do. But Lapiere, (1934) and Heritage (1984) emphasise how this may be erroneous, as there can be differences between expressed ideas and actions. Despite this complex theoretical issue, Marsh (1982) and Husbands (1981) consider questionnaires can deal with meaning just as well as interviews *if* the questions asked are unambiguous and the design adequately comprehensive to cover explanations as well as factual responses and includes items that bring the elements together.

In questionnaires, variations in response are seen as 'true' differences of opinion rather than artefacts of the procedure. Distinctively, the items are pre-set and fixed reflecting what the researcher recognises as important and seeks to have verified (or rejected). However, it is also important to recognise that if a survey follows a qualitative phase, the questions included may be informed by the earlier fieldwork. This is certainly the situation in this study. Indeed, Sieber (1978) proposes researchers should always design questionnaires with a comprehensive understanding of the topic area, obtained from systematic 'intelligence-gathering' rather than from individual ideas and ad hoc experiences, prone to prejudice and narrow stereotypes.

May (1993) observes an 'empiricist preoccupation' amongst many researchers using questionnaires. There are claims to less bias than in other methods and the possibility of replication, using the same process over time (McMiller and Wilson, 1984). Nonetheless May urges caution, challenging assumptions conferring objectivity upon quantitative, questionnaire research. Despite the 'dazzling array of....techniques, facts do not speak for themselves' (p84). Values, along with ethical and theoretical considerations influence the questionnaire process just as for any other method.

Importantly, using questionnaires goes beyond deciding what questions to include, to consider how the method fulfils the overall aims of a study, what kind of data it will generate and how it will be analysed. It requires the co-operation of a respondent.

Sampling and statistical analyses

Many writers have written about questionnaire design and analysis (eg de Vaus, 1991; Foster, 1998; Fowler, 1988; Hoinville et al., 1987; Oppenheim, 1992). Interestingly, de Vaus considers theoretical and purposive sampling, as well as the more commonly used random and representative samples. Similarly Bryman and Cramer (1990) discuss the dis/advantages of different sampling methods. I have used non-probability, purposive sampling for both elements of the fieldwork, selecting suitably qualified volunteers providing a broad range of characteristics, with each representing some relevant category of interest.

May (1993) sees sampling as a 'compromise between technical efficiency, time and resources' (p 69), with Moser and Kalton (1983) noting that 'fewer cases makes it possible to collect and deal with more elaborate information from each' (p 57), and that quite small samples can be amenable to statistical testing. However, for tests of significance and of association to be reliable and sensitive enough requires sub-groups to be large enough so that any comparative analysis has credible meaning.

Therefore, this study sample, with its various sub-groups - of men and women; physiotherapists, therapy and diagnostic radiographers; staff and students; NHS and private sector - is too small for inferential statistical testing. Instead, I have used 'descriptive statistics', recognised as both a useful and illuminating alternative (de Vaus, 1991; Foster, 1998; Johnson, 1977; Silverman, 1985).

Questionnaire design and administration

Questionnaire design and administration influence the quality of resultant data and it takes time to prepare a good 'research instrument' and maximise returns. In terms of content, constructing a valid and reliable questionnaire involves decisions about the wording, types and arrangement of questions relating to the methods of data analysis and overall role and place within the study. This involves, for example, deciding between open and closed questions and the ordering of the items in terms of whether they are factual, attitudinal or explanatory questions involving easy, complex, controversial or personal topics or issues (Moser and Kalton, 1983).

'Closed' questions show if a respondent has experienced, thought about, or is aware of an issue, whereas open questions access general feelings on a matter. Closed questions address specific aspects of issues, in contrast to open questions which ask how respondents feel about something. Both open and closed questions can be used to find out reasons for opinions and ideas, although differing in whether researcher or respondent controls the range of responses.

Whilst closed questions do not discriminate against the less talkative and inarticulate and responses are easier to code, limited options can force or create false opinions onto respondents; they also fail to allow for inclusion of extra ideas. However, spaces for additional comments can be provided. With open questions, where respondents determine their own answers, the full variety of (qualitative) data can be difficult to include and are invariably categorised by the researcher as elements of broad themes anyway. This form of 'meaning condensation' reflects the overall control of the researcher over analysis and reveals the 'slipperiness' between qualitative and quantitative data (Kvale, 1996).

Ambiguity can be a particular problem in postal surveys, where the question or response is unclear and participants cannot ask for help or clarification; added to this is the problem of deciphering illegible handwriting; 'loaded questions' also affect responses. All these affect the ability to use data and challenge validity. Therefore postal survey questions have to be particularly simple and straightforward to preclude non-response through uncertainty (May, 1993).

There may be a problem of 'systematic non-response' as non-responders may possess some particular characteristic relevant to analysis. Working out what the bias is, and its extent can be difficult. However, de Vaus (1991) suggests this is less important in analyses not dependent on

statistical testing and positivist notions of quantitative rigour. 'Non-probability sampling' means it is unnecessary to agonise over non-response bias, as generalisations are not the aim. Whilst a high response rate from a wide variety of respondents is preferable, there is no concern about statistical representativeness. Nonetheless, it is worthwhile trying to establish who the non-responders are, to identify any common characteristics and to send reminders.

Various strategies are suggested to encourage high response rates. It is crucial to be efficient and organised, pay attention to details, be careful and polite, provide clear instructions and repeat requests. Different methods of access and contact, delivery and follow up procedures vary in terms of their relative efficiency, organisation and cost (time and financial). More importantly, face-to-face approaches, phone and mail-based systems involve different skills and levels of interaction which influence the data produced. Using the mail, incurs postage and administration costs. Although sufficient and prompt responses are required, it is important to not harass, badger or coerce respondents. In some studies participants are given inducements to respond, but this raises ethical issues about biasing responses, as well as increasing costs.

Some writers suggest postal questionnaires can be better than face to face meetings because less 'social desirability responses' are elicited thus providing, from a positivist perspective, less 'distortion' of data (Dillman, 1978). From a different slant, May (1991) sees the self-completion postal questionnaire as a medium for the anonymous expression of ideas and beliefs and therefore a good method for the outlet of strongly held, controversial, contentious, negative, ethically, politically or personally sensitive ideas. This rationale forms the main basis for using the questionnaire format in this study, as the topic potentially touches on sensitive personal issues, involving sexuality, gender role and personal identity. In contrast to interview-based surveys, the postal questionnaire also allows respondents to reflect and consider responses for as long as they wish and without researcher prompts or interference. However it is possible that answers may come from people other than the target respondent.

Most importantly and despite the standardised format, questionnaire research still involves a research relationship, although it is different to the interview relationship. Whilst more distant and indirect it still influences responses and returns and varies for different respondents: individuals' attitudes to the research aims and method, topic and researcher continue to influence outcomes (May, 1993).

The appearance and layout of the survey form is also important. It needs to suit study aims and nature of the topic as well as the target population. The design needs to be engaging but also appropriate. For this study I considered it important for the form to look professional, official and expert rather than brightly coloured and informal. As well as the length, development and flow of the questions and the content and style of instructions, various other organisational aspects for the analysis need consideration. It is particularly important to identify forms for linking, coding and sub-grouping responses.

de Vaus (1991) suggests a good 'covering letter' helps motivate responses, seeing official letterheads provide efficient impressions and infer importance. He commends highlighting the specific value from participants' contributions and the reasons for their selection and that

anonymity and confidentiality should be clearly explained. de Vaus also suggests highlighting the mail date for replies. Letters promote co-operation and details providing a point of contact can be given (Hoinville et al., 1987; May, 1993).

Secretarial help can assist the process, with letters and envelopes typed, stamped and despatched and records of deliveries and returns kept. As a research student I usually worked unassisted. Nonetheless I recognise this as advantageous as it is easier to know exactly what has been done, what needs to be done, and where things are kept.

Decisions about the appropriacy and type of questionnaire involve practical as well as theoretical considerations and based on what is best for a particular situation. De Vaus concludes questionnaires 'will be the product of the research problem, the theory, method of administration, and methods of data analysis...[they] involve careful thinking, numerous drafts, thorough evaluation and extensive testing...[they have] the great advantage of...being relatively efficient' (pp 96-7).

Qualitative Data Analysis

Denzin (1989b) and Yin (1989) discuss the confidence of qualitative analyses involving the ongoing process of 'analytic induction' where several iterations are involved in 'explanation building' and the development of theory, with constant comparison and revisions of preliminary statements and propositions derived from primary analyses. The aim is to achieve categories that can be linked into patterns so different levels of analysis emerge. Miles and Huberman (1984) talk of qualitative analysis involving coding and pattern coding at first and second levels, where the aim is to see 'what goes with what'. This is commonly described as 'thematic analysis' and is the level at which many studies stop. Whilst involving interpretation, it tends towards the descriptive end of the analytic scale, relying more heavily on the organisational manipulation of data rather than theoretical frameworks (Strauss, 1987).

Analysis establishing patterns and links between categories can be taken further, with constructs involving abstract concepts, for example in the development of robust 'grounded theories' which can be understood and applied, in general, as 'basic social process' (Glaser, 1978). I have utilised this third level of analysis in the study.

Grounded theory

Glaser and Strauss are seen by Melia (1996) as the most influential writers on qualitative research methods in the 1970s, with their ideas for grounded theory further developed by Strauss (1987) and, later, in conjunction with Corbin (Strauss and Corbin, 1990). Grounded theory is described as a qualitative method with the rigour of the Columbia school (that relates to Glaser being 'schooled' in the quantitative tradition of Laserfield and the 'Columbia school'). Its theoretical underpinnings are in pragmatism and symbolic interactionism (Mead, 1964; Glaser and Strauss 1967).

Keddy et al. (1996) suggest Glaser and Strauss seemed to be aiming towards acceptance by the quantitative positivist world - dominant at the time - using terms such as variables, hypotheses, properties, theoretical sampling (etc) to legitimise the method. Later on, with the luxury of

hindsight, and an awareness of the critiques of Glaser and Strauss' writing style and approach, various writers reinterpreted some of the earlier details and use different language (e.g. Chenitz and Swanson, 1986; Guba and Lincoln, 1981; Lincoln and Guba, 1985; Strauss, 1987).

Grounded theory is based on the premise that *theory at various levels of generality* is indispensable for deeper knowledge of social phenomena (Denzin and Lincoln, 1994; Strauss and Corbin, 1990). Having been extensively discussed and modified all emphasise the eventual development of a 'story line' and 'core category', whereby the variety and detail comprising first and second level categories and constructs are related and brought together, to produce a third level of analysis and theoretical framework.

Various later texts are seen as secondary sources, but I consider them as signs of grounded theory evolving and attempts to make Glaser and Strauss' original writings more accessible. However, some (e.g. Strauss and Corbin, 1990) have been heavily criticised for their prescriptive tone and emphasis on procedure, with linear representations of what originally was a fluid, circular and cumulative process that emphasised 'constant comparison' and simultaneous data collection, literature integration and analysis (see Melia, 1996). The integration of literature relating to issues mentioned at interviews represents a substantial component of this study/thesis.

Erlandson et al. (1993) discuss the selection of 'the site' and the rationale for 'maximum variation sampling' involving 'theoretical sensitivity'. They suggest analysis is a progression not a stage. Marshall and Rossman (1989) describe it as the 'process of bringing of order, structure and meaning to the mass of collected data', emphasising it is a 'messy and time-consuming endeavour'. It involves both creativity and clear thinking in its aim to provide general statements about the relationships amongst categories of data, from which grounded theories can be made.

Keddy et al. (1996) consider the 'constant comparative' method the key 'essence' of grounded theory and consider it is this theory-developing property that 'allows for complex analysis of complex questions'. The most recent responses are compared with previous ones in the search for 'consistencies, discrepancies, anomalies and negative cases'. A conceptual framework takes shape as patterns and themes are identified and linkages and relationships between categories emerge. Thus grounded theories are developed inductively, following data rather than preceding them.

Although grounded theorists vary in their descriptions of what is involved and important, there are recurring elements. Generally, first level codes are not only identified but also related to each other, examined for their particular properties and dimensions. In 'axial coding' which involves interpreting the codes and categories in relation to a 'coding paradigm' and the identification of second level categories or 'constructs', the conditions and contexts when codes apply or emerge and details of their consequences are also explored. Importantly, this emphasises relationships between data in terms of process. Eventually the researcher proceeds to 'selective coding', whereby all the sub-categories are related to a core category (or discarded). An explanatory theoretical framework is developed from the third level of the analysis.

Therefore, grounded theory goes beyond thematic analyses as it emphasises the associations and relationships between data and the development of a core category that brings it all together

at an (abstract) conceptual level. It incorporates process and emphasises connections, rather than being a static interpretation of events and unconnected phenomena.

Emergent theories?

Discussions abound regarding the 'emergence' or 'forcing' of theory from data and the role and integration of prior experience and literature/theory into analyses (Melia, 1996). The original version stresses that theory emerges, being grounded in data, with the constant comparative method leading to conceptual categories to describe and explain phenomenon. Thus researchers follow up 'conceptually fruitful avenues' to allow emergent concepts to dictate the direction of the literature explored and nature of data collection, using 'theoretical sampling' so that data collection and analysis are side by side until the core category emerges and is 'saturated'.

Therefore researchers must work 'openly' towards alternate explanations by not closing down avenues of inquiry too early and by exploring them fully until no new data are provided in later fieldwork. Questions need to be asked of data in terms of what has been 'picked up' that suggests additions, revisions or challenges to the existing hypotheses (Marshall and Rossman, 1989).

But Glaser (1992) (and others) question the extent to which concepts and categories 'emerge', suggesting that data may be 'forced' into theories. Strauss' approach (e.g. in 1987 and 1990) is seen as more formulaic in style than the original form and attends more to the integration of 'prior concepts' and experience. There is no mention of 'saturation of categories' in Strauss and Corbin (1990), which Melia (1996) considers theoretically important, establishing 'when to stop' collecting data. She questions whether procedures are getting in the way of the theoretical underpinning and rationale of the approach, adding that both Glaser and Strauss had originally encouraged researchers to develop the method but not be narrowly prescriptive.

I believe the main point to emphasise is that a 'grounded theory' is derived from data yet moves to an analytical level beyond the data themselves. As Melia (1996) concludes, whether data jumps or is pushed is perhaps less important than whether an interview's structure or questionnaire's format is good, and whether data should be understood as stories, text or fictions.

Personal experience as bias

The value and trustworthiness of a 'grounded theory' involves rejecting traditional notions of validity and reliability. Researchers who interact and communicate naturally through some shared knowledge of the setting and its social norms and behaviours are welcomed (Erlandson et al., 1993). Strauss and Corbin (1990) see being directly involved in the phenomenon under exploration, or having prior experience of the topic as an asset, not a problem, and valuable for insightful depth and theoretical sensitivity. Although experience is described as 'gold to be mined' some concern about analytical difficulties from 'flooding' is acknowledged. Strauss and Corbin (1990) suggest this is where external verifiers' checks are particularly useful, to 'allow theory to emerge' and be fully grounded in the data.

As May (1993) emphasises, being 'an insider' is not something that can be 'achieved' as it is something you either are, or not. But researchers with 'shared understandings' know the language, rules and norms of the study group, facilitating an intimacy and closeness with participants. In this study, I could go beyond the 'front door' to the more private 'back stage world'

(Bruyn, 1966; Goffman, 1984; Hughes, 1976). Arguably, familiarity offsets disadvantages of single interviews as rapport can develop quickly, which is conducive to detailed and meaningful discussions. Also, Seymour (1997) suggests prior experience can help 'make sense' of data in the early stages of analysis.

Nonetheless Ely (1991) recognises both problems and advantages in research on/with people you know: feelings and expectations relating to the prior relationship can impinge in various ways. 'Gatekeepers' - crucial for getting projects 'off the ground' can be influenced by the quality of a previous relationship. Ely argues it is important for researchers to recognise and reflect on these issues and to acknowledge them. I consider these matters in section 2 of the chapter.

Feminist grounded theory

Keddy et al. (1996) suggest feminist research is evolving, along with new ways of doing science. In the feminist post-positivist era, grounded theory allows for complex analysis of complex questions and the grounded theory methodology lends itself to 'tenets of feminist research', for example facilitating participants' active participation and collaboration in projects (Maguire, 1987; Wuest, 1995). It also emphasises 'theory as process' not as a perfected end-product, which Wuest considers marries well with Scott's (1990) assertion that feminist theory must reflect changes in patriarchy over time and allow for pluralities and diversity (Wuest, p127-8). But most importantly neither see this as a signal for relativism, as the theories generated are seen to apply in general, as 'basic social process', although involving detail and variations in the data being tested in the sense of whether the theory 'works' (Glaser, 1978). Both grounded theory and feminist perspectives are seen as creative approaches to theory-building.

Appropriate to its symbolic interactionist roots, grounded theory researchers let the voices of those being studied be heard. This is congruent with feminist ideals of egalitarian research relationships with women's telling of experience as legitimate sources of knowledge.

Researchers check their interpretations with participants to confirm codings and reach agreement about the core category although Keddy et al. (1996) suggest this collaboration is often under-emphasised (eg Strauss and Corbin, 1990). Respect for other's perspectives and recognising multiple explanations of reality is true grounding of theory, and fits well with feminist ideals.

Although broadly supporting the ideal of collaborative and participative research, I believe that ultimately researchers 'own' their studies and should take responsibility for their analysis and any credit/criticism that follows. I see grounded theories develop from an interpretation and integration of many data sources in addition to participants' accounts, such that 'everything is data' (Strauss, 1974, personal communication, cited in Keddy et al. (1996). Indeed Strauss and Corbin (1994) note grounded theorists do not merely report the viewpoints of those studied but 'accept responsibility for their interpretive roles' (p274). Nonetheless, the methodology maximises discovery of 'insiders' views and perspectives', whereby theory is *predominantly* grounded in data.

Conclusion

I consider study participants' active involvement a positive and crucial element of the research process. I have worked with the participants in the interviews, understood as forms of social interaction involving ongoing interpretation and negotiation, thus producing context and person-

specific data. Individual differences contribute to the richness of the study rather than being problems to overcome. Gender and professional differences, and issues relating to age, class, ethnicity, sexuality (and so on) affect the data produced in ways that cannot be controlled or removed. The detailed knowledge depends on the setting, those involved and the particular circumstances under which the study has been conducted. However this is not a signal for relativism as I see that through analytic induction and the levels of analysis applied across the extended case and considerations of the associated literature, it is legitimate to identify a 'basic social process' that can be applied and understood generally.

I fully acknowledge the role and influences of the many study participants. I have actively encouraged collaboration, seeking out suggestions and comments at various stages. Additionally I see my own role and reflections, especially the reflective diary, have influenced the shape, interpretation and conclusions of the study. By taking part in the study I also hope that people have been provided with the opportunity to think about gender-related issues, to gain a deeper understanding of them so as to challenge their inequities.

I have therefore conducted the study within a general 'spirit' of feminism: the research aims to contribute towards achieving gender equality. It has also been carried out with regard to theoretical concerns first raised within the feminist academe about the nature and production of knowledge, exploitation of research participants and the role of 'engagement' within social research. Most importantly the study is 'for' women rather than 'on' women. I also recognise the importance of being aware of the influence of my personal values and perspectives as 'cultural baggage' and attempt 'conscious partiality' to help avoid problems of prejudicial bias.

Consequently in the next section I include a brief personal introduction to illustrate my background and explain my 'route' into the study, seeing how the questions I have asked, 'determine the answers' I got (Duelli Klein, 1983).

Section 2: Methods Used and Participation in the Study.

A description and discussion of the research process.

Having examined various debates about knowledge and approaches to research and the general approach I have used for this study, I now proceed to describe in detail the various stages in the research project, the methods used and evaluate experiences and outcomes of the process.

Inductive research and emergent design

Instead of a single research question defined at the outset of the project a broad area of enquiry has been examined: the gender composition of physiotherapy and radiography.

However, two partially discrete subject areas emerged as the project proceeded, in-keeping with the inductive approach and emergent design. These are

- experiences of training, work and careers of female/male physiotherapists and radiographers, and
- explanations for the gender divisions of labour in physiotherapy and radiography.

Personal background and my route into the study

Several key individuals, events and experiences influenced both my choice of study area and methods of enquiry. The following details represent those I consider most significant and directly relevant to my development, research topic and aims, study design and approach.

As with the study participants' descriptions of their training, work and career, my account is inevitably a rationalised and radically edited version of what actually happened, subject to the limits of forgetfulness and selective memory, nostalgia and maintenance of an intact self-identity and personal integrity. I see these as the limits of all social inquiry in attempting to access and portray an authentic reality. Nonetheless, I claim my account as a true, albeit personal interpretation of a lived, material reality.

Born in the mid 1950s, I grew up largely 'unaware' of socio-political movements, secure and valued within a comfortable and conservative middle class, meritocratic home and school environment. With most of my childhood spent living with my divorced mother and widowed grandmother, I obtained a 'good education' at a girls independent grammar school (after mixed junior school), leaving with 8 'O' levels and 2 science 'A' levels and interests in music and dance. I 'acquired' an understanding that whilst I wasn't university material, I could and should train for a secure and respectable career. Marriage plus children in the near to middle distance were assumed prospects.

Several of my family and its network of friends worked as health professionals, including mother a nurse, several uncles as doctors, an aunt previously in radiography and another an ex-occupational therapist. As a child I remember going with my mother to several of her workplaces and recall being impressed when I saw a physiotherapist helping 'spastic children' learn to walk. Later, in my early teens, I experienced physiotherapy myself and again thought it seemed good.

In my mid teens, on the basis of my positive impressions of physiotherapy and general interests and abilities, I chose and later got accepted to train as a physiotherapist at a small, female-only training hospital. Following many relatives into health care, I was encouraged in my choice by everyone around me. After qualifying in 1976, I worked in a number of NHS jobs, developing a successful career over 20 years, in various parts of England.

Despite the above experiences and choices, at no stage up to my early twenties did I recognise my life, attitudes and expectations in terms of gender. I never considered how women heavily outnumbered men in my family, schooling, college and occupation. I just happened to be in these situations and as women were important and valued in them, it was perhaps inevitable and certainly easy to remain unaware, or unconcerned by the constraints of femininity as problematised by the women's movement. Whilst, on the whole, boys and men were of a different world to me, I scarcely recognised gender divisions in terms of inequality and discrimination. If asked, I think I would have explained them as "just the way things are".

However, once in my twenties, my points of reference and range of experiences changed: so did my 'world view'. I gradually became politicised and enraged by an increasing awareness of class, gender and racial inequalities, and got involved in various campaigns and organisations, inside and outside the workplace. During this time I met and cohabited with Geoff, a 'politically active' socialist, a knowledgeable, kind and compassionate man, but he tragically died in his early 30s, following an extremely difficult year of illness. Everything was subject to question.

Although a member of the 'Women's Voice' socialist feminist organisation in the late 1970s, I became more specifically interested in gender issues after the main periods of activism in the women's movement. In my mid thirties I obtained a social science degree, taking special papers in gender and racial inequalities, then started a Masters programme in women's studies. I was interested in doing social research on gender aspects of health. I studied and discussed equality issues, and learnt more about feminism and research. Throughout this period I continued practising physiotherapy, whilst wanting to get into research.

Although oblivious to gender and other socio-political issues for many years, I see myself now as an analytical, observant and reflective person who likes to discover and analyse things. I 'need' to explain and understand situations and love to explore, consider and learn from my own life experiences and observations, as well as from the opinions and experiences of others. In terms of my values, I despise discrimination, bigotry and prejudice, especially racism, sexism and homophobia, and now, as a single independent woman in her mid 40s, see myself as a feminist and socialist.

Despite a growing political awareness, it took years for me to recognise and then consider how or why as a teenager I had 'chosen' a predominantly female occupation and career. I began to see it would be interesting to study how other people view their career choices and consider gender aspects of this process.

I believe these reflections on my life indicate how the research topic, as well as my 'perspective' may have evolved. There are obviously many influences - some recognised, others not - but this introduction outlines some I recognise as significant.

Stages in the project

The various stages in the research project, from the initial general idea through to the data collection and analyses and final completion of the thesis are illustrated below (figure 1).

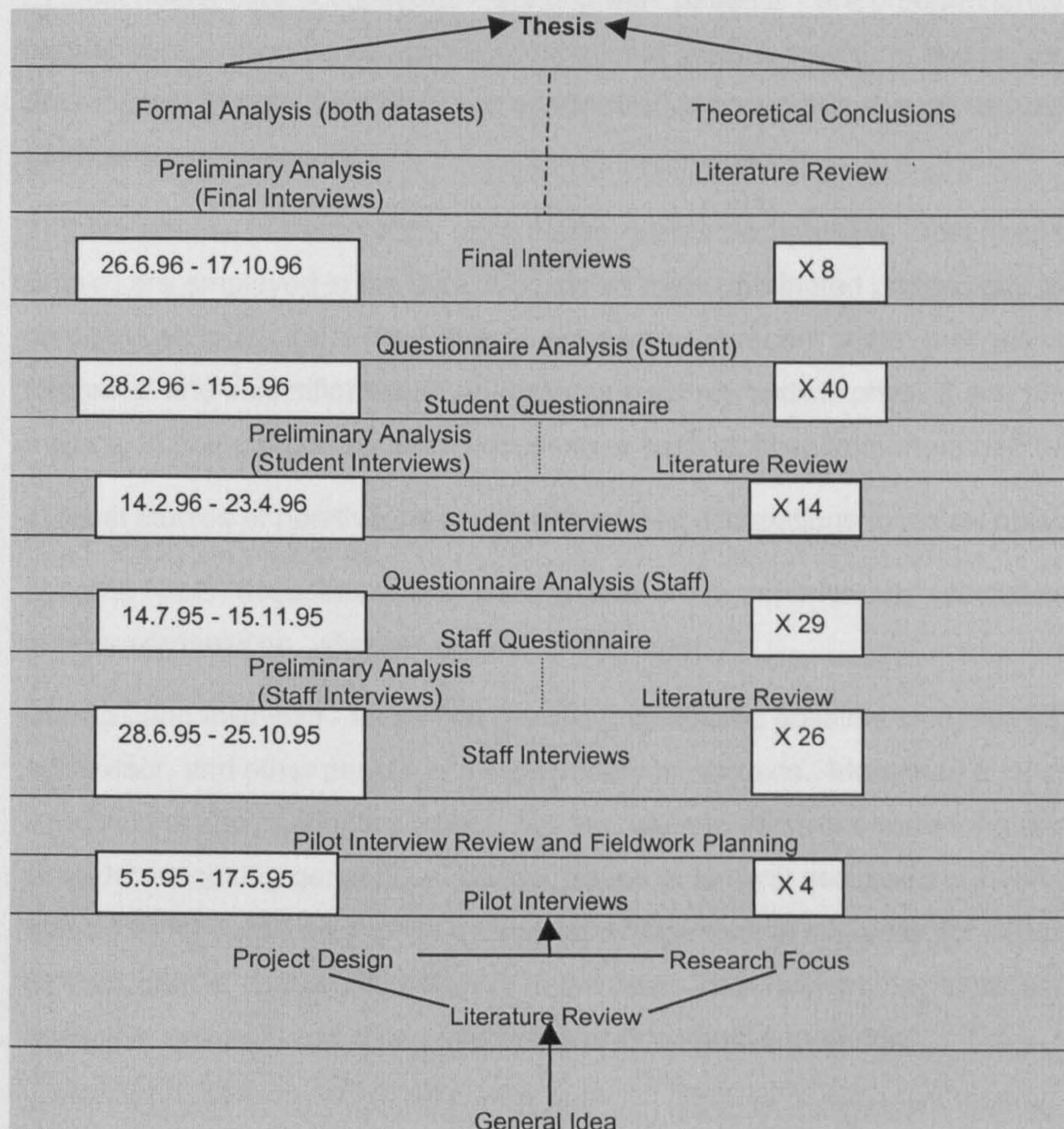


Figure 1: Stages in the research project

The early months of the PhD

What to do and how to do it

The focus of the project, its specific questions, design and methods were established after exploring a diverse range of literature - on health and health care, on work, occupations and professions and on gender - along with information-gathering about various health-related occupations from government publications, labour force surveys and management reports. I also studied numerous texts on the theory and practice of research, considering issues of ontology and epistemology, methodologies and methods, approaches and paradigms. The early stages were spent reflecting on 'what, how and why questions' so I could justify my choices and explain my actions.

During this exploratory period I established that

1) health occupations, similar to most other, are 'gendered' male or female; few occupations have similar numbers of women and men within their workforce; jobs as well as workers tend to be

associated with or identified by sex; 'women's jobs' tend to be lower paid, less skilled, lower status than most 'men's jobs'; and women predominate in the lower grades of mixed occupations even when the numerical majority;

2) most health care occupations - working with 'patients' - are predominantly female, but the gender composition varies across occupational groups, over time and by country; women also predominate in health ancillary and administrative occupations, such as hospital cleaning and medical secretarial work;

3) there are few predominantly male health *related* occupations; most male health workers (in Britain) are employed in the elite, high status male-dominated professions of medicine and dentistry, although there have been more women in recent years; men also predominate in (technical and scientific) health professions such as medical physics and pharmacy and are the majority in manual and ancillary occupations such as hospital porters and theatre technicians;

4) most studies of health care and health related occupations focus on nursing and medicine, and

5) some health occupations/professions have or are experiencing substantial changes in their gender composition, whereas others have/are not;

During - and following - these first months, I discussed possible study topics and methods with my supervisor, and other people in a wide variety of contexts. Many had a lot of useful ideas, suggestions and cautionary advice, but the roads to decisions were long and winding. I considered looking generally at gender issues in several occupations involved in health care and those that focussed on a small number of occupations to consider, for example, what accounted for their gender composition, now or in the past. This involved decisions about doing inductive or deductive research and using qualitative or quantitative methods.

Intuitively I was more interested in researching under-investigated occupations so soon decided against studying medicine and nursing. It also felt safer to study an unexplored group to ensure originality. I decided to study a couple of health professions using a qualitative approach. I wanted to explore meanings, experiences and understandings of 'gender at work' and to access the interpretations of people who experienced the phenomenon as an everyday, 'lived reality'. Doing qualitative research with 'insiders', as informed experts was therefore appropriate. To study an under-investigated area an emergent design with an inductive approach was appropriate rather than one testing a pre-determined hypothesis, using a rigid format and positivist perspective. I learned that the grounded theory approach is widely recognised as the 'method of choice' for studies of non-researched topics and, also, where the perspective of those involved in the phenomenon is sought (Strauss and Corbin, 1990). Consequently I decided to adopt this approach despite having some tentative theories of my own: I wanted to examine others' understandings of the gender mix rather than test out my own. My understandings of the significance of gender had, after all, only developed after years 'in the field'. I thought it would be more interesting to hear others' views and use this data to see if gender-blindness was widespread in the professions. For the same reasons, loosely structured interviews and a questionnaire using open-ended questions were used.

A comparative analysis

I thought a study of two occupations with some similarities but also various differences would establish more precisely than a single case study how issues of career choice and experience relate to specific aspects of gender.

I reviewed my 'fact-files' containing information about several health care occupations with details of their membership numbers and gender composition, entry qualifications, length of training, level of qualification, pay and career structure, along with outlines of work activities and a summary of their history. I examined art therapy, speech therapy, occupational therapy, physiotherapy and radiography as well as briefly considering chiropody, osteopathy, social work and pharmacy. I also considered how my personal experience and knowledge of the various professions might influence the research.

Physiotherapy and radiography

Finally I opted to study physiotherapy and radiography, on the basis of their common pay and career structure, professional identity - as 'professions allied to medicine' (PAMs) - and relation to the state and NHS (both organised and accredited through the 'Council for Professions Supplementary to Medicine'). They also both involve substantial work with patients; have similar entry requirements; have the same training period and qualification level (previously diploma, now degree); currently have similar proportions of women and men, and originated as distinct occupations in the same historical period. Whilst both identify themselves as 'caring professions', they are also referred to as professions 'supplementary to medicine' and 'allied to medicine', as well as 'semi-professions'. Finally, both professions have some (stereotypically) 'masculine' elements in their work: physiotherapy involves sport and physicality, whereas radiography involves physics and using scientific equipment and new technology.

Differences between the professions were equally important. For example, there are differences in the role, aims and instrumental tasks, and ways and amounts of working with 'patients'; they have different relationships to medicine; size of workforce, and type and extent of employment opportunities outside the NHS. Together I saw these features would provide an ideal basis to explore reasons for and experiences of the occupations' gender composition.

Personal identity, background and bias

I have considered whether being a physiotherapist is a problem or asset for the study. I support the notion that experience is 'gold to be mined' (Strauss and Corbin, 1990) whereby a relevant background enhances rather than pollutes research. As an 'insider' increased the potential for analytical depth, through sensitivity to and understanding of the issues raised by participants. Nonetheless I have carefully considered my impact on the process, to avoid 'prejudicial' bias and blindness to alternative interpretations.

In particular I have been aware of differences in my relationship to the two professions. As a physiotherapist I have little experience, knowledge and understanding of radiography. But I have also considered my sex, to consider whether my relationship with and understanding of female radiographers may be closer than with male physiotherapists. As indicated in the literature review, a body of research highlights the impact of gender on interaction and communication,

over-riding other social and personal characteristics. Nonetheless I conclude it is pointless to try and assess all the ways that I correspond to or differ from each of the participants and their influences on the research. Indeed I consider some writers' emphasis on the importance of common ground for shared understandings, close research relationships and valid data is so extreme that it becomes virtually impossible to do research on anyone apart from yourself!

Therefore I recognise differences in my relationships with every one of the participants relating to any number of variables. I believe it important to respect all the participants as individuals with different and complex identities and different perspectives on life. Nonetheless, to maximise closeness, quickly build rapport and enhance co-operation and a willingness to 'disclose', I tended to emphasise whatever 'common ground' I felt it was safe to assume we shared.

Who and what I was - and how I thought I would be perceived - influenced how I presented myself to the participants, affecting my role and relationship with them. Which role I felt most appropriate varied, such that at the start of the PhD I did not feel entitled to present myself as a sociologist or researcher, although keen to achieve that status. Whilst I longed to move on from physiotherapy I recognised it as useful as it inferred shared understanding with participants. Therefore, I tended to emphasise my professional identity with the physiotherapists; my sex and health care background with female radiographers; my health care background with male radiographers, and my learner role with the students. As I did more fieldwork I gained confidence in my researcher identity, and since its completion started to identify myself as a sociologist!

Although I see shared identity mainly as an advantage, it can sometimes be less beneficial. Taken for granted assumptions about shared understanding can be misplaced and people often think there is no need to explain things fully. Phrases like "you know" were particularly common from the female physiotherapists. Whilst I often 'did know', I needed to tape-record participants' ideas to use them as data. Also, whilst I could say "I'm not sure what you mean, please explain" this interrupted the natural flow of conversation and sounded rather churlish if repeated several times, as if I was questioning the participant's judgement of our common bond. This supports the notion that research is often easier and more productive with strangers than acquaintances, especially if the topic involves aspects of everyday life (Krueger, 1994; Morgan, 1998).

The reflective diary

Early in the first year I read that a reflective diary facilitates good research: be reflexive and consider your role and influence on the process commends Steier (1991). So I cautiously started one to reflect and capture my feelings about the project, as well as record what I was learning, my emerging ideas and their relation to decision-making. I saw this would be a useful addition to an organisational diary, although concerned about self-indulgence.

Writing about fieldwork and the feelings it evokes is claimed to help control bias or at least makes it explicit (Donovan, 1995). Whilst questioning this, I believe the diary clearly demonstrates my active, instrumental role in the study and the numerous influences on the process.

The diary exposes the impact of context on the study, developing and changing within the 'real world', and illustrates how pragmatism often contributed to research decisions with theoretical justification following later. It records my emerging ideas as well as their development,

implementation or rejection. Writing down thoughts and feelings, together with ideas and 'hunches' prevented them disappearing into the ether or staying as unresolved anxiety. When I felt 'stuck' reading my diary helped re-establish where I was going or what I could/should do next. Importantly, reading back showed patterns in my ways of thinking and behaving, so difficulties were resolved more effectively and efficiently, and repeats avoided: concerns found validity and resolution via expression.

Writing a reflective diary has been therapeutic as well as an effective research tool. What started out as a self-indulgent, time-consuming activity soon proved an invaluable, integral part of the process, becoming a vehicle for 'sorting myself out' and organising the project.

'Thick description'

In addition to writing a diary, the study is reported with regard to recommendations for 'thick description' within research reports (Strauss and Corbin, 1990). Details of the settings, context and relationships and reasons for decisions are seen as integral parts of the process and not 'mere appendices'. In that sense 'everything is data', including personal experiences (see Strauss, 1974, personal communication to Stern, cited in Keddy et al., 1996). However, because of conventions regarding thesis construction and length some details are located in appendices. Nonetheless, the thesis is considerably 'thicker' than many.

Including information beyond the data demonstrates rigour and shows how different elements inter-relate and how my learning about research influenced what was done and been produced. It leaves room to acknowledge where things could - and maybe should - have been done differently. Providing details illustrates how the process influences the outcome and conclusions of the study and builds trustworthiness.

Recruitment: how many people; how to recruit?

Six months after registering I began recruitment. At this stage I was unable to say exactly how many participants I would need, but aimed for a diverse mix of people from across the two professions. Whilst I recognised that all members of the professions had something unique to contribute, for a robust study and substantial theory I needed a 'maximum variation sample' (Lincoln and Guba, 1985). I wanted to recruit both sexes and from all career levels. So as to get people to 'buy into the project' I needed them to see it as relevant and interesting and that they had something valuable to contribute.

I estimated that I needed a minimum of 18 staff (to include both sexes, physiotherapists, diagnostic and therapeutic radiographers from at least three clinical areas) and 18 students (to include both sexes from each year group of the three courses).

It was impossible to predict how many people would provide enough data to theorise: I would have to decide 'when to stop' later. The depth and richness of the analysis and 'saturation of the categories' depended not on the number of participants but on what I discovered along the way. I needed to ensure the fieldwork was conducted in ways that facilitated willingness to answer in depth: quality rather than quantity of data is key.

How to recruit?

I felt it inappropriate to recruit health workers one by one or in an ad hoc way as their working lives involve advance planning of pressured time. I also thought it would fail as the study might be seen as disorganised. It seemed wiser to go to the various local departments, speak to the different groups and enlist potential recruits. I could then contact individuals when I wanted to organise the next interview. I could also select people on the basis of germane 'characteristics' - such as location, occupation, speciality, grade, sex, age - follow emerging lines of enquiry (Mays and Pope, 1995).

This systematic, non-probabilistic 'theoretical sampling' corresponds to Lincoln and Guba's (1985) recommendation for 'maximum variation sampling'. It allows for the uncovering of a full array of multiple perspectives and does not suppress the 'deviant case'. Consequently I recruited people from a wide mix of backgrounds and experience, such that many different questions could be asked relating to numerous perspectives and provisional theories (see appendix 3 for participant details).

Initially I wrote to the 9 heads of department for local NHS physiotherapy and radiography. I introduced myself and outlined details of the project and requested a meeting to outline the study to staff to access volunteers. Aware of busy schedules, I indicated how long I would need to introduce the project and the involvement wanted. Later I contacted the 3 university course leaders asking for access to the 9 student year groups.

Gatekeepers

The response to my letters was excellent, with some replying immediately. Others were slower to respond but only two needed to be contacted again. There was no obvious correlation between the speed of responses and my relationship with the individual heads (having worked with some previously) and all resulted in an 'introductory meeting' being set up. As such I experienced no problems with 'gatekeepers' restricting 'access to the field' recognised as a significant issue in some studies.

'Real work'?

At this stage I felt the 'real work' of the project had begun and was encouraged that 'the world' I wanted to investigate was willing to take part. Reading and thinking was interesting and important but setting up and doing interviews and analysing data felt more solid. Having at last decided on what to study I was excited at the prospect of getting started with the fieldwork. Having established that not involving 'patients' in the fieldwork meant I did not need hospital research ethics committee approval I could start as soon as I was ready.

Following up volunteers

At the introductory meetings substantial interest in the project was indicated with interesting comments and ideas offered. Along with information about the study and interview method, I gave assurances about confidentiality and anonymity. I also emphasised volunteers could 'drop out' when I phoned to arrange an interview date and time. I indicated it would be a while before some volunteers would be contacted again, relating to the study design. Several people indicated

their willingness to participate and at the first meeting I gave my contact details so they could get back in touch. However I soon realised I needed to get people's contact details at the meetings, as most forgot the study and did not get in touch despite their initial enthusiasm. It was difficult and time-consuming to track down 'possibles' later without knowing their whereabouts. From then on I took contact details and, to help selection, noted each volunteer's clinical area.

Bias and sensitivity

Although successful, I recognise weaknesses in the introductory letter and recruitment meetings, especially in the way I described the topic. I tended to refer to the 'female predominance' in physiotherapy and radiography - rather than the gender mix - which could have discouraged men from coming forward. My wording reflects my initial lack of awareness about sensitivity and bias. Although I stressed I wanted to recruit men I now recognise they could have felt uncomfortable and not come forward. This would have changed the direction of the study. Fortunately several men did volunteer. Nonetheless I recognise that I should have been more thoughtful, as those that offered to participate may have felt the need to be defensive. Importantly, I have considered this issue in the analysis, particularly when comparing male and female responses.

The sample (see appendix 3)

In total, 96 people from a wide range of health and educational settings agreed to participate in the study. Most (84) were volunteers from the 9 staff and 9 student meetings; the other 12 were recruited individually.

Invited recruits

Prior to the main fieldwork I asked two physiotherapist friends and the two local radiography course leaders for interviews. With my friends, the 'pilot interviews' were trial runs, whereas the radiographers' meetings were for 'intelligence gathering'. These 'strategic informants' (Smith, 1981), as well-informed experts about the setting and study topic, provided background information on radiography work and careers and details about recruitment, training and education.

About a year after the main recruitment phases (NHS and university), and following preliminary analyses I wrote to three randomly selected private sector physiotherapists working independently (listed in the 'Yellow Pages'), and to a private hospital physiotherapy department. I also contacted radiographers working in two private hospitals via their department heads. Whilst the response rate to my letters was low, this did not prove problematic, recruiting one male physiotherapist and two female radiographers.

Later, with the help of three college lecturers, I recruited four Further Education (FE) students considering careers in physiotherapy or radiography. As initial access to these students was difficult to arrange, the project was outlined to them by their tutors and they were invited to contact me if they were happy to be interviewed.

A participant suggested the final invited recruit: he had previously worked with her as a diagnostic radiographer, but now was a business manager in primary health care.

Recruitment overview

With participants recruited because of their specific experience, they represent an 'elite' 'purposive' sample.

The interviewees constitute a 'theoretical sample': people chosen to provide a mix of ages and experience, specialities, grades and work settings. The theoretical sampling with its stage by stage recruitment, was based on provisional and emerging data analyses, supplemented by theoretical sensitivity developed through familiarity with the literature and prior experience of the field (Strauss and Corbin 1990). I used 'opportunistic sampling' selecting 'politically important' cases (Patton 1990). The number of men interviewed represents more than double the proportion currently found in the occupations nationally (37% of interviewees, as compared to 15% nationally). I wanted a significant male voice to be heard, as the minorities in this context.

The pilot interviews also influenced interview sampling. I found it difficult to take on the role of researcher in the 'trial run' pilot interviews knowing the participants as friends. Consequently I resolved to interview volunteers I knew little or not at all, so as to have a similar relationship with everyone at the start of sessions. The more detached relationship felt easier than a closely involved one, and I began to anticipate my radiographer interviews more positively.

Many recruitment decisions were guided by discussions with other people reflecting my aim for consensual validation. However, all final decisions are my responsibility. I acknowledge the selection methods and procedures affect the data and their strengths and weaknesses are relevant to the analysis. Whilst decisions can be theoretically justified they were often dictated by pragmatic concerns, especially in terms of time and cost. For logistical reasons I could not fully analyse interviews prior to the next session, as transcribing tapes and 'inputting' data into Nud*ist took many hours. I believe I would have lost many volunteers if they had not been 'followed up' and interviewed relatively soon after recruitment.

Details of the sample (see table 1, and appendix 3)

Overall, there is considerable diversity within the sample. From the numerous recruitment sources, the volunteer sample involves 66 women and 30 men from the two professions (three occupational groups), working or studying (full or part-time) in more than a dozen settings and specialities, from all stages and grades of the careers.

The sample studied on 29 training courses, most as school leavers but with mature students up to their 40s. The participants' ages ranged from 16 - late 50s. Whilst many of the 41 staff qualified in the 1980s (16), the period spans 1954 -1995. A few staff attended all-female colleges but most studied in mixed groups: the highest percentage of male students in a year was 36% (on a physiotherapy course in the early 1980s), with more than half the groups having less than 15% men. No staff studied in the same cohort.

Table 1: STUDY SAMPLE, by sex, occupation and career stage

Occupational group/career stage	Total n (%)	Female n (%)	Male n (%)
<u>Occupational group</u>			
Physiotherapy	41 (43%)	29 (30%)	12 (12%)
Therapeutic radiography	10 (10%)	6 (6%)	4 (4%)
Diagnostic radiography	45 (47%)	31 (32%)	14 (15%)
<u>Career stage</u>			
Staff	41 (43%)	29 (30%)	12 (12%)
Student	51 (53%)	34 (35%)	17 (18%)
Pre-training	4 (4%)	3 (3%)	1 (1%)
Total	96 (100%)	66 (69%)	30 (31%)

Very few participants were from the highest grades, with only one senior superintendent volunteering to take part. Whether this relates to perceptions of the importance of the study, attitudes to research generally, or to availability is hard to ascertain.

Having identified the lack of very senior staff I chose not to seek them out, as I was most interested in the views and experiences of those near the start of their careers. To understand the professions in the present day made it reasonable to concentrate on the career choices and experiences of people who qualified in the 1980s and 1990s. Also, accepting the low number of senior managers is compatible with researching from the 'bottom up', often advocated within feminist research texts (Smith 1988). It is often just as revealing - if not more - to hear from people who are considered less important than those at the top.

In total I interviewed 52 people and distributed 82 postal questionnaires (see tables 2 and 4). The four pilot interviewees and final 12 interviewees were not included in the survey.

The interviews

As indicated previously in the project diagram (figure 1, page 100), 52 interviews took place in 4 phases over an 18 month period, in line with the emergent design, constant comparative method and developing theory (see tables 2 and 3).

Table 2: INTERVIEW PARTICIPANTS by sex and occupation

Occupational group and sex	Number (%) of participants
<u>Occupational group</u>	
Physiotherapy	24 (46%)
Therapeutic radiography	9 (17%)
Diagnostic radiography	19 (37%)
<u>Sex</u>	
Female	33 (63%)
Male	19 (37%)
Total	52 (100%)

The interval between interviews within a phase was often short: occasionally two were conducted on the same day although this was not ideal as it limited time for reflection and listening through the tape, so as to inform the next session. More often two or three interviews were held in a week. Nonetheless, in all sessions I drew on the experiences of previous ones, such that emergent themes and issues were explored in further detail, whilst still leaving room for new topics to emerge (Denzin, 1989b; Glaser and Strauss, 1967). By contrast, the 4 separate interview phases were based on formal and extensive analyses of the full transcripts of the prior phase/s and 'excursions' into the literature.

Table 3: Phases of interview fieldwork

<u>Phase</u>	<u>Dates</u>	<u>Number</u>
Pilot interviews (staff)	5.5.95 - 17.5.95	4
Staff interviews (NHS)	28.6.95 - 25.10.95	26
Student interviews (university)	14.2.96 - 23.4.96	14
Final interviews (FE students, private sector/ex-staff)	26.6.96 - 17.10.96	8

The fieldwork context and setting

Planning the interviews

Before the staff interviews I reflected on the pilot sessions, to inform and direct the fieldwork and decide on the best ways to organise and approach the meetings. The sessions helped identify and organise various practical matters. This contributed to the success of sessions and helped volunteers feel at ease, whilst aware the sessions were official, organised and purposeful.

Importantly the trial runs showed I needed to 'rehearse' the start of the interview, to explain the structure and aims of the session and ensure participants registered my assurances of confidentiality and anonymity. Questions must be simple and uni-dimensional and dichotomous questions avoided; I must not interrupt but listen carefully. I decided it was insufficient to hope I appeared non-judgemental, so resolved to repeat how I was not judging opinions as right or wrong, but keen to hear their ideas and experiences.

The participants chose the place and time for their meeting. Most wanted to meet me during work hours in work settings. Some university students were interviewed in hospitals during clinical placements. The FE students chose to be interviewed in their homes.

Experiences of the interviews

I found that whose 'territory' we met in affected my sense of role, authority and control over proceedings: the research relationships felt different. As a 'guest' in people's homes I often felt out of place. Having worked in various hospitals and at the university I was more relaxed and comfortable in these settings. I felt they were more appropriate to the topic and helped balance the research relationship. In these, both participants were in familiar territory, although I was a visitor. It felt like there was a 'trade off': I was taking the trouble to travel to their base whereas they were helping me with the study by volunteering for interview.

Sometimes I felt awkward asking about controversial topics and personal issues. In one-off interviews with strangers these questions seemed intrusive. Although wanting people to feel

comfortable and talk freely, the home setting felt problematic. I was concerned people might 'bare their souls' and later regret their confidences as 'private disclosures'.

Whilst I do not know exactly how participants felt in their sessions, the extremely high questionnaire response rate from the interviewees (90%) suggests they were positive about the experience and found the subject sufficiently interesting to continue participating in the study. Pleasingly, several people said they had enjoyed their interviews, either at the end of the session or when I bumped into them at later dates. Some said they had enjoyed thinking about the topic and others said it was great to have someone interested in their experiences and opinions.

Generally the sessions went smoothly, with no major delays or interruptions, breakdowns in technology or requests to stop prematurely. The atmosphere felt relaxed but also purposeful and productive. The participants worked hard, giving considered and thoughtful responses. At times the communications were light-hearted, even humorous, whereas at other times the mood became intense and serious. At no point did I feel the exchanges or atmosphere were hostile or confrontational, although occasionally I sensed some disquiet. In these situations I usually changed the subject, as it seemed inappropriate to deliberately upset them. Sometimes I tried a different, less threatening approach to the topic by generalising the question, other times I returned to it later.

Occasionally I challenged or asked participants to extend or clarify a point, even though they appeared a little perturbed. I also played 'devil's advocate' when I judged it would be found acceptable and appropriate. Decisions about 'how far to go' required 'on the spot' assessments of the situation and quality of relationship. This highlights my active interpretative role in the interviews.

The sessions were audio-taped with the participant's consent, so that accurate records of the conversations could be analysed later. Initial assurances about anonymity and confidentiality were repeated if signs of anxiety developed, especially if it seemed to be inhibiting disclosure. Importantly I reassured everyone at the outset they could stop at any time or refuse to answer questions. Participation was voluntary and dependent on goodwill: the participants retained full control over what they wanted to tell me.

Because I tended not to push people to talk about sensitive topics means these got less attention than I would have preferred, but with one-off interviews it was inappropriate to be over-intrusive. I believe participant control is important and reject coercive tactics. However, in addition to the tapes, soon after the meeting I wrote informal 'debriefing' notes and included 'off-record comments' said after the recorder was switched off. I have used this 'analysis in the field' as supplementary data and consider it ethical to include off-record comments as they were volunteered to me within the research setting and I was not asked to treat these comments as 'off limits'. However, in contrast to the taped material, these comments are not 'sourced' but incorporated with general ideas and information I have learned over the years.

During both the sessions and data analysis I observed the absence of criticism and negativity. Conflict and dissatisfaction were rarely apparent, both personal, inter and intra professional or between the sexes. The overall impression of the experiences of gender at work/training was

positive. This may suggest the accounts represent a 'public portrayal' of the professions. I surmise it was seen as inappropriate and disloyal to 'tell tales'. However there were exceptions, with a few participants openly critical of colleagues and dissatisfied about a range of issues. This raises questions about the limits of face-to-face methods for discussions about sensitive topics and intra-group criticisms especially from one-off sessions. However, through detailed interrogation of the data (for example, examining non-verbal details, 'subject shifts' and word associations), ideas about difficult issues emerged.

Challenging participants

One of the reasons I tried to convey a warm, non-judgemental manner was to encourage full and candid revelations. I have considered whether a feminist researcher should challenge someone who is being sexist, racist, homophobic (etc). Is the most important thing to hear what someone has to say, however objectionable I find their view? Once the values of a researcher are exposed as different to a respondent it may drastically influence what is said? I resolved to ask for comments to be elaborated rather than being critical, as bigotry and stereotypical prejudice can be extremely difficult to explain.

I responded to each situation on its individual merits, taking into account the extremity of remarks, the stage of the interview, the relationship thus far and other issues such as my mood on the day. Even though I didn't articulate my feelings, my body language and verbal tone probably indicated them.

The research relationship: authority, control and respect

I wanted to avoid the traditional, dominant researcher role, dictating the pace and tone of the meeting, adhering to my pre-set agenda. However, I did not want participants to take over or undermine proceedings. In accordance with feminist research principles, I wanted an equal relationship between participants, with inter-active communication and respect for each other's role, views, experiences and contribution. Whilst I had an interview guide, the participants governed the precise direction, detail and depth of our discussions.

Although wanting two-way exchanges I am concerned by the notion of 'reciprocity of disclosures' (Oakley, 1981). I consider using 'openness' as a pre-planned tactic - providing personal details solely to gain disclosure about something otherwise withheld - is manipulative exploitation. I resolved to communicate naturally and disclose personal information when it felt appropriate and comfortable.

Inevitably I felt more rapport with some individuals than others, and the relationships and ways of interacting varied. For example, several students were more deferential and passive than older staff, which may have been because of age differences or their perceptions of me as a qualified physiotherapist. Radiographers often spoke to me as a researcher rather than as a fellow health professional, which meant they were confident as experts when talking about their work but less assured when talking about generic 'gender issues and explanations'. Overall, the interviews with women, *perhaps* because of shared gender identity, felt like meetings of equals, whereas with the men, although they generally behaved politely and appeared interested in the study, our different perspectives were noticeable occasionally. However I did not find the men's interviews

consistently more difficult, confrontational, controlled or emotionally barren, as discussed by many feminist researchers writing about 'women interviewing men' (Oakley, 1981; Padfield and Proctor, 1996; Scott, 1984a).

Egalitarian research relationships?

In the vast majority of interviews I felt the relationships were equal and reciprocal and the sessions participative and productive. However there was one exception to this, when I felt 'put down' by one of the male participants, although this still proved an illuminating learning experience. During this interview I was described (over the phone which had interrupted us) as 'a girl' who had 'come to talk to me about her project'. The way he spoke suggested he thought both the research and myself were trivial. Before this I had already been irritated by the way he seemed to assume I knew nothing about the subject, despite having been told who and what I was, and about the research. I decided to finish the session prematurely, taking back the control and reasserting my authority. Reflecting on this later, I wondered whether this indicated I was kidding myself that the other relationships and sessions were equal and participative.

Interview questions (see appendix 4)

As analysis took place concurrently with data collection, the precise questions varied. They were based on *active listening*: I interpreted and responded to what was said, rather than adhering rigidly to a pre-determined checklist and order. Whilst using a standardised general plan, each session developed uniquely.

The preset question areas covered personal background; career choice; training and work experiences, and the gender mix.

Types of questions

Having introduced myself, described the project and outlined the interview plan, I asked a few biographical and descriptive questions. They provided a gentle start for the participant and helped reduce tension. I introduced 'opinion-seeking' questions later, once the participant appeared relaxed.

Generally I used a classic 'funnelling' strategy, starting with general questions then narrowing down the focus later (Morgan, 1998). So as 'to enable the researcher to understand and capture the points of view of other people without predetermining those points of view' (Patton, 1990, cited in Donovan, 1995) I used a predominance of open-ended questions, in the earlier interviews especially. For example, in the first interviews I asked an open question about coming into physiotherapy or radiography and the participant decided the particular aspect(s) to discuss. After a few sessions I decided to ask how, when, where and why they had come to work in their occupation and about alternative options considered. Later I introduced questions about what they knew or thought about other people's career choices. I tried to deter generalisations and stereotyping in responses by seeking depth and specificity, asking for personal examples and experiences.

Questions of gender

At the start of sessions when I asked about background and career choice, I did not mention gender, as I wanted to see if it 'emerged' spontaneously. I wanted to discover if accounts would vary by sex without 'forcing'. I was concerned to not manipulate findings, by leading participants to explanations and issues.

Later in the session, I asked about gender divisions and reasons for them. Sometimes we talked about experiences and opinions of the gender mix; in some sessions we focussed on past and future changes, whereas in others we considered consequences of change. Occasionally we discussed the accuracy of perceptions about change.

Bias and sensitivity

The precise wording of questions was crucial in determining the direction interviews took and how research relationships developed. Asking about the female majority was not the direct opposite to asking about the male minority: I was asking about social convention, involving beliefs and attitudes to conformity (or non-compliance) to gender roles and norms. It became clear that both the content and quantity of responses were influenced significantly by the participant's sex. Effectively men were being asked about gender norms, whilst being non-conformists themselves which may have been disconcerting for them. Issues of unintended bias and sensitivity and the consequences of leading questions became most apparent at this stage: asking about gender is a sensitive topic.

Later interviews

With each previous interview's preliminary analysis, plus excursions back into the literature, I asked questions in later interviews to verify or further explore points.

I used probing, direct and closed questions when clarification was needed, and when points required 'testing'. I increasingly used an 'inverted funnel' approach. I asked 'surfacing' questions to add depth and breadth, for the eventual saturation of categories and themes, establishing and checking the limits and extremes of categories, and identifying 'negative cases'.

For example, I asked students about the relevance of pay and career prospects for their job choice, as this was highlighted by several staff. Similarly, I asked the private sector staff about career development because of previous respondents' references to forward planning and ambition. Questions were also adapted according to the professional group, to distinguish between influences and experiences of gender and occupation.

How many interviews? When to stop?

With the project dependent on an *emergent* rather than a *priori* design the decision to stop interviewing was made when a 'redundancy of information' was reached ('saturation of categories'), with extra respondents confirming and repeating rather than adding different ideas. However, whilst aiming for a robust analysis, decisions to stop data collection were influenced as much by the practicalities of managing vast amounts of data as theory-based justifications.

The questionnaire (see appendix 5)

As mentioned previously, the questionnaire provided a larger source of ideas and explanations than I could obtain from interviews, reading and personal experience, and, although not providing statistically significant results, contributed to the theoretical sampling and questions asked in the last interview phase. The survey influenced lines of enquiry explored in the post fieldwork analysis and indicated whether ideas mentioned in only a few interviews were exceptional. It also freed up valuable interview discussion time by obtaining factual biographical details about interview participants. As such the questionnaire has provided both an inductive and deductive research tool.

The questionnaire was posted to 33 staff and to 49 students with 69 completed forms returned. Within the sample, different groups responded at different rates (see table 4). The respondents were given two weeks to return the forms in stamped addressed envelopes. They were asked to complete the form independently, to spend a maximum of 20 minutes on it, and to omit any questions they did not want to answer.

I decided against increasing the sample size as the survey supplemented the interview data rather than being an equal component. I felt a larger survey and quantitative analysis would change the overall balance of the project and alter my study aims.

Confidentiality was again emphasised and names were not included on forms, although each was coded. This facilitated sending reminders and a comparison of questionnaire and interview data.

Table 4: QUESTIONNAIRE SAMPLE and RESPONSE RATES, by sex and occupation

Occupational group and sex	Number (%) of questionnaire respondents
<u>Occupational group</u>	
Physiotherapy	32/34 (94%)
Therapeutic Radiography	7/9 (78%)
Diagnostic Radiography	30/39 (77%)
<u>Sex</u>	
Female	49/57 (86%)
Male	20/25 (80%)
Total	69/82 (84%)

'Factual' and bibliographical questions covered in both formats have been checked for consistency, whilst opinion seeking and experience based questions have been compared. Importantly, different responses have not been interpreted negatively as invalidating the data, but as reflecting the effects of participating in the research process and epistemological differences between the two formats. The process has not been used for triangulation, but for added depth and breadth, with multiple and shifting realities and different perspectives realised.

Response rates

I relied on co-operation through appreciation and courtesy, efficiency and hoped for an interest in the topic. May (1993) suggests interest is a highly significant influence on response rates and relies largely on the target population and topic. Nonetheless, in most studies some people fail to return forms and others return 'wasted' papers. Dillman (1978) suggests that despite 'good'

techniques, a 20% non-response can be expected. Well-conducted postal surveys are reported to have response rates between 60 and 75%, with the best from specific or homogenous groups and when the topic is relevant to the group itself, as in this study.

As 29 staff and 40 students returned questionnaires, this equates to a *highly satisfactory 84% response rate*. Reminders sent to non-responders after the deadline increased the rate from an already acceptable 68%.

Shared affiliations

The highest return rates were from interviewees, female respondents and physiotherapists (90%, 86% and 94% respectively). This suggests taking part in the interviews maintained participants' willingness to participate in the project and the research relationship and interview experience was positive. As a female researcher it is perhaps unsurprising that more women responded than men, although this may relate to them being the majority-conformists within the profession rather than a reflection of our shared sex. The higher rate from physiotherapists perhaps indicates a closer affinity between fellow professionals.

Questionnaire data: reliability and validity

Generally, the excellent response indicates high interest and commitment to the project and consequently the survey provides reliable data. The satisfactory completion of the form also indicates the structure and content of the research instrument was good. Only a small number of items within the 69 returned forms were not answered and all the scripts were legible. These aspects contribute to claims for validity.

Items in the questionnaire

After the biographical details, the questions relate to career selection and explanations for the gender mix. The items included were based partly on personal experience and the literature, and partly on the pilot and staff interviews.

The staff and student questionnaires and letters were almost identical, with differences relating to the different career stages. Staff were asked 17 questions, with one removed for the students, as inappropriate for their stage.

Emergent design and late decisions

Mixed methods

Using the emergent design and grounded theory approach meant some decisions were left until later stages of the project. For example, a questionnaire was first considered when I started planning the study but the final decision came after reviewing the first interviews. I decided to go ahead to ensure areas I identified as important from personal experience and in the literature were covered. With the open-ended questions and unstructured approach, interviewees could spend as much time as they wanted on whatever aspects of the general question areas I introduced, before completing the questionnaire. I remained keen to retain this approach as I primarily wanted to explore insiders' understandings but also wanted to include my ideas and other theories. Also, I recognised that a survey provides a better format for reliable coverage of

biographical and background information, freeing up interview time for substantive discussion. Finally, with the large number of volunteers I saw a questionnaire would avoid spurning anyone's offer of help with the study. My decision was therefore partly pragmatic.

Emergent issues and theoretical sampling

Following reviews of the NHS staff and university student interviews and questionnaires I considered interviewing people from other groups. The role and influence of careers information and advice emerged as a common and important issue, but as I only needed general details about careers services I decided against interviewing careers advisors. Whether or not they are like the respondents' descriptions was less important than perceptions and beliefs about them. Following analysis of staff and student interviews I identified various questions to explore with college students considering doing physiotherapy/radiography and private practitioners, and organised the final fieldwork phase.

Observational fieldwork

About one year into the project I considered using observational methods, as I began to identify differences in what people were saying to me and what happens in practice. For example, several said they 'treat patients the same regardless of their sex', which from my experience was not the case. I recognised the gap between beliefs and action (Gilbert and Mulkay, 1983). The differences illustrated how it can be a mistake to treat the 'verbal formulations of interviews as an appropriate substitute for the observation of actual behaviour' (Heritage, 1984, p236). Consequently, I discussed the rationale for observational fieldwork with an anthropologist.

I decided against observational fieldwork for two reasons. Firstly, by reconsidering my initial research aims: did I still want to interpret participants' understandings of gender in physiotherapy/radiography or had my aims changed? As they had not, what was the point of doing observation, as it does not reveal understanding? Secondly, with many years working in the field I recognised observational fieldwork might reveal little I hadn't already seen. It was because of my first hand experience that I recognised the differences between what was being said and done.

Data analysis: practical and theoretical issues

Transcribing

As indicated previously, the extent of formal analysis between interviews was limited. Because of the time for transcribing, I wrote summary notes from the tapes and recorded impressions of the session in my diary directly after the meeting; I also identified main issues and ideas. Whilst these records informed subsequent fieldwork, this interim analysis does not equate to the constant comparative method.

Although using the Nud*ist software alleviated some of my concerns regarding analysing a large data-set, it took me many hours transcribing the tapes verbatim, before transferring the script onto the computer. However, as widely recognised, 'immersion in the field' helps improve analysis and transcribing provided closeness to the data. What initially appeared a secretarial chore was an important part of the analytic process. With careful attention to the 'how' as well as 'what' is said,

I could distinguish the various 'levels of communication', whereby 'feelers' and 'asides' - which test out the responses and reactions of others - along with coded language and metaphors could be recognised. These are most often used in talk about difficult topics and feelings (Cox, 1978).

As Wolfgang highlights (1977, in Guba and Lincoln, 1981), our culture is so word-oriented we tend to forget other channels of communication play an important role. Whilst accepting the importance of non verbal aspects of communication (nvc), I decided to record only basic details in the scripts. Whilst I recognise they should not be ignored - as 'a bonanza for the knowledgeable inquirer' (Guba and Lincoln, 1981) - as a non-expert in linguistics I felt it unwise to attempt anything complex. As hard to control and ratify, nvc details are supplementary. Also, with the qualitative emphasis of the study, attempts at discourse analysis with its strict quantitative measuring were inappropriate.

Consequently I recorded limited non-verbal detail, for example long pauses, laughter, blushes and groans (Suchman, 1987). They have been useful for considering difficult topics, with 'conflict' and 'sexuality' as possible but 'hidden' themes. For this I looked at pauses as well as the choice or avoidance of words or topics and 'subject shifts'. Using Nud*ist I examined linkages between topics and words, and styles of speech. The software easily and reliably shows 'shifts' and 'associations' throughout and within the data-sets. But I have not measured the exact length of pauses nor counted the number of references or subject shifts as precise indicators, for statistically significant results.

Using computers in analysis: the Nud*ist software

Several writers review software packages designed to assist in qualitative analysis (e.g. Richards, 1991; Tesch, 1990). Many highlight the distancing of the human element from data with the use of machines and the *tendency* for elements of quantitative methods to 'sneak in via the backdoor' (e.g. Erlandson et al., 1993). Tesch suggests the key difference between early and later programmes is the helpful development from simple text retrievers to text data-base managers.

Richards (1991) emphasises that computers do not think for researchers, but do help efficiency. I have found using Nud*ist has made it easier to produce a dependable thorough analysis and manage a large data-set. Whilst understanding the risks from 'distancing', the thoroughness, speed and scope of the text and index system search tools provide a reassuring sense of rigour. The facilities to index and store coded data in conceptually organised 'trees' was much more than an 'aide memoire' as it also helped illustrate relationships and patterns between data and assist the development of categories and testing of theories.

Rather than increasing distance, I contend the technology helped me stay closer to the participants' perspectives. The ease of referring back to source and fully test out new ideas to confirm and build theories means the 'grounding' is firmer with the technological approach than would have been possible manually. I found the screen images of the tree also helped show relationships between categories and highlighted recurring issues. With dated analytic memos linked to nodes and previous data searches saved, I could return and build on old ideas.

The text unit and data searching

Nud*ist interrogates and numbers data by a pre-set text unit which can be word, phrase, line or 'speech utterance'. I had to set the text unit size before I inputted data when setting up the project. As the size determines the sensitivity of searches I decided on a 'line as text unit'. As search results could be 'spread' to lines adjacent to the retrieved unit, 'finds' could be reviewed within a broader 'speech context', to show associations and overlap of ideas (see appendices 6 and 7).

Conceptual levels and stages in the analysis

The interview and questionnaire data have been interpreted in different ways and to different levels, using various manual and computerised techniques. As well as examining the data from the two formats separately and together, I considered each case individually, and compared by sex, occupational group and career stage.

At different stages, different conceptual levels of analysis have been identified. These range from informal impressionistic observations of themes and issues concurrent with the fieldwork, to first and second level codes and categories and increasingly abstract third level constructs and theories developed from formal grounded theory techniques between the fieldwork phases and after. Although some stages, especially those involving coding, were predominantly mechanical rather than creative processes, they all involved decisions and were therefore interpretative.

When I began coding I found it easier to work with hard copies, writing notes on the paper (see example in appendix 8). To compare and contrast codes and categories by sub groups I separated the transcripts and survey forms by sex, occupational group and stage. As I read each interview script I noted scores of possible codes and categories in the margins having first colour-coded sections of the text according to the main question areas. References to gender by the participant, details about career selection, experiences of training/work and career, and explanations for the gender mix were each given a colour. This made it easy to identify the various topic areas before indexing them in Nud*ist and also exposed the varying amounts of time spent on subject areas. It provided a simple but visually effective method to illustrate the focus and flow of sessions.

I also found it useful to write 'descriptive summaries and brief notes' for each of the interview question areas (see appendices 9 and 10). For example, having identified the data relating to career selection, I wrote a resumé of each participant's account. This reductive method made it easier to identify factors and influences as well as establish key stages and processes. I found it easier to get a sense of common and occasional themes and issues and compare them by sex, stage and occupational group. For detailed and rigorous searches of the full text I used Nud*ist.

I started the computer-assisted process by firstly introducing the full manuscripts as individual 'documents'. I then coded each by sex, age, occupation and career stage (as a base data node) and coded each colour of interview text as a 'main node'; I also inputted and coded the staff and student questionnaires (see appendix 11 for Nud*ist tree and main nodes/indexing system).

Then started the laborious process of working through the interview margin notes to attach the coded text to different lower level nodes, in different sections and levels of the framework. For

example, having coded all the 'red' data relating to 'experiences' under one node, I differentiated and coded separately the experiences of training, work and career at the next node level. Data about different aspects of training were then coded below this, for example I distinguished social from academic aspects of the course, and placement experiences.

I also entered each questionnaire item as a separate document, with responses categorised at lower level nodes in the relevant section of the tree.

Whilst all the data are indexed under a base data node by age and sex (etc), and at several levels within the same section of the framework, some are indexed under several main nodes. For example, interview data about an experience of training described as influenced by the person's sex are coded in the 'interview', 'experiences' and 'gender' nodes of the framework as well as by the participant's demographic characteristics.

The process resulted in a detailed, hierarchical system of coding. At the 'twigs' of the tree are the nodes with the smallest number of text units linked to them, with some including just a few responses on a narrow topic.

I found Nud*ist most useful for text searching to establish the extent and distribution of themes and issues, to follow up ideas emerging from a few scripts to see whether they were in many others. As Nud*ist operates hierarchically, with category levels developed from macro down to micro detail, I found the coding-indexing system incompatible with the grounded approach which considers the fine detail first, then categorises data in order to conceptualise later. I discovered I needed to alternate between manual and computer-assisted methods, to make the leap from raw data to abstract concepts and constructs. Having the different node levels was useful for data organisation and the first/second levels of descriptive analysis, but assisted the development of the conceptual categories and constructs less directly. I needed to develop the 'explanatory framework away from the technology.

By printing out data attached to 'text search' nodes, I compared the dimensions and properties of codes and identified underlying associations and relationships between them: this led to second level 'conceptual categories'. I examined the detail of the data for similarities and differences, to expose relationships between categories in different contexts and conditions and their influence on outcomes. This was 'axial coding' using the grounded theory 'coding paradigm'.

For example, four conceptual categories were identified as types of *factors* relating to 'career selection' (awareness, qualifications, satisfaction and benefits) (see appendices 12 and 13). Each category comprises data involving scores of open codes, and similarities, relationships and associations between them were examined in order to classify them conceptually. In addition to the four factor types, career selection was interpreted in terms of five *process* categories (duration, detail, agency, range and timing) (see appendix 14).

The conceptual categories for career selection were considered in relation to each other to see how they apply across the sample, then with the conceptual categories relating to 'experiences of physiotherapy/radiography' and 'explanations for the gender mix'. They were examined together to develop the third level of analysis. This involved identifying abstract 'constructs' from central core issues to substantiate an explanatory theory bringing together the different elements of the

discussions about gender in physiotherapy and radiography. The 'selective coding' involved identifying key issues within each category and examining them in relation to the coded data across the sample, to apply or reject them as the basis of theory. This involved going back to Nud*ist to check the fit of the theory to the different cases.

Whose ideas?

With the interview data I needed to distinguish between what I said and what the participants said, taking care with search results. The data are not just a record of what the participant said, but a document of our conversation: my involvement influenced what participants said and my words are included in the transcripts. Accordingly some searches show I tended to initiate discussions about some topics, and that I favoured some words and phrases that participants rarely used.

Sourcing data and maintaining anonymity

In the thesis, quotations are referenced in [hard parentheses] with an interview or questionnaire code, followed by the line numbers of its Nud*ist document. For example, staff interviews are numbered 1 – 30, student interviews 1B – 14B and pre-training students 1p – 4p; staff questionnaires are Q1 – Q33, and student questionnaires Q1B – Q51B.

Each script and form is identified by sex, professional group, work location and interview date (see appendix 3). To assist my recollection of the participants/sessions I also identified scripts by participants' initials during analysis, but these have been removed in the thesis.

However, because the 'physiotherapy/radiography community' is quite small and self-contained, some individuals may potentially be identified, especially the male minority. I have therefore been cautious with referencing and verbatim quotes to 'protect' individuals privacy.

Generalisability

Although not concerned with data 'reliability', I have compared the interviewees' questionnaire responses with their interview accounts to look for changes and differences in emphases over time, possibly as a result of having considered the topic in the interview. Generally, responses are consistent, suggesting they represent firm beliefs and enduring opinions rather than transient ideas. However there are some differences, perhaps relating to the awkwardness some participants felt in discussing sensitive issues with a stranger. As well as embarrassment with 'taboo' subjects, some may have been concerned about appearing 'politically correct' (or not!), perhaps wanting to seem in line with current social conventions. Using a postal survey enabled participants to be more open, and certainly some written remarks were more controversial and critical than comments in the interview format.

With its mix of open and closed questions, the questionnaire provides a mix of qualitative and quantitative data. I have used descriptive statistics to analyse categorised responses to identify general patterns and trends, displayed in various tables and graphs within the results and appendices. However, as de Vaus (1991) stresses, whilst it is easy to identify the most frequent category this does not necessarily mean it is 'typical' for the group as a whole: people keep silent about issues for many reasons.

Whilst not statistically significant, the distribution of responses clearly demonstrates that some ideas and experiences are more common than others. Nonetheless it is important to recognise the results only apply to the study community as defined and described. However, with the 'maximum variation sample', methods of analytic induction and the levels of generality from a third, abstract level grounded theory, the explanatory theory is seen as applicable to a broader population of physiotherapists and radiographers. In that sense the study conclusions are seen as generalisable.

Credibility checks and consensual validation

I did various 'credibility checks' at different stages of the project. I asked friends, other research students, my supervisors and health professionals unconnected with the sample to comment on and apply my coding systems and verify the development and application of theoretical constructs and conclusions.

Checking back with participants was more problematic and less extensive. Although I checked several coding decisions at the start of the post fieldwork phase, it was difficult to contact people towards the latter stages of the project, as the students and many staff had moved on. Also with the length of time since the fieldwork, I recognised that participants wouldn't remember exactly what they said and their views may have changed substantially. This makes it hard for participants to comment on the fairness and adequacy of my interpretation and raises questions about allowing revisions and second chances to explain what was/is 'really meant'. This returns to the issue of 'timeless texts' and which 'versions' are the 'true' ones.

I also recognise that participants may dislike my interpretation for personal or political reasons. Although the general topic is not an obvious 'hot potato', I have highlighted aspirational attitudes and disparaging remarks about other health professions. Although anonymised, issues relating to sexuality might also be considered difficult.

But my main concern is over participants disagreeing with my conclusions and wanting to change or block them. This is different to member-checking early in the project, when discussions and comments about summaries, coding and categorising data were constructive and fostered a collaborative approach. I see member-checking not only relates to the validity of researcher's interpretations but also to the ownership of data and rights of participants to control materials produced from them. Instead of handing responsibility for analysis to participants, I believe researchers should take responsibility and claim analyses as their own. If taken too far, member-checking is not only impractical but also represents another scramble along the 'holy grail' of positivism with its concerns about researcher subjectivity. I consider it is more important to be thorough and rigorous, incorporating the full range of responses into analysis than checking back with participants for approval.

Another element for building credibility - 'member validation' – presented fewer problems.

Through my professional qualification and health care background I could easily understand the language and relate to many of the participants' experiences. I was able to communicate naturally, sharing stories and illustrating examples from my own experiences. Nonetheless I was

aware of the need to maintain an open mind to hear what participants said: I had to avoid jumping to conclusions, assuming we shared the same ideas.

In terms of academic rigour, I have thoroughly and systematically examined all the data, checked the fit of the explanatory theory against individual cases, and the methods of analysis at the different stages have been externally scrutinised and verified.

Conclusion

This chapter has provided a detailed account of the research process describing and critiquing details of why, when and what was done, and my experiences of it.

As emphasised earlier, the thesis should not be read as if it is describing a linear research process, starting with a hypothesis, then literature review, leading to data collection followed by interpretation. In the thesis I present the outcome of iterative research involving many circular processes. For example, as highlighted previously, much of the literature included in the review is considered as a consequence of the fieldwork, and yet it is physically located before the methodology and fieldwork sections.

Chapter 4 Physiotherapy and Radiography: a snapshot of the modern workforce

Before proceeding to my analysis of the participants' accounts of their experiences of the physiotherapy and radiography professions, and their explanations for the gender composition and divisions in them, I feel it is helpful to present some 'facts and figures' about the size and gender composition of the two professions over recent years.

Notwithstanding problems of comparison because of differences between data recorded by the professional bodies; statutory registers; Department of Health; the National Census and Office for National Statistics, and with some reporting figures for the UK, others England and Wales (etc), the overall picture obtained for recent decades is remarkably consistent (see appendix 15 for state registration and professional body figures).

The data reveal two professions that have

- *grown in overall size*, (see figures 2a and b), but undergone
- *changed little in their gender composition* over recent years, (see figures 3a and 3b), with a
- *large majority female membership* (also see figures 3a and b).

For example, the total number of state registered physiotherapists has risen steadily from 15,747 to 26,569 over the period 1982 - 1997; the number of state registered radiographers has risen from 13116 to 18,271 for the same period. (NB Remedial Gymnasts merged with the Physiotherapy profession in the mid 1980s).

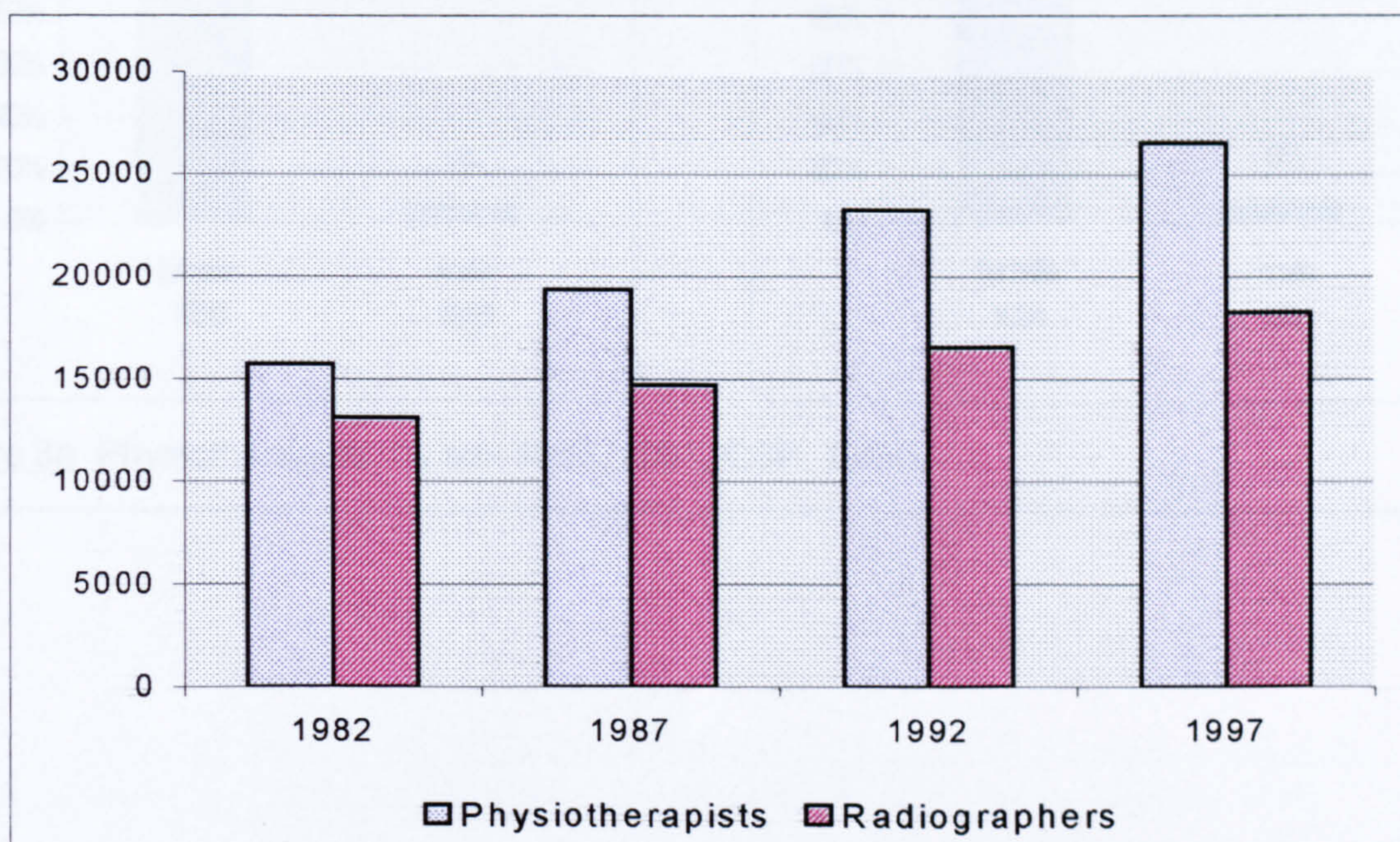


Figure 2a Number of State Registered Physiotherapists and Radiographers, 1982-1997 (CPSM, 2000)

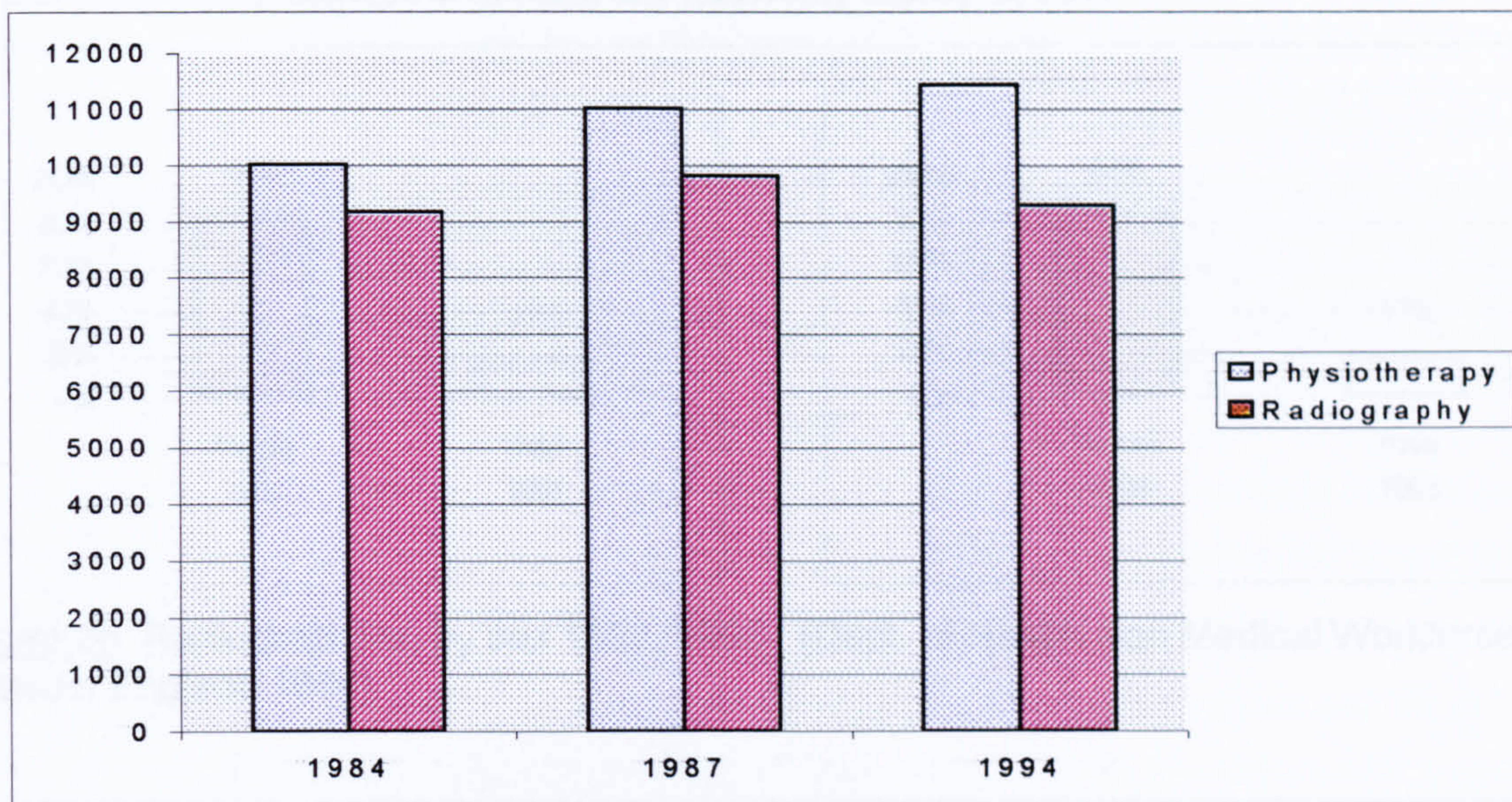


Figure 2b Number of NHS physiotherapists and radiographers (whole time equivalent posts) 1984-1994. Great Britain (Pay Review Reports, 1995).

Gender composition and changes over time

In 1986, 93% of chartered physiotherapists were female. By 1991, despite substantial increases in the size of the profession, the proportion of females has only changed slightly, falling to 91%.

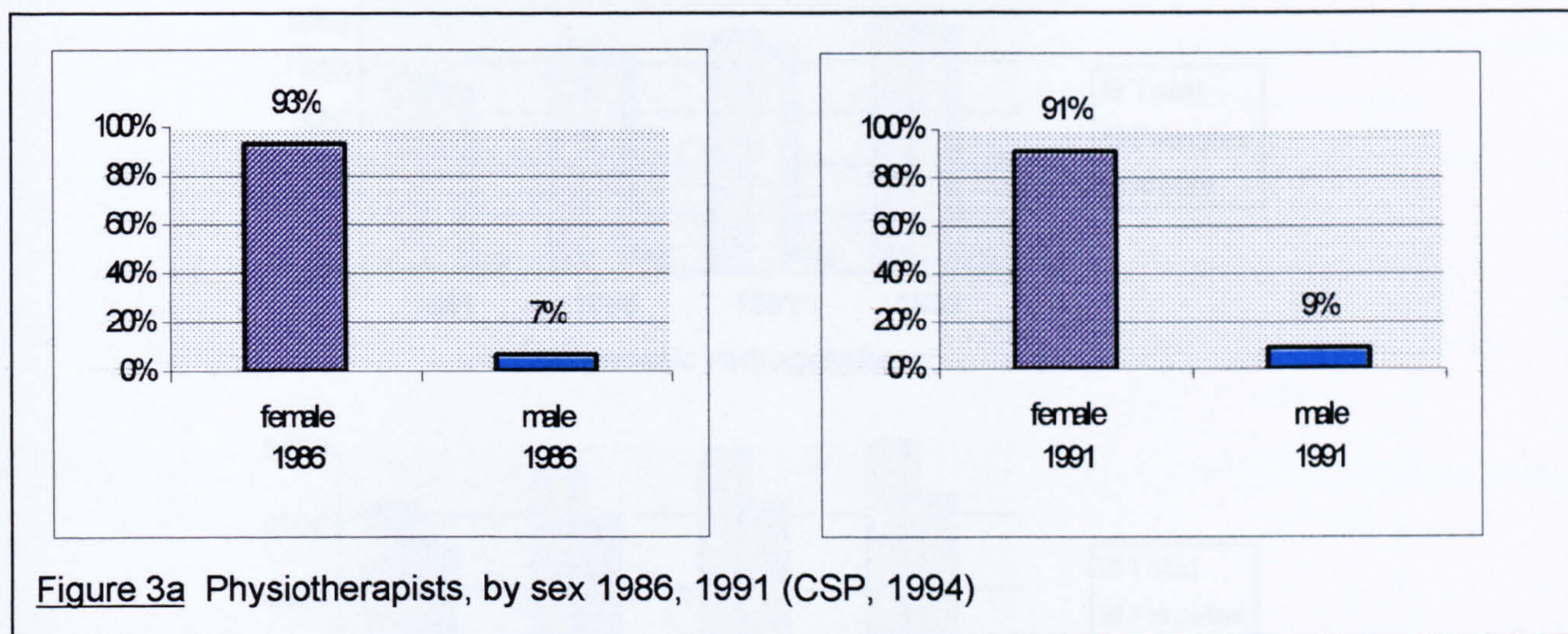


Figure 3a Physiotherapists, by sex 1986, 1991 (CSP, 1994)

In 1981, 84% of NHS radiographers were female. By 1993, and despite increases in the size of the profession, the proportion of females has fallen very slightly, to 83%.

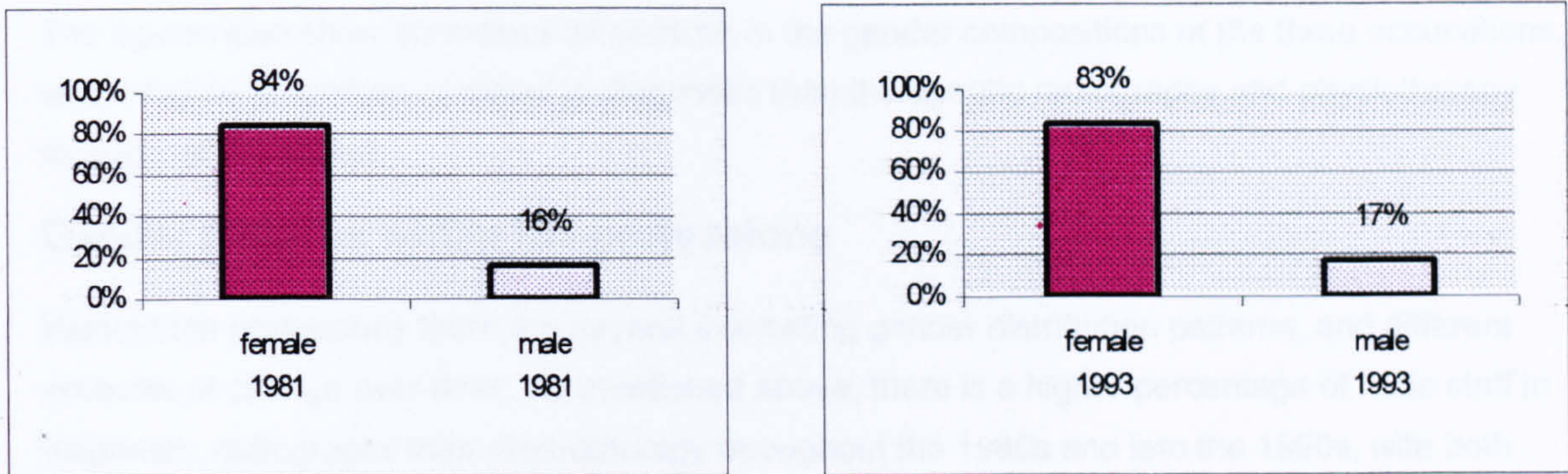


Figure 3b Radiographers, by sex 1981, 1993 (Dept. of Health Non Medical Workforce Census, England 1994)

As well as differences in the overall size of the physiotherapy and radiography professions (that continue through the 1980s into the 1990s), there are substantial differences in the size of the two branches of radiography and their gender composition (see figure 4).

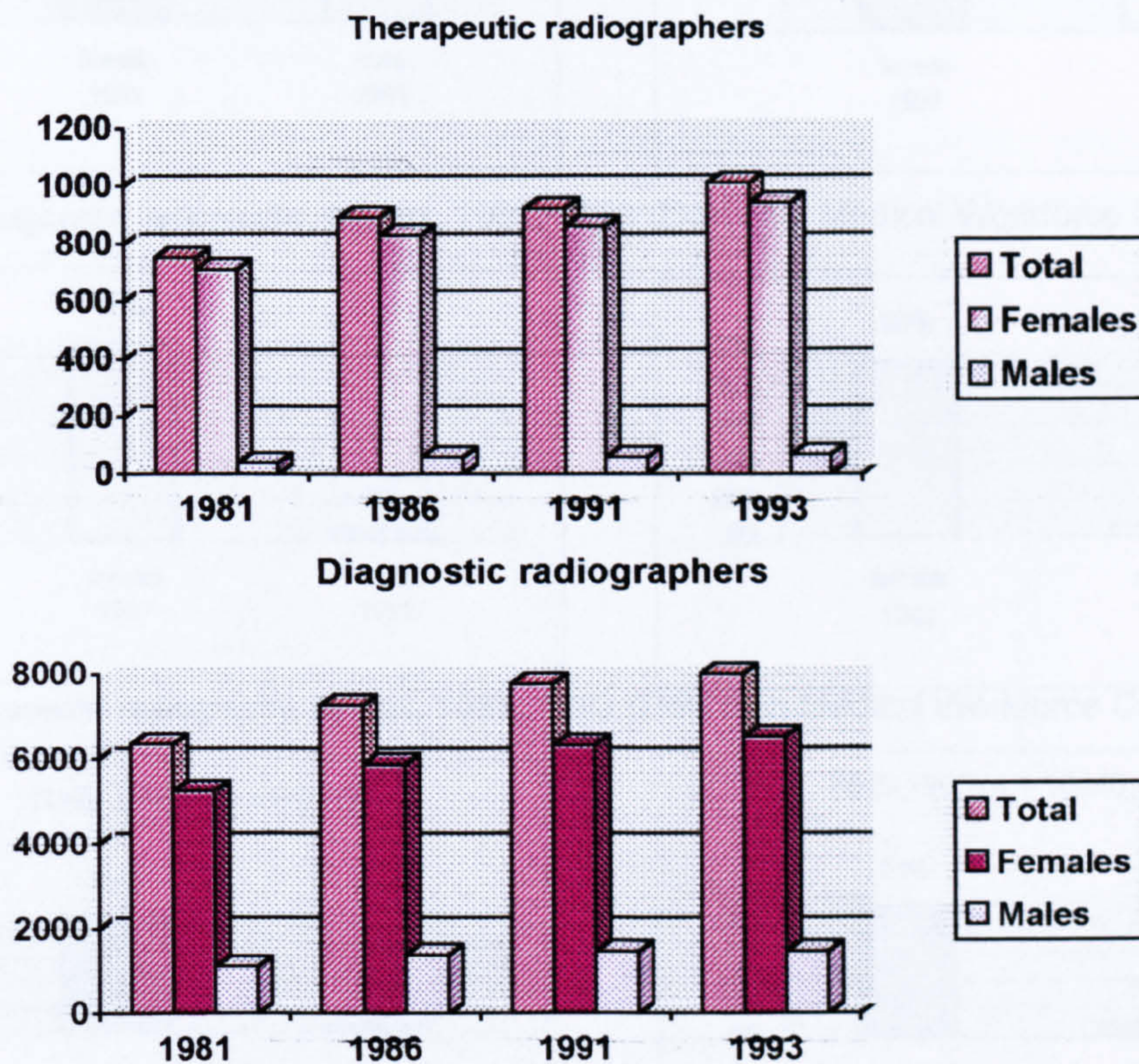


Figure 4 Number of whole time equivalent posts in therapeutic radiography and diagnostic radiography, by sex, 1981-1993 (DoH, Non Medical Workforce Census, England 1994).

In 1981, there were 7100 whole time equivalent (wte) radiographers employed by the Department of Health, with 750 therapeutic radiographers and 6350 diagnostic radiographers. For the same

period, there were 7140 wte physiotherapists. In 1993, there were 9000 whole time equivalent (wte) radiographers employed by the Department of Health, with 1010 therapeutic radiographers and 7990 diagnostic radiographers. For the same period, there were 10440 wte physiotherapists.

The figures also show consistent differences in the gender compositions of the three occupations, with a higher proportion of males in diagnostic than therapeutic radiography and physiotherapy throughout the period.

Gender patterns within the professions

Within both professions there are several interesting gender distribution patterns, and different amounts of change over time. As mentioned above, there is a higher percentage of male staff in diagnostic radiography than physiotherapy throughout the 1980s and into the 1990s, with both higher than in therapeutic radiography (see figures 5a, b, and c).

For example, in 1981, 17% of diagnostic radiographers, 7% of physiotherapists and 5% of therapeutic radiographers employed in the NHS were male. In 1993, the corresponding figures are 18%, 9% and 7%.

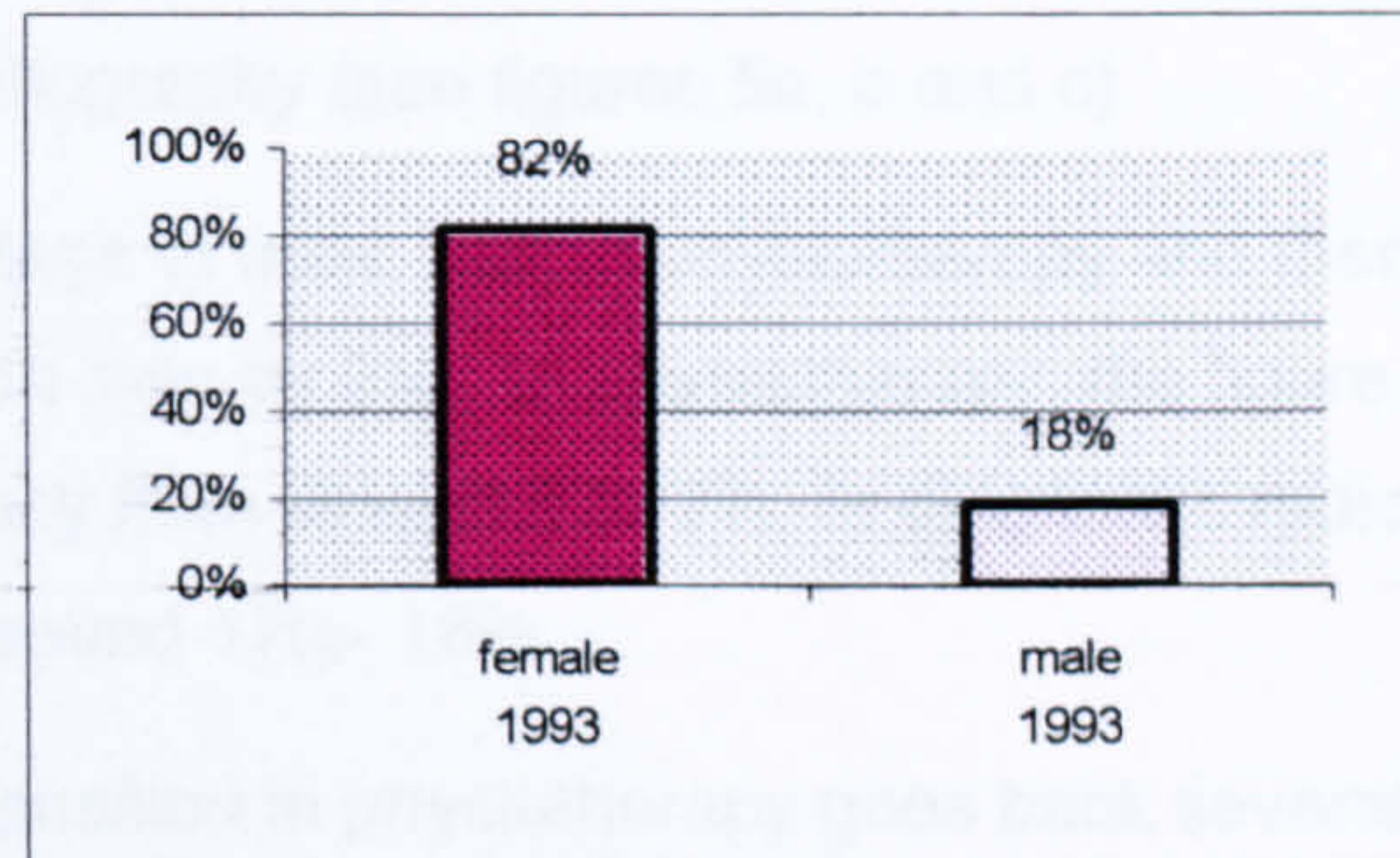
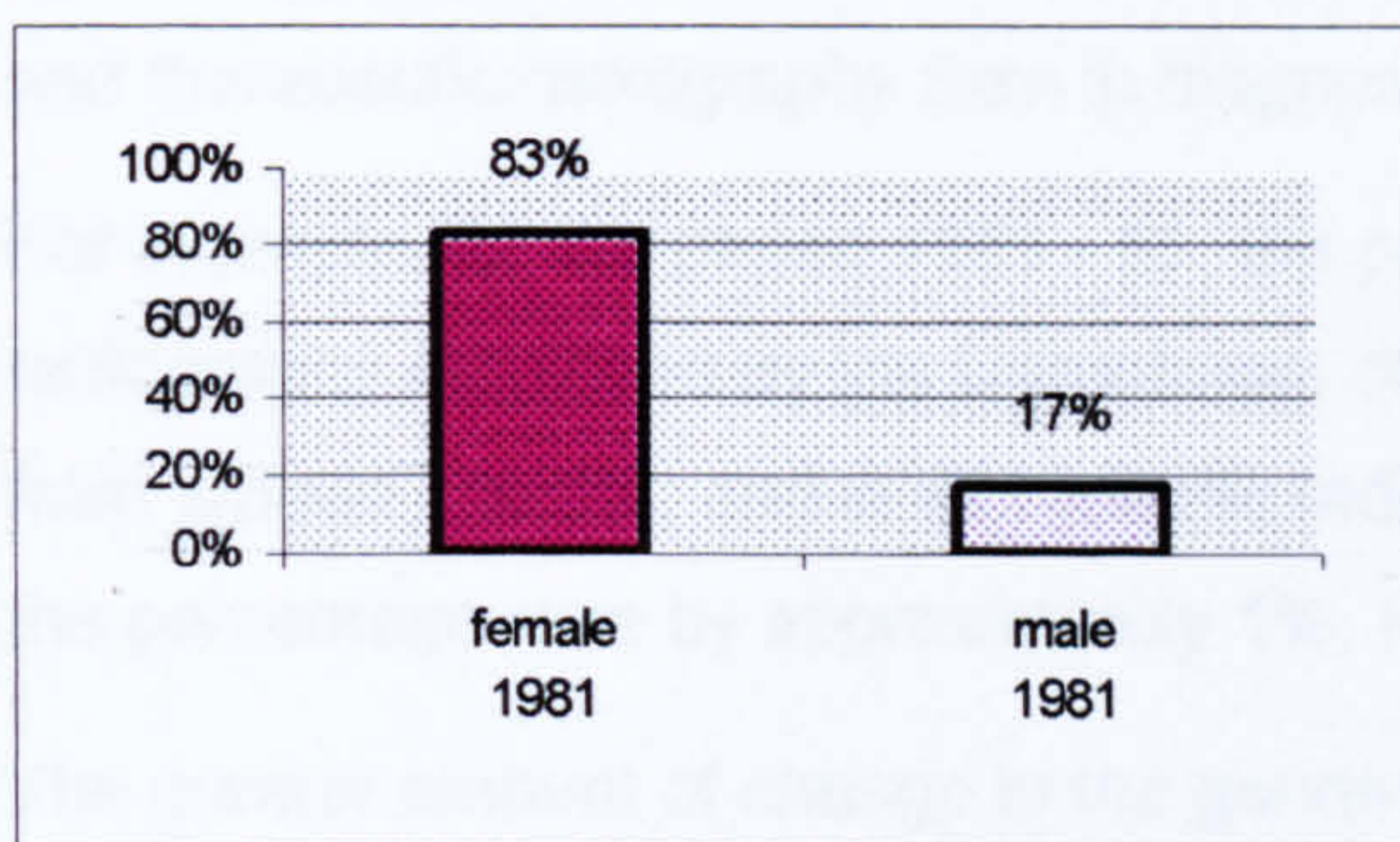


Figure 5a Diagnostic radiography, by sex, 1981, 1993 (DoH Non Medical Workforce Census, England 1994)

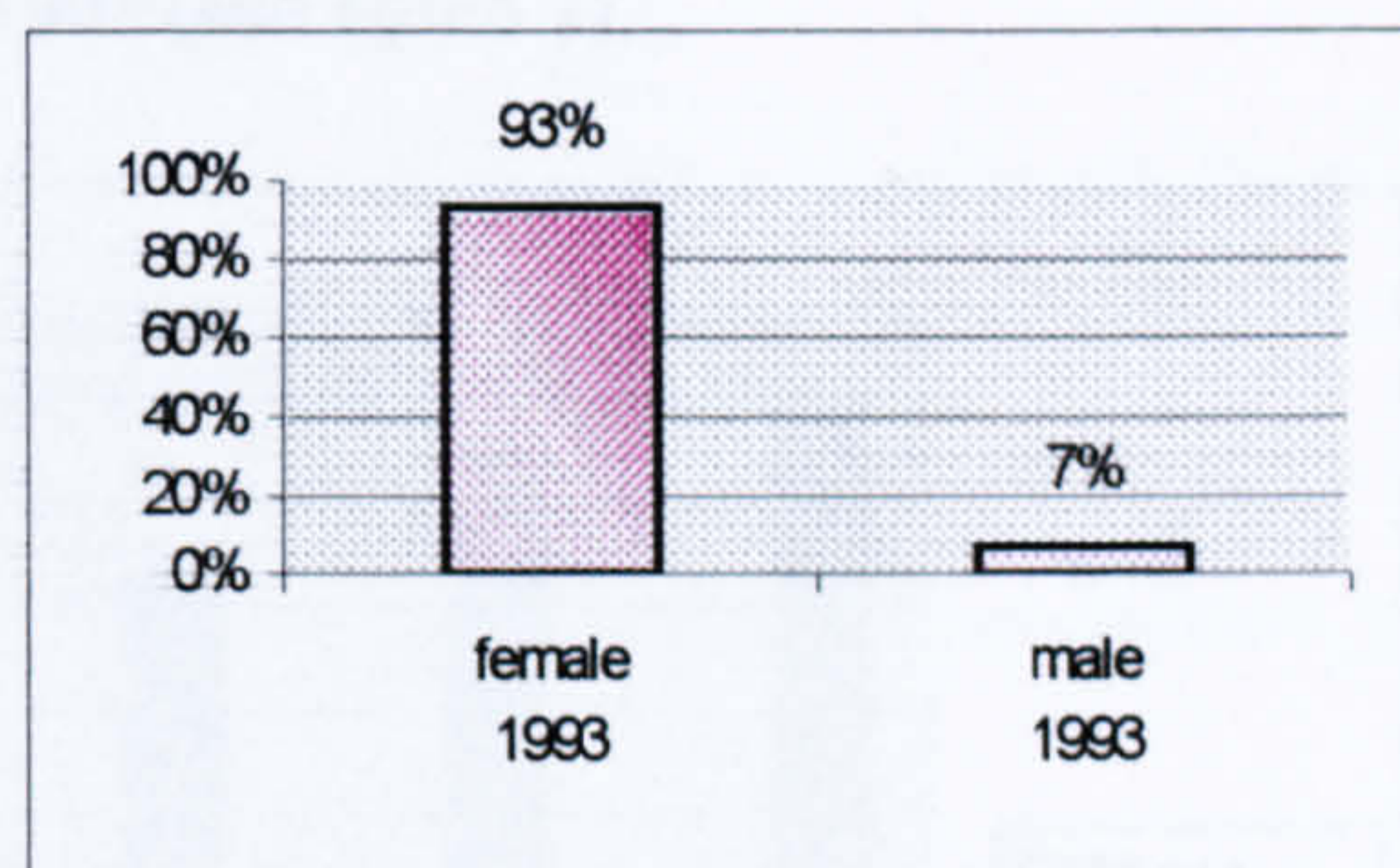
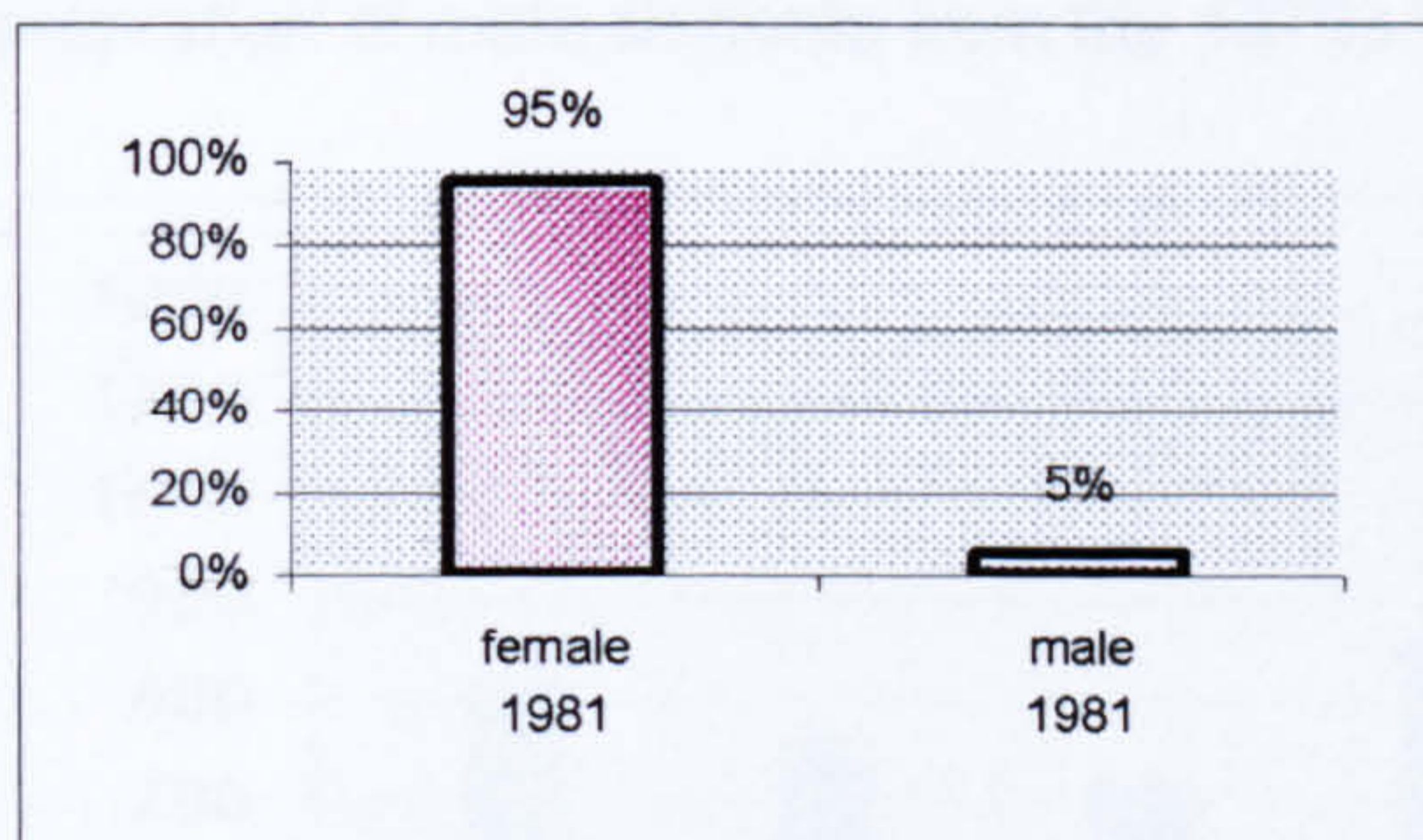


Figure 5b Therapeutic radiography, by sex, 1981, 1993 (DoH Non Medical Workforce Census, England 1994)

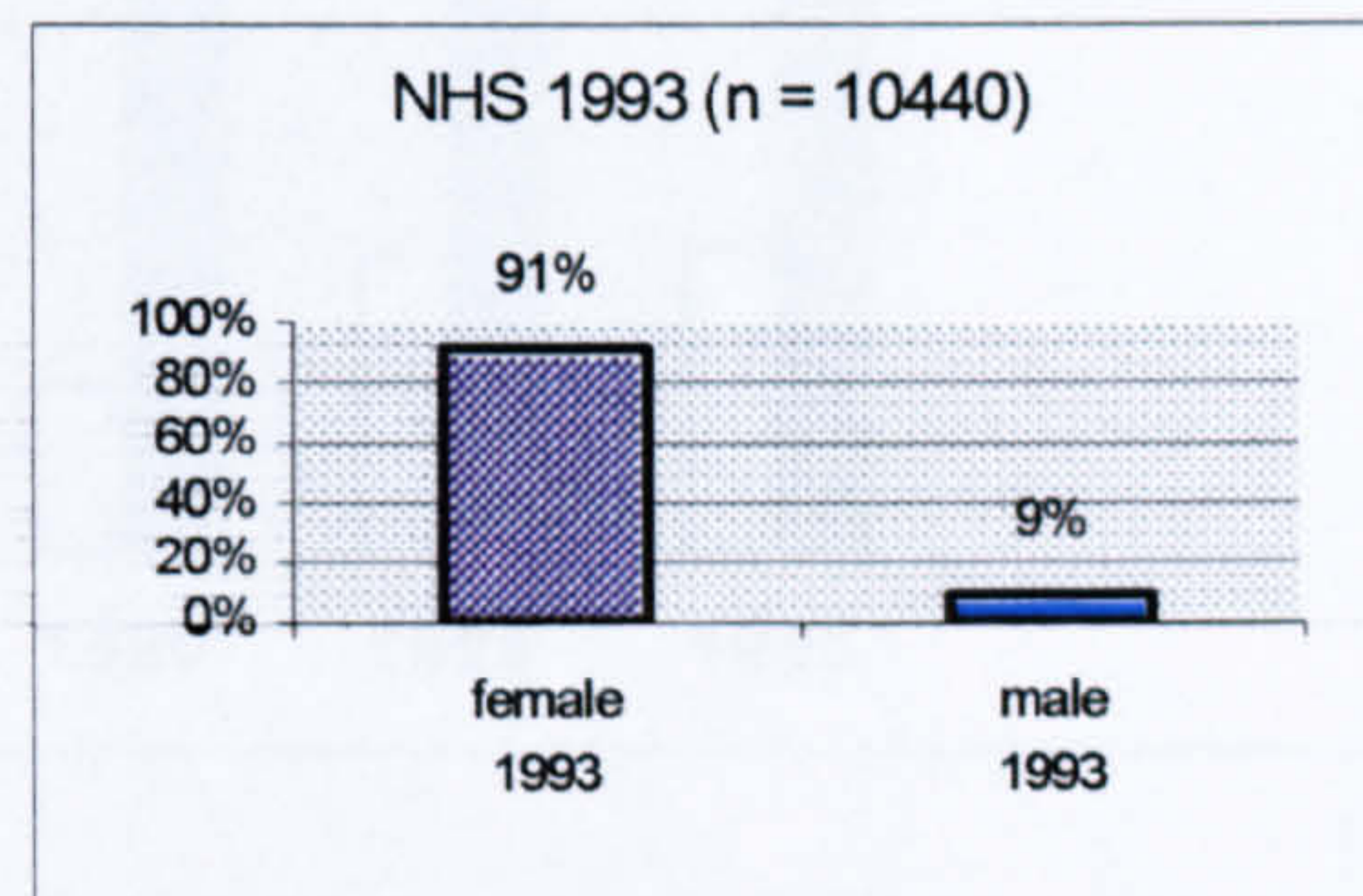
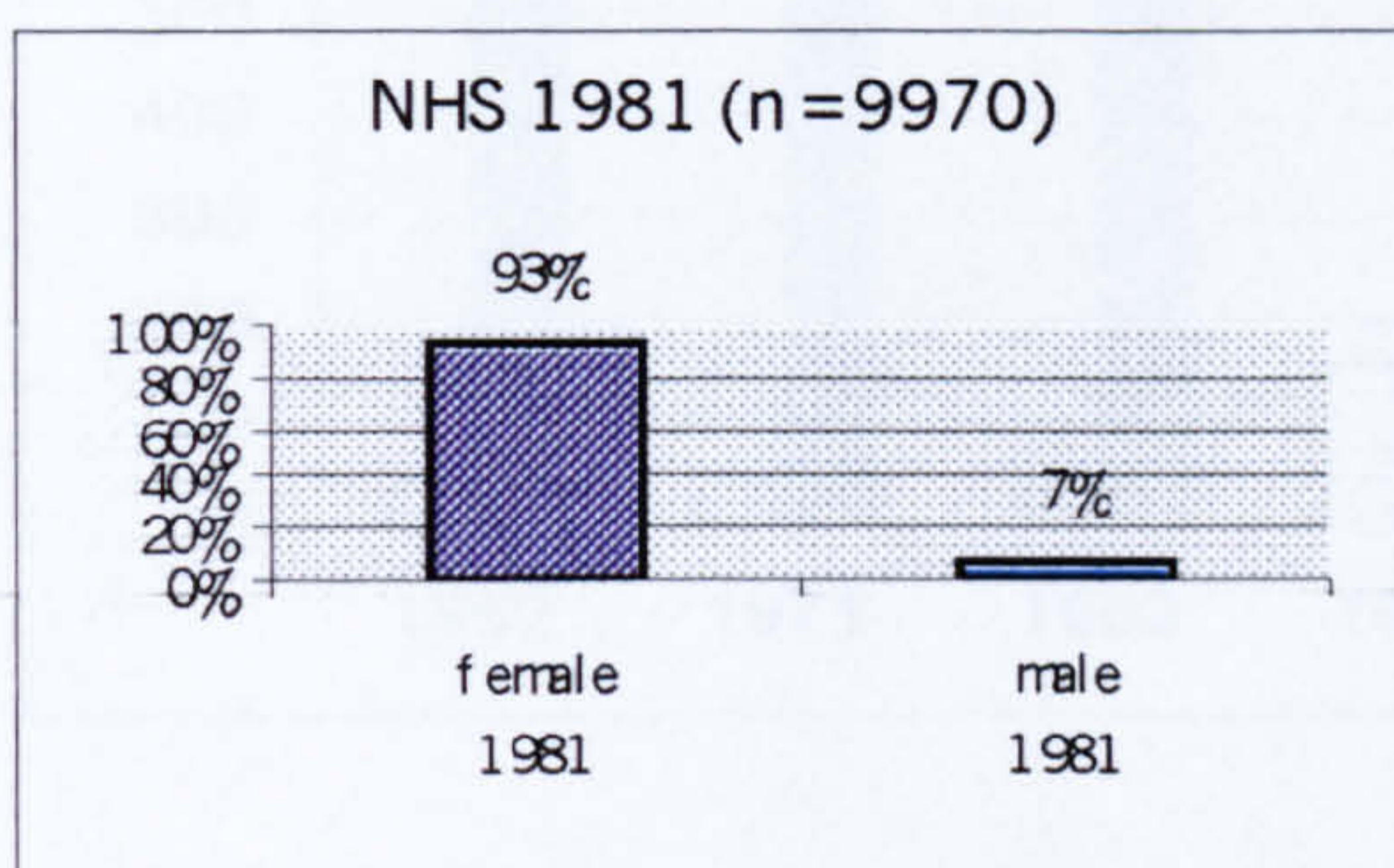


Figure 5c NHS Physiotherapists, by sex 1981, 1993 (DoH Non Medical Workforce Census, England 1994)

Interestingly, the percentage of male staff in private sector physiotherapy is substantially higher than all the other figures, with 35% male staff in 1991 (see figure 6).

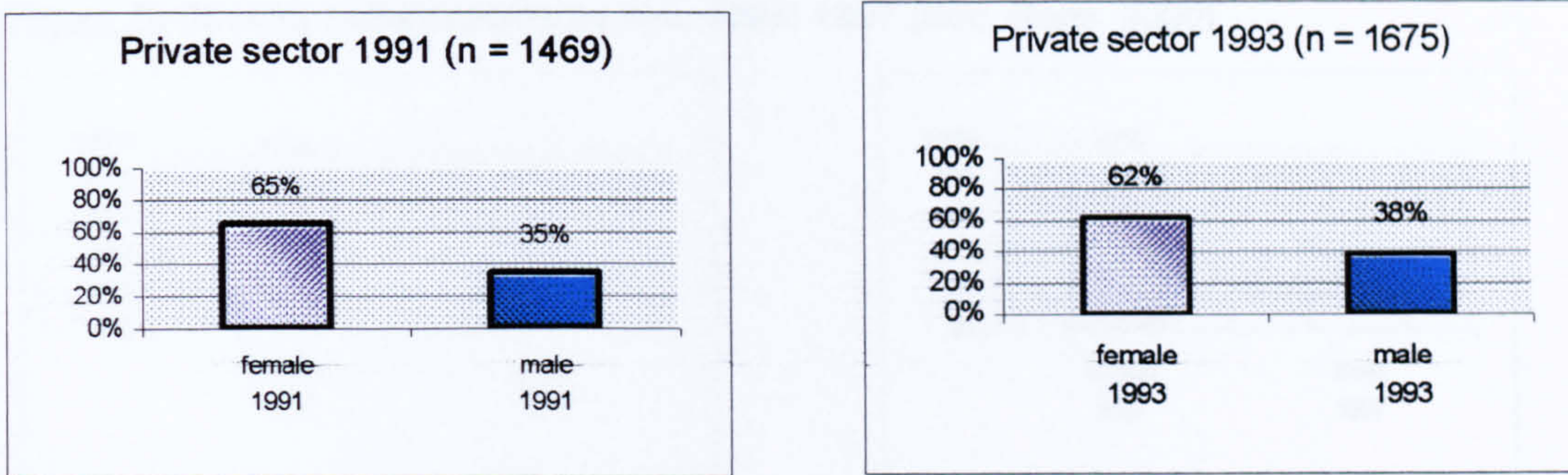


Figure 6 Private sector physiotherapists, by sex 1991, 1993 (OCPPP, 1996).

Notwithstanding the very different sizes of the three occupational groups, and different base line figures, over time there has been slightly more change in the gender composition of physiotherapy and therapeutic radiography than in diagnostic radiography (see figures 5a, b and c).

For example, for the period 1981 - 93, the percentage of male staff in physiotherapy and therapeutic radiography employed by the Department of Health rose by 2%. In physiotherapy, the figure rose from around 7 to 9%, and in therapeutic radiography from around 5 to 7%. In diagnostic radiography the percentage rose by approximately 1%, from around 17to- 18%.

The greater amount of change in the gender composition in physiotherapy goes back several decades and looks set to continue over the next decade, with a steadily increasing number and proportion of male students from the 1970s to the 90s (see figure 7).

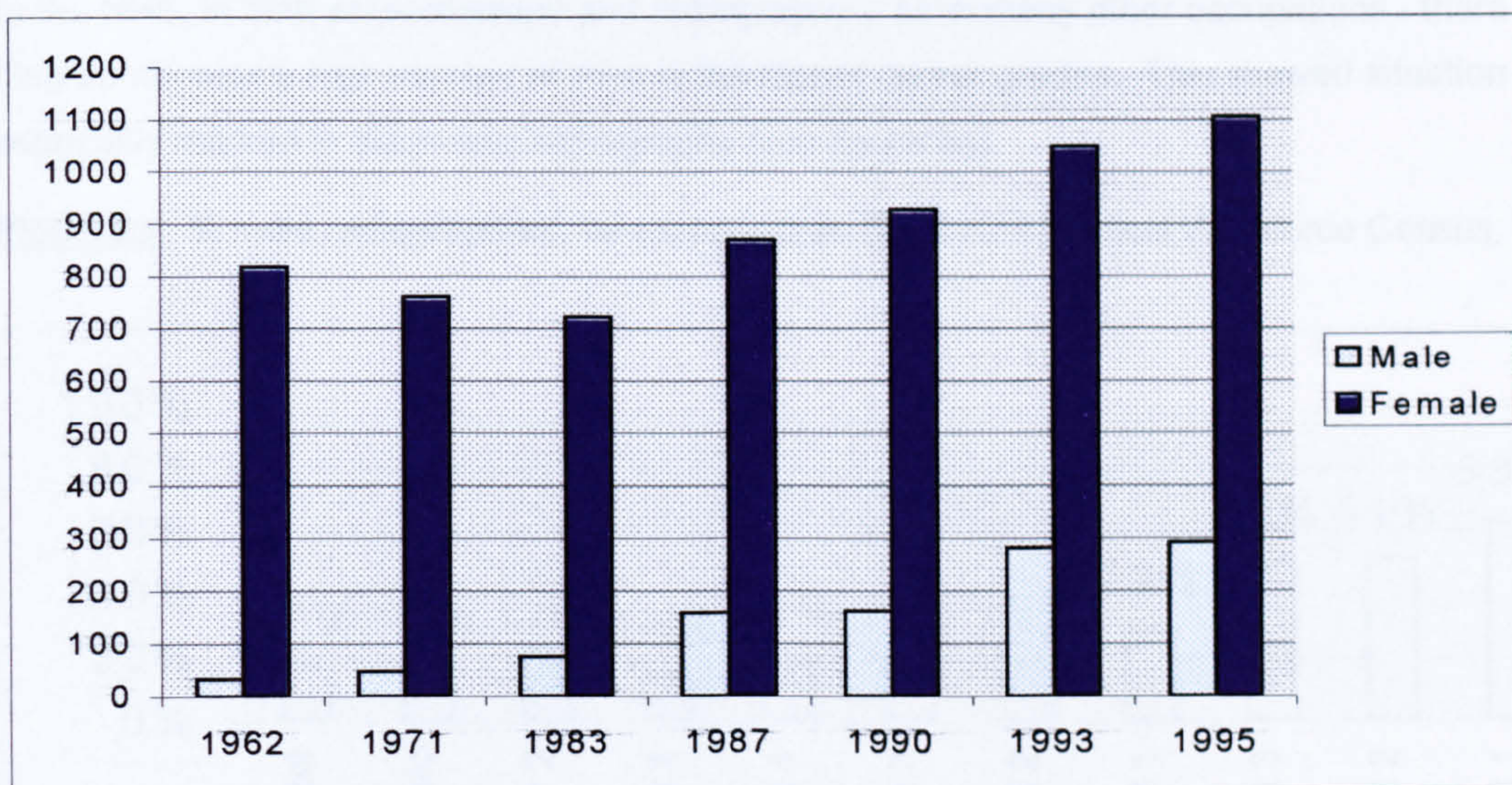
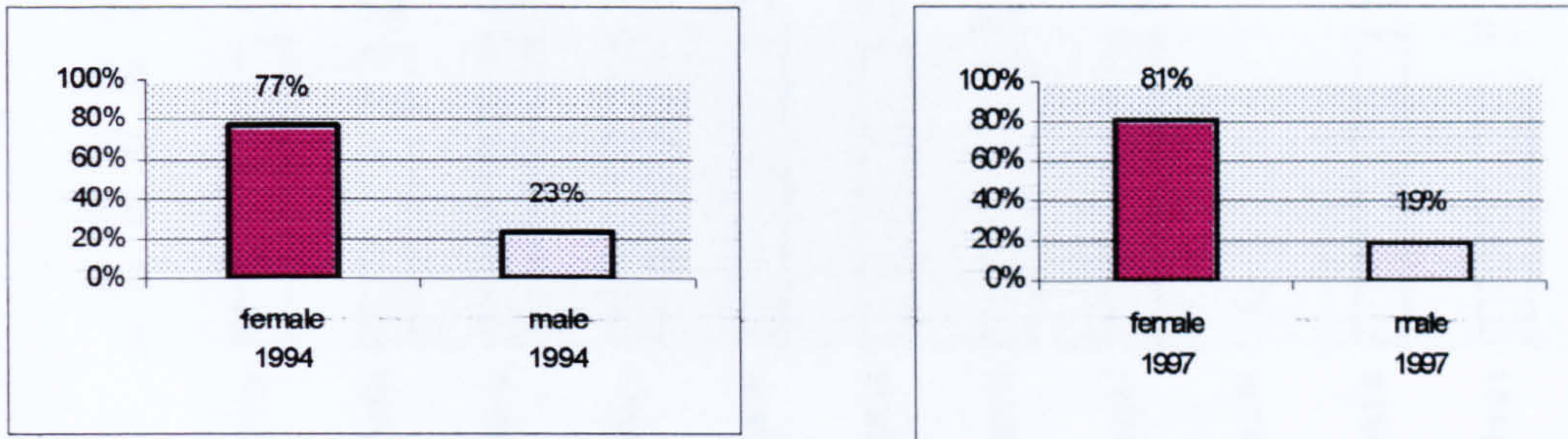


Figure 7a Number of physiotherapy students, by sex, 1962-1995 (CSP, 1996)

The sex of students in radiography training has only been recorded since the early 1990s, but during this period the gender balance has been quite stable, such that there will be only minor changes in the gender composition of the profession in the near future (see figure 7).

Figure 7b Student radiographers by sex, 1994; 1997 (Soc. Rads, 2000)



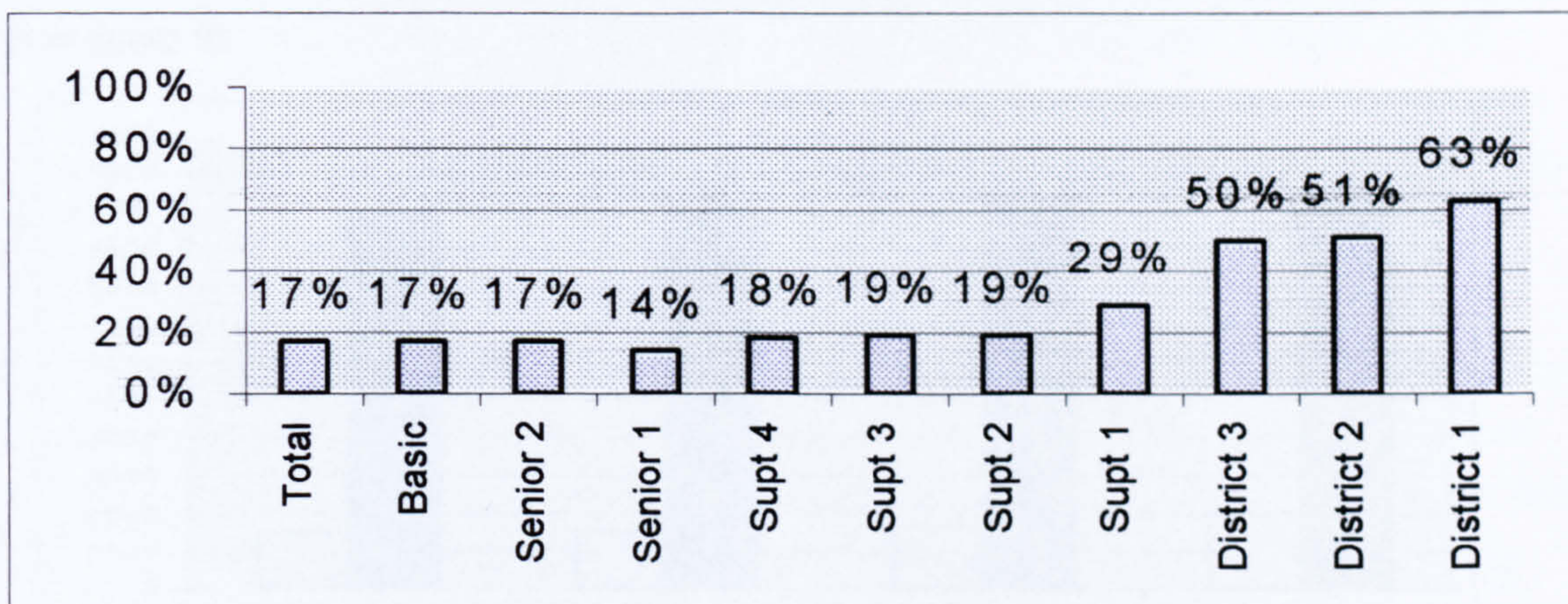
Although the gender percentage figures for radiography are relatively stable during the 1990s, the ratio of male; female students is (informally) recognised as considerably higher than it was in the 1960s, 70s and 80s, such that the gender composition changed more in the 1980s and early 90s than it will do in the mid to late part of the decade. Again, it is worth highlighting that the total number of radiographers in training and employment has risen. Although the percentage of males in the profession has not increased it has kept up with the general pattern of growth, with increases in the number of male students and male qualified staff.

Gender segregation: horizontal and vertical divisions

Within the professions, gender divisions vary by career grade; income level; employment sector; hours worked, and work area.

In the NHS, in both physiotherapy and radiography – as in many other occupations - there is a disproportionately high number of men in the higher *career grades*. This skewed situation is especially marked in diagnostic radiography (see figure 8a).

Figure 8a % male radiographers, by career grade (DoH Non Medical Workforce Census, England



1994).

In NHS physiotherapy, the proportion of male to female staff is more constant over the different career grades, with many males leaving the NHS to work in private practice instead of moving up into senior clinical and managerial positions.

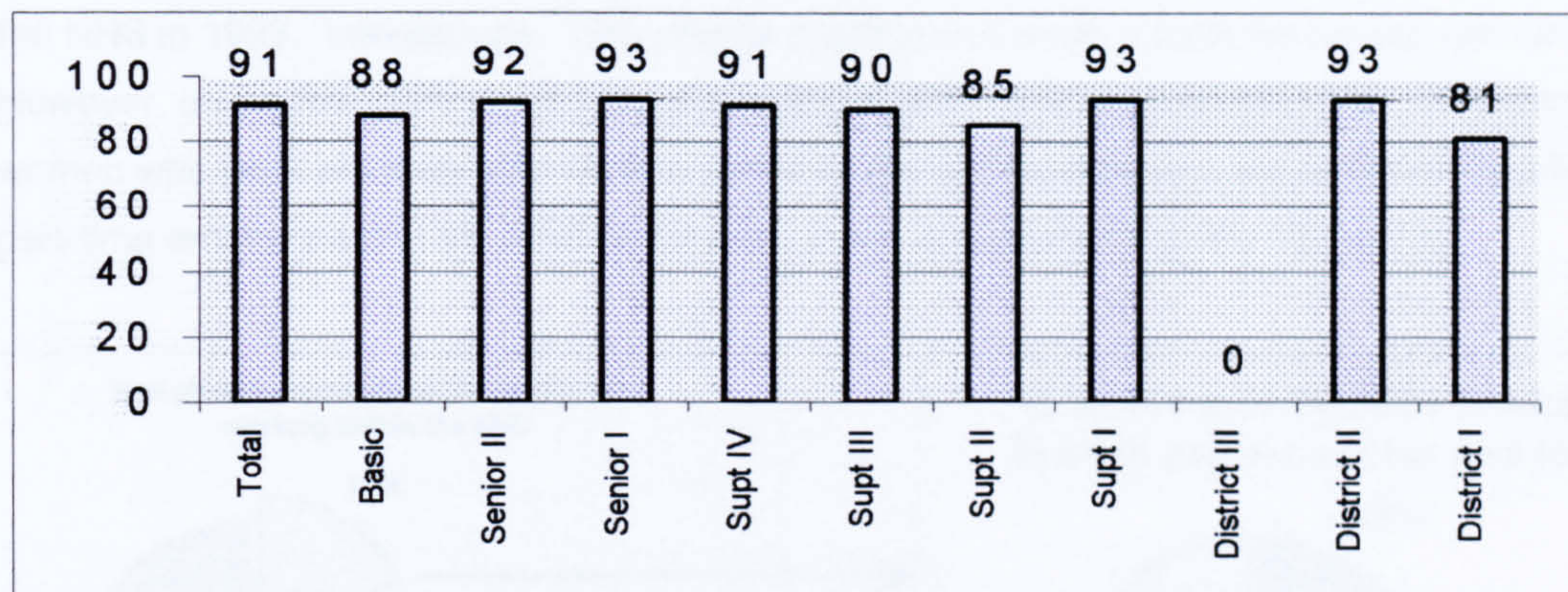


Figure 8b % female physiotherapists, by career grade (DoH Non Medical Workforce Census, England 1994).

Income levels

Private sector physiotherapy, senior education and top management and 'specialist/consultant' grades in the NHS provide radiographers and physiotherapists with income above the national *male* average. Although only employing a small proportion of the total workforce these are the positions/areas with higher percentages of males than within the professions overall. In radiography, where non-NHS employment options are restricted, men are concentrated in senior management, research and education. Hugman (1991) observes that whilst the pay differential is small between the top clinical grades and the start of management scales, the potential gap is significant. In physiotherapy there are only slightly higher proportions of male managers and educators than overall male staff (except in the top district superintendent grade), with a high proportion of male staff leaving the NHS to work, usually full-time, in private practice.

Employment sector: NHS and private

Although only a small minority of physiotherapists work in the private sector as compared to the NHS, there has been a significant increase in the number of private practitioners in recent years (see figure 9).

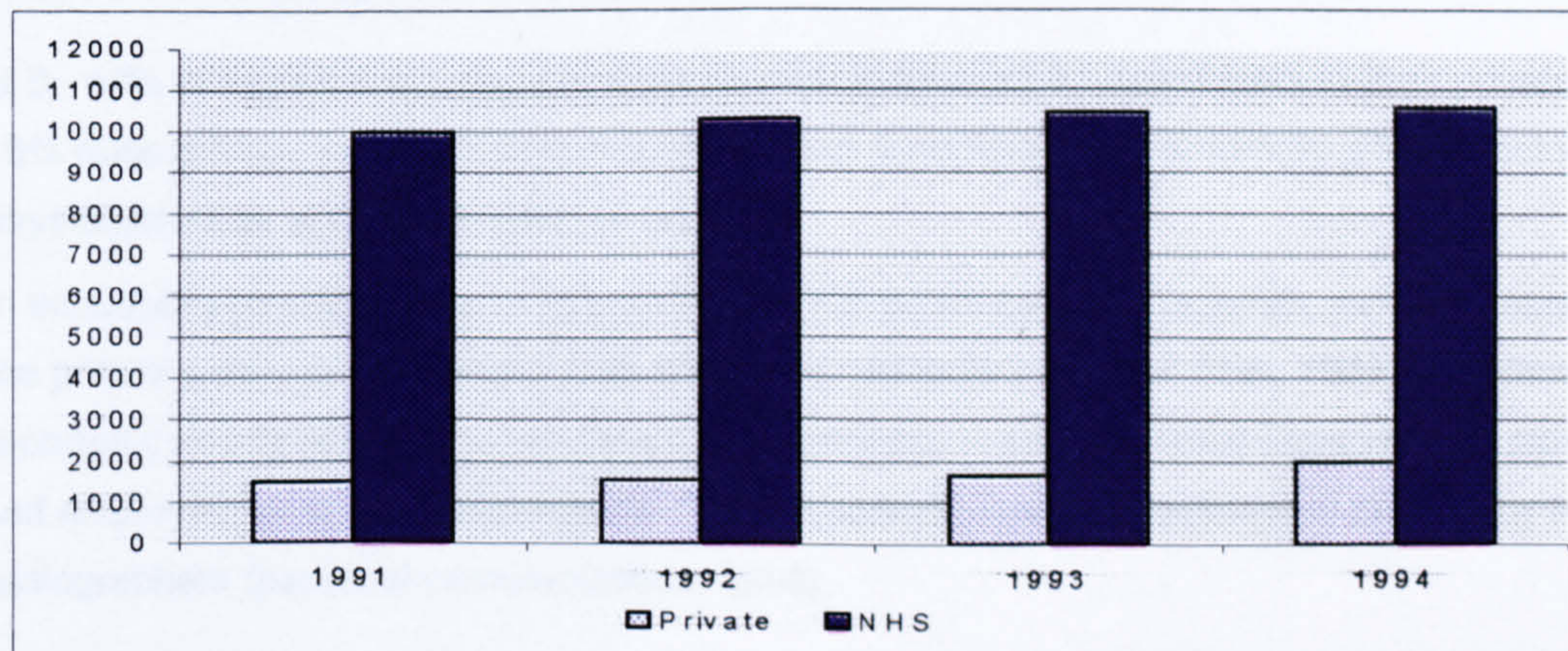


Figure 9 Number of NHS and private sector physiotherapists 1991-1994 (OCPPP membership survey, 1995)

As detailed previously, the gender mix in private sector physiotherapy is less skewed than in the NHS, with 38% males; 62% females in the private sector compared to 9% males; 91% females in the NHS in 1993. Interestingly, 16% private practitioners work in both the private and NHS sectors. However, only a few male private physiotherapists also work in the NHS (16%), whereas most women who work privately also work in the NHS (84%). Nonetheless these figures highlight how part-time employment in the NHS is not exclusively female (see figures 10a and b)

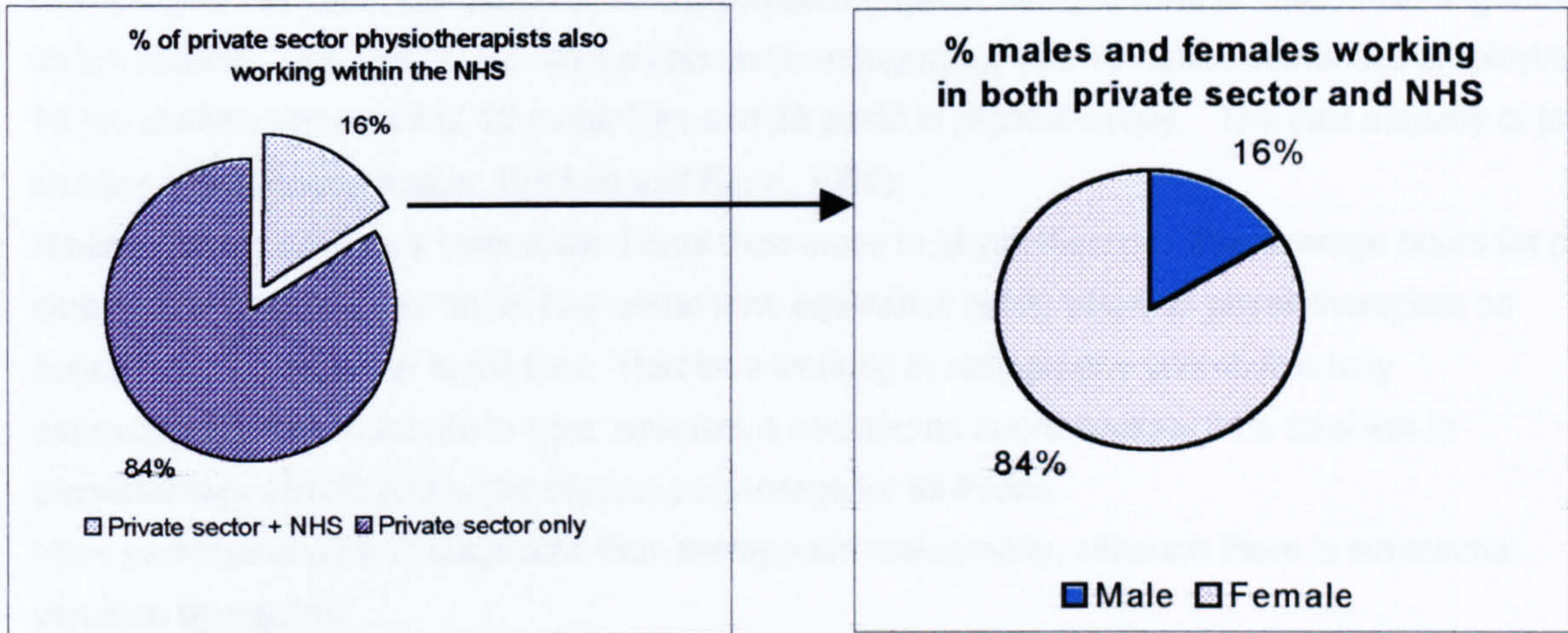


Figure 10a Private sector physiotherapists also working in the NHS, by sex (OCPPP membership survey, 1995)

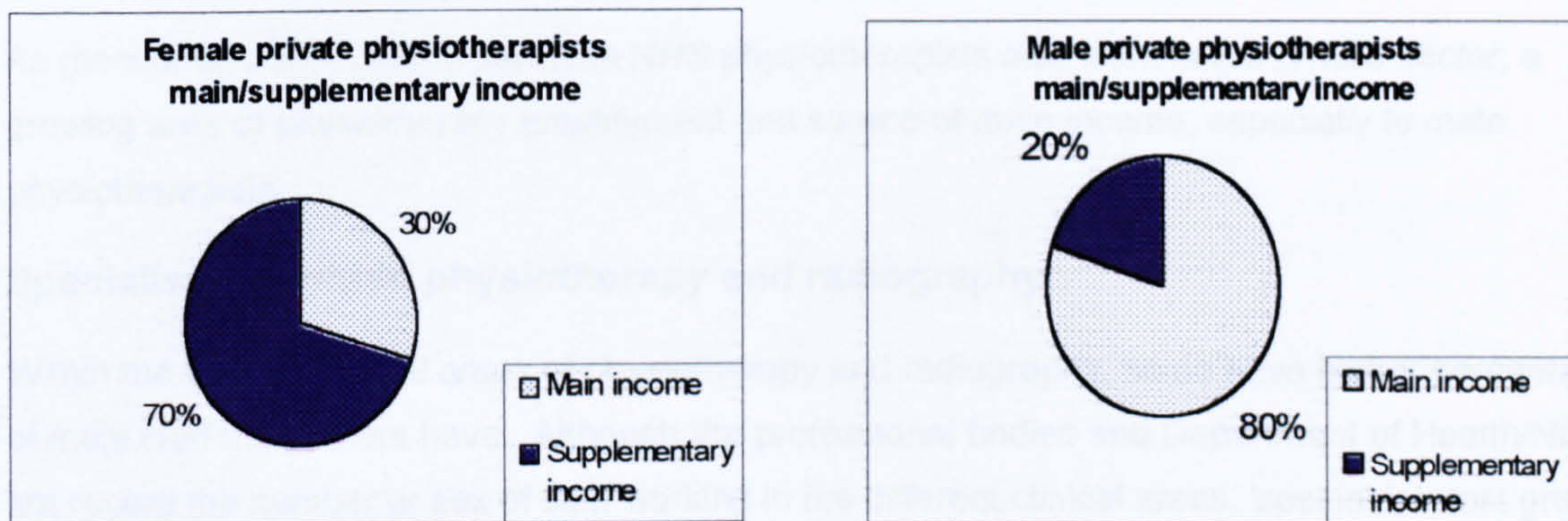


Figure 10b Private physiotherapists by sex: private work as primary/supplementary income (OCPPP membership survey, 1995)

N.B. 44% of male private physiotherapists work more than 31 hours/week in their private work; 16% male private sector physiotherapists work in NHS as well; 84% female private sector physiotherapists work in the NHS as well.

In contrast to physiotherapy, a very much smaller percentage of diagnostic radiographers work in the private sector (4.6% leavers from NHS reported in SW Thames RHA, 1988) and these are reportedly nearly all females, employed as generalists in small hospital departments, rather than as self employed, or in small businesses. They reportedly have less autonomy than many NHS radiographers (personal communication, 1996).

Part time and job share work in physiotherapy and radiography

Overall in 1992, approximately 35% females, as compared to 7% males, in NHS work part time (Jackson and Barber 1993).

Only 4% female senior managers in the NHS work part time.

Within the labour market generally, 17% of part time employees are males and 45% of employed females work part time (1989). The proportion of employed work that is identified as part time is 24.4% (Meager, Buchan and Rees, 1990).

A smaller percentage of radiographers work part time than physiotherapists and other PAMs (22.8% radiographers in 1987, compared to 36.8% physiotherapists, rising to 45% in 1995, including 5.5% as job shares). Job shares are most common in radiography, with 16 health authorities employing 70 job sharers compared to 12 authorities and 28 posts in physiotherapy. The vast majority of job sharers are women (Meager, Buchan and Rees, 1990).

Radiographer part-timers work fewer hours than those in physiotherapy. The average hours for part time radiographers is just under half whole time equivalent (wte), whereas physiotherapists on average work more than $\frac{3}{4}$ full time. Part time working in radiography contributes only approximately 12% total wte in post, whereas it contributes approximately 34% total wte in physiotherapy (1987) and is the highest percentage for all PAMs.

More part-timers work in diagnostic than therapeutic radiography, although there is substantial variation by regions.

Based on calculations of those paying reduced subscription rate for the professional bodies membership in 2000, less than 2% (approx) of part-timers are males in radiography. Few part timers posts are at senior grades, and staff do better grade-wise in job shares.

As mentioned above, some part-time *NHS* physiotherapists also work in the *private sector*, a growing area of physiotherapy employment and source of main income, especially to male physiotherapists.

Specialisation within physiotherapy and radiography

Within the various *clinical areas* of physiotherapy and radiography, some have higher percentages of male staff than others have. Although the professional bodies and Department of Health/NHS do not record the number or sex of staff working in the different clinical areas, 'special interest groups' within the CSP collect membership information and this serves as a reasonable proxy for demonstrating gender specialisation patterns. Few male physiotherapists work in specialities dealing primarily with acute or chronically ill hospital in-patients and many work in out-patient clinics, private practice, treat sport injuries and orthopaedic conditions.

For example, the percentage of male physiotherapists varies from 1% or less in oncology/palliative care, paediatrics, women's health and amputee rehabilitation to 20% and over in orthopaedic and sports medicine, manipulations and private practice (see table 5).

Table 5 Chartered Society of Physiotherapy 'Special Interest Groups' by sex (1996-7)

Special Interest Group	Total number	Females		Males	
		No.	%	No.	%
ACPOCP (Oncology/Palliative Care)	195	197	99	2	1
ACPRC (Respiratory Care) Gender details available for £90	549				
APCP (Paediatrics)	1240	1230	99	10	1
BAHT (Hand Therapists)	249	241	97	8	3
ACPM (Management)	864	808	93	58	7
AOCP (Orthopaedics)* estimate as some members not specified sex	400		92*		8*
ACPAT (Animal Therapy)	136	126	93	10	7
<i>OCPPP (Private Practice)</i> <i>*estimate from membership survey 38%</i>	3694		62*		38*
MACP (Manipulation) Promised gender details after exec. cttee. approval	446				
ACPIN (Neurology)	641	611	95	30	5
ACPC (Community)	386	381	99	5	1
<i>AACP (Acupuncture) *estimate from forename as some not stated sex</i>	790	659*	83	131*	17
<i>ACPOH (Occupational Health) * estimate from 1998 figures</i>	200*	190	90	10	10
ACPIM (Massage) * approx a/a	70*	65*	93	5*	7
BABTT (Bobath trained, in paediatrics)	498	488	98	10	2
BACPAR (Amputee rehab) *estimate as some members are prosthetists	193		99*	2-3*	1*
AGILE (Elderly)	350	344	98	6	2
<i>ACPSM (Sports medicine)</i> <i>1000 plus in 1997; * = 2000 figures</i>	1507*	1081	72	426	28
Hydrotherapy Association	140	131	94	9	6
ACPPLD (Learning Disabilities)	262	249	95	13	5
ACPIH (Independent hospitals)* estimate as some members not specified sex	446		90*		10*

Approximately 15% members work in independent practice and hospitals (CSP Annual Report, 1997).

Italics = interest groups with >10% male membership .

* = estimates

No similar information is available for radiography, although anecdotal evidence and an informal personal survey of departments local to this study indicates male diagnostic radiographers rarely work in ultrasound and breast screening, and many work in angiography and CT scanning, moving into areas involving the latest technological-computerised developments and minimal tactile contact with patients (personal communications, 1995; 1998). Most male radiographers work in the diagnostic branch of the profession.

Excess numbers of male staff from both professions reportedly move into *education and research*.

Short term careers

Although female economic activity rates have generally increased in recent decades (by 25% for women aged 25-34 years between 1971-93), participation rates of state registered physiotherapists and radiographers (under 65 years, working in the NHS) have remained generally low, at 54% and 60% respectively in the late 1980s (Dept of Health, 1989). Around 38% of NHS physiotherapists and 40% of radiographers are under 30 years old, with many leaving their profession less than 10 years after qualifying.

Conclusion

This chapter provides a brief review of workforce data and shows the extent of gender divisions and asymmetry within physiotherapy and radiography. It also demonstrates the enduring nature of the asymmetry and some differences between the professions.

This represents the context within which the study participants study and/or work, and provides the backdrop to their interview accounts and questionnaire responses, which I now proceed to examine.

Part Two

Interpretation of the Findings

Introduction

The differential rate of recruitment of women and men into physiotherapy and radiography lays the foundations of gender divisions that continue to build and develop within the professions. Substantially higher numbers of women than men apply for places on the professions' education and training programmes, with progressively higher proportions of females getting accepted, starting and completing courses (see appendix 16). As shown in chapter 4, once qualified, physiotherapists and radiographers' career paths vary, often by sex, with some employment areas and grades having greater gender asymmetry than the professions as a whole and others being more gender-balanced. Therefore, to present female and male physiotherapists and radiographers' experiences and understandings of this situation, I have divided my interpretation of the findings into four chapters, which represent two stages in the career process:

1. **Career selection, considering 'factors' and 'pathways' involved in decisions to go into physiotherapy or radiography, (Chapter 5), and**
2. **Experiences of training, work and careers in physiotherapy and radiography, (Chapters 6, 7 and 8).**

Within the four chapters I focus on the study participants' descriptions of their personal career selection to interpret and discuss experiences of training and work in physiotherapy/ radiography. But I also examine the participants' own explanations for the gender divisions of labour in their profession as they relate to their own career decisions and experiences and their understandings of other people's initial and later career decisions.

Some experiences were described in relation to gender, whereas others were not recognised as gender-related by the participant but shown to vary by sex when the detail and distribution of issues is compared across the data-set. For clarity, the three 'experiences' chapters are subdivided by sex. Some experiences are shown to vary by occupation and/or years and location of training. Most accounts relate to the study participants' own experiences as one of the minority/majority group in their profession; but some relate to what they know or have heard about the experiences of other people in their profession.

Reflecting the way the interviews proceeded, the participants' explanations for the horizontal and vertical gender divisions within their profession are interspersed with their accounts of the different aspects of their work and stages of their career. Participants' explanations for the numbers and distribution of the sexes related mostly to their own profession, but some to other occupations, especially other health professions. Estimates of their profession's gender composition and perceptions of change in the proportions over recent years were discussed in most interviews. In the questionnaire, reasons for the female majority, what might cause changes in the gender mix and the likelihood of future changes, and views as to their impact were surveyed.

All the study participants recognised the predominance of women in their profession, and that the numbers of men have increased in recent decades. Although the two professions have slightly different gender composition, most from both thought there were higher percentages of men than the various workforce data indicate (see chapter 4). Many also thought changes in the gender balance more extensive than has occurred. A large majority considered further changes were likely in the future. None discussed that the overall numbers in the professions have increased recently, with the gender balance changing very little.

Most participants were positive about the rising number of men and supportive of further increases. Yet none suggested that the selection process was unfair or biased against male applicants, despite local and national data on 'conversion rates' indicating males are selected at a lower rate than females (see appendix 16). Indeed a few, including some male participants, believed their university selected male applicants with lower qualifications than females. That a higher proportion of males could be recruited through 'positive action' was rarely mentioned and had mixed support from both sexes, despite several participants saying they would prefer and thought it would be beneficial to the profession to have a more equal gender balance.

Based on their personal experiences of choosing, training and working in physiotherapy or radiography; an awareness of colleagues' experiences of the same; and their (imperfect) estimates of the profession's gender balance, the participants suggested a wide range of reasons for the gender composition of their profession and the internal gender divisions, both past and present.

Importantly, the research method and wording of questions - especially those regarding 'explanations' for career selection and career patterns - affected the quantity and quality of responses. In the interviews, 'explanations' for the male minority and male career patterns were discussed more than those for the female majority and women's career patterns, especially by the female participants. Both sexes seemed to find it harder to explain convention than exceptions. Some topics were discussed frequently and in detail in interviews but rarely mentioned in the questionnaires, and other (usually 'sensitive') topics were included in the written format, but discussed rarely in interviews.

Many of the explanations linked and several recurred. Both similarities and differences in gender perspectives emerge: although both sexes often identified the same broad themes and shared many ideas about gender divisions in physiotherapy/radiography, there are frequent differences in emphasis, detail and ranking. Some differences are also found between the occupational groups and by age and stage of training/career.

I have selected the quotations within the findings chapters for a range of reasons: they illustrate a point succinctly; are especially typical, or highly unusual; demonstrate a number of closely related points, or indicate some degree of importance afforded an issue. Some extracts are long because they demonstrate several or complex points.

Chapter 5 Accounts of Career Selection

I have divided this chapter on career selection into four parts. Firstly, I examine the factors involved in the participants' career decisions and secondly, the processes leading to them. After considering the full sample, I compare career choice decisions and explanations for gender different patterns in recruitment by sex and occupational group.

Some study participants trained many years before participating in the research and others were students during it, consequently accounts of their career choice rely on memory to varying degrees. It was harder for some people to recall the detail of why, how and when they had decided on their career. Inevitably, accounts are partial and selective, probably affected by nostalgia as well as rationalisation after the event and involve participants' attempts to present themselves in a good light. Although I recognise this, I have not quantified its influence and do not assume time since career selection correlates to accuracy of account.

Some individuals focussed on just a few topics and others cast their net wide; some gave many details and stated which aspects they considered the most influential, whilst others gave no such indication. Some details were described as major influences, and others as important but secondary; some issues were seen by a few participants as relevant but minor, whereas others were generally described as unimportant.

The study participants' career selection is examined in two linked ways, reflecting the complexity of decision-making. But of course, the participants did not divide career selection consciously: the categorisation is merely an analytical device. The two methods provide different insights, and show choosing a career as an evaluative process. Relatedly, the data does not fall tidily into the categories created. Instead this chapter shows the complexity of decision-making, and the many steps and 'levels' of cognition involved. I aim to show how these processes and experiences are constructed, influenced and vary in different situations, particularly referring to the contribution of gender in career selection. A summary of the main findings relating to career selection is located in appendix 17.

Firstly, I describe four conceptual categories (or constructs) comprising the 'factors in career choice'. I then examine the decision-making process, referring to five constructs in the 'pathways to a decision'. The factor and process constructs are then compared for the sample sub-groups. Primarily I consider similarities and differences by sex, but I also compare the three occupational groups, to differentiate and evaluate the relevance of occupation-specific factors to female and male career choices.

Career Selection as an Evaluation of Factors

Evidently, a large number of factors are involved in career selection. As indicated in the methods chapter, I coded transcripts and examined details, with phenomena relating to career selection grouped into four constructs. I labelled the constructs 'awareness'; 'qualifications'; 'pleasures', and 'benefits'.

Although details vary, all the participants considered what occupations they were capable of and qualified to do, and what they wanted from work and life for her/himself and for others/society.

Past and present circumstances and the types and amounts of information about, and personal and social attitudes to physiotherapy/radiography influenced choices. Although decisions were reached in different ways, and the participants did not emphasise all aspects as equally important, there were many similarities. Some participants described influences on their own choice in terms of similarities or differences to those in other people's career choices, with some acknowledging gender dimensions in their comparisons. This was how many linked the accounts of their own career decision to their explanations for the professions' gender composition.

- **Awareness:** "I knew about it" (see appendices 12 and 13)

All the study participants identified various sources, types and levels of awareness that had in different ways and extents initiated, influenced and informed their career choice. Several suggested differences in awareness were the main reason for the different numbers of female and male applicants to physiotherapy and radiography. To choose a career, people have to be aware of the occupation. 'Awareness' refers to what and when participants knew of their course/profession and how they knew it, prior to their career decision. It also includes images and impressions obtained from both factual information and opinions, and their influence on participants' attitudes towards and expectations of the course and profession.

Some participants became aware of their profession by chance and others through active investigation. Many had long term or general knowledge about hospital/health care occupations, but learned about physiotherapy/radiography later. Before they decided on physiotherapy/radiography, some participants had detailed knowledge about the job content, pay and conditions, required qualifications, the gender composition, and so on, whereas others only knew about one or two aspects. Some knowledge came from direct sources, for example being in hospital as a child or from visiting or working in a hospital. Other impressions and information came indirectly, for example from literature/media sources, word of mouth, or another person's experience. For some, a friend, family member, teacher or careers advisor had informed them of their profession. In these cases information was presented in ways that reflected the provider's knowledge and opinions of the course, work, profession and its workforce and their view as to the appropriateness of a career in the profession for the participant. Some participants had been aware of both positive and negative aspects of and attitudes to their career choice, whereas others had only known of positives. Most said people had generally encouraged them, but a few had been discouraged.

Expert advice

A diagnostic radiographer emphasised the help he had received from a well-informed individual.

The start with radiography was...my best friend...his mother was a radiography lecturer on the therapy side...from being 10, 12, we'd come up and see her, and she used to show us round the hospital, [so] radiography was a job I knew about. By knowing this lady...I found out a lot more...she said go into diagnostic...cos there's more money in it and there's more scope for moving around. Which was a wonderful piece of advice [22: 180-210].

Personal experience

One therapeutic radiography student was aware of various health professions through his frequent hospital admissions as a child. The main reason he gave for working in health care was

because he felt 'a duty to pay the NHS back for their help' [2B]. He had benefited from physiotherapy, liked the people more than nurses and 'attributed his health to them', deciding on therapeutic radiography after abandoning his 'long term desire to do physiotherapy' because it 'requires phenomenal grades' [various lines]

- **Qualifications:** "I can do it" (see 12 and 13)

'Qualifications' are the qualities and capabilities people bring or *put in* to their occupation and make them suited to their job. Many participants indicated how they had perceived their compatibility with their chosen occupation. They mentioned having various types and levels of qualification that they saw as relevant and useful. Some emphasised their personality and aptitudes, and the relevance of their upbringing, experiences and social interests for developing inter-personal and technical abilities; others focussed mainly on formal academic knowledge and skills. Some abilities had been assessed formally, for example by examination, whereas others were based on personal evaluations or other people's comments. Some participants observed how compatibility enhances the standard of service for 'patients', as well as making the work 'satisfying' for the person through doing the job well (see later section).

Generally, participants were more forthcoming about their abilities and their relationship to career selection in the questionnaires than at interview. In the written format, some described a particular subject s/he is *good at*, having spoken of it as something s/he has an *interest in*. Modesty appears to have inhibited these participants in face-to-face exchanges.

Several participants suggested gender differences in personal and academic qualifications contribute to the number of women and men applying to study physiotherapy/radiography, although many stressed that differences are often imagined or exaggerated rather than real, and based on stereotypical notions of gender different abilities and interests.

Personal suitability

Several participants identified their personal suitability for the job. Many described their caring attitude as an important and relevant quality. A physiotherapist said his character and interests were confirmed as appropriate via a computerised careers assessment and successful admission interview. Being suitably qualified, he felt he would 'fit in'.

I just told them what sort of character I had. Presumably because of this computer thing the characteristics I had...fitted in with their criteria...patience, understanding, obviously you've got to be pretty caring...and quite sporty [25:202-216].

Academic abilities and interests

For some, academic ability level was the primary positive reason for their choice, although for others it had blocked another preferred choice. A diagnostic radiographer said his moderate ability at science prevented him doing other courses but was adequate and useful for diagnostic radiography. He enjoyed rather than excelled at science, and this influenced his career choice.

The grades for pharmacy were a lot higher than I needed to do radiography...I didn't do as well as I should have done in my A levels and sort of passed up the opportunity to do pharmacy and pharmacology and came into radiography...I'd wanted to go into some sort of medical field...about sixteen I realised it was too hard for me to go into medicine...and nursing it's too much like hard work...I've always erred on the side of science-based subjects...but they weren't good enough to go into studying pure sciences [22: 169-220].

- **Pleasure: job satisfaction as personal fulfilment and enjoyment.** “I will enjoy it” (see appendices 12 and 13)

All the study participants said they had anticipated enjoying their future course and getting job satisfaction: they expected the work to give them pleasure and this was described as the main thing that had made it attractive. They related job satisfaction to various types, sources and levels of personal fulfilment and enjoyment. For several participants fulfilment involved ‘feeling good’ from ‘doing good’ reflecting the *intrinsic value* they attached to the effects of the work. The job was widely seen as worthwhile in a moral sense, as it helped individuals and was socially valued.

Enjoyment was expected from the work tasks. Many said they had anticipated job satisfaction from doing something well and many mentioned choosing their profession as it utilised their personal interests (see ‘qualifications’ above). Several highlighted preferring physically active and practical skills, and work producing an objective outcome. However some emphasised the pleasure they got from intellectual and personal challenges, seeing the course and career involving learning and using complex knowledge and skills, which made the work stimulating and interesting.

Issues relating to job satisfaction were the most common and, generally, the most important factors identified in participants’ career selection. Data relating to anticipated ‘pleasure’ are abundant in both formats with several participants using the phrase ‘job satisfaction’.

Being able to help people directly was often described as both personally rewarding and socially valued. Many emphasised the caring aspects of their profession as the main factors in their career selection, albeit in diverse ways. For one this took a religious form, with the profession providing a ‘good way to move’, as an example of Buddhist ‘Right Action’. He had perceived physiotherapy as effecting ‘profound change on people’s lives’ and had thought it would ‘make me a better person’. This ‘totally top idea’ of a ‘wholly moral’ and ‘worthwhile job’ promised him job satisfaction and a sense of fulfilment [23].

A female participant also saw physiotherapy as satisfying, but for other reasons.

They seemed like my type of people and I thought they had a wonderful job...having a lot of fun as they were doing (it)...the relationship that the physios all seemed to have with their patients and their skills and the knowledge that they had, really sort of impressed me [17: 126-34].

- **Benefits:** “It’s a good career” (see appendices 12 and 13)

Some participants saw physiotherapy/radiography as a ‘good career’. They had anticipated various benefits, rewards and opportunities for the immediate, short and long term. Together with job satisfaction, the benefits represent what participants thought they would *get out of* the occupation, as rewards relating to the social status and economic value of the job. Some identified material benefits, for example the qualification, secure and plentiful employment, reasonable pay and good working conditions, whereas others highlighted non-material outcomes such as status, respect, independence, autonomy and authority. Many benefits were related to

characteristics of professions as elite occupations and aspects of professionalism. The influence of 'benefits' on career selection was emphasised more in the questionnaires than the interviews, where altruistic motives were highlighted more often.

The benefits of a secure career were very important to some participants' career selection. One diagnostic radiography student said his main concern had been to choose a course that would provide guaranteed and immediate employment. Radiography had 'presented itself' as an occupation where you were 'up and running straight away', in a job with a 'structured career path', that provided a 'secure future' with a 'solid life' and 'reasonable money' [13B: various lines].

Connections Between Factors In Career Selection

Some codes recur within the different constructs, with associations and relationships between them. For example, for some participants having experience of and abilities to care, and/or a caring attitude ('qualifications') are what ensured enjoyment doing caring work ('pleasure'). Whilst some participants recognised such connections, some relationships only emerged through analysis.

Although all the participants' career selection involved many factors, they related to different numbers of constructs. More than half stressed factors within two constructs (e.g. awareness and pleasure) but a large minority highlighted three (e.g. awareness, pleasure and benefits); a few referred to factors within all four constructs. All mentioned how they became aware of their course/profession, showing how knowledge is pre-requisite for conscious choice.

Relationships between the constructs also vary. For example, for some participants, 'awareness' of physiotherapy/radiography followed enquiries about employment opportunities to utilise their interests or abilities ('qualifications'). For others, awareness and positive impressions of physiotherapy/ radiography led to deliberate attempts to develop relevant skills and required entry qualifications. For example, some participants knew to choose A level subjects favoured by admissions tutors. Sometimes a general interest in hospitals/health care was gradually narrowed down to the specific choice, whereas on other occasions participants knew specific details about physiotherapy/radiography careers and checked out general aspects of higher education/NHS employment later. In this way career choices involve a decision-making process.

Career Selection as a Process: Pathways to a Decision

In addition to evaluating 'factors', participants chose their profession through a decision-making process. Career decisions did not happen at a single moment in time or involve a static review of factors. Some people's decision was very quickly reached, whereas others deliberated for a long time. There were differences in the number of points that served as 'crossroads' in the decision pathway. Some participants highlighted many stages and a range of factors, whereas others made up their mind quickly, focussing on certain types of factor. A further variation is that some participants actively sought information, whereas others were more passive. Additionally, some decisions were made having reviewed several very different occupations from different sectors and levels of the labour market; others chose from a limited range of alternatives. Finally, some participants chose physiotherapy/radiography at school, whereas others decided later. A few decided having studied or worked in another field.

I analysed the process in terms of *five* dimensions, namely:

- **Duration;**
- **Detail;**
- **Agency;**
- **Range, and**
- **Timing** (see appendix 14 for definitions; 18 for sample distribution)

- **Duration: short or long.** 31/48 interviewees had 'short' decision-making periods

Decisions to do physiotherapy/radiography were mostly reached within a year, however a few took many years to make a final decision. Although not deciding on diagnostic radiography until she had left a nursing course, one radiographer's interest went a long way back.

Like a lot of other people I got interested in radiography when I was x-rayed myself when I broke my leg when I was 14...I'd got it in the back of my mind that it was quite an interesting thing to do [1: 15-18].

Some of those who made 'early' decisions still spent a long time reviewing options.

From when I was six or seven...right up till my GCSEs...I started looking at alternatives...I knew I wanted to work in a hospital...(except for) a very short phase when I wanted (to be) a policeman...I considered being a nurse, radiographer, a doctor, an operating theatre department assistant, things like that... I used to get a lot of information from the careers people before a lot of people had even thought about careers or anything like that [10B: various lines].

Others decided more swiftly. One only considered therapeutic radiography after failing to get the grades needed for her first choice (of physiotherapy). She contrasted her quick decision to those of colleagues.

Going through clearing...I just phoned to see if there were any places left...I came up for interview and it was only like a week before...(I had) a basic idea that I was going to be treating people who mostly had cancer...using radiation...Most of the other people on the course had been round to radiotherapy centres...and I had never done anything like that [8B: 101-111].

- **Detail: simple or complex.** 27/48 interviewees' decision-making was 'simple'.

There is wide variation in the number of factors and stages at which different details were considered. A small majority decided on the basis of a few similar factors and small number of significant times.

Significant times

Several participants highlighted the times when they had to choose GCSE and A level subjects, when many people had advised them. Concurrently, many also read 'careers information'. Over half arranged visits to hospital departments and stressed this was the most significant stage in their decision-making process. The visit provided detailed insights about the work and the staff,

and several said this helped to make up their minds; it firmed up vague or third party information and opinions.

For a few, the most significant time was when an earlier choice had to be abandoned because of inadequate examination grades.

In contrast to decisions made at school, one made a chance discovery of therapeutic radiography in his 30s. His decision to change occupations was based on finding features of the work attractive.

It was opportunist...Radiotherapy was something I'd never even heard of before...I just came across this piece in the New Scientist about linear accelerators...they seemed rather interesting so I made further enquiries...I was invited to have a look round...and it progressed from there really. I wrote then to the university and was offered a place...I thought now was an ideal opportunity whilst still young enough to come in and repay my local community [16: 44-71].

Complex decisions

Nearly half the participants incorporated many different factors and stages within 'complex' pathways to a decision. The following long extract illustrates the many factors and stages identified by one radiography student.

Mum was a nurse...that's where my medical background comes from...I had a careers interview...and suggested a medical theme...and she said about physio and radiography...cos I wasn't bright enough to be a doctor...I looked at them and ended up with radiography...When I first failed my exams I thought about nursing ...(but) wanted to prove...I could get my A levels...I enjoyed biology and particularly human biology... A lot of my friends were going into engineering and that never really appealed, I wanted to do something hands on (and) to leave university with a degree and...have a career...at the end...It was a lot more stable... At first I'd thought radiography was just x-rays...I knew I couldn't do therapeutic, I couldn't handle that...I like to know...there's a good chance they'll be OK...I spent a couple of days in a department...to find out about more about it [4B: various lines].

Other complex decisions were reached more speedily, some after an intense period spent reviewing options thoroughly but quickly. [21] identified various important factors and several types and stages of information gathering, but in contrast to [4B] her exploratory period was short.

I needed to do something...the kids were growing up...I decided about Christmas ...I wanted something medical...ideally to be a doctor...(but) to fit in more with my lifestyle...I spent some time in a local hospital...and decided I didn't want to be a nurse... then a neighbour who was a physio said "Why don't you come and have a look in the department?" So I started doing voluntary work...You've got to show that kind of dedication to get in...I started looking in the January and (applied) in the June, so it took me that amount of time to make my mind up [21: 79-99].

- **Agency: active or passive.** 29/48 interviewees were 'active' decision makers

Most participants set up 'visits' to hospital departments to add to information from promotional literature or careers advisors. Several said the visit 'finally made up my mind' because they had learned precisely what the work involved and because of the welcoming, warm and positive attitude of staff towards them and 'patients'.

Some participants stuck to their original decisions despite discouraging attitudes, negative influences or needing to overcome obstacles. One decided on physiotherapy five years before she started training.

I didn't get my biology 'A' level the first time so I resat...I also worked as a physio helper...to prove...I wanted to be a physio...Re-applying, I went to visit some principals and they said...try somewhere up north...When I didn't get my A level...I thought "Well what could I do? Do I want to work in a bank, do something else?" Well I thought there's nothing else I particularly want to do...

SK Did you or your family have any personal experience of physio?

No, none whatsoever, in the family, no nothing.

SK So how did you firm up your first vague ideas?

...After my O levels...I found a local physio department and said I was interested in doing physio and could I come and have a look around. I went to local hospitals and spent about half a day in each...

SK Did your school support you...?

Not an awful lot, no, because they didn't know...I don't think anybody had really applied for physio before... My parents and my family supported me but...school didn't really know that much... It was my sister who said "Why (change) if you want to do physio, you go and get it" [17: 38-186].

This extract illustrates a determined and active participant, contrasting with passive ones, who described how they 'fell' into their occupations through chance discoveries, or when opportunities and unsolicited information were offered. However, some of those who identified chance in their career selection did follow up their initial passivity with active explorations and voluntary effort.

Chance: socially constrained choices or random opportunity

Several interviewees identified elements of chance influencing their decisions. Although they tended to describe chance as random, I recognise that chances have to be taken (or not), and may remain unobserved or ignored if individuals are not receptive to them. As well as being in the right place at the right time to receive an opportunity, I contend being receptive is, to some extent, influenced by socio-economic background and situation. Similarly the ability to take up a 'chance opportunity' is socially and economically constrained. Although the start (or some other stage) of the decision-making process may be passive, the decision to take up any opportunity is active.

- **Range: broad or narrow.** 25/48 interviewees considered a 'broad' range of careers.

Just under half of the participants said they had only considered working in health-related occupations. Within these, several had considered 'caring professions' exclusively (i.e. health professions directly involved with 'patients').

Of those mentioning a broader range of career options some referred to courses/ professions they had considered but rejected because of their academic level, length of training, career opportunities or working conditions; others mentioned courses they had applied unsuccessfully to, or started then left. A few highlighted how all their options - in or out of health work - related mainly to social interests or academic abilities (e.g. [4] considered banking because she was 'good with figures'; [12] mentioned geo-chemistry because of his 'A' level subjects).

Many considered numerous health occupations in detail over a long period, only briefly considering one or two non-health options. Therefore, despite the balance of broad and narrow selection processes, most participants were predominantly interested in health-related employment.

- **Timing: early or late.** 28/48 interviewees decided on their profession 'late'.

More participants decided on physiotherapy/radiography after leaving school than before. This is partly explained by the number who failed to get the exam results needed for their *first choice* (12). Most of these 'second choices' transferred onto physiotherapy/radiography quickly, although sometimes this was through chance circumstances arising, rather than advance preparation of a standby option. Interestingly, all late/fail choices were 'passive' decision-makers. Overall, most participants made career decisions before 'A' levels, even if unfulfilled or changed later.

The remaining 'late' choices therefore constitute a minority. Only a few of these decided for purely 'positive' reasons; most involved necessity, such as redundancy or unemployment. All who made late/change decisions actively sought out detailed information, took various strategic steps (e.g. doing an 'Access course' or voluntary work) and highlighted the importance of job satisfaction and secure employment.

Comparing Career Selection, by Sex and Occupation

In this section of the analysis I demonstrate several differences between the female and male participants' accounts of career selection, plus some variations by occupation. Some differences in explanations for gender patterns in career selection are also shown. From the qualitative and quantitative data analysis within and across the constructs and processes the extent and nature of the differences are exposed. The male and female participants, as physiotherapists, therapeutic and diagnostic radiographers, chose their careers differently.

Did the women make quicker, earlier, more casual career choices than the men? Were the women or men more active in their career selection? Did the women generally emphasise and value job satisfaction more than the men? Did different things represent job satisfaction to boys and girls? Were girls' entry qualifications higher than those of boys? Was the potential to earn a good wage over many years considered more frequently and as more important by boys than girls? Did gender differences for the factors considered and the processes involved vary for the different occupations? To answer these questions I considered:

- Which groups of factors were the most important for the participant sub-groups? Which were mentioned frequently, but less important?
- What negative aspects (as worries and concerns) were highlighted? What might be 'missing'?
- What about the unusual: the negative case?
- What about 'second choices'? Do they vary for the different sub-groups?
- Do/how the dimensions of process vary for the different sub-groups?

Comparing Main Factors in Career Selection, by Sex and Occupation

I didn't ever feel it was unusual for there to be few men as the pay is less than they could earn elsewhere, say in engineering...boys were not encouraged with caring professions where they would not earn a great deal of money. Girls are not under so much pressure to do their absolute best money-wise...and boys are also looking for something with power and lots of interest very quickly and radiography doesn't come across like that at all. It's perceived as lower than what they could achieve in industry. The pay and power aspects come across quite strongly...You get the feeling there are more brownie points in something not in a hospital. The status is definitely less [28: 65-82].

I identified the 'main reasons' for career selection using both data formats. For example, in the interview data I have examined words and phrases of emphasis; returns to and expansion of details pertaining to a topic; 'qualifying' words, and topic ordering. I have also considered the speed, tone and volume of speech and use of pauses. Details were compared for participants participating in both formats, and no contradictions were found between the two formats, although some different priorities and details were occasionally evident.

Table 6: Career selection by sex, occupation and factor constructs (N.B. questionnaire data; n = 69)

Construct	Times mentioned*	Main reasons for career choice					
		Total	Sex		Occupation		
			Female	Male	Physio	Th Rad	D Rad
			(50)	(19)	(32)	(7)	(30)
Pleasure	66 (96%)	45 (65%)	35 (70%)	10 (53%)	22 (69%)	5 (71%)	18 (60%)
Qualifications	59 (86%)	8 (12%)	4 (8%)	4 (21%)	2 (6%)	1 (14%)	5 (17%)
Benefits	29 (41%)	14 (20%)	9 (18%)	5 (26%)	7 (22%)	1 (14%)	6 (20%)
Awareness **	4 (6%)	2 (3%)	2 (4%)	0 (0%)	1 (3%)	0 (0%)	1 (3%)

*Totals > 69 as participants referred to as few/many factors as s/he chose (i.e categories are not mutually exclusive).

**Low numbers relate to 'awareness' being examined separately in questionnaire item 10: as careers information: sources, number and quality (+ve or -ve)

To give a flavour of the different frequency and weighting of the different types of factors (construct) in career choices for the two professions and sexes, categorised responses to the open-ended questionnaire item (number 4) asking participants the 'main reasons for your career choice' are ranked and shown in table 5 above.

Pleasure: job satisfaction and personal fulfilment

The main factors for both sexes and professions were the aspects of physiotherapy/ radiography participants perceived they would enjoy (see appendices 12 and 13). However the type of factors and their importance varies for the groups.

Sources and types of pleasure

Individuals did not identify a single factor they had perceived would provide pleasure: they highlighted various sources and types of enjoyment. For example, a student physiotherapist said she had been highly motivated as

All the aspects I'd wanted out of a job are (for) job satisfaction...the working with lots of people, not being stuck behind an office desk...the knowledge I'm getting ...and helping and advising people' [9B].

- **Pleasure from working with people: contact and involvement; caring for patients**

Most female physiotherapists and all the therapeutic radiographers highlighted 'working with people' as one of the main reasons for their career selection: they anticipated tremendous rewards from the rapport and close involvement with patients, personally helping them to cope with illness. Some, from both professions, said they had liked the 'extent of caring and involvement with patients' [8], and wanted the opportunity to develop relationships with patients over time [24]; several stressed the importance of communication [17]. Others focussed on the personal care and physical contact.

Several female physiotherapists said they had chosen a 'caring profession' rather than medicine as they liked the extent of 'patient contact', usually on a 'one to one basis' [3B]. One liked physiotherapy as it involved 'providing the treatment herself' and 'making a difference' [13]. Pleasure came from *caring for* as well as *caring about* people, and related to the direct and active care role in effecting change. [3B] liked 'the amount of time with people...helping with their rehab' [36]. Several liked both the amount of time with patients in a single treatment and seeing the same person over several sessions.

In contrast to the female physiotherapists, very few males mentioned the importance of wanting to 'work with people' [23], or the appeal of their profession relating to 'how physiotherapists get involved' [Q13B]. However several referred to the attraction of using manual skills and 'hands on' treatments, providing effective personal care.

Several therapeutic radiographers especially liked the balance of physical care and emotional involvement.

You get to know and have a rapport with the patient from day to day...that is what I thought was the beauty of it...to be doing something physically and also caring for somebody...you get so much more patient contact in therapy ...whether they were dying or whether you could cure, you are still doing something to ease their pain... that meant a lot to me [12B: 366-370].

Most male and several female diagnostic radiographers also wanted to 'work with people' or 'mix with the public', but more than half of these preferred limited emotional involvement with patients, through short-term contact. One liked the way diagnostic radiography involves 'meeting different people all day every day' [4]. Both sexes often contrasted diagnostic radiography with nursing, therapeutic radiography and physiotherapy, which were seen as too harrowing because of ongoing involvement, often with critically ill or dying people. The different types of physical involvement in radiography and physiotherapy were also highlighted, with diagnostic radiography a way of 'helping people without actually hurting' [1]. Generally, diagnostic radiographers

preferred limited patient relationships, and the instant 'end product': together these provided a 'positive outcome'.

I wanted my patients to get up and walk out and everything would be all right...I didn't want to look the other way and see that person might (soon die)...that would be too harrowing [4, 224-229].

Although atypical, a couple of female therapeutic radiographers and a few physiotherapists of both sexes also had concerns about too much emotional involvement. One had worried about the strain of 'dealing with people I can't help, and handling patients and their families negative emotions' [Q9B]. Another admitted

reservations, fears about people...being upset and me having to comfort them, asking me questions I...couldn't give them the answer to... I wasn't really bothered about the physical mess or the blood and so on...Before I started it was the emotional stuff, definitely [8B:178-190].

- **Pleasure from 'doing good', to 'feel good'.**

Personal fulfilment was mostly obtained from *helping* people, providing *effective*, useful treatment and care. Doing good was a practical way of showing you 'care about people', having a 'caring attitude' or 'nature'.

The *worthwhile* work of the profession related to the effectiveness and results of the skills and techniques used. All the male therapy radiographers and physiotherapists who prioritised job satisfaction as an important factor in career selection highlighted this. By contrast, a smaller proportion of male diagnostic radiographers emphasised the importance of 'helping people'.

One male physiotherapy student wrote it was 'good to help improve people's health' [Q14B]. A staff physiotherapist was 'impressed' by the 'profound effect on people's lives...curing...not just aiding the process' [25], and another referred to the attraction of the 'useful, impressive and incredible manual skills' that provided a 'cure not just care' [Q12]. Another was especially keen as physiotherapy suited his 'altruistic tendencies' and 'motivation' [23]. The male therapy radiographers emphasised how their work was a 'very worthwhile endeavour' [2B] as it was both rewarding and 'worthwhile to care for people' [Q17B]. Two highlighted the social value of their profession, choosing their occupation to 'repay debts' to the NHS/community/society [2B; 16]. A male diagnostic radiography student said 'part of the magic' had been the way 'scientific knowledge was used to good effect', helping to 'make people happier and healthier' [10B].

More than half the female physiotherapists and diagnostic radiographers also highlighted the fulfilment from being helpful, doing useful work: several had been attracted by the effective skills and techniques used. Like their male counterparts, the female physiotherapists especially valued the therapeutic skills, as they did 'more than just helping' and 'made a real difference' [13; 17], involving 'impressively effective, manual techniques' [21]. Several enjoyed the responsibility of helping people and were impressed by physiotherapists' abilities at 'motivating people to succeed in rehabilitation' [3B].

Although the ability to personally and directly 'make a difference' was important, it was seldom the 'raison d'être' for the women's choice. However, one referred to the enduring effect of a strong and positive impression from a visit to a physiotherapy department.

The particular things were the amount of contact with the patient and the extent you can help them...that really really encouraged me and that stayed with me, the amount of progress you can actually make with a patient [3B: 101-107].

Several radiographers of both sexes focussed on 'helping people get well' or 'feel better', by 'aiding the process' and 'problem solving', liking to 'care for people'. One chose diagnostic radiography as

I like hospitals and I like being of service to people...I enjoy being around people and I think I'm helping out you see which is good [1: 18-21].

Some especially liked the idea of 'creating' the 'end product' of a diagnostic image, representing objective evidence of useful effectiveness and technical skill.

In contrast to the males, only two female therapy radiographers highlighted the worth and effectiveness of the work as a main source of job satisfaction. Radiotherapy involves 'doing good' and is 'rewarding', as even when a cure is not possible it has 'an effect by easing pain' [12B].

Although altruistic motives - through caring for people and 'doing good' - were sometimes important in career selection, for most females and some males they were secondary to other factors. Sometimes the appeal of the instrumental skills or theoretical knowledge base of the technical aspects of the work was more important, and occasionally a desire for the benefits from 'a career for life' [Q50B].

- **Pleasure from *enjoying the subjects and skills* involved in the course/work**

Commonly, job satisfaction was related to the use of academic and leisure interests: this made the job appealing and interesting.

Sciences: most therapeutic radiographers of both sexes were interested in science and technology, and technical subjects, and several females highlighted liking – and being good at - physics at school. A few highlighted that as radiography involved a lot of physics and technical aspects it had appealed far more than nursing and physiotherapy. A few female diagnostic radiographers also said they liked physics and technology but most mentioned other science subjects, including anatomy and biology; sometimes the interest in science was non-specific.

In addition to the valuable 'immediate end product', one had thought diagnostic radiography looked

fantastic as it suited what I wanted to do...with the patient side, the technical side ...it appealed because of my interest in bio-engineering and genetics and the technical scientific skills...it's the best of both worlds [18: 74-173].

No male diagnostic radiographers mentioned liking physics as important to their career choice and job satisfaction, but a few students enjoyed maths and other sciences involving biological, technical and medical subjects.

Several female physiotherapists said their career choice linked to an interest in science: most specified liking 'medical fields' and 'issues', and one highlighted her 'interest in the human body' [Q6B]. Another said physiotherapy had appealed because

I've always been interested in, that have always fascinated me, just one of those things from childhood...there was nothing else I'd found I would enjoy as much or do well in...it was biology orientated [1B: 124-35].

In contrast to the females, very few male physiotherapists suggested their career choice related to an interest in science. However [7B] said he enjoyed biology and sciences generally, and [7] referred to his 'interest in physiology'.

Sport, exercise and dance: nearly all the male and several female physiotherapists who prioritised job satisfaction referred to their interests in sport, physical fitness and exercise, movement or dance. The physicality of physiotherapy made the profession an attractive option. A few radiographers who had originally wanted to do physiotherapy also highlighted the role of sport in their career choices and had remained keen to avoid sedentary work, preferring practical work.

[23] emphasised liking the 'balance of physical and mental activity' of physiotherapy and [25] said as a sports enthusiast he had wanted to work in an 'active, physical job'; [7] preferred to not be 'desk-bound', instead wanting 'physical rehabilitation and hands on work' that utilised his 'interests in physiology and sport'.

Sport was not exclusively a male interest: several female physiotherapists highlighted their enthusiasm.

Nursing...was always an option but...it was really physio I wanted to do... because I'd done a lot of athletics...I was more interested in going into something with a sport element...it's more appropriate because it's what I enjoy doing recreationally, but it's still got a caring aspect [8: 50-70].

The combination of recreational and academic interests contributed to one woman's choice.

Gymnastics for one thing...and also being interested in sciences... and I've always been musical and whether rhythm has got anything to do with it, but I consider myself quite a musical, rhythmical person, so...physiotherapy is what comes out of it [14: 49-57].

- **Pleasure from doing well: enjoyment through an *ability* to do the job well**

Job satisfaction often related to doing aspects of the course/job well, from using academic and/or personal abilities. Several female and a few male radiographers and a few female physiotherapists perceived the work would be interesting and enjoyable because they liked and were good at science. Several of the women said about enjoying their A level sciences, and how they had seen physiotherapy/radiography put both their interests and abilities to good use.

A radiographer liked the 'hubhub' of the hospital atmosphere, and had wanted a 'hospital profession on the scientific side'. She did not want as much caring as in nursing, but a hospital job that would use her interest and qualifications in science. When deciding on her career she didn't 'feel a lot about the patient...it was the theory of everything...I was a bit academic then really [9: 235-236]. Another liked photography and art as well as science and had seen her 'eye for detail' would enable her to do radiography well [1].

Few male participants said scientific ability had contributed positively to the satisfaction they wanted from work. Enjoyment from scientific ability was never predominant in male choices,

however job satisfaction from an interest in science was common, especially when one of several interests. Unable to get the grades for veterinary medicine, one had chosen physiotherapy because of his 'interests in biology, sport and exercise'. Another said his 'interest in medical subjects' and diagnostic radiography was 'more science based as opposed to purely a caring profession'. Despite exam grades too low for a science degree, another said he chose diagnostic radiography mainly to 'use his interest and school exams passed in biology and science'.

Several female participants had wanted a profession to match their intellectual level and provide a challenge. Job satisfaction related as much to the pleasure from achievement of a complex skill - for self-interest and personal growth - as to the usefulness, effectiveness and social value of the work. One physiotherapist stressed

the scope and depth...The academic criteria you needed to be a physio was a lot higher than to be a nurse...you had to be a darned sight more intelligent to get into physio than to be a nurse...I wanted...a challenge [21:168-187].

Another perceived therapeutic radiography would be 'academically stimulating' as well as satisfying her 'wish to do caring work' .

I wanted to do a caring thing like nursing, but it wasn't academic scientific enough for me...I was looking for something...in the caring health type sphere, but with a bit more to it... There was a lot of pressure to get me off to University...(but) I thought this sounds more like what I want to do really...the scientific plus the caring...the balance was just right for me [24: 78-146].

Personal qualities and abilities

Most male participants chose physiotherapy/radiography because it utilised their personal qualities: one described his 'caring and enthusiastic nature' as 'essential ingredients for the job' [15]. Others claimed the 'right personality', 'altruistic tendencies' and motivation, that they were 'confident' and 'good with people', liking and being good at communication and 'enthusiastic about caring'. One male diagnostic radiography student said he had 'good interpersonal skills' [Q38B], and another was 'able to assist people and have a friendly approach to patients' [Q47B]. A therapeutic radiography student said childhood experiences of caring for his family meant he 'worked well with people' as he was 'a good listener able to talk to people and put them at their ease' [5B]. Another highlighted his 'confidence' with people and an ability to 'be professional' [10B]. Putting these qualities to use provided several male participants with a route to job satisfaction, although rarely the first factors identified.

In comparison to the male participants, fewer females linked their career selection and anticipated job satisfaction to personal attributes. Most that did were physiotherapists, but the majority chose their jobs because of its characteristics rather than their own. However, a few diagnostic radiographers highlighted how they had liked 'the look of their profession' because they enjoyed giving attention to detail, compatible with their creative and artistic flair.

- **Pleasure from *doing*: enjoying *practical skills* and *applied knowledge***

Several participants especially liked the physical and practical nature of the work tasks and skills. Many physiotherapists and a few radiographers anticipated enjoying the job as it was 'hands on', practical work with a scientific slant.

Several female participants said the physical care-work of their profession appealed as it contrasted to the mundane, intimate, personal and sustained care associated with nursing. The physical care-work of physiotherapy/radiography was considered of higher status and complexity than that of nursing and other non-professional care-work. Choices involved the positive evaluation of the profession-specific instrumental skills over 'basic care'.

I didn't want to be a nurse...it's just, it's so mundane, most of it...just seeing to people's incredibly basic needs...it just didn't interest me...not to do it for a career [14: 224-229].

Several radiographers of both sexes emphasised their enjoyment of an explicitly technical-scientific job, applying theory in practical, useful and skilful ways. One diagnostic radiographer had 'liked the idea of radiography' as she was 'a doer not a thinker' [5]. Another recalled how her choice related to the prestige she associated with applying technical skill and a tangible product.

I went to careers and said "I've got A levels...and want to do something medical" ...and I know it probably sounds an awful thing to say, with a bit more technical merit (than nursing), a bit more esteem with using your own skill... Produc(ing)...an end product...radiographs and things like that [18: 61-132].

Several physiotherapists of both sexes focussed on the practical character of the job. Many of these enjoyed sport and exercise and liked the prospect of gymnasium-based group work, but other sport enthusiasts preferred individual exercise/movement therapy or 'hands on' manipulative treatments. Others were impressed by the wide variety of skills and approaches used. The recurring themes are the preference for active, practical and physical work.

Several female physiotherapists considered different health and science professions in terms of their academic or practical emphasis: they liked physiotherapy because of its balance. A few favoured physiotherapy over medicine partly because of the physical, practical nature of the work, sometimes relating to interests in sport and movement. Several of both sexes referred to the 'impressive' and 'interesting' mechanical-physical principles of rehabilitation skills and manipulative techniques, and were 'fascinated' by kinesiology. Some liked being 'on the move', liking to 'go round the hospital'; one contrasted active physiotherapy with sedentary speech therapy.

The fact that you were moving, you were doing exercise...it was always more physical than sitting at a desk on a one to one basis...that's what really appealed ...that you weren't stuck in one room with one patient [11: 85-94].

Caring plus: several emphasised their enjoyment related to the combination of 'caring' with other aspect/s of the work. These included the use of theoretical knowledge; applied use of science and technology; effective and practical skills; therapeutic or diagnostic role, and professional status. One female diagnostic radiographer stressed liking 'meeting different people every day', 'looking after' and 'caring for' them, whilst using technology effectively to 'produce the end result' [4]; a male diagnostic radiography student chose his profession as 'it has a good combination of patient service and technical expertise' [Q3B], and a male physiotherapy student wrote 'it's a very practical job mixing theory with people and their problems' [Q6B]. Most therapeutic radiographers stressed it was the 'balance' of caring and science that influenced their preference for their branch of radiography.

Many male radiographers were highly motivated by their direct input into people's lives. One had felt he suited and would enjoy therapeutic radiography because

I care for the quality of life offered to patients, and like the methodical, technical and scientific aspects of the practical caring work' [16].

Several of both sexes described physiotherapy/radiography as preferable to nursing because of the scientific/technical components and effective therapeutic/diagnostic skills. Nursing was often described negatively, with its work dismissed as less interesting, 'more of a slog' and mundane, mainly involving looking after/caring for patients and being subordinate to doctors. A few disliked the contact with death in nursing and others highlighted the 'blood and gore'. One chose therapeutic radiography because she saw it as 'less messy' than the diagnostic branch, although she thought her concern over blood was more common to men generally. However a male diagnostic radiography student was attracted when

Care of the patient...gets the adrenaline going, when the pressure's on and when its blood and guts...this is really strong in radiography [4B: 220-222].

Another preferred therapeutic radiography to nursing because it did not involve direct contact with death, despite working with cancer/terminally ill patients.

A few radiographers also highlighted the added appeal of 'doing something a bit different' and 'less run of the mill' than nursing [8B; 5B].

I've an interest in medical subjects...and this is more science-based as opposed to purely a caring profession...It's interesting cos it combines patients and technical work, and it's a bit out of the ordinary...You can tell what is wrong with patients and have direct contact with patients...but it's not too involved...It's not just a running round after people, clearing up...its more diagnostic as opposed to caring, but there's still elements of caring [10B].

Rather than focussing on or referring first to caring aspects, and describing 'the science' as a bonus, some radiographers described caring as the 'add on': 'it's not just a technical job *but also* helps make people feel better' [Q4B] (*my emphasis*). One liked the 'only very brief not continual...easier care' of radiography, describing 'caring' in terms of a 'unique responsibility for patient safety':

The caring is related to the technical sides, as it is about protecting the patient... (from) the dangers and risks of radiation [14B; 512-513].

In addition to learning safe techniques, she, like a few other radiographers, enjoyed the idea of being 'patient advocates', ensuring doctors did not expose patients to unnecessary tests or treatments.

Some, mainly women, compared physiotherapy/radiography to medicine and referred to the relative status of various health professions. High status was an element of appeal and source of satisfaction. Physiotherapy appeared 'more of a challenge and more closely related to medicine than nursing and O.T.' [Q11]; radiography was 'a little bit of a step up' [4] and 'quite a substantial profession' [9].

- **Pleasure from *fitting in*: liking the staff and the hospital/department atmosphere**

Sometimes job satisfaction related to participants feeling they would fit in with the 'type of people'. Most therapeutic radiographers, many (mainly male) physiotherapists and several (mainly female) diagnostic radiographers highlighted this as important. Nearly all participants had visited or

worked as volunteers/assistants in their profession's departments prior to applying, or starting their course.

Several therapeutic radiographers mentioned being impressed by the ambience of departments, and the positive attitude and friendliness of staff to patients and colleagues. Although one emphasised physics as the main influence on her choice of therapeutic radiography, as a 'painfully shy' young woman she had also been influenced by the friendliness of staff towards her; the department atmosphere had seemed informal and welcoming, which contrasted with impressions of diagnostic radiography. Another referred to people 'being passed from pillar to post' and about different 'levels of appreciation' in diagnostic radiography, preferring the more 'personalised' therapeutic atmosphere as 'more my cup of tea' [12B].

Although one male student had been concerned by the 'low morale' and negative attitude of some staff, most diagnostic radiographers said they had felt 'immediately drawn to it' because of the 'friendly staff' and the sense of a 'dynamic, friendly and lively place'. One said diagnostic radiography had appeared an attractive 'way of life', with the 'friendly atmosphere' and 'helpful and keen' staff: she concluded 'this is OK, I'll stop here' [18]. A male radiographer liked the 'quiet and sedate' female-majority environment, contrasting it with loud, raucous and competitive male-dominated workplaces that resembled 'football matches' [19].

Several radiographers and a few female physiotherapists had wanted to work in hospitals as they generally liked or were 'fascinated' by them. One diagnostic radiography student stressed he had 'always been interested in hospitals' because of the 'magic atmosphere', seeing them as 'positive places' that 'get people better', being 'safe and friendly environments' [10B].

Several physiotherapists of both sexes recalled positive impressions of staff, impressed by their enthusiasm and evident job satisfaction. One described being 'very struck by the positive atmosphere' and especially liked the way humour and non-competitiveness between colleagues accompanied a 'serious and committed approach' to the work [23]. Many said staff had seemed 'encouraging', 'likeable', 'fun and sociable', 'friendly, outgoing and chatty', 'nice people'. Several had felt they suited physiotherapy and would 'get on well straight away and fit in', because they 'shared the same approach to life'; they were the 'type of people I get on well with', as 'young, healthy and intelligent', and 'forceful, strong, efficient and positive thinking', who were 'nice to people, and good communicators' [various].

- **Enjoying teamwork: working relationships and responsibility**

Some therapeutic and one male diagnostic radiographer liked the promise of close working relationships in 'small team' work. Others, predominantly radiographers, referred to the attraction of multi-disciplinary health care as it resulted in shared responsibility, with some preferring their profession to medicine because of its onerous burden of overall responsibility.

I never wanted to be a doctor...(it) never appealed to me...I would never have wanted the responsibility of being a doctor [20: 244-249].

However, some radiographers and several physiotherapists preferred their profession to nursing because they perceived it had more clinical autonomy and responsibility. Some, mainly female

physiotherapists wanted responsibility as it represented a source of professional status, authority and 'respect'.

It wasn't just about helping people...(but having) that bit more authority involved with it... (and) autonomy over what you choose to do...when I was thinking about it ...nurses just did exactly what doctors told them...I knew I didn't want to be a nurse ...it was the autonomy angle...more than anything else [17: 80-89].

Physios had...more professionalism...a great deal more autonomy than other paramedics (and) a good deal of respect...I wanted to make my own decisions. I didn't want to be told what to do...I wanted to think for myself [21:166-178].

- **Pleasure from variety and interest: patients, skills and specialities**

Diagnostic radiography and physiotherapy were commonly perceived as interesting and fascinating careers, providing daily and long-term variety through work with different people, equipment, techniques and treatments, as well as diverse clinical specialities and work settings. Both sexes said these elements made the professions mentally 'stimulating' and 'challenging', and because treatments and technologies were 'constantly developing and changing' they would not become boring. Diagnostic radiography was a 'good way to go as it provided a continuing learning process' [14B]: 'long-term interest' offered the prospect of an 'enjoyable, long-term career' [18].

A few physiotherapists of both sexes saw the different specialities and types of employment provided 'good career opportunities' with 'long term prospects'. One was 'keen to have a broad range of options open' [23], and another had been impressed by physiotherapy as 'a diverse profession and not just sport...involved in lots of different settings...it's incredible what physios can do' [7:130-133], although, like several others, he was unaware of the full extent of specialisation when considering physiotherapy.

Interestingly, no therapeutic radiographers highlighted diverse opportunities as important to their career selection, although a few mentioned the interesting range of machines and treatments used. However, some diagnostic radiographers preferred their 'branch' because of the greater variety.

Differences in sources of 'pleasure' explaining gender patterns of recruitment

Gender different career choices and sources of job satisfaction were frequently related to the social acceptability of showing a caring attitude through doing care-work. Several participants said girls not only see female adults as primary carers, but are raised to show their caring nature, encouraged to think about and look after other people's feelings, and learning to value themselves in relation to the value of their work for others. Both sexes said that women are 'more able to show their caring side...much more than men' [Q31B], encouraged both at home and elsewhere, to do so. And some, especially male participants highlighted 'the fact that men are not brought up or encouraged to be caring' [Q5].

As a consequence of gender-differentiated childhood 'the caring aspect is something that does not appeal to men' [Q47B]. Through socialisation, girls and boys not only develop different care

abilities, but also develop different attitudes to different types and ways of caring that result in girls and boys getting or anticipating different levels of satisfaction from the various types of care-work. This attitude influences adolescents choosing what to do after school, with few males viewing work caring for people as a potential source of satisfaction. Importantly, *a gender distinction between the satisfaction from caring for people and having a caring attitude* became evident when a few, mainly male participants, stressed how a *'caring attitude towards people' is not sex-related*: This was exemplified by the fact that many men work in public service professions, such as medicine and law.

A lot of males are, contrary to beliefs out there, are caring people. We are concerned about our fellow human beings [16: 262-264].

Conversely, working with people, being directly helpful, as well as showing a caring attitude is not only what many girls can do, expect to do, and are encouraged to do. Care-work is a source of personal satisfaction for many women as it fulfils their traditional gender role.

Several suggested the different amounts of physical and emotional care-work influence gender patterns in recruitment, but different opinions were expressed as to which was the hardest or least appealing. A few said both types of personal care-work are difficult and unpopular with most men. Even though some women can't cope with care-work, men anticipate various problems with care-work far more often, so rarely consider working in caring professions. One female therapy radiography student said

Because it's viewed as a caring profession...I think men are put off...The thought of having to clear up somebody's sick or something like that...a lot of them are happier doing something technical rather than having to deal with people's feelings and emotions...the physical mess and the emotional upset and seeing a lot of blood here, there and everywhere, and needles...I think a lot of men are turned off by that and more so than women, and yes, definitely the emotional part [12B: 515-534].

Many females were convinced that 'the undesirable mucky side to the job' deters men generally [Q18B]. Others highlighted men's concerns about the 'amount of physical contact...feeling for surface landmarks' [Q41B]. Some female physiotherapists highlighted concerns many men have with physical treatments that involve getting close and using a lot of touch. A few males suggested physical contact was an increasing concern with the media attention given to cases of unprofessional conduct by male health professionals.

But several participants of both sexes said emotional care is the major problem for most men and that men dislike the prospect of 'large amounts of caring for sick people' [Q28B], especially with severely/chronically ill and elderly patients. The prospect of this stress deters male recruitment. Nonetheless a few, mainly female therapeutic radiographers, said men in caring professions are just as good and enthusiastic as women about emotional care-work, suggesting low male recruitment reflects stereotypical and misplaced assumptions of men's inability to express or cope with emotions. Many concluded the main disincentives to male recruitment within their profession are the messy sides of personal care-work and prolonged emotional involvement.

Male participants distinguished between types of care-work less often than females, but some of both sexes stressed that most people do not know much about the different types and amounts of care in physiotherapy/radiography when they decide on their careers: it was therefore difficult to

assess which were the main sources of satisfaction or problems for either sex: nonetheless generic care-work was seen as difficult and unattractive to most men and contributed collectively to the low numbers of men in caring professions.

Some, especially female participants, also linked gender different sources of job satisfaction to the differential status of women and men's roles, activities and domains generally, with low status associated with caring as female and lowering of satisfaction for males from it as a result. Several suggested that care-work has not been recognised as skilled as it is seen to rely on (women's) natural or socialised abilities; and through being a predominantly female activity, caring is widely associated with femininity. Consequently, predominantly caring occupations have long been and remain female areas of activity, and as low status work are also low paid. Jobs perceived as 'women's work', and tasks associated with women, were seen as 'stigmatised'. As female caring professions, physiotherapy and radiography were widely perceived as difficult for men, psychologically, socially and materially, and as occupations where women feel comfortable and confident, despite the status and financial penalties.

Although the stereotype and reality of caring occupations as mainly women's work were described as a male deterrent by some males, the financial/practical and personal difficulties of working in a female occupation were emphasised more than problems relating to the social value and gender associations of caring. Having chosen to work in the professions, the male respondents did not highlight the natural femininity of caring and low status of their profession as a major deterrent to male recruitment, presumably because this would problematise their own career decision.

Some females suggested the amounts of non-caring work in physiotherapy/radiography explained the presence of those men who did join the professions. The men were in the professions *despite* the caring, usually because they had seen they would enjoy radiography because of the science and technology, and physiotherapy because of the sport/physicality of the work and potential for lucrative self employment in private practice. These were understood as male-friendly, masculine interests that provide men with job satisfaction. That most men did not know about these details explained why so few males enrolled.

By under-stating the diverse, complex and effective instrumental skills and rational scientific approach, (as well as ignoring the fact there are some male staff) the professions appear less interesting and attractive, and are ignored by potential (male) recruits. Several, mainly female participants, highlighted that the under-acknowledged aspects of the work are often the 'male-friendly tasks' and the behavioural characteristics of 'professionals', (e.g. as knowledgeable, expert, authoritative, autonomous, responsible) which they saw as particularly appealing and important sources of job satisfaction to men because of their associations with masculinity.

Several participants suggested a more accurate, less stereotypical image with less emphasis on caring would increase the numbers of men in the occupations and achieve a more equitable gender balance. The amount of complex technology and science, the autonomous application of effective and diverse instrumental skills, and the level of theoretical knowledge underpinning clinical practice in physiotherapy and radiography were widely seen, but especially by male respondents, to need greater recognition and exposure, as they are the aspects of the course and work most important for male job satisfaction. Their promotion would also raise the professions'

overall profile and status. Associations between gender different sources of job satisfaction, patterns of recruitment and professional status were prevalent.

I would make sure firstly that people understood what it was better, not just men, but everyone in general...I'm not saying to promote the scientific subjects is just to attract men...as women may be attracted by that...It's just that you have got to include an explanation of what radiography is actually like, just to show...what you are going to be doing when you are a student. That it's anatomy and physiology and physics...and there's some electrical and mechanical stuff you have to know, and that we have to know a lot about the machines ourselves [10B: 543-563].

Benefits

Benefits from physiotherapy and radiography were mentioned less often than 'pleasure' and 'qualifications', however, they were the 'most important' factors in career selection for a higher number of participants than 'qualifications', with similar proportions by sex and profession. Despite this, several participants across the sample suggested that men and women prioritise 'benefits' to different extents, contributing to the gender patterns of recruitment in physiotherapy and radiography.

Eight types of benefit were identified, with some participants referring to several and others focussing on a few (see appendices 12 and 13 for benefit codes, properties and dimensions).

I decided I was going to go to university...I wanted something that guaranteed, well gave a very good prospect for a job...I wanted to do a degree mainly for my own ego...to (prove) I had the brains...(and) a job with a lot of responsibility...working with the general public, and...quite well respected [11B: 70-108].

Some factors were mentioned more often than others, and some were highlighted mostly by one occupation or sex. Several of the types of benefit relate: for example, the internationally recognised qualification opens up opportunities to work abroad.

Profession

More than a quarter of participants highlighted the attraction of various aspects of their occupations as 'professions'. This was the most commonly identified benefit and mentioned across all sub-groups, but especially important to female physiotherapists. Several referred to the recognition, status and prestige of physiotherapy/radiography as professions and 'substantial' occupations. A few highlighted how their parents had been pleased by this aspect of their choice, with one describing her choice as 'a step up'.

Several focussed on the respect for and authority of professionals, indicated by the amount and type of responsibility involved in the work. Some highlighted the importance of clinical and administrative autonomy: for a few, autonomy equated to professionalism, and reflected the level and authority of their occupation's knowledge and skill. Although some did not clarify what the attraction was, several said they 'wanted to work in a profession' and specified a type by prefixing it with caring; hospital; health, or medical.

Several considered the autonomy and status of different health professions in hierarchical terms, positioning physiotherapy/radiography above nursing but below medicine and preferring it partly because of this.

The course and qualification

The academic level of the course and type of training influenced the career choice of over a quarter of participants. Some had wanted a university course at degree level, whereas others, all female radiographers, wanted to study at diploma level. A few, mainly women and radiographers, highlighted course location, with one keen 'to go away to university' [8B] and others wanting to stay at home. Some wanted a university setting and others hospital-based training. Several, mainly men, liked the 'structured' and 'vocational' training, providing quick access to a professional career after graduating. A few highlighted the advantages of a profession with an internationally recognised qualification and universally relevant/useful skill. A vocational degree is common to all health professional courses, but some said physiotherapy/radiography (and nursing) were better than medicine as there was less obligation to study post-graduation. A male diagnostic radiography student liked being 'immediately up and running straight away, in a career' [13B]. A diagnostic radiographer who trained nearly 20 years before interview, said one reason for her choice was that

At the time it was a two year course so you didn't feel you were spending too much time with academic work before you got to the nitty-gritty of actually doing the job [1: 22 - 24].

Prospects: promotion, breadth and types of career opportunities

About a quarter of participants were attracted by promotion and specialisation prospects. A higher proportion of male than female participants, especially diagnostic radiographers, stressed *hierarchical aspects* of career structure as important. One diagnostic radiography student anticipated furthering his 'career into management' [Q47B], but another staff diagnostic radiographer emphasised he had 'not thought about promotion' and other 'career' issues such as pay when deciding what to do after school [19]. Most females across the professions stressed prospects were not influential on their choice.

Similar proportions of men and women stressed the appeal of the *wide range* of career opportunities. Several referred to the diversity of clinical specialities but others, mainly physiotherapists, to the number of opportunities in different settings. Interestingly, one diagnostic radiographer mentioned her concern about 'limited options' in radiography as compared to physiotherapy [6]. Some referred to the opportunities for working abroad, and a few physiotherapists mentioned the opportunity to work in the private sector.

Job security

A small number of participants referred to the importance of 'lots of jobs' and the perception of 'virtually guaranteed employment' and 'a career for life'. Mainly radiographers and mature male students highlighted these aspects, although a few female physiotherapists also emphasised the importance of 'steady employment after training'. A diagnostic radiographer said 'there will always be ill people so there will always be jobs' [22]. Several, mainly therapeutic radiographers, highlighted the numbers of students taken onto courses matching the number of staff needed by the NHS, thereby ensuring sufficient jobs for graduates.

Pay

A small number of participants said issues relating to money had contributed to their career choice, with a larger proportion of the men than women highlighting these considerations. A few were attracted by the guaranteed grant for students on health professional courses. Some, of both sexes, stressed the pay level had not been a concern when choosing their career. One said

Money wasn't important in my initial decision, I actually thought it was lousy pay, but it didn't matter at the time as I was married...if I was materialistically ambitious it's not the profession I should have chosen [21: 292-296].

Another said she had been 'discouraged by friends who thought the pay was poor' [10]. No therapeutic radiographers mentioned money in their accounts of career selection, although a couple suggested the opportunities to earn more in diagnostic radiography, with overtime, influenced some people's, especially men's, choices. Although this view is endorsed by one male participant who chose diagnostic over therapeutic radiography partly because of the overtime opportunities, a female physiotherapist also referred to the 'option to earn more by working on call' [13].

Most described positive perceptions of the pay level: it had been seen as 'reasonable remuneration', as you 'can earn a good living', an 'enjoyable lifestyle' and financial independence. A couple highlighted the 'adequacy of the pay' in relation to the length and level of training.

In health care there are hierarchies of pay...it's partly historical. The doctors are on self-employed contracts and we are on NHS contracts, and I think that's a division between us. It's partly political and partly historical [16: 625-630].

Hours/shifts

A very small number of participants, mainly female physiotherapists, highlighted the appeal of organisational aspects of physiotherapy/radiography employment. The 'absence of shift work' and 'reasonable', regular working hours fitting 'lifestyle priorities' were contrasted with careers in both medicine and nursing.

In medicine the hours are too long and I'm a person who needs her sleep...I didn't want work to rule my life, but I wanted a career, a job I could enjoy...I have the rest of my life to lead as well [9B: 184-187].

Many of the women described their career plans as 'long-term', involving commitment to a 'career, as a way of life' [18].

Different emphases on 'benefits' explaining gender patterns in recruitment

A few participants recognised their profession's roles, relationships and responsibilities within health care, the levels of clinical and administrative autonomy, and various other organisational features reflect the way caring professions were predominantly female from the outset.

Although some female participants said women were penalised in their career progression if they worked part time, a few suggested maternity leave breaks and part time jobs to fit around family responsibilities were seen as more acceptable than in male dominated occupations. A few suggested that this meant female professions fitted women's lives and family roles and was seen as an important factor behind the higher numbers of women at the stage of choosing careers. No males mentioned these aspects.

The professions' origins and histories were seen to impact on the status and material rewards of the professions in the modern day and influence gender patterns of recruitment.

As traditionally caring professions...the low pay and status and lack of opportunities may put males off [Q1B].

A female radiographer suggested more men might join if pay and prospects were improved: these could compensate for personal 'discomfort'.

The thing that would bring men in is better career prospects and better money... Then they would probably get over the discomfort of having to handle people... Men don't show their emotions and they don't hug...they worry...it's a caring profession, will all my friends think I've gone queer? [1: 502-512]

Participants of both sexes said the measure of social value most commonly recognised by men was economic, and this, along with the desire/pressure to fulfil social obligations such as the 'breadwinner' role, was seen to inhibit some men from joining physiotherapy/ radiography and stop many of those who did qualify from staying in their profession. Predominantly female occupations were recognised as almost always low paid occupations, providing only second wages, 'pin money' or sufficient for a single, independent (woman's) income.

With most boys seeing male adults as primary wage-earners and family breadwinners and rarely in supportive, caring roles, they learn their primary role and responsibility is to work and support others through their income. Several from both sexes said the low pay and prospects from care-work are causes for concern and sources of dissatisfaction to many men: a few differentiated status from material rewards but many saw pay as the main source of job satisfaction for most men.

I think it's to do with money and status and the fact that it's predominantly women already...Because a lot of men still are family breadwinners...I don't know whether that's changing...but when I was training most of the mature students had families and they were the breadwinners...it was a concern for them...They were thinking of eventually going into private practice...they can earn more money [23: 349-410].

Although several staff and a few predominantly male students discussed the influence of pay levels on the gender composition of their profession, most saw earnings become more of a concern for people later in life. Most of both sexes said money was not a primary factor in career choices and several highlighted the adequacy of the money for single people.

Some participants, mainly females, also noted physiotherapy/radiography income was not low except in relation to other professions. One said 'It's seen as a semi-profession like teaching and nursing, and has poor pay in relation to business and management' [Q6]. Another observed 'other professions especially in private industry are more highly paid' [Q8]. One concluded the problem was the 'lack of prospects as compared to industry and top social group professions such as law' [Q22].

The potential to earn better money and increased management opportunities in the NHS in recent years was seen by one female radiography student to explain the rising number of men in diagnostic radiography. In contrast, therapeutic radiography was seen to remain as a poor career for men in terms of its earnings potential and promotion prospects because of 'the inability to earn more than the basic wage' from overtime [Q27], and as 'a small profession therefore career limitations' [Q26].

A few of both sexes suggested changes in the number and types of jobs in different sectors of the economy were challenging and changing attitudes as to what constitutes acceptable, appropriate or desirable work for the two sexes, and seen to have affected the gender mix in physiotherapy/radiography in recent years. Experiences of redundancy and unemployment meant these professions were increasingly seen as attractive options by higher numbers of men needing work with job security.

The role of males is on the decline, and male jobs are on the decline, with heavy industry on the decline, and part-time work and things that ladies can fit into better are on the increase, these are general trends in society, so now basically (men) have got nowhere else to go...it is mainly a response to other problems [13B: 455-470].

Professional relationships

Although discussed infrequently, a few participants recognised that caring professions such as physiotherapy/radiography developed within Victorian society and a medically dominated health care system that was, and has remained, a very male-dominated, hierarchical system.

Some participants of both sexes suggested this explained why men rarely choose physiotherapy/radiography: they are generally brought up to be in positions of authority, especially, but not exclusively in relation to women.

It's much more on a level with nursing, which again is traditionally female and I think historically I think it is because men had the powerful roles and women had to do what they were told. So with medicine always being men and nursing being female that has affected physio...men haven't wanted to do it [7B: 388-393].

In addition to some men having problems with the predominance of women within the profession and its hierarchy, perceptions of inter-professional roles and relationships in the hospital hierarchy, with physiotherapy/radiography as subordinate to medicine, also made the professions unattractive to more men than women. High professional status and authority were widely described, but mainly by females, as important issues to more men than women in their career decision, although many suggested impressions of autonomy and responsibility were of equal concerns to both sexes.

Another male radiography student said 'It's not macho enough for a lot of men, it doesn't have the same social standing as medicine' [Q3B].

Others saw the female predominance in their profession related to the subordinate role and relationship to medicine but saw this was because it is acceptable for women who wanted professional work.

It is a caring profession originally subservient to medicine and therefore traditionally it's a female type of role. It continues to attract women because it provides them with professional status [Q8].

Several female and one male physiotherapist suggested some men have an 'ego problem' working under female managers, although a few female respondents suggested the opportunities for management might attract men into female majority occupations.

Male dominance and hierarchies of control

Several participants stated that men are socialised towards, prefer and expect to work in positions or occupations which confer respect, authority and social and economic status. Men were said to

dislike and generally avoid positions of subordination and support, and within the range of options considered that they 'qualify' for, tend and prefer to choose those which provide them with the highest status or authority/leadership role. Most people identify medicine at the top of the occupational, professional and health care hierarchies and the caring and allied health professions as subordinate. Several, mainly females suggested that more commonly this status issue is a male concern. Although reticent about stereotyping, a male physiotherapist said

It's more to do with the money than about problems expressing emotions and with physical closeness. I think for most men it's more straightforward, it's status and power and macho and things like that... and maybe down to some innate characteristics, but I don't know you can say that...that kind of generalisation often isn't right ...But I think it comes back to the money and status and power, and maybe in the back of some people's minds there are those who consider it a problem working with women...and the sort of men who would be bothered by that would talk about money, status and power [23: 547-549; 780-785].

Within radiography and physiotherapy, men inevitably experience learning from or working under female seniors/managers, at least in the early years of training and post qualification work. In effect, men opting to work in 'caring professions' are accepting and adopting subordinate and supportive working positions as they relate to both internal and external professional roles and relationships.

The status of acquired and achieved knowledge

Despite being necessary, socially valuable work, a few participants recognised that caring for the sick is afforded low status because it is seen to not require academic knowledge or formal education. Instead it uses natural abilities (of females) and/or (women's) social skills developed informally during childhood. They suggested the association with gender explains the predominance of female recruits in both physiotherapy and radiography and that the acquired mode of learning to care damages intellectual-based claims to status. Additionally, low status, semi/unskilled *caring* was often contrasted with the high status of complex, theoretically based medical science, responsible for treating and *curing* disease. The expressive and tending tasks of caring were contrasted with dynamic, instrumental tasks of therapeutic work in terms of their different levels of expertise and skill, agency, knowledge base, incorporating notions of status and associations with gender. Some participants suggested the award of a diploma level qualification until the 1980s reflected the low status afforded the knowledge and skills of physiotherapy/radiography and said this contributed to the low numbers of male recruits. More men had started joining the professions since the degree award because of its higher status and the positive image of university based academic education rather than hospital-based apprenticeship style practical learning.

Qualifications

Qualifications were rarely identified as 'most important factors' in the participants' own career selection, but the majority acknowledged them as generally relevant to their choice. A higher proportion of male than female participants highlighted qualifications as 'most important' for career choice, but they had some influence for similar proportions of females and males. A slightly smaller proportion of physiotherapists than radiographers indicated the primary importance of their qualifications to their career selection but similar proportions from each occupation mentioned their relevance (see appendices 12 and 13 for qualification codes, properties and

dimensions). Several participants of both sexes suggested gender differences in personal and academic qualifications contribute to gender patterns in recruitment in physiotherapy/radiography.

Female participants focussed on their level of academic ability and suitability of their formal qualifications, their caring attitude and abilities to care, relate to and motivate people. Males referred mainly to their interpersonal and communication skills, suitable personality and caring attitude, the subjects they had failed and courses they had been rejected by. They both highlighted the relevance of subjects they had studied, with several mentioning their scientific background. Double the proportion of males as females chose physiotherapy/radiography as second choice professions, and more men studied around their upper academic limits. However, three women had retaken exams and reapplied to physiotherapy/diagnostic radiography having failed to get the required grades at the first attempt.

First and second choice courses and careers

Physiotherapy/radiography were first choice courses/careers for most female participants but for a minority of males. 10 had failed to get the exam grades needed for their first choice (six women and four men) and 14 had worked/studied in other occupations/ courses previously (seven women and seven men). Some had not started training or failed exams but changed their minds after submitting an application to another course. Most of those who decided to change career prioritised job satisfaction and employment benefits, rather than academic or personal qualifications.

Most 'fail' participants (6) were diagnostic radiographers, with no female physiotherapists failing to get into preferred options, and only two of the male physiotherapists. Within the fail group, one therapeutic and three diagnostic radiographers had failed to get onto physiotherapy courses. In addition, a therapeutic radiography student had realised he needed to choose another course before exam time, recognising he would not get adequate grades for his preferred choice of physiotherapy.

Second choice careers

Neither of the female participants doing physiotherapy as second careers had failed to get onto another preferred choice, compared to more than half the second choice radiographers. One had not trained or been employed previous to physiotherapy, working as a housewife and mother until the death of her husband necessitated a 'radical rethink'. With A levels and other relevant qualifications in massage and counselling she decided to go to university and get a professional qualification to become an 'independent breadwinner' [2]. The other was a botany graduate and ex-research scientist, who wanted to return to work after 'full-time motherhood' [21]. She rejected laboratory work as she wanted something 'more stimulating, medical and with people'.

Physiotherapy represented 'a compromise' as she had the academic ability for medicine, but the length of training and difficult career made it incompatible with her 'lifestyle and responsibilities'

For some radiographers their change represented a step down to the nearest or 'next-best' thing, often changing from one health profession to another. Despite her ability, a diagnostic radiographer had achieved inadequate exam grades in science for pharmacy: having been 'let

down' by her school who 'ignored female science students', diagnostic radiography was chosen as another 'scientific hospital profession' [9].

Generally, those who had failed to access their first choice were less positive about their course/profession than other female participants, but spoke favourably about most aspects of their second. The two female radiographers interviewed who initially chose physiotherapy were generally positive about their profession, but still preferred physiotherapy. Interestingly, several women described radiography as the recommended profession for women who were unsuccessful getting into medicine and physiotherapy. It was considered easier to get into radiography because of less competition for places and lower exam grades.

Rather differently, one diagnostic radiographer had taken a 'step up' with her second choice: although she had failed the exams needed for banking, she was offered a place in radiography after temping as a 'radiography assistant'. She was delighted as she considered herself neither academic nor scientific, and it offered the 'opportunity to be a real student' [4].

Several of the women in second choice careers stressed how both options suited their abilities and interests. For example, some referred to the similar scientific knowledge base and practical aspects of the work, and others mentioned how a caring attitude and ability and enjoyment of working with people were essential to both.

Most of the male participants doing physiotherapy/radiography as second choice careers had failed to get into their first choice. Some failed exams and then looked for an alternative, but others looked elsewhere beforehand. Two radiography students had originally wanted to do physiotherapy, but recognised they would not get the required grades. Of those who failed to get onto other courses, all had chosen scientific subjects and half were medical-oriented.

Some who changed careers emphasised the relevance of their academic qualifications and profession-specific technical skills. One highlighted his engineering degree and another his computer and technical skills from working in commercial photography. However, others emphasised their enthusiasm to leave previous employment.

I didn't enjoy the office work, I hated the job...I thought "Wow, it would be such a cool thing to be able to do that with your hands, to be able to help someone change their lives like that, and get paid for it at the same time"...And I'd done science A levels and O levels...I knew I didn't ever want to work in an office again...because of what I wanted out of a job [23: 26-45]

The engineering graduate felt his earlier degree classification was too low for a highly competitive labour market: he wanted a course that still involved applied science but guaranteed job security.

I got a 2.2 honours degree...and tried to get a job...I got about four interviews...but missed out...After a year...it was time to think of something else...Basically I was looking for a secure job...(and) a skill that would set me up...for work...I didn't want to come away from another course and have nowhere to go and radiography presented itself as an answer... (After) three years...you can go anywhere and do what you want. It is quite governed and structured, a career and a limited number of people coming out from training [13B: 14-40].

Relevant academic subjects and Interests

A few from across the sample chose physiotherapy/radiography to use and match their qualifications. Several emphasised being good or experienced at something directly relevant and

useful to their studies/professional work. They derived pleasure from using a skill or ability, demonstrating the link between the two constructs (with 'pleasure' dependent on 'qualifications'). Feeling good was also often associated with the ability to do something well.

Several female participants explained their suitability in terms of their qualifications in sciences and practical subjects with enjoyment turning them into main reasons for their career choice. Many physiotherapists spoke about their academic abilities, with some referring to science qualifications generally, and others highlighting particular A levels such as biology. A few highlighted the relevance and usefulness of qualifications in social sciences and languages and one mentioned counselling.

Fewer female radiographers than physiotherapists mentioned the positive influence of their academic abilities on career choice, but some referred to the relevance of their science A levels: several therapeutic radiographers emphasised their advanced level physics, and one student said her choice was firmly rooted in abilities and enjoyment of maths and physics.

I had always been more maths minded...it came more easily to me...and I enjoyed physics...I did it...as I knew it would help with this course...I made my mind up...when I was doing my GCSEs... [Careers] said "What's your favourite subject...have you any ideas?... I said something in a hospital...in a profession ... She gave me a list...then I decided which I liked best [12B: 66-92].

Fewer male than female participants spoke about formal academic qualifications as a *positive* influence on their career choice. Although several referred to their interest in and relevance of studying science most acknowledged their limited ability level, or failure in exams, had restricted their career options. However, a few stressed their 'intellectual' capability, with a couple doing second careers mentioning their degrees in science subjects. A couple mentioned technical abilities and highlighted computing and photography skills. Another highlighted his sports therapy qualification, taken after failing to get into veterinary medicine.

Above nursing; below medicine

One male diagnostic radiography student and a female physiotherapist chose their profession having done better in exams than predicted by teachers. Both had been considered 'good enough for nursing', but with their success decided they wanted 'something better' and 'above that'. Several others, all women, had also rejected nursing as not sufficiently scientific or academic enough for them.

In contrast to those moving up to physiotherapy/radiography, some described their choice in relation to courses/professions considered but abandoned because they were above their academic level. Of these participants, a higher proportion are male than female, with five men and three women giving up on medicine/veterinary medicine because they weren't 'academic enough'.

However, some participants, predominantly female physiotherapists, considered their course as complex and academic as medicine and noted similar entry requirements for both at many universities. Some of these had considered doing medicine and had sufficient academic qualifications for it, but had opted for physiotherapy/radiography because they wanted a shorter course, easier career, more patient contact, or less responsibility. Interestingly, some of these

highlighted the importance of professional status; authority of knowledge, and appeal of independent work and autonomous decision-making.

Personal qualities and attributes

The male participants spoke more than the female about the role and relevance of personal qualities and abilities to career selection. Many described themselves as 'right for the job', with one saying it was his 'sort of thing', but most detailed their compatibility more specifically. Two said physiotherapy suited their 'personal character', and others their 'strengths and weaknesses'. One said diagnostic radiography is 'what I am cut out for', highlighting his 'friendly, caring and outgoing qualities', 'confidence' and ability to 'work well with people', and 'fairly studious and quiet' disposition' [10B].

Several males across the occupations highlighted their caring attitude or compassionate and caring nature. A few physiotherapists referred to non-specific abilities or personal qualities, but most specified particular attributes. A few, mainly diagnostic radiographers, referred to their confidence and ability at working with people, and others referred to their caring abilities and sensitivity. Generally, they said they were good at 'relating to people', with some highlighting communication and inter-personal skills. Some, mainly physiotherapists, added that this ability included getting on well with colleagues as well as patients, with a few highlighting the female majority workforce and how their non-sexist attitudes and dislike of gender stereotyping and homophobic bigotry were crucial. One diagnostic radiographer highlighted his ability to 'work well in a team'. Several radiographers stressed their conscientious and responsible approaches to work, paying 'attention to detail'.

Fewer females than males stressed the importance of their personal qualities on career selection. Indeed, some female radiographers highlighted their diffidence with people when considering careers, suggesting the relatively limited patient relationship had influenced their choice. A few stressed they were unskilled at caring in adolescence.

A few female participants indicated the general suitability of their personality to the work and their similarity to the type of people in their profession, but most explained their compatibility in detail. Several, especially therapeutic radiographers, stressed their caring nature and attitude; some, mainly physiotherapists, highlighted their abilities at caring for people and sensitivity with people and problems, and a few from each group referred to previous experiences of doing caring. A few referred to their useful practical abilities, with a couple highlighting their tactile abilities, and several physiotherapists highlighting their physical fitness and sporty, active character. Similar to the males, a few female diagnostic radiographers highlighted their conscientious approach and attention to detail, being good with responsibility.

Several females from across the professions focussed on their communication skills and highlighted their ability to relate, listen and talk to people, ease people's anxieties, to encourage and motivate them. One physiotherapist described herself as suitable because she is 'slightly bossy' and another saw herself as 'capable of motivating people'; a radiographer highlighted being 'a people person'. A couple said they were 'sociable and outgoing' and 'easy to get on with'.

Differences in 'qualifications' explaining gender patterns in recruitment

Several participants of both sexes suggested gender differences in personal and academic qualifications contribute to the pattern in applications to study physiotherapy/radiography. However, most stressed that differences are often based on stereotypical notions of gender different abilities and the consequent development of gender different attitudes, skills and interests.

It may be to do with the individual's socialisation...although stereotyping may have some influence [Q50B].

Through the different socialisation of girls and boys, especially in the home and at school, gender different abilities (and attitudes) developed during childhood. It was widely suggested that girls than boys therefore choose to work in different occupations because they prefer jobs involving skills and activities they are best at it, and which fell in line with stereotypical notions of what women are suited to.

Several, mainly female interviewees suggested through girls and boys doing different amounts of caring as children, different levels of ability for caring work developed by adulthood. Most women have better caring skills than most men as they have been encouraged and expected to look after people's physical and emotional needs from an early age. More women therefore see caring professions as obvious and attractive career options as they use already developed skills.

Women are accepted as being better carers in our society. This stems from the social upbringing and environment within our families. Adult male and female roles are often stereotyped in family circles, so girls play with dolls and boys with meccano [Q30].

Interestingly, amongst the few males who highlighted gender different abilities to care were those who mentioned how their own abilities and interest in care-work had been fostered by a childhood that had necessitated them providing a lot of family care.

Caring as feminine

A small number of participants, mainly females, recognised differences in abilities and personal qualities between the sexes as biological in origin, suggesting caring comes naturally to women as it is essentially feminine: caring uses the natural abilities of women developed out of their biological functions to reproduce and nurture, therefore more women than men do care-work, both in the home and in paid employment. As 'women are more caring', and 'men are less caring', 'women may find caring easier than men' (various participants). A female therapy radiography student wrote 'women have always been more in touch with their emotions than most men and aren't afraid of other people's emotions' [Q20B], and a female diagnostic radiography student wrote 'I think we are just more caring, kind and helpful than men' [Q42B].

Of the few males who mentioned the notion of biological caring traits, all were dismissive of natural abilities to care and challenged the view that biological differences *explained* the gender composition of their profession. Although they were highly sceptical about women's superior and natural caring abilities themselves, they nonetheless saw potent stereotypical beliefs about biologically-based abilities as commonplace and responsible for discouraging men from developing or showing their caring nature or abilities, or from wanting to work in 'caring' occupations or professions.

Some female participants also acknowledged stereotypes about women's natural caring abilities were as potent in effect as real differences, variously commenting that 'women are stereotypically better at caring for people' and 'it is simply an assumed idea' 'caring attitude traditionally of women'.

Interestingly, most of the females who suggested biologically-based caring abilities influence recruitment patterns modified or rejected their view later, recognising incompatibility with what they had seen. They acknowledged that if caring is a feminine trait, this makes good male carers difficult to explain, without pathologising them. Also, some females have limited caring abilities when they start training.

Conflation of gender and sexuality

Associations between the professions' gender composition and biologically-based/ feminine caring abilities were sometimes linked to discussions about sexuality. But the contribution of sexuality was always mentioned in relation to the stigma of (male) homosexuality and used as a way to explain the low numbers of men in physiotherapy/ radiography rather than the predominance of women. The discussion associated male carers with male homosexuality and identified men's associated fear of being seen as effeminate. Several female participants saw this as a major deterrent on male recruitment. Although being seen as effeminate and 'homosexuality' were rarely mentioned by name by male participants, and ideas about aspects of sexuality were only mentioned when I asked about them, some volunteered that male recruitment was low as it was easy to 'damage the fragile male ego'. Also, because of the 'stigma' of working in caring and female occupations there were problems for 'male pride' and 'macho'.

These concerns about sexuality were recognised by several female participants as extremely off-putting to adolescent males who were perhaps more self-conscious and insecure than older ones. Nursing was highlighted for its (alleged) high number of gay men and influenced recruitment patterns into physiotherapy and radiography as they were collectively identified as caring professions. Several of those who referred to the effeminate nature and/or homosexual orientation of male carers conflated gender and sexuality: by transforming homosexuality into a form of femininity they feminised caring men.

Nearly all the nurses are gay for a start, well about 50% of those I've come across ...they're effeminate men in some ways...there's an underlying association between the caring and sexuality...its effect is not as strong as it used to be, but you can still feel the undercurrents of it (in physiotherapy) [2: 596-610].

Interestingly, no comments were made about female carers' sexuality. This suggests that lesbians were not masculinised and seen as less able/compatible with caring work in the same way as gay men were feminised and better suited to it. Women, regardless of sexual orientation, conform to female gender role by working as 'caring professionals'. However saying nothing about lesbians may suggest a denial of their existence, rather than rejection of the biological association of sex and sexuality with caring.

A few physiotherapists, again mainly females, referred to the deterrent effect - for men - of the sexualised association of their manual therapeutic skills with massage parlours and the stigmatised label of 'masseur'. Although the association annoyed several female physiotherapists

as they felt it damaged their professional status, they did not think it discouraged women from joining the profession.

Although several questioned the femininity of caring, many participants recognised the potency of the stereotype. Caring skills, attitudes and approaches, caring work and caring occupations are seen as easy, attractive, suitable and therefore common choices for women and difficult, unattractive, unsuitable and unlikely choices for (most/'normal') men. Working in a caring profession confirms a woman's sense of (feminine) identity but challenges the (masculine) identity of a man.

Some participants linked issues relating to 'awareness' and 'qualifications', and often alternated these explanations for gender patterns of recruitment: participants switched between suggestions that carers are seen as/predominantly are women and women are/are seen as better carers. Many participants recognised that stereotypical notions of gender different abilities at caring were 'validated' by the fact that more women work as carers, both at home and in employment: gender ideologies are reinforced and traditional divisions of labour perpetuated. Caring roles and occupations have traditionally been female and remain as 'It's still seen as a girls' thing to do' [Q22B]. Many participants of both sexes saw this as an important influence on recruitment.

Many radiographers would argue that as it has traditionally been women it therefore continues to attract women. Many men are not good and possibly think they could not be good carers [Q2B].

School subjects

Several participants of both sexes said that subjects studied whilst at school channel and limit career choices, with skills encouraged and developed often defined in traditional terms of what is gender-appropriate. Several highlighted how girls, especially in co-education schools, are often encouraged into domestic/biological/life science options whereas boys are more often coaxed to study hard/physical and mathematical sciences. Qualifications in biological and social sciences open up different employment options to physical sciences, with various health care professions particularly welcoming students who have studied biology.

However, some participants stressed how the particular sciences studied at school are not the only influence on career routes. Male students with sciences rarely get directed towards or apply to caring professions, instead encouraged towards technical occupations, and pure science, engineering or medical degrees if sufficiently academic. Conversely female science students, regardless of ability and interest in physical science subjects, are rarely advised or encouraged to apply to study medicine or engineering or do pure science degrees.

Some female participants also suggested that with subject and career choices generally taking place during adolescence, the tendency to conform and choose subjects and occupations that were common to others of their own sex related to concerns about conforming to norms of (hetero)sexual identity which were seen as stronger than if decisions were taken at later stages of personal, psychological development. A few men alluded to this, noting how more men studied physiotherapy/radiography as mature students when they were more self-assured and less bothered by what people thought of them.

Awareness

Very few questionnaire participants identified awareness factors as 'main reasons for their career selection', although they all identified many types and sources of careers information. By contrast, all the interviewees described several details about how they had become aware of their profession, with just over half highlighting this as an important influence on their decision-making process (see appendices 12 and 13).

Important influences

A far higher proportion of male than female participants highlighted the influence of awareness on their career choice; similarly a higher proportion of diagnostic than therapeutic radiographers referred to its impact, with both branches higher than physiotherapists. 'Awareness' was also described as one of the main reasons for gender patterns of recruitment into the professions. The main difference between the sexes in the interviews related to the different times and ways participants had become aware of and interested in their occupation, rather than the source and quality of information or attitudes towards it. A higher proportion of females than males referred to their long-term general awareness of and interest in health occupations.

Hospital visits

A large majority had visited hospital departments and gained first hand impressions and information about their profession and its workforce, with many highlighting these visits as very influential. Whilst some referred to a lack of, or late awareness, or negative attitudes and biased information, others highlighted plentiful sources of useful, detailed and encouraging information.

Information sources

The most common sources of information and advice for both sexes and professions were careers advisers and publications. Family and friends' influences were mentioned nearly as often, but by female participants mostly. Teachers, personal experience and 'other' sources of information were generally less common.

Overall, in the questionnaire, information sources were assessed positively (79%), but about one-third of teachers' advice and information was judged negatively. Family influences were positive for nearly all staff and most students, but parents had discouraged a few, mainly because the work was perceived as emotionally stressful. Most had been encouraged and praised for their choice, with their profession admired for its valuable work. Several from all sub-groups highlighted the information and encouragement of a family member or friend working in health care, with a few in their chosen profession. A few mentioned personal experience, and a few referred to friends or relatives having physiotherapy treatment or an x-ray, or visiting someone in hospital. None mentioned experience of radiotherapy.

Careers information sources were more common to students than staff reflecting the increased service in recent years, but both groups and sexes gave similar and mostly positive assessments of its role and influence. Several, especially males, mentioned computerised career assessments: they were liked as useful, comprehensive and objective. However, a large minority viewed teachers and careers advisors information negatively: some, mainly men, had received

poor quality information and others, mainly women, had been discouraged in their choice, mainly in relation to their academic potential. A female physiotherapy student said 'teachers felt I was selling myself short not being a doctor' [Q23B], and four 'grammar school' females wrote of teachers' discouragement and disappointment, as they had wanted them to go to university. Several radiographers, especially from the therapeutic branch, highlighted negative views and a general lack of knowledge about their profession as compared to physiotherapy (and nursing), but a few physiotherapists also mentioned widespread ignorance about the detail of their work.

In the interviews, most of the men emphasised the origins of their career choice in relation to a specific event, time or experience. Some highlighted the (positive) influence of specific individuals, for example, friends, neighbours or relatives working in health professions, whereas others attributed their knowledge to clinical contact with the profession or to health services generally. Only a few had wanted to do physiotherapy/ radiography for years before starting and most did not describe a gradual development of interest or long-term ambition to work in a hospital. Similarly, a long held wish to help people or any general expectation of a caring job was unmentioned.

Once they became aware of and interested in physiotherapy/radiography as possible careers, most of the men were encouraged by those around them, with several being admired for their choice of a 'worthwhile profession' and 'steady job' [22]. However some experienced mixed messages and two were warned specifically about potential problems for men in a predominantly female and caring profession. Problems related mainly to poor pay prospects, difficulties with female managers and working with ('sensitive') patients. A few were discouraged because of the high academic level. By contrast, a few recalled positive consequences being highlighted, referring to plentiful employment, easier promotion and a less competitive working environment, popularity with (some) patients, and 'opportunities for lots of dating' [7].

Very few female interviewees emphasised the importance of singular influences or individuals as key to their career decision. Most female choices were rooted in general experiences and expectations rather than specific events or significant influences. The development of their decision was usually gradual and its origin hard to place. Many spoke of 'always wanting' or knowing they would do something like this, unable to recall the start or reason for their interest. Several had been predominantly interested in hospital/health care occupations for years and gathered information about them at various times and in different ways, often before GCSEs.

Positive or negative opinions

Most of the women were widely encouraged in their choice but this was not always the case. A few spoke about negative remarks from siblings and friends, and others of discouragement by careers advisors or teachers. Most negative remarks were from male friends/relatives and based on their impressions of the work as unpleasant and poorly paid, or badly respected.

Discouragement related to perceptions of the participant's academic ability and did not involve criticism of the work of the profession per se. Those who experienced negativity were not deterred usually because they felt comments were from 'ill-informed' people or those with an 'alternative agenda': 'they weren't interested in my future but concerned about the number who got into university' [24].

No female participants were criticised by their parents for their choice, but some mentioned concern for their emotional welfare, with the difficult and taxing emotional involvement with sick and sometimes dying patients. One was cautioned by her father about the limited openings in diagnostic radiography, compared to physiotherapy. Most experienced enthusiasm, encouragement and praise for a worthwhile and good choice, having selected an occupation afforded respect and professional status, providing a 'good career'. No female interviewees had experienced comments regarding the predominance of women in their profession. Their choice was not perceived as problematic or unusual, but as successful and appropriate. When I asked the women about their awareness of, or feelings about choosing a predominantly female occupation, most were dismissive of its role in their career decisions. Some said they had been happy to work in a female profession; although unconcerned by the female majority, one said she would 'not have wanted a job with a male majority' [14B].

Differences in 'awareness' explaining gender patterns in recruitment

Several participants linked issues relating to 'awareness' to 'pleasure' in their explanations for gender patterns of recruitment, alternating explanations within interviews.

Caring as women's work - like nursing

One of the most common explanations for the gender patterns in recruitment into physiotherapy/radiography is that they are thought of as 'caring professions' as they involve physical and emotional care-work. Several study participants said their profession was 'seen as being like nursing...a female oriented profession...and society sees carers as being predominantly female' [Q11B].

'Nursing' and 'caring' were often used interchangeably when participants spoke about perceptions of their professions and gender patterns in recruitment: both terms related to 'looking after people' and were associated with women, and contrasted with the detached care provided by predominantly male doctors. Participants suggested nursing and caring were also widely seen as less skilled and lower status than medicine, and negatively associated with domesticity, especially by men.

Caring professions are unattractive to many men because they are often seen as 'extensions of women's domestic role', having developed as 'female professions for 'middle class women' before marriage and children. As 'women's work' the skills of the job were not seen to require intellectual ability, academic knowledge or learned expertise; also, as women's employment it developed as low paid work, based on sexist assumptions that it provides an adequate second wage or 'pin money'.

Over time the various negative associations of gender with caring, low status and skill made professional care-work unattractive for academically able young men, and difficult for those expecting to be family breadwinners.

If you are caring at the base roots you are female but if you've the top job you are male...It's the general applying of the nursing, changing the beds, washing patients, giving them their treatment...that tends to be seen by the general public as female ...it comes down the line to radiography... It's actually a very scientific job but the public tend to think it's a nurse

taking their X-rays. They don't realise quite how scientific and physics-based it is...that's the public perception and why men don't come into it [11B: 352-390].

Many connected the amount of care-work to the predominance of women: because physiotherapy/radiography (predominantly) involve caring for sick people, they are perceived as and are (predominantly) female occupations.

Like nursing, if you think of radiography you think of someone helping a patient, you don't think in the first instance of someone dealing with a lot of technical equipment ...and that's different for men and women to see it that way...it's seen as a caring profession and that's the main thing that affects the gender proportions [4: 458-463; 536-538].

A few, mainly female participants added that as caring represents a conventional female role, work in 'caring professions' such as physiotherapy/radiography confirms a woman's gender identity. Conversely, for men to choose a caring profession as an unconventional gender role, challenges their masculine identity and requires self-confidence or a rebellious attitude, an awareness of the presence of other 'normal' men in the profession, or an appreciation of and interest in the work tasks beyond caring. A few interviewees of both sexes said men who choose to work in caring professions are often from backgrounds with family members working in similar fields. As children they were more likely to learn what the work involved, and experience an upbringing where stereotypes about sex roles and abilities had already been challenged. They were less likely to identify the work as exclusively caring, reject it as women's work or as feminine in character.

It depends on how you are brought up and what your parents did as professions, as jobs perhaps...I think it's allied with nursing and other caring professions and maybe boys are brought up by their parents or in societies who believe that caring professions ought to be female and hard manual jobs that don't require caring are the men's [12: 928-935].

A female radiographer suggested 'insight into what the job's about' explained the men who currently work as radiographers, highlighting the importance of detailed and accurate 'awareness' of the various tasks involved, corresponding with several male participants' accounts of the factors influencing their career selection.

Those that are (radiographers) maybe...they have a history of someone in their family being in the caring professions so they've an insight into what the job's really about [1: 512-518].

Careers information

More than half the participants of both sexes suggested limited information contributes to their profession's recruitment pattern. Several males suggested most boys were unaware of physiotherapy/radiography as career options and that their awareness had developed by chance. Several of both sexes spoke of misperceptions relating to poor careers information that distorts impressions and maintains narrow, stereotypical and often derogatory beliefs about the professions as low status, women's work. Despite many study participants having mainly positive experiences themselves, teachers and careers officers were seen widely as unhelpful and uninformed. Several, mainly females, also accused them of directing boys and girls to different occupations on the basis of stereotypical attitudes about abilities and interests and gender-appropriate careers.

A lot of people...don't know what a physio does...or feel that it's vaguely something to do with massage...so a lot of males don't consider it as an option ...I'm sure if a lot more males

had more information they might choose it more often. And with this affiliation with nursing they get put off...In schools...I bet they don't go to any of the boys and suggest it. They're far more inclined to say what about medical physics or a medical degree...I think if they were told more at an age where they make their choices...more men would choose it [2: 742-780].

A few male participants said the label 'caring professions' is misleading and that male school students were particularly discouraged if they saw mainly women working with patients in recruitment pamphlets. The complex diversity of the work and more male staff need to be shown otherwise the female - caring association remains predominant.

Not just caring; not just women

Several participants emphasised that perceptions of physiotherapy/radiography are invariably limited and often wrong. Both sexes said their frequent identification as 'caring professions' underestimates the complexity and variety of the work affecting recruitment. Through limited information, partial impressions are obtained and traditional career choices prevail. Many said boys feel discouraged from visiting departments because the occupations are invariably described as 'caring professions' and presented as 'girls' jobs'. As subject options and further enquiries are often made after reading careers information the impact of first impressions was thought a crucial influence.

The large female majority in physiotherapy/radiography combined with feminine, low status image of caring were seen as problematic for many men. Female participants suggested both aspects were problems for men, whereas male participants focussed heavily on problems of the female-dominated environment. Many men were said to find it difficult to relax and socialise with women and assumed they would not be accepted.

I can't think of anything else that would stop them coming into it apart from the fact of the majority of females (which) might make some men think twice, before they enter a broadly female, feminine environment. Some men can do it, but some can't get over that hurdle [3: 746-751].

Several, mainly female participants, suggested physiotherapy/radiography were seen as too 'gentle' and 'not macho' enough, and many men also worried about feeling 'out of place', thinking the minority experience would be 'threatening' or 'intimidating'. Main impressions of these professions were of a female workforce, working with patients, caring for them: together these images discourage many men from joining the caring professions. Choosing to work in a female environment was seen to prompt questions about a man's masculinity.

People generally don't know what a radiographer is...So (men) end up thinking "I don't want to be (like) a male nurse...I might get mocked about it", have things thought about them...and they don't want...a working environment full of women ...thinking it would take away from their masculinity...thinking it's not a man's job... with the caring aspect of it...there would be some sort of conclusion that your friends may take from it...that it's a woman's kind of job [10B: 378-395; 532-586].

Biased advice

Several, mainly female participants, said boys who indicate an interest in hospital, health or science-oriented careers are more likely directed towards medicine or other high status, 'scientific' occupations. Several suggested the number of men would increase if there was 'more gender

equality within all school levels and proper careers advice. They still have female and male jobs' [Q11B].

It's probably something to do with status, you know if a fella at school shows an interest in caring for people I'm sure they'd be directed towards medical school if they're academically bright enough to do that. I'm sure not many careers officers would actually sit down and discuss nursing or radiography as a first off thing with males, fellas that are interested in hospital work and care for patients [3: 782-789].

Several participants said many careers advisors assume physiotherapy/radiography are work and environments few men want to consider or enjoy as they perceive them as female, caring professions, unaware of the extent of technology and science and number of men already employed. Also seen as low paid, low status 'semi-professions' they represent unattractive career options for men and are infrequently suggested to boys. For those boys who asked about them, negative aspects and consequences were highlighted.

Although the male participants were 'survivors' of the careers service, having heard of and chosen physiotherapy/radiography against the odds, some had experienced discouragement, warned about low pay and problems from the majority female workforce. They suggested young men who were uncertain or had few information sources or little support would probably abandon plans to study physiotherapy/radiography. Conversely, many female participants said they, like many other women, had been directed towards and encouraged to work in health care professions as they represent good careers for girls with an interest in health and ability in science. Most female participants said medicine had not been suggested to them, even though several were academically capable. A few said they had highlighted their interest in scientific work and would not have considered radiography if it had not been suggested and they had not been encouraged by teachers or careers advisors; they recalled being told they would enjoy working in hospitals, but remained unaware of other scientific hospital jobs with less patient contact, such as medical physics, which they may have preferred or been better suited to. They said their experiences were common to many female colleagues, and explained the predominance of women in caring professions.

Health-related occupations

Several participants said awareness of the range of health-related jobs is very limited, and many people only know about nursing and medicine, which are perceived largely in terms of gender and hierarchy. If physiotherapy/radiography are known of, they are often associated with (subordinate) nursing/women rather than (dominant) medicine/men, largely because of the extent of work with patients, and therefore unattractive options for most men. More women discover the range of hospital careers because nursing - as the archetype female profession - is often the first occupation suggested; more women therefore progress to ask about other 'similar options' not initially mentioned. A female radiography student suggested

It's not a very publicised career...most people haven't heard of it...(men) might never know about radiography and that might be why they don't apply...A lot of people get into radiography because they are a girl and want to go into a hospital but don't know what to do and then start to enquire and find out what jobs there are, but I don't think as many boys want to work in a hospital and enquire what jobs there are [11B: 394-396; 473-480].

A male radiographer said as most hospital occupations are seen as female occupations, most men who are interested in health science-related work look elsewhere.

The science thing answers some of the questions about why more men do other things...Men sort of go into high powered scientific type things...if they're good enough to go into pure sciences...And there are very few other jobs in hospitals for men apart from medicine and a few other high-powered scientific jobs, like engineers...I think men look at the Health Service and probably they just haven't thought about other aspects of what you can do in a hospital [22: 202-208].

Department visits: personal impressions: influencing change or reinforcing tradition?

Because of limited impressions from careers information literature and discouragement or ignorance of some advisors, some participants said fewer males than females arrange to visit hospital departments. Some suggested more males might apply to physiotherapy/radiography if they visited departments and got beyond the narrow images of the professions. Visits reveal the detail, range and effect of the work first hand and show men as well as women working successfully and happily in the profession, perhaps using a complex technique or machine, or in a position of authority.

However, a few participants said awareness developed from personal observations can discourage people, and especially men: department visits may highlight the scarcity of males, or reveal dissatisfaction and frustration with the pay and career structure is higher amongst male staff. In addition, several suggested the uniforms worn by caring professionals deter some people, especially men: those concerned about professional status are unimpressed by the casual look of the tracksuit and/or tunic and trousers, and lots of men think the uniforms look 'poncy' [1]. Also, for those who mainly want to do physiotherapy to work on sports injuries, the extent of rehabilitation work with the chronic sick and elderly might be off-putting. For those who thought of radiography in terms of science and high-tech machinery, the extent of patient contact might be daunting. The appeal of sport and science and deterrent impact of patient work was seen as generally more common amongst men than women.

Some suggested information from advisors and audio-visual materials have less impact on career decisions than visits. Several highlighted how the gender composition of the workforce had been one of the main impressions from their own visits, with some saying they had no men at all. A few males said that they thought even fewer men would apply if they realised there was a chance they would be the only male student on a course, or might end up working as the only man in a hospital department. Some suggested the number of male applicants will only rise substantially once all courses and departments (small and large) have a few men). They suggested this 'critical number' for change would take a considerable time to reach.

Media coverage

'I don't think that radiography is a particularly well publicised career' [Q40B].

Several of both sexes said the media has considerable influence on people's attitudes and beliefs, interests and knowledge, and impacts on career decisions. 'Public awareness is low', and physiotherapy/radiography need 'better promotion' as 'most people are uncertain about our role'

and 'few realise the extent of modalities and responsibility'. What little coverage there is, was said to provide partial and misleading impressions of health professional work and relationships and perpetuate traditional gender role stereotypes and out-dated attitudes to gender-appropriate career choices. Despite health programmes and hospital dramas changing recently, with doctor: nurse roles and relationships more accurately reflecting real life, some participants said other health professions were seldom included except peripherally, stereotypically and/or uni-dimensionally.

One student described being 'amazed' when he saw a radiographer portrayed positively on a TV drama, using a 'complex looking machine', whilst instructing various other hospital personnel [13B]. He felt positive media representation was vital to broaden the appeal and awareness of radiographers' work and role, which might encourage more men to consider careers in radiography.

Several said it was important that publicity increased and portrayed the professions as diverse and rewarding gender-mixed occupations, warning that images need to be realistic if they are to impact on recruitment. But a few said accurate media coverage does not guarantee better understanding or wider appeal, and ultimately has little impact on recruitment, as snapshot impressions are inevitably limited. Some physiotherapists said many people think of their profession as sports injury work because that is the main media image, and this 'dynamic' image was the primary attraction for many people, especially men. But some females added that when sport is men's main motivation, most lose interest and change their minds on making further enquiries: the range and extent of hospital-based work involving care for the sick and elderly is revealed and amount of studying and academic level of the course becomes apparent. Also, the large female majority, subordinate position of caring professionals to doctors in the hospital hierarchy and low pay of NHS careers get discovered.

But a male physiotherapist was surprised more men didn't stick with physiotherapy.

I can't really explain why there aren't more...I'd have thought a sports-minded young man would enjoy doing it, but for some reason it just doesn't seem to attract that many...With the media image...you always see the physio on the football pitch ...that's what most people perceive physiotherapy as, and that's certainly what I perceived it as. I know now that's only a tiny fraction of what it is...but the sport got me into the process and I've come out the other end, so I'm surprised it doesn't get more into the process [25: 563-578].

Career Selection as Process: comparing the sub groups

In addition to comparing the factors in career selection, I have compared the five processes, although the sample size, especially for therapeutic radiography precludes claims for statistical significance. Like the factors in career selection, several processes vary by sex and/or occupational group (see appendix 19 for details).

Career selection processes by sex (see appendix 19)

Career selection processes were similar for both sexes in relation to the length of time spent deciding on their profession; level of complexity involved within the decision (range of factors considered and stages in the process) and level of activity involved in reaching the decision.

The decision-making processes that vary the most by sex relate to the *range of options* considered and *time of decision*: substantially higher proportions of females than males chose their profession from a narrow range of occupations (67% females: 17% males), and before leaving school (53% females: 22% males).

Career selection processes by occupational group (see appendix 19)

Different proportions of physiotherapists, therapeutic and diagnostic radiographers had simple decision making processes, and decided on their profession actively and late, whereas similar proportions across the occupations made quick decisions from a broad range of options.

The therapeutic radiographers were more similar to physiotherapists than diagnostic radiographers in relation to the timing, agency and detail of their career decisions. A minority of diagnostic radiographers were active, and a high proportion decided after leaving school; just under half considered a limited number of constructs, making simple decisions, as compared to three-quarters of therapeutic radiographers.

Importantly, when data are compared by sex and occupation concurrently, the different approaches, issues and priorities in career selection that relate specifically to gender become more apparent (see appendix 19).

The analysis reveals that *gender differences in the process of career selection relate mainly to the range of options considered, with most females and few males considering health related courses and occupations only.*

Negative Aspects of Participants' Career Choice

The interview accounts of career selection were generally positive and only occasionally did participants admit to having had concerns about their choice of profession. Although negative aspects were mentioned infrequently, they were especially rare from male interviewees. But I conclude this may reflect their desire to avoid unwelcome attention as minorities in a predominantly female profession, and as a female interviewer I may have presented an especially difficult person for them to admit any gender-related concerns face to face.

To avoid a rose-tinted interpretation, I asked about 'your main negative concerns' in career choice in the questionnaire, hoping to encourage disclosure by posing a direct open-ended question about the existence of problems. The anonymous postal method reveals negative feelings not acknowledged at interview.

The majority of questionnaire respondents of both sexes admitted they had worried about some aspect of their career choice. Of the 69 respondents, less than a quarter acknowledged 'no concerns at the time', most of whom are females. Most of the concerns were distributed amongst the sample, however a few are predominant in particular groups.

Qualifications, and the sources of intrinsic and extrinsic job satisfaction identified as important factors in career selection - as 'pleasure' and 'benefits' - and of different importance for the sexes were also causes for concern for some participants. However, some concerns did not correspond to those seen as important to their sex by others, highlighting the extent of stereotyping about gender different abilities and interests, and sources of female and male job satisfaction.

Only one male physiotherapist but several females from all three occupations were concerned about the *career structure and opportunities to diversify*, and a few across the sample wondered if the work would become boring or tedious; diagnostic radiographers of both sexes wrote of worries about staff morale and *job security*, and several mentioned changing, difficult or deteriorating working conditions. Some physiotherapists and diagnostic radiographers of both sexes worried about not coping with *the course/work*. Although only a couple of female students indicated that they had been worried about not achieving the grades needed for their course, worries about the *academic subjects* were scattered across the sample, as were concerns about the *coping with the emotional strains* and time demands of the course-work.

In contrast to the interviews, several physiotherapists and diagnostic radiographers of both sexes reported they had been unhappy about pay, 'knowing working in the NHS would not be well paid' [Q5], especially 'as the salary does not seem to match the amount of work we do' [Q28]. Slightly more male participants, students and more recently qualified staff admitted financial concerns. A few referred to the profession's *low status* and authority *relative* to other professions, with a male diagnostic radiographer highlighting '*subservience to doctors*' [Q35B], and a female physiotherapist concerned about the profession as '*female dominated*' [Q7].

Gender Issues Recognised in Participants' Own Career Selection

Very few female and only half the male interviewees referred spontaneously to the significance of gender within their accounts of career selection. In some interviews where the participant did not mention gender, I asked if they felt their sex or gender-related issues had influenced their own decision-making and career choice. To ensure some coverage of the subject with all participants I included a survey item on 'any gender aspects in your career decisions'. In the 69 returned forms, only 10 respondents indicated gender was an element in their career decisions.

Overall, just over one-third of participants thought gender had some (generally minor) influence on their own career decisions: most of these were males. Those who recognised the influence of gender identified various examples. A few females said their sex had probably influenced their childhood/adolescent experiences and expectations of care-work, and some of both sexes mentioned the influence of their school and careers officer's attitudes towards gender-appropriate education, subject choices and careers.

Yes. On reflection my O levels and A levels may have been dictated a lot by the fact that I was female. i.e. Home economics and biology classes etc were predominantly female [Q6].

A few females had considered their career choice in terms of roles as wives/mothers; a few said they had recognised and briefly considered the implications of the predominance of women in their profession. But a physiotherapy student stressed

It was a secondary issue, but I felt I would not have to battle against male prejudice in a female dominated environment [Q8B].

A few male participants mentioned people commenting on their choice as a female dominated profession, but dismissed negative remarks and criticism as either unimportant or narrow minded. Some of the comments tied the 'problem' of 'female profession' to it being a low paid profession. Despite the extent of discussions about the male breadwinner role and consequent importance of

good pay and prospects to men, no males indicated having these specific concerns at the time of their career choice. In contrast, they and several others said they had considered what it would be like to study/work in a predominantly female environment, with some highlighting the impact of their department visit when they had become more aware of the extent of gender asymmetry.

Knowing it's a female dominated profession made me wonder how I would interact, but it never affected my decision to be a physio. I wanted to be a physio and that was that! [Q12].

Interestingly, one mature diagnostic radiography student said he had not wanted to work in a single sex environment again, having previously worked as a coal-miner: despite the skewed gender mix he saw radiography as a mixed occupation.

Working with women was a consideration - but this was not an exclusively female environment [Q32].

Some of the men had considered the gender mix in terms of advantage: they had been told of enhanced promotion and social opportunities, and anticipated a more pleasant and supportive working environment. However, several had recognised being part of a minority was very different to being alone, and said they would not have chosen their course if they had expected to be the only male. Many of those unconcerned by the minority situation also emphasised feeling they could fit in, having similar interests and attitudes to the female majority. In contrast, a few said they enjoyed going against the grain, with one being spurred on by discouraging remarks [15]. Another said

I always do my own thing regardless of what other people think or say...I'm OK with it, if you don't like it tough...I have no worries about people assuming anything about my sexuality, they can think what they like [10B: 540-606].

Only one male participant acknowledged concern about negative consequences of female predominance, identifying the lower status of female professions. Overcoming this 'problem' had required him to 'swallow his pride' [13].

Conclusions: career selection and its influence on the gender composition of physiotherapy and radiography

In Chapter 5 I have presented my interpretation of the findings relating to career selection. I have shown how physiotherapy and radiography are generally seen and evaluated as potential courses and careers in terms of their knowledge base, work tasks and relationships involved, and the intrinsic satisfaction and extrinsic benefits they are perceived to offer in the short and long term. They are sometimes also considered in terms of their gender composition and professional status, and occasionally in terms of their 'fit' with future roles. Individuals consider these different elements in relation to personal characteristics, abilities and interests. Substantially more female than male physiotherapists and radiographers choose their career from a range of health professions, with most deciding before they leave school. Importantly, and despite differences in detail, sometimes varying by sex, I have shown that both sexes are career-oriented, having taken active steps to find a career perceived as enjoyable and able to fulfil their requirements satisfactorily. No-one of either sex move into careers in physiotherapy or radiography by accident.

Rather than there being one or two reasons for the much larger number of women than men joining physiotherapy and radiography, I have identified many complex and inter-relating influences. A summary of the factors and processes relating to career selection are located in appendix 17. Despite some contradictions within the participants' explanations for the gender patterns of recruitment and their own largely gender blind experiences of making career choices, plus some differences in emphasis by participants' sex, a substantial degree of shared understanding about the main influences on gender patterns in recruitment is demonstrated.

To avoid repetition, the main findings and key themes of this chapter will be discussed in Chapter 9, where they will be considered alongside and in relation to the emergent issues and main themes from the next three chapters.

I now proceed to examine the participants' accounts of their experiences of physiotherapy and radiography training and work tasks and relationships, to consider how they correspond to their various pre-training perceptions and expectations, and influence their career paths.

Chapter 6

Experiences of Training in Physiotherapy and Radiography

Having considered the participants' accounts of career selection, and how they vary by sex - in relation to gender associations of the work tasks and relationships, and perceived rewards and suitability of the professions in relation to personal characteristics, abilities and interests - I now turn to the data relating to 'experiences' of physiotherapy and radiography.

Presented in this second chapter of my interpretation of the findings is a detailed examination of the participants' descriptions of their experiences as student physiotherapists and radiographers, and their understandings of and explanations for gender divisions within their profession (with findings summarised in appendices 20, 21, 22, 23 and 24).

I investigate participants' comments regarding their enjoyment of and levels of difficulty with the course, as well as details about:

- the time, stage, location and organisation of their training;
- the number and ratio of male: female students and post-school: mature students;
- the theoretical and practical subjects, and clinical placement issues;
- social relationships with patients, lecturers and supervisors/qualified staff, and between students, and
- orientations to work and career.

Male Experiences of Training

The minority sex

All the male participants trained as minorities but individual accounts of training experiences vary greatly. The size of the minority varies substantially in the different courses as well as for the location and year of training: two men studied as solitary males, but the rest were in small groups of two - nine men, constituting 10 - 40% of their student cohort. The therapy radiographers generally studied on courses involving small cohorts (maximum of 10 people), such that the gender percentages varied dramatically with small changes in overall numbers. The diagnostic radiographers and physiotherapists trained in much larger cohorts, involving up to 42 people for those already qualified and over 60 for those studying currently. The participants had different opinions about the contribution of the size of year group to their experiences as minorities.

Most of the men described a positive overall training experience and the phrase 'no problem' was often used when talking about the academic, social and gender aspects of their course. However, despite this favourable overview, a number of difficulties were experienced during training.

A few said they experienced negativity regarding the status and gender associations of their occupational choice from people inside and outside the university/health service. Some said they experienced no comments, but one suggested that negative comments, especially regarding the sexual orientation of male carers, were more likely to occur behind his back. Several felt the general lack of comments may reflect ignorance as to what their job involves, although others said this dearth of knowledge about hospital careers beyond nursing and medicine prompts some people to ask questions. Overall however, the majority said most people were positive and encouraging about their selection of a worthwhile job and promising career.

Minority experiences

Although the experience of being a minority male varied substantially, the vast majority of the male participants said they thought it was much easier to train within a group. A few mainly older participants said most young men dislike being part of a small minority and suggested this 'common concern' not only explained the low number of male applicants but also why some male students left their courses.

Some emphasised how they had enjoyed their courses and colleges *because* they had strong and established records of taking substantial numbers of male students, which they linked to traditions of positive approaches toward mature students as well. As such, none of the male participants had wanted to be pioneers, with one radiography student stating

If there were less men I would have been very scared...the fact that I was following a few...made it a lot easier. If I was going to be the first, then no...I'm not someone who is a trend-setter, it would have been embarrassing... I wouldn't like to attract attention to myself [13B: 525-548].

One physiotherapist said it was easy for him as there were nine males and 21 females in his year: this was 'about average' for his college which he described as consistently 'pro-men...and mature students' [12].

A few suggested that not only was being part of a larger minority group better for them, but that both sexes enjoyed and benefited from a gender balance. Being one of nine males had

made a big difference...it was a lot easier than being just one or two...it helped the camaraderie...everyone was in the same boat...and the girls liked it better too [12: 208-218].

Nonetheless, one of the two 'solitary' male participants said he had especially enjoyed his diagnostic radiography training because he 'got on quite well socially as one male amongst 32 females' [30: 46-47].

However, the other singleton was extremely unhappy and linked this to his isolated situation. He was at the point of giving up his therapeutic radiography course, saying 'it can get to you' [2B]. He reported various problems: being the butt of jokes whenever he 'opened his mouth in lessons' and being exposed to 'men-bashing jokes' on placement. He said he felt he could not complain as that would 'cause more friction' and saw the jokes exposed double-standards: he was taught that patients should be treated respectfully and equally, regardless of their sex, whilst he was goaded because of it. He felt excluded from his cohort and had lived like 'an enforced hermit' away on clinical placement. He generally enjoyed the job and the 'lessons were okay', although

he found the mass of detail difficult to remember; the main problems were 'the company', with its predominance of unfriendly, unhelpful and critical female staff and 'immature, school-girlish' students.

Mature students

Several male participants mentioned that male students are commonly 'mature': being older was said to often make various aspects of the course easier. The age advantage was linked to being more self-confident generally and to being married, having children and/or more life experience, making them more relaxed in women's company.

One mature student suggested being older made it easier to

fend off...off-hand comments...I don't think the younger 18 year old lads would be able...(as) he is still looking for himself [13B: 589-599].

Frequently, being older was said to make it easier to socialise with staff on placement. A few suggested the predominantly female environment of the staff-room was especially hard for young, single male students. One physiotherapist described what he thought was involved.

(Some) feel overawed by it or embarrassed...it's just a case of making the effort yourself and trying to be a part of it... As students you know the people...very little...and they are females, so it does hamper social conversation in the staff room at lunchtime...times when you don't really want to talk about work... To show you are happy to talk and co-operate... needed that little bit of extra effort to show I wasn't going to talk about football every day... and could understand what they were talking about [12: 675-725].

Practical lessons: profession-specific skills and techniques

Getting used to being undressed and touching each other in mixed lessons, and various aspects of the 'hands-on' practical work were seen by several male participants as difficult and off-putting for many men, however, opinions differed about gender differences. The age advantage was again mentioned, with older male students said to handle the practical aspects of the course and work with patients better than school leavers.

Many male participants described at great length their personal experiences of these physical aspects of training. Most said they had found the physical contact and bodily exposure required when practising on each other extremely embarrassing, at first. However, a few said they were fine about it from the outset, in lessons and later, with patients. One physiotherapist suggested

It was designed to be fairly early on to get you over the shock of it all and start accepting it as normal...It was discussed informally between us...You know it's going to happen...you've heard stories, or horror stories, from previous students and so you do discuss it...but it was never discussed formally [12: 171-185].

A few of the men said they couldn't remember much about these aspects of early practical work and most concluded it therefore could not have been a 'horrendous experience' or 'big deal' in the long run, otherwise they would remember more. A few also suggested embarrassment and 'initial shock' may have been less for male than female students.

It was all a bit odd...stripping off and that...but after the first...you get used to it...it probably wasn't so embarrassing for the men...but I'm sure it bothered the female students, cos I think...women get embarrassed stripping off in front of other women, let alone in front of men...whereas blokes I don't think they seem bothered about it really [25: 372-383].

One physiotherapy student concluded that both sexes are

a bit fazed...getting undressed with people you don't really know...Although most got used to it quickly as you do more...it didn't happen for everyone [7B: 269-293].

Both sexes were said to get used to these experiences, by them becoming routine and unremarkable. Light touch and palpation skills became more confident and purposeful, and getting undressed stopped being problematic as people got to know each other and the experience became more familiar.

Interestingly, very few of the men connected their own discomfort to consider patients' feelings going through similar experiences of body exposure and touch. One of these linked sexual aspects of physically caring for patients to the classroom experience.

Touching another male...at first, was a bit off-putting, because you were getting close to people of your own sex...it felt a bit awkward...it feels better treating a female patient...almost more natural...Going back to when we first started at college, yes, I was definitely conscious of it...doing massage, for example [7: 418-426].

Reflecting the different work of the professions, the amounts of exposure and physical contact in class are substantially greater for physiotherapy than radiography students: unsurprisingly the former discussed the issues more. Importantly, not all the experiences described were negative. Indeed, many male physiotherapists said the manual skills represent the main corpus of physiotherapy and are the skills they value most, with several saying that having chosen this career meant they were people largely unconcerned by physical contact. Some mentioned how their 'touchy-feely' upbringing or pre-training experiences of caring situations had probably helped, with a few recognising how this tactile aspect of their upbringing was different to that experienced by most boys, generally discouraged from physical displays of emotional warmth.

However a physiotherapy student suggested that many male students did feel uncomfortable, but suggested this meant they ended up more gentle than females.

Although a lot of men are less able to touch...male physios are a lot more gentle than female physiotherapists...partly possibly, because, they are more aware of... the social implications and things [7B: 463-467].

Others suggested men become particularly gentle with manual treatment technique through learning their greater size and strength could reduce clinical effectiveness.

With regards to handling skills it was always said..."Use finesse rather than brute strength"...At times girls had better results...they tended to have...a finer, more agile approach...You don't have to use as much force...handling positions, handling skill, rather than say strength... you gradually develop and discover your strength isn't your answer [15: 680-695].

Amongst those male radiographers who highlighted the physical closeness and touch in their work, several had found it difficult initially, despite touch and exposure in radiography being quite brief contact, relating to the setting up and positioning of machinery. They reported feeling extremely anxious and awkward, as students. A few suggested this difficulty heightened their awareness of patients' feelings, recognising the need to work carefully and considerately with them. Several added that as most of their work had to be learnt 'on the job' with 'real patients' it was even more important to get over their feelings for the patient's sake.

One therapeutic radiographer highlighted how men's difficulties varied.

We have to position the patient accurately so that means there is a lot of touch... I have never had any problems with that myself, but I think with some they may be a bit uncomfortable...A lot are very nervous...that shows on their faces [5B: 243-264].

Learning to work professionally

Common to the men in all three occupational groups was an emphasis on quickly learning to cope with embarrassing and difficult 'sensitive' moments through 'learning to work professionally'. Although few saw 'professionalism' as a 'coping strategy', by looking knowledgeable and in control, remaining detached, focussed and speedily efficient, inappropriate emotions for the effective and efficient health professional, such as embarrassment and nervousness, were contained.

The 'professional approach' was said to help reduce embarrassment, for both parties.

There was one girl, who we had to map out the heart and er, she was quite large...I think there was sort of an embarrassment factor...for her, more so...You felt it for her, and so then that made you feel slightly uneasy... (I) either joked it off...or said "We're going to be totally professional about this aren't we?"..That would sort of put things at ease [15: 474-494].

Learning to care professionally

In contrast to the claims of several male participants about wanting to do care-work when they talked about their career choice, only a few spoke about learning how to do it during training. Of those who did, all suggested that whilst the practical skills and instrumental techniques of the professions were learnt in lessons and improved through supervised and examined practice, 'caring' was neither appropriate for, nor amenable to formal instruction. In support of this belief, was the way caring abilities and attitudes were not subject to specific formal assessments, instead being subsumed within other tests of competence and skill.

Several said caring was not mechanical but intuitive, although some suggested it was not integral to the performance of their work. However, to work sensitively, required a caring attitude and professional approach, which enhanced the delivery of the learned technical skills and some recognised this was important for a quality service.

It is here that a *hierarchical distinction between caring for and caring about people emerges strongly*, with the former increasingly dismissed by several of the men as both mundane and undesirable, and commonly associated with nursing and other less skilled occupations involving routine and repetitive 'tending'. Whilst caring *about* could not be taught it was, for many, both a large part of the impetus behind joining a caring profession, as an attribute nurtured through practice rather than education and involving *a moral stance and attitude imbued with superior status, virtue and value. This was the essential part of a professional approach, which continued throughout your working life.*

One radiographer recognised that although his caring ability had taken time to emerge, he must have had a caring 'tendency' to even 'dream of getting involved in that sort of area'. A caring 'attitude' was important.

I think you just acquire it, I don't think it can be taught, to care...(or) sensitivity. They are just things, you might have them dormant or have them buried so deep they never surface... (Physical caring) can be taught as a practical, what you do really, but there is a lot more to it

than that. I'm sure if you are treating a patient but you don't care about them at all...they are going to notice that something is not as it should be...if you are doing it mechanically [19: 739-750].

Despite recognising their limited caring skills, none of the males identified the absence of 'caring' in the formal curriculum as a deficiency of their training. Accompanying this, the tasks of their profession that were seen as basic or nursing-type care-work became the least important and devalued aspects of the course/job and increasingly distinguished from the occupation-specific instrumental techniques and procedures: these were the *professional skills* to concentrate on and required expertise to do well. Significantly, the weighting of coursework assignments and exams reinforced this developing understanding of the professional corpus.

One suggested caring for people was 'a problem for men' simply because it was seen as a woman's job [19]. He suggested that this explained the ways he and other (especially male) radiographers avoided 'the mess' of both the physical and emotional elements of the care-work in their job. As students they soon learned they could off-load physical mess to (usually female) nurses - as lower status professional carers - and keep emotional involvement to a minimum through brief, single contacts. Nonetheless he saw radiography as a 'caring profession' because of the underlying caring attitude and direct patient involvement, although the form and amount of care provided was very different to nursing care, which was little more than 'looking after' people.

Preparation for 'gendered work': patients and professionals as men and women

Besides the absence of 'caring' in the curriculum, most of the male participants said their lecturers had never discussed anything about gender-sensitivity relating to clinical practice. Instead men and women soon became subsumed under the title 'patients' and gender-blind professionalism became the norm, advocated as evidence of good, non-discriminatory practice. Of those that acknowledged (predominantly female) patients' gender-related concerns, most still said gender-sensitivity in clinical care was about respect, and was neither something to be taught nor to be seen as a female prerogative: sensitivity was part of a caring attitude and something (most) health care professionals inevitably have, by virtue of their career choice, regardless of their sex.

Sometimes you get the impression that some women are uncomfortable... It's a kind of intuitive thing...I don't think that sort of thing is ever really formally taught it's just something you learn as you grow up...You need to be sensitive to that... (but) I think part of it is innate, and the person who will be drawn into physio (already has) the characteristics you need [23: 704-772].

However, one gender issue was widely acknowledged in training: *for their own protection* several men said it had been 'drilled into them about privacy from day one' and about the need for 'always being careful', especially with female patients and younger participants (staff or patient) [25].

Thus the most common behavioural guidance relating to gender in therapeutic encounters was geared towards practitioner's self-protection - against accusations of sexual harassment from confused or predatory women - rather than concern for patients' well-being. Although the men acknowledged they had not experienced problems themselves, the need to take precautions with women was mentioned often, and by nearly all the physiotherapists. Experiences of sexual advances from female patients were recalled as humorous, although still illustrating the need to be careful.

I had a couple of confused old ladies telling me I could have sex with them (laughs), which was a bit desperate (laughs). Thankfully it was in front of witnesses.... And that was certainly something that was drilled into us...that we had to be really careful with female patients...to leave the curtains slightly open...watching your own back [23: 605-617].

A recently qualified physiotherapist said it was easier, in some ways, to work with female in-patients because of the group environment where everyone is already in their pyjamas. He contrasted this to outpatient examinations where you are 'on your own behind the curtains' and people don't know what to expect.

Especially with a young woman, I'm more wary of what she's thinking... palpating down her back or, if it was her groin...(or) looking at their standing posture...in terms of the sexual harassment or molestation side of things... Say a rib injury, palpating around and just under the breast...you're a bit cautious...she might not realise it's necessary...I don't want her to suddenly scream as I do it...so *the way to do it is be firm with your handling, be professional* ...I picked it up along the way... and from what you hear from other people that you've been with...I remember my first out-patients, you were told if you were ever unsure...make sure you get somebody else in...Often you can get round it just by being professional... looking like you know what you are doing...confident...like you are zeroing in for specific things [25: 424-489].

Usually it was recently qualified staff or students who mentioned more formalised training regarding gender-sensitivity and other 'expressive' dimensions of patient work. However these aspects remained as minor parts of the taught course, with its emphasis on theory and (supposedly) gender-blind instrumental skills and techniques. Of those males who qualified less recently, several said they thought a lot more time was now spent on the course considering gender and other 'social' subjects. However this view does not seem to be supported by recent students' accounts.

Overall, most male participants said they learned about gender issues on clinical placements, largely through observing qualified staff, and trial and error. Despite this ad hoc method there was widespread recognition that a 'professional approach' represents the best way around gender-related problems of working with patients and as such demonstrates the potency of learning traditional professional norms through informal mechanisms of professional socialisation.

Theoretical coursework

The male participants said less about lectures and theoretical subjects than about clinical placements and practical-technical lessons. Also, what was said contrasts with the females' accounts.

Several acknowledged difficulties coping with the academic level, and concerns about the unexpected complexity and amount of detail in the more theoretical subjects. Some questioned the need for some of the advanced theory for the day to day work of the profession. One saw the degree as aspirational.

I don't think you need (the degree) to be a radiographer...I find the degree course bears very little resemblance to what I am doing in clinic...my head is stuffed full of academic ideas...You get into the department and all you have to do is take the views...It has only changed very recently...basically trying to make radiographers what they are not [13B: 359-376].

A few recent graduates and current students found the self-directed mode of study as hard, often commenting on the amount of detailed rote-learning; many lamented the huge workload, especially at the start of their course when several said they had wanted to take advantage of

their new student lifestyle. Others were unhappy about the course timetable, along with the extended academic year for clinical placements. This particularly irritated one physiotherapist who studied around the transition period from diploma to degree qualification.

The work...it blew my mind...everything you learn from day one...you'd have to retain...and build on once you qualify...I was interested in anatomy but never in such detail ...it was just so daunting that you had to remember and recall it all, and relate it to everything... I resented it after a while, because quite a few of my friends... (had) lectures three times a week...and I was working 9 to 5, every single day... I began to think is it all worth it, just because of the amount of work [15: 226-266].

Whilst most said the exams were hard, a few males found the theoretical subjects easy. One described the coursework 'as a doddle compared to A levels' and easier than the practical lessons and placements [19]. Related to this, some mentioned how their interest in science and technical subjects had both contributed to their career choice and made these aspects of the course easier and more enjoyable.

Certainly the physics side...I thoroughly enjoyed...It was the combination of the two, the technical and the caring side [16: 161-165].

Similarly, another said

My strong subjects are science...and radiography does in fact need quite a lot of maths...I'm not bragging saying I was brilliant... But I have the science part behind it as well, so that's why I like it, because I care for people and how people are...and yet I am also using my knowledge of science [10B: various].

Arguably, by emphasising how the training is academically and personally challenging reinforces claims for the status of the course and qualification to be recognised as high: survival and success is something about which to be particularly proud.

Clinical placements

Many males said they were impatient – albeit nervous - about starting work with 'real patients'. More than half said they felt awkward or extremely nervous with patients for the first few times. Although most said their problems were neither long-lasting nor peculiar to themselves, or to men generally, a few admitted hating most placements. One diagnostic radiographer said he had been

More interested in the technical side of the equipment and how it operated ...than actual patients...The actual practical work for the first year...(I) hated it, because I didn't feel comfortable, working in the hospital environment and working with (patients)...the work was too hard [19: 152-181].

Another recalled feeling very self-conscious.

At first it was very hard and very daunting and the first time you go out to do an x-ray and call the patients...really nervous and you don't say it loud enough... and then after a few times you just get more confidence [10B: 309-313].

Emotional work

Some students considered caring for a patient is harder for more males than females, feeling greater stress with emotional work.

I think men perhaps have more difficulty with emotional aspects of caring for people...I don't know whether they, we, wouldn't be able to handle the emotion or that we can't express our emotions [10B: 398-403].

However, others thought male students have no more emotional difficulties with the work than females. Some also thought male students - like male staff - are often more caring towards patients.

Despite initial difficulties, most males said they found clinical placements enjoyable experiences. One said starting patient work was enjoyable, even if

Very demanding...physically and emotionally...because of the intensity of what was going on... You could be glib about it...but I wanted to get involved...to think about what you are doing...and dealing with the emotional stuff as well, dealing with how you are feeling as well, there's a lot going on...it's a very demanding job...but equally it's very stimulating and very rewarding [23: 554-572].

The most positive comments were from those who had not started training straight from school, doing physiotherapy or therapeutic radiography. However, the following post-school, therapy radiography student also enjoyed his placements.

You go into the department and it's like, oh god there's so much to take in and they expect you to know it all at once...it's all very new... Sometimes they throw you in at the deep end...You tend to learn very quickly then, but I enjoyed it [5B: 121-126]

Most males said clinical placements were when all the hard slog of the coursework began to make sense, although a few said there was little or no connection between what was taught formally and what happened in the real world of clinical practice. Students were given more time with patients than staff, which was generally seen as a gentle way to start practising techniques, although criticised as unrealistic and therefore pointless by others.

Despite the problems encountered, the vast majority of male participants preferred placements to course-work although this view was not universal. Several said the practical work was seen as what the job is really about. One mature student added that he liked

Being able to get out of the college environment which I found a bit repressive. It was a chance to practice what I'd learned and also to work with people in the profession, not just students...being able to work with people, often on a one to one basis...try and find out what their problems were... analyse them and start putting your treatment into effect...seeing the results [7: 303-317].

As such this physiotherapist emphasised liking both the instrumental and expressive aspects of the therapeutic relationship and relished placements as the times where his studies became useful. His satisfaction echoes many other males who stressed how the course and job has the 'right balance' of technical/scientific knowledge and practical application through effective and professional care-work. However, increasingly little was said about working with patients as a source of satisfaction instead focussing more on the new technical skills and putting knowledge into practice.

Male hierarchy and specialities

Most male participants said they soon noticed the predominance of male staff in top positions in hospital departments, and their concentration in a few clinical specialities, usually involving limited contact with sick patients. They offered a variety of social, economic and psychological explanations for these career patterns but generally did not refer to sex discrimination. Most thought women could make it to the top if they had equal amounts of ambition and experience as men. However, a few acknowledged enhanced career opportunities for men and admitted being

happy about benefiting from them, although opinions varied as to the advantage that different career paths provide. A willingness to acknowledge any consequent downside for women also varied.

I see it as an advantage as a man, in that I won't take maternity leave and things like that, so perhaps that will be an advantage to me over my female compatriots ...Certainly...most of the men I have seen so far...seem to rise a lot quicker than the ladies, so that's good. I can handle a bit of positive action [13B: 228-234].

Relationships with patients

As previously mentioned, very few problems working with patients were reported by the male participants, despite being extremely nervous about coping beforehand. Indeed, where relationship problems were mentioned, they were more often related to staff than patients, which I examine later in this chapter.

Exclusion

Whilst most patients of both sexes had been accepting of them as male students, nearly half the male participants recalled experiences of being asked to not treat an individual or being excluded from a treatment area because of their sex. As such, exclusion represents an experience unique to male students and even those men who had not experienced it personally mentioned the issue.

For some, exclusion involved being asked to leave by, or on behalf of, an individual patient at the beginning of the appointment(s), whereas for others it was a pre-arranged barring of men from an area of clinical practice. This restriction results in certain technical skills, placement areas or clinical specialities being exclusive to female students: exclusions had all involved female patients or related to exclusively female conditions or anatomy.

Generally the men were circumspect about their (only occasional) experiences of rejection, with many referring to 'the patient's right to refuse' as something therefore they neither could nor should challenge. Most concluded the infrequency of requests for men to leave meant most patients do not mind either sex, as both are recognised as 'professional' in their approach. Very few recognised that patients might find it difficult to ask for someone else not connecting patients' infrequent requests to the authority position of radiographers and physiotherapists, as health professionals.

As a sex-specific experience, I decided exclusion presented an interesting issue to examine, but quite often I perceived reluctance to discuss or disinterest about the subject. This I have interpreted as a sign of the men feeling defensive about a tangible example of problems relating to their sex. When I tried to explore why some people prefer to be managed by someone of their own sex, a few suggested those 'sensitive' patients who did object to men were a mystery, extreme or odd but as a minority they were happy to accommodate them and it 'wasn't a problem'.

I've only ever once been asked to stay out of the room, while I've been treating a female...by the patient...

SK Why do you think that was?

Er I couldn't tell you, I'm sorry, I've no idea...she requested I wasn't there...so I let the rest of the staff cope with that...

SK What kind of treatment was she having?

It was breast cancer...Unless we are specifically requested to stay out of the room by the patients themselves, we all go in at all times.

SK Do you think they can ask for people not to treat them?

They can. Yes, most definitely...They are always told beforehand [16: 240-274].

Most seemed perfectly happy to be relieved of work by being rejected, with some saying they'd learned to steer themselves away from those expected to be unhappy with male staff, such as Asian/Muslim women. However, a few said it was both ridiculous and unfair that they were excluded routinely from certain clinical areas, pointing out how male doctors were not subject to such negative attitudes and working restrictions. It was also highlighted how routine exclusions vary in different departments.

In this hospital...it's gynaecological x-rays...an examination called a hystero-salpingogram ...they're usually on young women...it's an infertility examination. I saw them as a student, and at H as a radiographer, but not in this hospital, they must always have female radiographers...(because) they have to lie on the table with their legs wide apart...and pregnant women tend to favour females...(so) we haven't any male ultrasound staff here [19: 399-424].

Despite none having seen patients ask for female staff to leave, several men seemed keen to stress that male patients don't always like/want female clinicians. There was support for routine provision of male staff for exclusively male conditions or anatomy to avoid embarrassment.

SK What about working with men...Are there any areas where women are excluded?

No, but it's not very often that men have their penises x-rayed (laughs) but it can happen, or have their testicles scanned by ultrasound, and I think most men would be more embarrassed to have a female radiographer to do that, so it's usually one of the male doctors who would do something like that [19: 425-433].

Involvement with patients

Overall, male participants loved the rapport they developed with patients: a few admitted being quite surprised at their new found ability and did not feel that women were any better at communication than they were. Several said they found it was quite easy to get on with patients and were surprised by how much patients opened up to them about their problems and personal lives. They saw how the hospital uniform and inferred professional role belied their limited knowledge and confidence.

After a few times you just get more confidence, you're surprised just how much people will talk to you...You get some just coming in for a wrist x-ray and they'll tell you...the whole life story and about every time they had an x-ray and how they've done it and where their son is on holiday and things like that...You've got to be interested in what people say [10B:313-320]

However, diagnostic radiographers varied in their appreciation of patient contact: a few were glad that these aspects were limited, but a few said the limited time staff spent with patients disappointed them. Nonetheless, and like many female diagnostic radiographers, most did not want too much involvement, especially with people who were dying or extremely sick, as it would be too upsetting: they would not cope with such difficult relationships and sad outcomes.

Nonetheless a few said they were sad to see how some staff seemed to lose appreciation of, or willingness to, spend time with patients later in their careers. Staff were busy and familiar with

hospital routines and became insensitive to the scared individual who needs gentle encouragement. One student believed it was crucial to treat patients as people and said he had seen lots of staff patronise patients. He spoke at length about patients being treated rather brusquely, as objects, or as stupid for misunderstanding instructions. He felt students were sometimes better with patients because they still realised how daunting the whole process is to those unfamiliar with it [13B].

Authority and compliance

Many suggested patients were more responsive and possibly more compliant to requests or instructions from male students than female students (and staff). Several referred to experiences of patients presuming they were doctors. Some felt they were seen as more authoritative and knowledgeable because of their sex and acknowledged this could be an advantage and was a confidence booster.

Quite often you are asking a patient to do something quite difficult...and it may hurt. I think they often will put their arm in a position more often if it's a male radiographer, that's what I meant by being more authoritarian...if they see a man in a white coat they think, "Oh I'd better". They're more likely to do it [4B: 329-338].

Similarly a physiotherapist said

There's a difference in the way patients perceive you...especially older patients, I think they see a man as more authoritative somehow, they'd maybe take my word more than they would from a woman, just because of the way, the culture of when they were younger and the woman was housewife and the man was in charge...It's more what you look like, that you know what you are doing [25: 683-711].

However, a few acknowledged stereotypes could be problematic for them as they did not always know what to do. On those occasions they said they tried to bluff their way through by looking confident and professional.

Relationships with staff

Although most males had never experienced such a predominantly female environment before their training, few said much about this and most did not see it as a problem. Instead they talked mostly of positive relationships and experiences with staff. Only two mentioned difficulties 'coming to terms' with the situation and one referred to needing to 'swallow his pride' and focus on the promise of plentiful future employment, to cope.

Polarised experiences

Male students' training was widely identified to involve extremes of experience, whereas female students only occasionally had individual 'personality clashes'. A few suggested that male students' placement experiences depended largely on staff's attitudes to the changing gender balance in their department and/or profession and beliefs about masculine gender roles and behaviours in society more generally.

Although some did not consider they were treated differently because of their sex, most recognised it had some impact. A small number referred to difficult relationships with clinical staff but related this mainly to stress caused by heavy workloads. Instructing and supervising learners, of either sex, meant busy staff had even more to cope with, which meant students were not

always welcome additions to departments, especially on early placements when they could do little independently. Nonetheless, a student said

The hospital here is a very good department and very friendly and open... you are immediately drawn to that... nice people... they'll smile at you... they are not ignorant (rude) and it makes a difference [13B: 164-167].

It was commonly suggested there were both positive and negative sides to the male-minority experience, although details of the positive aspects were described very rarely. An exception to this is male students' common experience of being assumed to be medical students, by both staff and patients, contrasting with female students often being mistaken for nurses.

Some discussed problems mixing with staff on work-breaks away from patients, and others mentioned awkwardness in the clinical, team environment. One said he felt male students were treated differently by staff. Although he had not experienced any problems, with them 'all being very open with me and I could talk to them', he knew of others having problems. Yet like most of the men he described these problems individualistically, as 'personality clashes' [5B]. Another said his discomfort was because he

wasn't used to working in a team... it was hard to adjust to... my problem was not the other members of staff... the problem was trying to integrate myself with them [19: 193-203].

Bad experiences

Whilst experiences of clinical and academic staff vary, the most difficult times and worst experiences mostly relate to *male lecturers* and *female supervisors*. A few referred to being picked on in classes: a physiotherapist recalled bitterly how one male lecturer

Had it in for me... almost took a dislike to me... which caused me one or two problems in class. I'll never forget, forgive him for it... he'd pick on me in class, he'd know your weak points and would highlight them... He did it once or twice and I had a word and it eased off after that. That was in my first year... That part wasn't a nice experience [7: 252-268].

A radiographer also spoke of a hard time, which he now understood as a test.

The biggest problem I had was with one of the lecturers. He was OK when he got older and after I qualified, he'd even come and see me. Before, he was always going on at me... sort of testing me out maybe. I got on all right with all the other lecturers [30: 66-71].

Some talked of their own and male friends' experiences of unduly harsh assessments: one black participant spoke about 'tongue in cheek comments'. He and another black colleague thought white males had fewer problems. He said, as 'a minority within a minority', it took him a while to 'settle in and be himself', and on placements

felt like I had to work really hard just to make sure there wasn't anything bad... that I wasn't up to standards or whatever... I think I just put the pressure on myself, but that was what I felt. Rightly or wrongly [15: 310-318].

He described a particularly bad experience with a female supervisor, which he felt arose because he was quietly diligent. He did not fit her expectations of how students should behave (as proactive, outspoken, dynamic and extrovert). He felt aggrieved she failed his placement despite treating many patients successfully and complained - unsuccessfully - to his personal tutor. His black friend also experienced various severe problems, which they related to 'the threat' he represented to staff and lecturers, as an extremely bright, 'high flier'. They concluded that whilst

white male students sometimes experience problems with female supervisors they tend also to experience advantages: this was not the case for them.

Several male participants referred to students dropping out of their course, with a substantial proportion being male students after early placements. Settling-in problems were more commonly grounds for leaving than failing coursework. The men spoke often about students giving up because of not 'fitting in' or enjoying the hospital atmosphere, although emphasised this was not an exclusively male problem. Interestingly, two male and no female student interviewees in the study left their course before graduating.

Positive experiences – male advantages

In contrast to those who struggled, were a few males who reported how their confidence was boosted. They referred to a 'supportive female environment', and of being coaxed and mothered by some female staff, generally being given an easier time than female students. Apart from one student who complained about teasing and unfriendly female staff and students, no male participants described victimisation or sexual harassment, which a few acknowledged was a common experience for women in male majority situations such as building sites.

I've not had any problems...I think I probably get a better deal than the girls sometimes...There is quite a lot of rivalry between the women...With men...they feel we don't have to compete with them...I think that is why some of the female students feel a bit uncomfortable sometimes... Sometimes they feel they want to mother you, and sort you out [5B: 334-344].

A couple of male participants mentioned how they had been accepted on their course with lower than average grades, which they related to a pro-male recruitment drive. One related this to an individual (male) superintendent's positive attitude and personal wish for more men to join (him in) radiography, whereas the other felt it was part of a more generalised campaign throughout physiotherapy. Several recognised how in recent years there had been attempts to encourage men into caring professions, which they broadly welcomed. In contrast to the female participants, none spoke of this in terms of positive discrimination or (un)fairness.

As mentioned previously, several of the men reported being mistaken for doctors or medical students. Most related this to gender traditions in health care employment. Some thought the experience amusing, but most said they were indifferent. But one was positively displeased, being proud of doing radiography and wanting his profession better recognised [2B]. A few acknowledged that it annoyed their female colleagues, but said it had not created friction between them at an individual level.

Professional hierarchies

A few male participants said they had realised it was important to be aware of hospital hierarchies to avoid difficulties in inter/intra-professional relationships. Although he did not recognise it at the time, one physiotherapist considered learning about the hospital ethos and professional relationships was probably the main outcome of his first 'observational' placement, when no clinical skills were practised and involvement in patient care was minimal. He had observed the dynamics of the hierarchical multi-disciplinary team and later appreciated this was very worthwhile.

I don't think I learned anything clinically, but you learn from being in that environment...how you can get on with each other...The sort of ethos...finding out who was who and how people interacted together and how the nurses and doctors got on, and when the physio came, how, what sort of relationship they had [12: 281-294].

Relationships between students

A few recognised that as the minority sex they had needed to feel quite confident and assured about themselves to enrol in the first place; one took this further to suggest this included feeling comfortable about one's sexuality, and unconcerned about people's attitudes about men moving into a predominantly female, social world. Nonetheless, the male participants generally reported mixing more with other male students than with females, particularly at the beginning of training. It was a lot easier to be 'the lads together'. Several initially found it hard to approach women, especially when they were grouped together. However, once they'd spent more time together and got to know each other - especially those that shared lodgings with girls - the gender-based groupings began to break down: one mentioned the 'jovial' exchanges and 'banter' between the sexes.

The amount of mixed socialising after college hours varies tremendously and several mixed mainly with other male students, from inside and outside their course. Even one radiographer who said he 'liked girls' 'did not socialise with them out of work' [19].

For most males, social and working relationships between students of both sexes were positive. Yet several said being of a similar age and stage in life was more important than their sex. However, this often involved no contradiction, as many male students are also 'mature'.

The older (men) we don't have a lot in common with the girls...they all want to go to the clubs...and I'm just too old for that kind of thing...I get on with them in a...friendly work environment, but we are not that socially similar [13B: 616-618].

A few male participants mentioned friendships with other students on different courses. In particular, contact with men on other health professional courses was helpful for some in reducing problems from being in very small numbers within their own course. It helped forge a sense of strength, and built confidence to cope with shared minority experiences. One said he was disappointed by the lack of time spent studying with other health students, as he found his own course extremely difficult socially. Even though other male students were minorities they were not solitary male students: for him the joint lectures were crucial. He described one of the male occupational therapy students in his year as his 'best friend' and 'invaluable ally'.

But one radiographer mentioned disquiet about relationships between students from different courses. He identified elitism and ignorance between professional groups.

I'm not saying they all don't understand but...there's not a lot of knowledge... one of the physios turned around to one of the radiographers and said "I don't know why you are bothering with all the anatomy anyway. All you are is glorified button pushers" [10B: 483-494].

A few males reported spending most of their leisure time with others doing various male-oriented activities. However not all of them did this: some mixed as much with female as male students, from their own and other courses, and a few spent little time with either, outside of college hours. The latter tend to be older or married men.

Orientation to the future

The extent to which male participants, whilst they were students, had an overt orientation to the future or their career varies. Over half had clear ideas and ambitions, although the amount of detail varied considerably, largely by occupational group. Some aimed to work in specific clinical specialities, and for some physiotherapists that also involved strategies to facilitate private sector employment with its enhanced financial opportunities and autonomy. Some radiographers mentioned how they expected to rise up the NHS hierarchy to reach senior positions, although none mentioned the highest grades. Overall, the consensus was that you could get where you wanted with perseverance, post-registration training and a willingness to relocate.

Several said they had been pleased with their choice of course and saw their training lead to a promising long-term career. One mature student

came into it aware that I wasn't going to attain those heights...I've no intention of going that far, I don't want to, I had responsibilities before and I no longer want that...I have possibly 20-25 years in this profession...and I'd like to get to...be a superintendent of a department [16: 564-572].

Amongst the students the common view was that initial and later pay levels were quite reasonable and prospects were good.

As regards pay, well we are better paid than nurses and I would say it is an average pay...a radiographer starts on a basic wage of between 12 and 13 thousand which isn't bad. But it depends on how money-oriented you are really. I mean for me the job satisfaction is a real incentive...it's something I feel I can stay in...I can see myself progressing up the ladder as well, it depends how far you want to go really...to get to the senior grades...there's always lots of opportunities for that... endless areas...It's just up to you really [5B: 473-490].

However, one of the qualified physiotherapists - now extremely dissatisfied with NHS earnings potential and career structure - said he was not concerned about pay and career prospects until he married and had children to support. Before his only concern was the potential to develop skills relating to his interests and abilities.

Several males considered the option to travel and work abroad with an internationally recognised qualification in a generally useful profession an asset, with many highlighting their plans, as students, to do this at a later stage. A few suggested this was a particularly male interest and ambition. One physiotherapist said

I always thought...I'll do the job and get the experience behind me and then go abroad...and make more money there ...(I was) looking forward to the travel... Male students, I think if you were going to give (them) a questionnaire about what they want to do...in the top five would be the sports, private practitioner, and travel. I think they would rank very high [15: 167-178; 983-988].

Several male participants, as students, had hopes and ambition, focus and direction and a substantial recognition of the importance of their course/career choice in building up prospects and opportunities which would affect their success and happiness in future roles and responsibilities beyond work itself. Many said they also sensed differences between male and female students, with males showing a more active orientation to the future than their female counterparts.

Importantly however, *many of the male study participants had few or only vague plans for their future* whilst students, only beginning to consider the openings provided by their qualification after

graduating. One physiotherapist recognised how he had 'landed on his feet out of luck really' saying he had not considered his future whilst choosing his course or during his training. Another, now working in his own successful private practice, had no plans for his future whilst training (or in the early years after qualifying), but recalled his parents being pleased about his choice of course as they saw it led to a secure job. However, a few said they had never been concerned about the future: one older radiographer said he was still the same now as he had always been, with no career plans or ambitions to 'progress'.

Female Experiences of Training

Compared to the male participants' diverse accounts of training, the female participants' accounts are both more homogenous and positive. Some of the issues and concerns raised are similar to the male participants and some differ either in content or emphasis.

Nearly all female participants were very satisfied with their overall training experience, and very few described either substantial problems or major dissatisfaction with their chosen course/profession. However, a few acknowledged some initial anxieties or temporary difficulties.

The majority sex

All the female participants trained as part of the majority sex: a few studied in exclusively female cohorts but most in groups with small numbers of men. As with the men, the size of year groups varied considerably (from 3 – 60+), and earlier students graduated with diplomas and later ones with degrees.

Despite being the majority sex, none of the female study participants described their experiences in terms of an advantaged position or easier process.

Mature students

A large proportion of female participants were single and started training before their early twenties. Only a minority began later. Some reported that they had known mature, female students comprising a mix of married, divorced and widowed women, both with and without children; a few said it was probably harder for those with children to manage both family and course simultaneously, a viewpoint endorsed by female participants with children. These experiences contrast with those described for mature male students.

Initially he was very supportive...that support quickly diminished when he realised it ate into a considerable amount of my home time...I cooked the meal, cleaned round...got them to bed...and then I'd disappear upstairs for an hour and a half every night...That was one of the things that contributed to the marriage breaking down [21: 314-323].

Overall, no advantages were identified for older female students with the academic coursework, but several of the women spoke about mature students of both sexes being better initially at the inter-personal 'caring' elements of the work - in lessons and on placements - than most school leavers of both sexes.

Reactions and comments

The women said it was uncommon for them, as students, to experience reactions and comments from friends and family: most that did arise were very positive. Pride was the most common feeling of female participants' parents, but only mentioned by a few of the males.

Several radiographers said that, in contrast to physiotherapy, most people didn't really understand what their future job involved: one mentioned how lots of people seemed to think radiography was a lot more complicated than she did, lavishing unduly positive praise upon her. More generally, few people had much to say beyond general support for them doing 'something in a hospital'. This reinforced their feeling it was a worthwhile job.

A diagnostic radiography student described how people she had previously worked with had been impressed by the idea of her studying for a university degree, and her parents were thrilled as she was the first in her family. A therapeutic radiography student recalled her parents being very proud, because, like her friends, they were impressed that she had chosen to study for a 'caring profession': they said she was 'incredible' for enduring the course and because the work appeared very stressful.

Whilst none recalled any off-putting or critical remarks during training, a couple of therapeutic radiographers mentioned negativity from teachers and/or careers advisors because their course was at diploma rather than degree level. Being considered to have the capacity to study for a degree, a diploma level, caring profession was neither intellectual nor well recognised, and therefore considered beneath them. The participants said they were keen to inform those with negative opinions of the complexity of the course/work and value of the professions' work.

The course

In contrast to the male participants, most females were happy with both the theoretical and practical elements of the course-work, coping well with the academic level. However, several said they generally preferred working with patients in the hospital setting.

Typically, one experienced therapy radiographer remembered enjoying her course because of its varied content.

From very early on...one of the things (was)...the lovely mixture...between technical and clinical...and there's a lot of academic, theoretical knowledge which you need to have...I used to love working on the Van de Graf generator...it was fascinating...I used to like that side as well [3: 137-209].

A few - especially more recent students - emphasised how they loved 'the feel' of being at university, as 'proper students' rather than on a hospital-based course. Nonetheless, others emphasised how they had enjoyed being at a hospital: a physiotherapist recalled

It was attached to the Infirmary...and I really, really loved it, being very closely linked to the hospital [21: 199-201].

Although most females did not find the academic work very difficult, like some of the males, a small proportion acknowledged difficulties settling down to the 'hard graft' and self-discipline required for the first year. Living away from home for the first time provided some students, of both sexes, with more tempting alternatives than studying.

I had problems with coming into university because at home Monday to Thursday I was always kept in...to do my homework...As soon as I got my freedom I was just out all the time, so I didn't really settle in until about half way through the second year...It wasn't particularly hard, it was just a matter of remembering everything... (but) everything else came before it. I didn't have the right attitude [9B: 261-284].

Practical lessons: profession specific skills and techniques

Undressing in class, and learning to palpate and touch each other was difficult for a few women initially, but all said they soon felt okay, and realised it was necessary.

To start off with you think: Oh my god I'm going to be in my bra and pants! But you get used to it cos everybody is in the same boat and it doesn't bother you after a bit.

SK How about touching each other? Doing the handling, lifting and manipulations?

It didn't bother me, I mean it was part and parcel of the learning process...if you started with a complex then I suppose you wouldn't do physio anyway...I wonder with the slightly larger girls, they might have been really conscious having to take their clothes off...(The boys were) aware that they were in a class full of girls with virtually no clothes on...First day there, maybe they're excited there's lots of girls with just the bottoms on or whatever, but then it becomes an everyday normal thing ...you just get used to it [9B: 306-346].

Echoing the male participants, some females said male students tended to laugh off their embarrassment more often than female.

I think they found it easier to joke and laugh about it, to cover their embarrassment ...In massage the five men were put into pairs with women, so they had to get over their embarrassment really...Being in a mixed group was worse initially but after a while you don't see them as members of the opposite sex, just as another body to practise on. I know that sounds awful, but that doesn't come into it at all, as it doesn't with patients [3B: 172-180].

However, one recalled with some amusement how male students didn't seem embarrassed, but were

Typical lusty young males you know, when we all had to take off our tops in class ...sort of ogling up who'd got the biggest boobs...the typical male adolescent. I mean (laughs) they're adolescents even when they're 30 aren't they (laughs)? But no, they quickly got over that and we all sort of settled down... But I must admit the girls with the nicest backs were always the most popular ones in massage (laughs) [21: 534-542].

Paradoxically, some female participants said it was easier with more men in a group, because it then felt more relaxed as a more balanced, normal situation; several physiotherapists said having more male students also meant it was better for practising techniques, as the experience of different body shapes and sizes was useful for work with patients.

As with the males, several female radiographers said that most of their practical skills, learning about calculating dosages and accurate positioning, meant applying real life 'surface anatomy' to people with a myriad of shapes, sizes and symptoms. Therefore the best learning was with real machines and patients, under close supervision, rather than in class with other students and most saw little advantage in practising lots of simulated situations. However, the clinically-based approach made the learning experience more nerve-racking, as they had to get it right, 'from scratch'.

But for one student it was the challenge of doing the real thing that made learning to produce an x-ray image so enjoyable.

It is being artistic it is, it's such a puzzle, cos the human body's not perfect...most people are far from it...so most pictures are a bit mediocre. But suddenly, just when you are getting a bit (downhearted)..a perfect picture comes out [11B: 218-221].

Generally, learning to do the profession-specific techniques, both hands-on and with equipment, was not particularly difficult for any female participants after the first few attempts. Despite initial concerns, most really enjoyed practical lessons and more than half said they found them easier and more interesting than lectures.

The practical lessons were more fun, you get more involved...doing the actual hands-on. And I remember them better. If I am just read out information...I don't take it in...whereas in practical sessions I actually take it in [9B: 294-298].

The practical classes are good, I enjoy them the most...Certain things I find hard, like palpation of the different structures but the actual techniques come pretty quick [3B:147-150]

Preparation for 'gendered work': patients and professionals as men and women

More female than male participants connected initial/occasional disquiet about physical closeness and touch to consider patients' feelings, coping with the intimacy and intrusions of health care encounters. Some females also recognised how the sex of those involved contributes to the feelings provoked.

Like the males, the female participants reported varying amounts of attention in lessons to the subject of patients' sensitivities and avoiding or easing disquiet, either generally or with regard to gender aspects. Although more physiotherapists than radiographers said patients' feelings had been discussed, one recently qualified physiotherapist said

It's never been mentioned, no, never been talked about, personal space and how some people's is bigger than others, and things like that. It's just something they expected us to pick up...(but) several didn't pick up at all on people's boundaries. They would just blunder in and stay there, even when the person was making it completely obvious that they are not wanting it [2: 405-418].

Whilst several said nothing had been taught about gender issues of health care-work, others remembered them being stressed a lot. One recalled

They said to be careful when you are working with patients because although you are quite comfortable about getting undressed, patients won't be...used to it like we are.

SK ...(and) different for the two sexes?

Yes that was an issue, yes. Maybe if I was treating them, as opposed to a male, or vice versa, some female patients might feel uncomfortable with a male physio. It doesn't bother me, but it might bother them [3B: 189-209].

Importantly, and in direct contrast to the male participants, most females said working with patients rarely required them to provide reassurance, as patients generally seemed relaxed. Also, female participants did not highlight feeling the need for a 'professional approach'. Some suggested different socialisation for boys and girls, and childcare or other family roles tended to develop more women than men's handling skills.

That may be a reason why men find it more hard, cos women generally tend to be more tactile...I mean it's quite normal for girls to walk around holding hands, in school, and we tend to stay more tactile as we get older, but for men it's not the done thing, it's not socially acceptable for men to hug, but it is more-so for women. I think that is an issue with it, cos there's a lot of physical contact with patients in physio and you have got to be comfortable with physical contact...to be comfortable with them [3B: 285-294].

Being a mother, one said she had felt 'no qualms' with physical contact or emotional involvement, and had studied massage and counselling as well. Mature female students had an added advantage, being less emotionally inhibited and more adept at support through physical contact than many younger, but especially male students.

Although some female participants had noticed male patients tending to expect, accept and seemed unembarrassed and happy to be treated by women, several mentioned that gender-sensitivity is still an issue, as care and thoughtfulness are always important, regardless of the sex of the individuals involved. A few also mentioned how they had soon recognised power and control aspects in clinical relationships. Even as a student one said she had felt she should give choices to patients, asking how they would like to be addressed, explaining things and asking permission when she was going to touch them.

Learning to care professionally

Whereas many male participants described the importance of learning to work with a *professional manner and approach* with (female) patients, to 'keep sex out of the equation' [23], female participants did not mention this aspect of learning about care-work. None described professionalism as 'the best way' to provide care, nor recalled this as a predominant part of their education. Instead many referred to the need to be tactful and respect people's privacy and to explain everything, regardless of the patient's sex.

However, several recognised the worries many male students had about working with female patients. One physiotherapist said the only discussions on her course about cross-gender working related to male therapists avoiding problems working with female patients. Although still not using the term 'professional' she recalled that some of the younger males felt particularly vulnerable, so tended to be more formal in their manner and approach with female patients, but most especially with Asian/Muslim women who they were advised should always be accompanied during examinations and treatment. Lecturers and supervisors had emphasised how male students must learn to avoid the risk of sexual harassment allegations.

In contrast, a therapy radiographer recalled how her (all female) student cohort had been advised to avoid being alone with male patients although the concern was about protecting their sensitivities rather than those of the patients: it was about protecting the professional rather than an issue of professionalism. Another said that gender issues had only been discussed on her course in terms of staff availability.

Occasionally we had female patients, and they would either say they didn't want a male radiographer, or student present...but we didn't discuss it as an academic issue, as a professional issue if you like. It was only an issue clinically that occasionally female patients didn't like men in the room [24: 355-366].

Although mentioned less frequently than by the males, a few females said most of what they had learned about clinical practices was through observing staff working with patients. Generally they had not observed systematic or substantial differences between the ways male and female staff worked with patients. Although with supervised practice professional expertise and confidence developed, the professional learning process was identified as one which also sometimes involved using initiative to deal with new, difficult situations.

No female participants mentioned any formal lessons about how to care. Nonetheless several recognised their abilities to provide good quality care had been limited at the start of their training and taken time and practice to develop through time spent practising on placements, following the example of staff observed as caring professionals. Unlike the men in the study, they did not discuss the feasibility or appropriateness of formal teaching on care, but saw care as an essential aspect of their professional role. Interestingly however, care-work was not accredited as a professional skill or technical expertise by the female participants, similar to the males.

Theoretical coursework

The female participants expressed a fairly narrow range of ideas and experiences regarding their courses' academic level, theoretical content and quantity. In contrast to the male participants, there were no major problems with the theoretical subjects or workload for the females, and nearly all passed their exams and assignments without difficulty. Some liked the theory-based subjects best of all, despite being challenging.

At first I didn't enjoy working in a hospital, I liked the course, and...the people on it...I liked the work, the academic side, and I was interested in it...(although) I found the physics very difficult [8B: 273-291].

Because she liked studying sciences, another enjoyed

the anatomy, and the physiology and then the pathology and things, whereas with the chemistry I liked getting down to the molecular level. It gave me a really nice combination...cos you have got the (macro) side of the anatomy but then you have the physics and things like that [14B:175-180].

Even those who preferred the practical elements of the course, saw the relevance of the theoretical subjects.

It's a lot of theoretical stuff which I'm not keen on, although it is interesting. It's not what I expected although I know it is necessary...the practical lessons are good, I enjoy them the most, more than the lectures and taking notes [3B: 139-148].

Despite the absence of caring on the curriculum, several females, like the males, referred to their course as having the 'right balance of caring and science' [24]. But in contrast, only a few females mentioned the amount of work as particularly onerous, again highlighting the hard, first, pre-clinical year. Although not complaining about the workload, one recalled the time needed for homework had put extra strain on her marriage. But another mature student highlighted being pleased she coped well with the academic level.

I'd thought all the people...will be 18 year olds with A levels...and really clever... As it happens that is not the case. I mean I'm not the top of the class but I'm certainly not struggling [11B: 210-215].

Male students – one extreme or another

Several females described male students in terms of extremes: male students were either laid back and academically weak or highly ambitious and academically excellent. A few spoke begrudgingly of male students often being favoured by lecturers.

Two of the boys, they were very good...very academic...excellent at their work and got A's for everything, but they got 90% of the teachers' attention...they were obviously heading for private sport physio... The third one wasn't so much like that. He wasn't so full of himself I suppose, he was more, he wasn't so academically good as the other two [2: 228-265].

They didn't do particularly well, but I think that's true male-female anyway, in working... Fellas are lazy compared to women when it comes to knuckling down and working hard, and that was certainly true in my year, they just didn't put in the hard graft that the women did...They were more laid back about it normally. If anyone was late at lectures it was them ...There was an awful lot of work you had to hand in throughout the year and they were persistently the ones who were late and got the lower marks, because they hadn't put the work in...There was only one really who tried academically very hard, the rest were very, very laid back [21: 392-456].

Superior to caring/nursing

Nearly half the female participants contrasted the pleasure they got from their course to what they perceived would be wrong with doing nursing. Several spoke of the smaller amounts and emphasis on personal care in physiotherapy/radiography, seeing their role and therefore their course as more complex, scientific and technical than nursing. They described their training as preparation for a therapeutic or diagnostic professional care role: for many this made the course more interesting and for a few, the higher academic level linked to superior professional status.

(In nursing) there's very little assessment...there's a lot of hands on, but it's all routinely technical...they are not trained to be diagnosticians, they are trained to nurse, to care for, whereas we are trained to rehabilitate, to make a person as independent as possible...There are fewer, the skills involved are fewer. Their academic intelligence...at most levels is lower...the clinical nurse specialist is at about the same level as the ordinary physio [21: 742-751].

Some physiotherapists took this further, to also position themselves above radiographers who they considered as technicians, with far less autonomy and skill than them.

Clinical placements

A few female participants found their first experiences of working with patients very difficult, and nearly half admitted feeling quite nervous and/or self-conscious. A couple said they had been 'quite shocked', and a few mentioned being amazed by the passive acceptance of patients to professional intrusions. Most however, were delighted by the warmth and openness of patients towards them and many really enjoyed getting out of the academic environment to start talking and helping people, despite having few clinical skills. Placements weren't as hard as many had expected.

Although I just felt like a loose end and you spend so much time standing round, doing nothing and getting in everyone's way basically, I didn't find (talking to patients) a problem and that was often what helped me, to do something by talking and looking after them [8B: 278-287].

Several talked about gender different levels of confidence and caring abilities, but opinions were divided. Some thought female students found it easier working with patients, as more confident generally, and with better interpersonal skills. One said she herself experienced

No problems, its never bothered me at all, it's just second nature I suppose... It just came...and made me more aware [11: 357-359].

However, several challenged the gender advantage observing confidence and abilities in caring were less in young women with less life experience. Some who initially found looking after people difficult often challenged the idea of women's natural ability to care, on the basis of their own experiences.

I think it's an individual thing about how you were brought up and what you feel comfortable with...That's an individual thing, and I know some people find it incredibly easy...(We) might assume that women would perhaps be more sensitive...are more intuitive and sense when the patient is upset...we make assumptions that we would be better at it than men...And I'm not entirely sure that it is, has been, thinking about it, er, no. Well I'm not [24: 747-777].

Another, who acknowledged initial difficulties with patient care related them to her age and sexual maturity rather than her sex.

Anybody going into a hospital environment which is completely strange to them ...At 18, you've not long since gone through puberty...and all of a sudden you're told you've got to get hold of this person...30, 60 years older than you...and start touching them, as well as having to think about the positioning... I think talking to and touching the patient as well...is one of the hardest bits [6: 776-791].

Some of the women in the study spoke about male students being as good as females at working with patients, and a few suggested that some men were better than some women at the inter-personal aspects.

Different views emerged as to whether the capacity to excel at inter-personal care was peculiar to men who choose caring work or could be brought out in most men simply by doing the training. Were they 'special', different and atypically sensitive men?

It might be that there's a different kind of personality drawn to physio and that's why they don't seem any different ...they seem more tactile, more so than other men, so maybe it's that, that helps. They seem more caring, not that they are atypical as such but in the social structure and from their opinions, they seem I suppose atypical [3B: 300-305].

Although some females were initially diffident about their skills and ability to cope, it was recognised that male students generally worried more than female about patients' reactions to them.

I think it is probably easier going being a female mainly because I think female patients prefer female practitioners, and males don't really mind either way...I do think they do worry a bit more, but not really (badly) [1B: 312-325].

Emotional work

Female participants rarely mentioned significant problems as students dealing with sick or vulnerable patients who needed emotional support. Indeed, in complete contrast to the males, a few liked especially to work on the wards, enjoying an ongoing, involved relationship with ill patients who were physically or emotionally dependent on their help. However, this was not universal and some, albeit fewer, liked limited involvement and preferred the technical to the inter-personal aspects of the work. Some comments about care-work show how female students, like male students, clearly differentiated *emotional involvement* from instrumental *patient contact*.

When I started I found I enjoyed it, it was the right mix of patient contact and technical, not too much time with patients, as I'm not too good at a prolonged build up of rapport with people like in nursing. This work appealed much more, with the quick result and end product, it gave it an instant grab [28: 26-29].

Most of the female participants, but not all, said they were not nervous about seeing patients in distress, nor shocked by 'physical gore'. A couple suggested they, like lots of women, felt okay with the physical detritus of the work, being more used to blood – through menstruation - and comfortable with supportive health care relationships because of their socialisation.

One enthusiastic student said she was unconcerned by gory sights, nakedness or emotional distress, because

With anything medical, once that takes over, the fascination...it gets the better of me...I can go in and watch...it's the same with people undressed...I didn't think about the people I would be seeing...not to the extent that we do anyway ...my curiosity in what is going on, that takes over [11B: 270-282].

A therapy radiographer recalled feeling shocked, but not by the patient's clinical problem.

There was one breast lady, sort of lying on the bed and I was shocked at the fact, well not shocked but I noticed that she didn't have a top on and she was just lying there and there were people standing round...I don't mean it to sound strange, but I'd never been in that kind of environment...and there was a man in there and that struck me as well [8B: 237-246].

Female occupations, clinical specialities and male-dominated hierarchy

A few female participants had not thought about the predominance of women in their own and other health professions until they started training or begun placements.

I wasn't surprised but it wasn't anything I'd ever given any thought to [11B: 330-331]

I was aware of the fact I was in a woman's occupation but I suppose to a certain extent at the time I just accepted it... I recognised it and I realised it but I didn't worry about it, or think about it to any great extent [24: 296-302].

Whilst on placements a small number began to take note of the different gender composition of health care occupations and the different numbers of men in the different specialities and career grades. But most said the gender distribution remained unremarkable and did not worry them, although a few would have 'preferred more men for a balance'. One student added that she would have felt unhappy if she had been in the minority group. Commonly most accepted that 'this was just the way things are', and related it to the amounts and types of care-work involved and feminine image of caring overall.

Many female physiotherapists said they soon recognised the different specialities favoured by males: frequently men were keen to work in out-patient settings rather than wards and many preferred treating acute injuries; several wanted to move into private sector employment. One student said men rarely enjoyed ward work as they considered it boring or unpleasant.

Some suggested emerging preferences also related to how well students fitted into the different 'cultural traditions' and atmosphere of specialist areas, and how easy they found the work.

(men) didn't generally like ward work...they did it as a job, as something to be got through, rather than thoroughly enjoying themselves...they didn't seem to click quite as easily on the wards as they did in the gym or within an out-patient department...I think the empathy with the male gender as a whole, is an area they fall down on, and I think they have to work too hard at it. But to most women it comes naturally...I genuinely do believe...they don't really want to do it [11: 463-488].

Occasionally gender associations were recognised as part of the desirability of different specialities, and aspect of the differential status afforded them. Many of the female physiotherapists said outpatients and sports medicine were seen by many males as

Not sissy...a macho thing...and 'the prize'...You are not the downtrodden little physio that's given instructions by doctors and nurses, you have an opinion that's listened to [11: 532-565].

One contrasted selfish and altruistic attitudes to future careers in terms of gender differences.

Most male physiotherapy students were

very sport oriented...they weren't interested in all this geriatric business and hospital stuff and NHS, they weren't interested in that. They saw it as a Big Career...We got annoyed that they weren't...It was just a feeling, that you owe the NHS something after the training and having been paid to do it...to give something...to the older community and benefit the community at large instead of a small, elite highly privileged group of people...but they didn't seem to see any of that [2: 241-254].

Several females discussed how, as students, they had noticed men being over-represented in senior positions: some considered this quite reasonable as men did not take career breaks for maternity leave and child-care: promotion was achieved through 'time served'. However, a few said they had thought this unfair and had been concerned about discrimination based on gender-stereotypes. One student observed

all the people with the responsibility tend to be males, and not necessarily a better radiographer, and not necessarily been there any longer than anyone else...they tend to be the ones that get the superintendent posts [11B: 443-446].

Relationships with patients

None of the female participants described problems in their relationships with patients while studying, beyond the first few days on early placements. They found it easy to get on well with both sexes and people from different backgrounds, and enjoyed dealing with different health problems. Patients also seemed happy to be treated by them. In direct contrast to the male participants, none experienced exclusion due to her sex. Several mentioned that males were always aware of the prospect of rejection, and a few said they were glad not to have to face this. Although most thought the situation unsurprising, they felt female patients' concerns were unnecessary: male students could do the work just as well as them and would behave appropriately.

Several suggested that because women were expected to be carers, few male patients were reluctant to be treated by them, even as students. Women were not asked to leave treatment rooms or avoid certain areas, so felt welcome and relaxed in all situations. Some said they thought many female patients preferred female staff, even if they did not refuse males.

I think maybe some of the females mind having a male...if they have got to strip down to their underwear, but I don't think it is such a problem for male patients ...I don't think it bothers them in the same way [9B: 405-413]

Despite being favoured by female patients, a few students sometimes found it easier to work with male patients: they mentioned difficulties examining women as 'breasts got in the way', and because women tended to be more shy. However, several suggested relationships were easier with female patients, with one saying they tended to 'open up to them, woman to woman' [9B].

The female participants had varying opinions about male and female staff's abilities in relating to patients. Several said that male staff on their placements had been warmer, more communicative and caring than female staff who were often brusque and uncaring. However a common explanation for this was

patients' perception that the female radiographer is a nurse and a male radiographer is a doctor...When the male radiographer enters the room there is a lot more respect for them, whereas the female you get less...they just expect we are going to look after (them)... Females get treated as a nurse continuously...it tends to build up... (We) tend to over-compensate perhaps...because the patient is going to be funny with us [14B: 551-570].

Several mentioned how male students were sometimes wrongly identified because they wore white coats rather than tunic and trousers. This was seen as a deliberate ploy to elevate status and escape the 'girly image' of their profession [9B]. A couple also mentioned male co-students being seen as more technically knowledgeable and authoritative than themselves at equivalent stages. In contrast to the uniform issue, male students were not blamed for this, linked instead to general sexist perceptions of ability.

Interestingly, despite observing many gender different experiences, most female participants concluded differences in the ways staff and patients interact are not necessarily related to their sex but to aspects of individual personality.

Relationships with staff

The female participants said much less than the males about staff-student relationships. Nothing was mentioned about conflicts with lecturers, for either sex. However, several referred to male students getting more attention and encouragement from lecturers, sometimes from male staff and sometimes from female.

Whereas several of the women in the study liked the 'the camaraderie of the ward...and were accepted as members of the team immediately [11], a few mentioned difficulties with supervisory staff on placements. Although disappointing, most accepted these experiences as understandable, relating them to a particular problem of the workplace or individual. This contrasts with male accounts, where difficulties were described as very worrying and representative of a major problem requiring active resolution.

A few mentioned feeling a burden to busy staff. One physiotherapy student was critical of her first placement, but remained optimistic.

My supervisor just didn't have any time for me whatsoever...because she was heavily pregnant...and off sick a lot...I was being tossed between supervisors and hardly got taught a thing...but it was only one area, so I didn't let it put me off or anything [9B: 250-258].

Another described hospital staff as 'very cool and unwelcoming' on early placements when she knew very little and 'got in the way, asking questions' [8B]. Whilst she recognised staff were busy and stressed, she wondered if there was less tolerance of female novices as some staff seemed more willing to be supportive to male students.

Some said male staff were generally nicer to students than females, and seemed less stressed and happier with their work. A couple said male clinicians were the most popular with students.

There's one radiographer who's actually very good at teaching students here, and he happens to be male, so a lot of students flock to him cos he'll spend time [11B: 517-520].

One added that younger female students tended to assume male staff knew more than female staff, always asking them lots of questions.

I've found that the younger (girls) tend to go and ask them... where they wouldn't ask a female radiographer of the same standing...I think the younger females tend to sort of idolise them a bit [4: 593-600].

Very few female participants recognised any advantages for them in their student relationships with staff - male or female - because of their sex. Although some recognised they may have fitted in more easily with the majority female environment than male students, they did not think staff favoured them. The only staff who *may* have been nicer to females were those who were 'old school' or took a 'particular liking to you' [8].

Relationships between students

Frequently, female participants spoke about relationships within their course as very good: most spent nearly all their social and college time with fellow students. However, several said despite getting on well with male students, especially once they got to know them, they tended to spend most time and discuss more serious issues with other women. Several only had casual and lesson-related contact with male students.

Mature students found it hard to be as socially involved with their year group, often because they had responsibilities at home with children. However, most got on well during college time, although a couple mentioned feeling some degree of 'separation' from their peers: one said she sometimes 'felt quite isolated'.

However not all the younger female students spent all their time with co-students. One preferred being 'away from the group as a whole' in the evenings, even though she 'bonded well' during the day and 'never had any doubts' about her chosen course and profession [10].

Whilst a few of the female participants said male students mixed in well with the group, many more suggested they were less integrated. A therapy radiographer mentioned how all the women on her course had lived together whereas the male student lived with his parents, which inevitably set him apart. However he was not treated as an outsider, as he was 'a nice lad who wasn't at all macho or odd' [24].

Types of men

Several female participants described male students as distinct personality types, with their popularity depending largely on which type they were: commonly the men were identified as either macho, quiet or odd. The first type tended to love sport and preferred being one of the 'lads together', and was usually a loud and domineering presence in class. His relationships with women were said to mainly be limited to dating and he was often described as concerned about being seen as 'explicitly heterosexual'. Some were openly critical of this type, particularly when they got 'more attention from women lecturers' whereas others were amused by them. One commented caustically, that whilst

lots of women were annoyed by their attitudes and behaviour, the rest were too busy sleeping with them [2: 269-270].

The quiet type were often older and generally described as gentle, sensitive and caring. They mixed mainly with other mature students, of either sex, during college hours and often spent social time away from students. However there were a few young quiet men who seemed shy but

were often quietly confident. These men were more widely popular than the other types, often because they were considered less sexist and more mature.

The third type identified was the 'oddball'. Some thought these were more common in earlier decades, but a few of the women suggested they were still around. One radiographer who trained in the late 1960s said, albeit rather nervously

All the men were a bit odd...a certain type...one's who didn't fit in...socially...Not by any means all of them but certainly a fair percentage were people with chips on their shoulder about various things...had very odd attitudes...I think they seem more 'normal' now from what I've seen...(They'd often) be loners...who'd tried lots of things...and quite a few, a couple were very small, with chips on their shoulders ...physically small...not like typical male students, with lots of friends, going off to sports things [4: 615-660].

Nonetheless, and despite some occasional sharp comments about male student's attitudes, behaviours and approach, most female participants said they got on well with male students regardless of their type: they shared a goal in working towards a common professional identity.

Orientation to the future

Most of the female participants spoke about their early plans for the future, and several contrasted male and female students' approaches. There was a balance between those women who focussed on sources of intrinsic job satisfaction relating to the clinical work and those who emphasised on extrinsic rewards relating to career aspects; most men were seen to focus attention on the latter. For example, some of the women had ambitions involving plans to develop clinical skills in order to specialise, and others emphasised intentions to travel and the advantages of being able to earn enough money to maintain a comfortable, independent lifestyle. A few viewed their career in general terms, seeing its potential to provide work that would maintain their interest over many years.

What appealed was...because it was a technical profession it was constantly being updated and I'd never be bored by it [5: 48-52].

Like the male participants, none of the females mentioned long-term plans to reach the highest career grades. A couple mentioned being disappointed to discover promotion beyond Senior 1 level meant moving into management and administration. One said

I knew the pay sounded pretty good and you can get quite high up in the profession, but I wasn't really aware that once you got to the superintendent grades it was mainly administration...I decided that I don't want to do that side but stay more patient-oriented [3B: 124-128].

However some female students had no clear focus on the future. One said she had 'no long term view or expectations at all' and another spoke of 'no clear direction'; another wanted to keep her options open.

I want to get a good look at everything although I've got a few ideas where I want work when I qualify. But they are to be confirmed or depend on my placements. I don't especially want to work with children...but I'm quite interested in ITU or working with people with HIV/AIDS [1B: 143-148].

In contrast to the males, several female participants were keen to work in hospitals, with ill patients, on the wards, for the NHS. Several recognised this as one of the main gender differences. Some mentioned how the different approach to careers resulted in some resentment between students. One concluded that men soon realised they could 'have a good career...once

they're in and on their way' [4] as - despite difficulties with female patients and 'involved' care-work - they generally had positive experiences during training and saw male staff progress rapidly through the ranks.

Several female participants spoke of having wanted to achieve a balance between career and wider life plans: some liked the length of the course and time it took to become independent practitioners: one had recognised she would soon be 'up and running... doing the work' [1]. Another said she was ambitious but did not want work to take over her life: she saw her qualification would take her into a job with hours and shifts that were not too onerous, as well as provide an interesting career that paid 'reasonable but not brilliant' money. It also enabled her to travel and work abroad before 'settling down' [9B].

Conclusions: Experiences of Training and their Influence on Gender Divisions in Physiotherapy and Radiography

In this chapter I have shown that female and male physiotherapy and radiography students often experience various aspects of their training differently (see appendix 21 for summary of findings) Despite some differences in the participants' experiences of training relating to where and when they trained, plus some differences in emphasis by sex, a high degree of consensus about gender preferences and problems is evident, as well as substantial shared understanding of their contribution to gender divisions within the professions.

Notwithstanding individual variation - that challenges the validity of essentialist ideologies of sex different abilities and attitudes - the **main gender differences** in experiences of students during training relate to:

- theoretical and practical coursework;
- relationships with clinical and academic staff and between students;
- clinical placements and working with patients; care-work and profession-specific treatments and techniques;
- gender-sensitivity, professionalism and professional approaches to health care, and
- other students and staff's attitudes and approaches to patients, the work tasks and careers.

Despite having the qualifications and enthusiasm to get accepted onto courses and embark on their training, most of the gender different student experiences described involve the same attitudes and abilities, concerns and preferences identified in the previous chapter as contributing to gender patterns in recruitment. The aspects of training that male and female students enjoy the most/least or find the easiest/hardest tend to confirm their expected difficulties and concerns and anticipated sources of job satisfaction and influence developing career plans. Many of the gender different experiences of physiotherapy and radiography students contribute towards the development of gender patterns of employment of staff within the professions, influencing both vertical and horizontal divisions of labour.

As with the findings relating to factors involved in career selection, the main findings and key themes of this chapter on experiences of training will be considered in Chapter 9, alongside and in relation to the findings from the other parts of the analysis.

I now proceed to examine the qualified participants' descriptions of their experiences of physiotherapy and radiography work tasks and relationships, consider how they relate to training experiences, and how they influence gender patterns in career paths.

Chapter 7

Experiences of Working in Physiotherapy and Radiography

Having examined the descriptions of student experiences of physiotherapy and radiography I have identified gender differences in the enjoyment of and problems with: academic, practical and clinical aspects of the course-work; professional and social relationships with patients, staff, and other students. Different approaches of female and male students to future employment have also been highlighted. I now move on to my interpretation of the qualified participants' descriptions of their work experiences and their ideas about how different experiences of work tasks and relationships relate to the development of gender different career paths, especially focussing on patterns in specialisation.

The chapter is divided into two parts, with the male and female accounts examined separately. Within each, I consider the participants' experiences of their work in terms of the job content, patient and staff relationships, and its effects and role. These aspects of the work are considered in relation to:

- **Job content:** working with patients, the instrumental tasks and emotional relationships involved, including various features of the skills and techniques within different clinical specialities and their associations with gender;
- **relationships:** intra and inter professional relationships, involving social and work time issues; hierarchy; responsibility; communication, and autonomy; and
- **job effects and occupational role:** issues relating to caring and curing; treatments and diagnosis; assisting and support.

Male Experiences of Work

Introduction

Generally, the male participants were positive about their work, with all identifying aspects they particularly enjoyed. One spoke of 'no regrets', another saw his work as 'the tops' and another said he had 'landed on his feet'. Nonetheless, a few mentioned areas of dissatisfaction, difficulties they had needed to overcome, or issues encountered. None of the problems had been serious enough to result in giving up jobs, and all said they intended to stay in their occupation for the foreseeable future. The most serious, ongoing concerns mentioned by the men relate to 'career' aspects rather than the work itself: commonly, negative comments were about pay, discussed in the next chapter of the analysis.

Several male participants described how work preferences and problems informed their own and other people's decisions about where or in what to specialise, with a few highlighting gender differences within preferences, problems and patterns in specialisation.

Job content: instrumental and expressive work and different clinical areas

The content of the job was for many male participants the most important element of their past and present positive work experiences, but different foci emerged within the discussions. Most emphasised enjoying the instrumental skills and tasks, but almost as many stressed 'working with people' was good, because of the inter-personal relationships. However several highlighted both aspects equally. Some emphasised the variety of patients and illnesses, whereas others enjoyed the mix of technical and caring skills and tasks. A couple highlighted the unpredictable and changing pace of the work, and another liked meeting lots of different staff.

It's not the patients particularly...it's that there is a variety of work...the casualty work, the body scanning, and I worked in the spinal injuries unit, and each type has got a different type of patients as well, and angiography. So yeah, there's variation, and moving round from one area to another, it's not like you are working in the same room with the same people day in and day out [19: 453-461].

Instrumental tasks: complex and effective skills

Most male participants talked about the variety of technical skills and physical work activities in the different grades and specialist areas of their profession. Several described the appeal of their current work area personally and for others, with a few identifying gender different preferences. Some highlighted enjoying *doing* the treatment or test, using a profession-specific technique or skill, whereas others emphasised liking the *effect* of the task.

Several said the practical skills made their job interesting and 'not mundane'. Many physiotherapists and a few radiographers enjoyed their work because it involved similar things to their leisure interests, such as sport, electronics and computers. Some described their work as 'fascinating' and many enjoyed it as a challenge: because of the intricacy and diversity of the techniques and instrumental tasks used and complexity of scientific knowledge informing them, *high status* was attached to the work. As the instrumental tasks represented the *core professional skills* to the males doing them well was supremely satisfying. One private sector physiotherapist said

I like the challenge of earning enough to support my family and myself on the basis of my reputation and skills which I've built up over 10 years [27: 75-78].

For many males, the profession-specific instrumental skills were the most important things learnt during training. They separated (and possibly ranked) one caring profession from another. Many males spoke about being encouraged to do courses after graduating to facilitate specialisation by building up technical skills and professional knowledge.

I attended lots of courses to increase my specialist skills. As a junior I went to various types - in neuro as well as out patients - and it was encouraged a lot, especially at basic grade and sometimes it was funded...I was not particularly unusual [26: 14-30].

Practical work and physical contact

Echoing some of the concerns during training, the qualified male participants spoke of continued and heightened awareness about the physical aspects of their work. Although many liked the very practical job, several still highlighted the need for caution when handling people and being physically close to them, especially as patients were often in states of undress. However they

emphasised this was an unavoidable part of their work for accurate positioning and effective treatments.

It's quite physical really...you can't do radiography without touching a patient... the only way to get a good film...a good diagnosis...(is) to find that part of the body... and you can't...unless you touch it, unless you look for your landmarks... You've got to be careful of complaints from, you know, sexual harassment, interference but apart from that it's...it's not unprofessional, it's part of the job [22: 737-762].

Male participants said they never touched patients more often or for any longer than absolutely necessary, and most said they did not use touch or closeness to provide emotional support as it could easily be misconstrued. Many again referred to the importance of the 'professional approach' to avoid emotional-sexual connotations arising from physical contact. Whilst the male staff said they now felt completely comfortable and confident about touching and handling patients of either sex, with the assured competence of an expert professional, this depended on strictly limiting physical contact for explicitly clinical effects.

The caring in physio it's a sporty thing, not a wishy-washy sort of sympathy thing ...maybe a good crack or something like that...physio is more physical and pro-active than sympathy, physical contact in physio is very different to touching in any 'normal' environment...giving a chap a massage or manipulation doesn't bother me in the slightest...in this clinical environment it's no problem at all [27: 106-122].

Despite the need for caution, using their manual skills (for example in soft tissue manipulations and other therapeutic techniques) brought many male physiotherapists the most pleasure, representing the *elite skills* of their profession. The high status they gave the 'hands-on' work came primarily from the expert application of effective manual techniques and was often preferred over work involving technical equipment.

I like the physical treatment of injuries...if somebody's got a back problem I like to be able to palpate and feel things...I tend to dislike using the machines... I don't really understand them...and they seem a lot of faffing about, which is why I like the hands on approach...They have a part to play but...I'm more interested in getting my hands on a patient and going through a problem-solving approach, using your knowledge of anatomy, physiology and pathology, coming to a solution [7: 612-630; 851-854].

By contrast, radiographers often spoke positively about using complex technology, machines, physics, science and equipment. Many highlighted the constantly developing technologies, and some emphasised the excitement from using sophisticated, electro-medical machinery harnessing the latest computer knowledge. Keeping up to date with scientific developments and being able to successfully operate complex, innovative equipment for therapeutic effects/diagnostic purposes was particularly appealing. Some mentioned the complexity of learning to use new computer skills, although a couple said the work was not really more difficult as 'the science' and operational skills stayed much the same even when the technologies advanced.

Technically at the moment I find CT scanning the hardest because I haven't had enough experience of it so there's a lot to remember, you know with the computer commands and things like that [19: 336-338].

Despite the emphasis on technical aspects of radiography, several males enjoyed the unavoidable mix of caring and science. One liked diagnostic radiography because it is a '50:50 mix' [19]. However, several acknowledged that men in both branches tend to work in areas involving the highest proportions of technology and least direct patient contact, or in managerial positions away from patient care.

Effectiveness

An important aspect for many male participants was being effective and/or objectively useful. General effects mentioned were being helpful, of service, and useful, and more specific effects included being able to treat effectively, to cure or ease symptoms, to rehabilitate, and facilitate diagnosis. For some, their preferred clinical specialities related directly to the satisfaction derived from the extent of effect they could produce.

Neuro I felt I could do, cos the satisfaction with, say the stroke patient getting, learning to walk again and doing all those kind of things, I felt a sense of achievement there. And out patients again it's something where you've someone coming up with excruciating back pain and you get them out and up again and you feel great. Chest care...I was always questioning "Am I being effective?"...There's a bit of a cloud there [15: 597-612].

Some male participants said their job satisfaction linked to their *primary role* in, and therefore responsibility for, an effective outcome. Several physiotherapists preferred to work independently rather than in a team, enjoying the fruits of their individual labours. This involves various issues relating to ways of working, including autonomy and control as well as decision-making and communication.

Ward work is far too, you're not in control of your own environment and you are relying on other people far more, which inevitably means you haven't got the whole picture...it tends to be a lot more chronic things, which don't tend to respond so well ...seeing old biddies and all you are going to do is ease their symptoms, you are never going to cure them...I like to feel I'm actually doing something and not just aiding...the process [25: 510-524].

However some male participants had different preferences, with several radiographers wanting limited responsibility for patients and some liking teamwork, suggesting it provides better patient care.

We are an auxiliary input into their care, but we are never their primary carers, and because we are not...we can always pass on any major need that they do have...to the primary nurse... I think it's nice to help the patient get better in whatever way you can and diagnose different things, but to be the person who is responsible for that, no... I'm responsible for my patients when they are in my care but...an x-ray is just part of the process [22: 438-451].

I think you need to work as a team rather than as an individual in this line of work, that is certainly of paramount importance...some people will go in with a bravado type of image and then afterwards you'll be speaking to them and they'll just break down...this is why we work in a team as it allows us to spend time with that patient if necessary whilst the others are doing the (other) work [16: 337-339; 423-428].

Working with people: emotional work of relationships with patients: the professional-patient relationship

Although the technical aspects of the work were given substantial attention, most male participants also spoke lengthily about the 'emotional work' of relationships in their work. Relationships with patients were assessed for their relative ease and enjoyment, often relating to their frequency and quality.

Several described what they - and other colleagues - enjoyed or disliked in different clinical areas. In terms of job content - rather than extrinsic benefits - the instrumental skills and effects, along with personal interests, were seen as significant reasons for specialisation trends for both sexes. However the most common feature of male career paths relates to the different levels of emotional involvement and stress of different clinical areas.

What kind of relationships?

Nearly half the male participants enjoyed their work because they liked working with people: their job involved direct patient contact. However, most only wanted limited physical contact or closeness with patients. Many preferred 'people-work' at a casual, social level, and enjoyed time chatting with patients. Whilst several enjoyed the relationships they developed with patients and 'good rapport' they had with them, very few wanted more significant relationships.

Basically it's a job I enjoy doing and I enjoy looking after the patients, and I love the patient contact. I like talking to people and I like talking to patients...having a chat.. I like communicating with people [22: 470-483].

It's very hard to define, it's just me, it's what motivates me, what makes me smile... It's something I always wanted to do and it's something I enjoy doing... it's a strength I've identified in myself over the years and utilised...It's the relationships definitely [12: 567-579].

Emotional Labour

The emotional stress of working closely with the seriously ill, over long periods of time, was identified frequently as problematic and difficult. Several males did not want close relationships with 'dependent' people, and a few highlighted the advantages of shared and intermittent responsibilities. Some actively avoided the strain of relationships with patients arising from ongoing involvement, seeing the potential for intense emotional difficulties, whereas others were happy to see people repeatedly but emphasised the need for intermittent contact with meetings of short duration. One diagnostic radiographer recognised the avoidance of emotional involvement as a particularly male preference.

Emotional care, talking to patients and receiving their worries and anxieties and things like that...a lot of men perhaps just aren't sensitive enough or capable... just don't want to be involved in that sort of thing...It's minimal here because you never really get emotionally involved with your patients...not as nursing is, I don't think you get so involved [19: 700-714].

One physiotherapist recalled a difficult time after getting fond of a terminally ill patient. He felt unable to discuss how upset he was when the patient died, and said no one was there for him to talk to about his feelings [15]. Consequently he decided to avoid the emotional pain from involvement with patients 'likely to die on him': this contributed to his decision to specialise in 'out-patients' work. He added that his was a common reaction to the more intense, emotional work involved in longer term care and with seriously ill, ward patients and suggested it is problematic for men more often than for women.

However, a small number of males said the expressive element of the work was the most important part, providing considerable job satisfaction. Although dealing with someone who is 'hysterically crying' is 'quite hard...quite distressing', giving emotional support was both 'rewarding and extremely worthwhile' [23]. Another was pleased to be able to support people even whilst feeling quite shocked himself: caring professionals had to conceal their emotions.

I've been shocked by the sights, possibly once or twice, but you have to be very careful about that, you don't show that reaction in front of the patient ...because you don't want to make them feel more isolated than they already are. It's no good going to a woman with a fungating breast and saying "Phew, that looks horrible and it smells dreadful", you just don't do it [16:685-691].

Those males who discussed the emotional dimensions of their work most, barely mentioned the instrumental tasks. One physiotherapist who now extolled the pleasure and therapeutic importance of the patient: professional relationship had experienced temporary but serious doubts about his professional identity. His doubts arose because of his awareness of the unequal value placed on expressive/caring and instrumental skills. He lost sight of the technical skills he used, and identified his ability to relate well to patients as a personal rather than professional attribute. Consequently, he had felt unable to value the 'caring relationship' as a valid part of his work, worthy of financial recompense. But he now recognised caring relationships with patients were vitally important and his instrumental skills were secondary.

Several emphasised that although they refer to themselves as 'caring professionals', the work was far more complex than 'simply looking after' or 'caring for patients'. It was 'not just caring' [7], by virtue of the expert *professional skills and scientific knowledge* applied. And it was not like nursing with its primary emphasis on personal care.

Despite the male participants emphasis on the predominance of professional skills over caring, one physiotherapist said with some sadness that he was less good at looking after people now than during his training and early working life. He regretted losing the time he saw was needed for a quality caring relationship, as

It felt thrilling to treat people and I enjoyed patient contact, looking after their concerns as well as improving their (symptoms)...I liked to explain and help people through their problems...it is less good now...more pressures to hurry up with treatment techniques [26: 96-101].

One therapeutic radiographer stressed how he really enjoyed providing practical and emotional support, and these interpersonal aspects of caring had superseded the pleasure he initially got from the technical-scientific work. Interestingly, and in contrast to physiotherapy and diagnostic radiography, where patient care was widely seen as decreasing, emotional counselling work was seen as an increasing part of therapeutic radiography and recognised as an important professional development.

A couple recognised how a pleasant health care experience mattered to patients and liked feeling appreciated for 'caring'.

With a patient even though you are only with them for a few minutes and you may never see them again...they come back a year later...and remember you as someone who was involved in something particular that happened to them. You may have x-rayed thousands of people since then and don't know them, but they remember you. And that is a source of satisfaction. I think radiography can be seen as a caring profession [30: 106-117].

Patients' gender preferences

A range of ideas about and experiences of patients' gender preferences were mentioned by many of the male participants, especially physiotherapists. Strong preferences were said to be rare and not always against males. Several said most patients were happy with either sex, as long as they could rely on professionalism. A few male participants suggested that as carers are expected to be female - as the traditional norm - patients were often surprised to be cared for by a man, but this does not mean they really objected.

Nonetheless, several recalled occasions where patients had not asked for a female replacement, but seemed particularly apprehensive, or reluctant getting undressed or being examined by them. They said it was easy to sense patients' uneasiness and that although 'these things usually settled down by the second appointment' [15], if it was extreme it was usually better to find a female substitute for both parties' sake. A couple of physiotherapists thought many female in-patients felt uncomfortable with male staff, although it depended on the illness and treatment.

It often felt quite difficult and awkward for me and the patients too...with the intimate and exposed, ill or elderly women...it was my personal discomfort as well as wondering how the patients themselves may be feeling [26: 105-110].

Although most patients with gender preferences were female, and wanting female staff to look after them, a few recalled exceptions. Some old people were said to like male therapists and therefore responded better to treatments: some old ladies seemed to thrive on flirting with a younger man and tried harder for them, and some old men seemed to enjoy having a chat and were less embarrassed with their juniors. Only rarely, had male patients objected to having male staff, with concerns about sexual overtones of massage being hinted at.

The only time was...when I was doing the student games...a male chap, a Jamaican sprinter, he didn't want me to massage his legs, he wanted a female physio to do it [23: 630-633].

Some suggested patients were occasionally more compliant and receptive to their advice, being more in awe of them than female staff. One suggested male staff often had a different approach and better rapport, but was uncertain about an advantage in effect.

I find they try to get on with you more if you're a man. They might do things more for you, tell you more...It's anecdotal really, but I'm sure there's a difference. When I've seen some female physios treating patients I think I would have a different rapport...I don't know if it's a real difference or whether it's because females approach it differently... When it comes to treating patients I think men can do an equally good job but they might have a different approach... Men might be a bit more forceful...whereas a female might be...a bit more gentle or persuasive and still get the same results... But I think both approaches have their say [7: 369-383; 782-794].

Professional approach, gender preferences and associations with sexuality

As mentioned above, many male participants highlighted the benefits and importance of a *professional approach* in clinical relationships. This was most frequently mentioned within the context of avoiding problematic situations, and widely cited as an antidote to potential gender-related difficulties, which sometimes involved (usually oblique) references to problems associated with issues relating to sexuality. Several referred to the importance of a detached manner and focussed approach, where all touch and physical contact was purposive and instrumental, as a strictly operational tool. Through the appearance of asexual, gender-blindness this dispassionate professional approach was seen to provide patients with welcome reassurance and an air of guaranteed respectability and was not recognised in terms of running the risk of staff being experienced as cold or unfeeling when they provide treatment.

Intra-occupational relationships: social and professional, involving conflict, gender and hierarchy, responsibility, communication and autonomy

Most male participants reported no problems intra-professionally, getting on well with their female colleagues and managers. None mentioned any harassment, being teased or tormented by the female majority; a few identified this as an experience that women in male-dominated occupations often experience and have to either endure or leave. Interestingly, whilst one suggested harassment and teasing may relate to the class composition of an occupation as well as gender, another recognised men's experiences in predominantly female occupations across the class spectrum as 'gentle teasing': it was on a completely different scale to female experiences and rarely constituted anything like victimisation or sexual harassment.

Female managers

Although few male participants mentioned working under female managers, and none described examples of problems, one 'tolerant' physiotherapist thought it was an issue for many men.

Men don't like working in female dominated environments...men like to be in charge ...Whereas for me working with females or with female bosses is not a problem, I think it might be for other men...I am happy to tolerate working in a female environment...I think an awful lot of men would be put off by it, they might feel oppressed. I don't think they would be comfortable [7: 676-713].

Some physiotherapists suggested that most male staff (and students) prefer male managers, feeling encouraged and getting help from their experience. It was good to see a positive, male role model, and with 'far more male seniors in out-patient departments' than other clinical areas contributed to its popularity with males. Some males found it 'difficult to cope with a female-dominated environment' [15].

One physiotherapist reported his female manager giving him most of the referrals involving physically active treatments of 'young lads'; female staff were given more of the emotionally charged in-patient work with seriously ill patients. However he saw this differential allocation as reasonable rather than prejudicial as 'they were better at coping with it' [15].

Others thought male and female colleagues were treated the same. From his experience, one believed that work was allocated randomly.

On a professional basis in terms of your capabilities as a physiotherapist I wouldn't say that they do... I wouldn't say K or L as the Senior 1s treat me any different just because I'm a man...any differently than they would anyone else... I'd say there was a difference in how patients perceive you but I would say there isn't with the way other professionals perceive you [25: 664-685].

Although most radiographers had worked under male managers, none of the male participants mentioned feeling more comfortable with or encouraged by them, nor identified being treated differently by one sex compared to the other when work was allocated.

Within radiography...I don't think the males are given anything or treated any different to the females [30: 147-149].

However, in radiography departments, instead of work being allocated from above, male staff often decided themselves to avoid work/patients they pre-judged as inappropriate, difficult or unpleasant work for them as men. This meant female staff tended to end up busier than male, as the two sexes did not experience the same number of difficult situations. Interestingly, the male

participants said this arrangement had not presented tensions between them and their female colleagues. None described the practice as an example of preferential treatment of male staff by management.

Working relationships

The question of gender influencing working relationships was mentioned rarely, with only occasional brief but positive phrases such as 'no problem', 'we get on fine' and 'good, the same with both sexes'. A couple said they thought of their work associates as 'colleagues' rather than as men and women, and one said he had hardly noticed or thought about the gender asymmetry in radiography until I arrived to do this study: he claimed total gender-blindness.

When you first came to ask for a few people, I sat down and thought about it and I must have had my head in the sand...I'd just never really thought about it...When I'm working with a person their sex just disintegrates to me, it doesn't matter to me what sex they are because they're a colleague you may need help from, you are working with, they are just a working colleague. They may as well be green and have three eyes, if they're doing the same job, then it doesn't matter [22: 843-852].

A small but significant number of male participants said they thought some colleagues gave them more credit and status than their female counterparts, assumed to know more simply because they were men. A couple had been asked for advice on treatments when less experienced than some of the female staff present. One mentioned being asked to help with machinery problems, which he could not do as he neither understood nor liked machines.

Often you'll get approached because you're a man, to fix things, or something's tight, so "Can you undo it?" [7: 634-636].

These requests for help or advice were usually from more junior female staff or students. Whilst recognising it must be extremely annoying for the senior, more expert women, they did not identify negative attitudes or hostilities afterwards.

If I was female it would really tick me off, yeah, it would be very irritating [23: 833].

Social relationships

Despite good relationships with female colleagues whilst working clinically, several male staff found it difficult to fit into the staff-room environment and social gatherings such as Xmas parties: some avoided these events and places as much as possible. Many wished there were more men in their occupation, as it would make these situations more 'balanced' and improve the quality and diversity of social conversation. Some ate lunch elsewhere to reduce the time in the staff-room and several rarely socialised with colleagues out of work.

I'm not particularly involved in the physio social scene. A lot of the physios here they will all go out as a group... I do go out, but I tend to be more, my social scene is away from physiotherapy. In that sense I think of it as a profession where I am away afterwards, in the evening [25: 653-658].

But some had never felt like an 'odd one out', either as students or as staff, because there had always been a few men around, and a few enjoyed departmental outings.

Although there was a bit of a problem with limited conversation with females in the staffroom, the staff outings were very enjoyable [27: 142-144].

Several male staff referred to their presence being of benefit to departments, by reducing or defusing petty gossip, squabbling and bitchiness. These conflicts were widely understood - by both sexes - as a problem common to female workplaces: a male presence supposedly prevented disruption. However, one physiotherapist said conflicts between the women has still occurred in a 'brilliant department' with 'enough men to put together a football team'.

You could never explain it, it was fine one day and the next...they were at each other's throats...Then two days later it was fine again...You'd want to know the gossip, but you never got...involved in it...sort of sit on the fence and just look down and think "Whoah, they're at it again!" [15: 731-742].

Another referred to female staff being

Very catty behind your back, regardless of you being men or women. But working on your own you can feel isolated... It could contribute to men not wanting to be there, as you have no-one to relate to if you are on your own [27: 145-151].

Interestingly, a few men in the study said they prefer the predominantly female environment. One thought he would find it 'a struggle' to work in a male environment: after 13 years in the 'strange environment of physiotherapy', he had 'adapted' to see it as 'just part of my life' and felt 'privileged' to feel welcome and comfortable with his female colleagues. Nonetheless he chose not to socialise with them after work, although most of the women did. Another preferred the 'quiet' and 'sedate' predominantly female environment of radiography to somewhere full of 'raucous and loud' men. Nonetheless he said 'it might be nice to have a few more men'. Another who preferred the predominantly female setting, acknowledged being a visible minority could have drawbacks.

Being one of a few...everyone knows who you are... I don't know whether that's an advantage or not... I think it works both ways [23: 330-332].

Inter-professional relationships, involving social and work situations

Nearly half the male participants referred to the predominance of women across the health service and several identified gender dimensions to working relationships and hierarchies between staff from different health professions.

There are very few jobs in hospital for men apart from medicine and a few other scientific, high-powered jobs [22: 783-784].

Whilst some recognised high status was more often associated with men and male occupations than women and female occupations, and that many men wanted or expected high levels of authority, power and respect, a few male participants said this attitude was neither inevitable nor universal.

I don't know whether that would be more important...according to whether they are male or not... Some men find it very important and other men they just feel alright without [23: 800-812].

A few male participants acknowledged being given more status than their female counterparts by other health professionals. Sometimes this involved assumptions about their knowledge, respect for their opinion and/or not being routinely dismissed.

If the doctor had done a decompression of the shoulder and I think it's the neck...I could actually go and say "Well this is what I think is the problem". But I know that other physios...have gone in there and...were sort of like dismissed...I always found it easier...

And it was said it was only because you're a male...Yes, it could have been that, but it could have been how you approach them [15: 901-929].

Autonomy

Several males referred to varying roles and inter-professional relationships around the hospital. Commonly, physiotherapists said they had less autonomy on most wards than in out-patient departments, which they did not like: they connected this to more doctors being around and the dominant authority of medical consultants on wards. Despite good relationships with doctors, and no problem getting referrals from them - or from nurses and other therapists - most liked full control of their clinical decisions, role and effect.

It's your autonomy, your professional autonomy, it's different. Whether you can make, you are making your own decisions, whether you are making the difference, or whether you are just helping somebody else [25: 549-553].

In contrast, radiographers are generally more controlled by medical authority, reflecting the traditionally dominant role of the radiologist. Although department work is less subservient now, some diagnostic radiographers noted a greater sense of freedom and autonomy working on the wards where other staff had no authority over their work. A couple mentioned how some staff seemed in awe of what they did.

Whilst many wanted and felt entitled to professional autonomy - because of their rigorous training and scientific knowledge and skills - several did not want responsibility for overall patient care or managing other staff groups. Some recognised doctors' authority and responsibilities were changing alongside other professions' developments, which had influenced inter-professional relationships.

Doctors obviously have more responsibility than we have, because they're the ones to prescribe the doses, but we do the calculations to make sure the dose is delivered at that particular depth...we treat them...But responsibility...is beginning to turn ...becoming more multi-disciplinary...I think every discipline has to be aware...of what other professions are doing...we have a very close working relationship with all our doctors [16: 635-658].

Several male participants referred to greater respect and improved communication between doctors and PAMs in recent years, along with increased autonomy. Although few thought they were ranked as highly as doctors in terms of status, authority and responsibility, the inter-professional relationship was now far less hierarchical. Although some staff recognised gender dimensions in hierarchical relationships, this radiographer did not recognise the contribution of gender despite acknowledging the rising number of female doctors.

When I first started...doctors questioned us all the time about safety... you often had problems because basically they used to think of us as there to do whatever they wanted...we were their little boys and girls...it was a sort of master-servant relationship... Nowadays radiographers are more assertive and stand up for themselves more, and for patients...It used to be all male doctors, but there are more females now... As a male radiographer I don't think it was any different. I was a radiographer and my sex was immaterial...everyone was treated the same [30: 119-147].

Health-care hierarchy: gender and professional status

Male staff described relationships with nurses and other PAMs infrequently, with more attention paid to those with doctors. Inter-professional relationships were generally seen to involve an occupational hierarchy that routinely invoked gender, with medicine as male at the top, and

nursing as female at the bottom, and radiography and physiotherapy positioned somewhere between them. Status positions were most often related primarily to the types and amount of patient contact and authority.

Caring professions, it's like a step up from the nurses, so you've got the nurses and then you've got your physios...I feel it stems from that aspect of massage and hands-on contact...and a lot of the time nurses have to rely on what the doctor, the consultant says...they have to carry it out...In medicine they don't get so involved with the patients as a nurse or physiotherapist [15: 805-876].

Several physiotherapists described themselves as similar in status, knowledge and skills as doctors, whereas radiographers often referred to their profession as subordinate to medicine and 'frequently lumped in with nursing'. This description prevailed, despite male radiographers sometimes being mistaken for doctors by patients and other health professionals. Very few males acknowledged the more similar gender composition of physiotherapy and radiography to nursing than to medicine when describing their status as close to medicine.

A few spoke about differences in communication between doctors and physiotherapists working in the NHS and private sector. Doctors tend to treat private physiotherapists as equals and communication is more of a two-way process [27]: professional skills, expertise and primary role in effecting clinical improvements are duly accredited. Interestingly, gender dimensions to this different relationship were not considered, with none mentioning that higher proportions of private than NHS physiotherapists are male.

Although individual relationships with nurses were favourable, most male participants considered nursing as a profession of inferior status to physiotherapy and radiography. Whilst this was usually linked to the predominance of less complex caring skills in nursing work, it was also linked to the associations of personal care with femininity. The males frequently identified the strong influence of gender associations of work tasks and approaches, and varying gender composition of health related occupations in their ranking of health professions.

Nurses were seen doing the dirtier and intimate aspects of personal care-work and providing most emotional support to patients. As well as many men finding them unpleasant, awkward and/or difficult, these tasks were seen as mundane, low status work: they were associated with natural feminine traits and abilities rather than learned skills.

Career paths, clinical specialities and associations with gender

The male participants' accounts of specialisation focus mainly on areas' different contributions and role in health care. Some accounts also involve generally vague hints about gender dimensions of work in terms of the (personal or social) value, status and prestige associated with the different skills and tasks.

Some male participants highlighted how certain patients and situations remained more difficult than others even once qualified. As before, the hardest experiences generally were the emotional strain of work with the seriously ill or dying. Ward work with the chronic sick and elderly was unpopular with the male participants and male staff generally, seen as too slow and unrewarding by many. Other difficult situations for males involved tactile or exposed work, mainly with women, especially if young or from an ethnic group that disapproved of male-female contact outside of

marriage. Other problem areas included work with children, the confused elderly, and the severely infirm.

Interestingly, most male participants now rarely experienced these problematic situations having already moved into clinical areas or grades where the difficulties did not arise. But the problems were ongoing for those in lower grades and recently qualified as they had not specialised or moved up the career ladder away from the most stressful, least favoured clinical tasks or patients.

Many male participants emphasised the importance they attach to being effective, although this meant different things to different individuals. For some effectiveness meant contributing significantly to a cure, through a primary or major role in treatment or diagnosis; for others it included contributing to substantial improvements in a person's 'condition', by helping a return to functional independence, or easing of symptoms. No male staff prioritised satisfaction from emotional support to patients. Effectiveness represented an objective outcome involving instrumental skill and agency, rather than a subjective feeling and was seen as a major influence on male career paths.

The subjective and often transient effects of care-work, from providing emotional support and being generally helpful were inadequate for most males. The more objectively effective they could be, the more satisfied they were, and the status and desirability of the different types of work were elevated consequently. Occasionally, male participants acknowledged high status was also part of the appeal of those areas enjoyed more frequently by men, but most saw men's preferences relate to the desire to be effective more than a desire for high status. Helping people by using instrumentally effective therapeutic/diagnostic skills is the high status care-work of caring professions and professional care-work is evaluated positively by men. Professional care demonstrates the high status afforded a caring attitude: men can demonstrate they care about people by working in a caring profession.

Fitting In

Some male physiotherapists suggested they and many other male staff moved towards out-patient work as it was easier to conform to the established pattern of male specialisation. Their choices were not just because of difficulties with emotional relationships, enjoyment of relevant hobbies and interests, or effect from the instrumental skills used, but because they felt more comfortable in areas where men were already customary and more numerous: they did not feel the 'odd one out' [26].

Some male physiotherapists reported feeling uncomfortable in the female-dominated atmosphere and environment of the wards: as men, they were not expected to do 'patient contact' work. Some patients seemed surprised or even shocked when they went to see them, and looked apprehensive when they closed curtains for privacy, not knowing who or what they were. A few suggested feeling 'out of place' deterred many male staff from choosing ward-based specialities. Several recognised how male doctors do not provoke the same reaction and related this partly to the manual contact and longer time physiotherapists spend with patients; medical professionals are usually involved in much briefer, more detached encounters. Also, people are used to seeing male doctors on wards and recognise them by their white coats when they arrive at the bedside.

The male diagnostic radiographers identified few clinical areas where men predominantly choose to specialise, although some patients and techniques were described as harder and less popular than others. However, whilst ultrasound was a disallowed field, scanning and angiography were mentioned as especially popular with many male staff and as high status fields, the first because of the advanced computer technology and limited physical contact with patients, the latter for being one of the new 'extended roles', taking on previously medical work. Although he recognised that men in therapeutic radiography often move into the newest fields using the latest computer technologies, the male therapy radiographer (and male students) highlighted interest in the developing psychological support services.

Female Experiences of Work

Generally, the female participants were very positive about their work, with all identifying several aspects they enjoyed. Compared to the males, none mentioned any significant problems with the task content, but a few had concerns about inter and intra-professional relationships, often involving gender dimensions. Some female participants said it was the levels of intrinsic job satisfaction from different areas of work in their profession that were the main influence on their own and other women's decisions about where to specialise.

Many female participants said a lot about gender different approaches to specialisation and the narrow range of clinical areas male staff tend to work in. Male specialisation patterns were seen to reflect the difficulties and/or negative feelings male staff experience or anticipate with many care- work tasks, patient groups and predominant number of female staff, such that they often choose to move into those areas involving the least problems.

Job content

For many female participants, like the males, the job content was the most important element of their positive work experiences, but different emphases emerged.

Nearly all the females highlighted 'working with people' when speaking about their work, and most described it as the 'main', 'best' and 'most important thing': one said she had 'loved working with patients from day one... Involvement is the best thing' [6:118-120]. Generally they liked the inter-personal relationships and physical contact with patients and were more positive than the males about both aspects.

However, many females from all three occupations said they enjoyed their work because 'it's got everything in it', with a 'good mix of technical skill and caring' as well as 'achieving' an 'effective result' or 'worthwhile outcome'.

I like...doing some good...a lot of caring for people there's no sort of end product...It has got the best of both worlds. You've got your technical skills and your knowledge and... patient contact and...produced this end-product...(It's) very rewarding [18:126-132; 802-806]

Emotional involvement and professional caring

A large proportion of the female participants spoke about patient: professional relationships. Like the males they recognised the type of health problem, and duration and frequency of meetings affected the intensity of emotional involvement. Some had far more involvement than others, and many stressed they enjoyed their job because the amount in their speciality was 'more right for me than any other' [10]. Unlike the males, most females liked involvement with patients, finding it gratifying rather than difficult and worrisome. Enjoyment related mainly to time, but also to the type of situation.

You've got so much time with people, you get to know people and you're not just doing treatment for a part of somebody's body. You get to know the person...their problems...seeing people when they come in...how upset they are...then seeing them a year later... how they've progressed...Other areas... have got a huge case load, the whole hospital to see, whereas we only have about six patients so we have all the time to spend there [10: 200-262].

I like being with different people...the ways you interact...and a lot of difficult patient situations to deal with...It is definitely an emotional thing...we do meet physical needs...but the biggest demand is the psychological type of caring [24: 600-609].

To enjoy the work many recognised the need to like and be good at communication as

You spend most of your working day with patients...anybody who goes into physiotherapy, be they male or female, needs communication skills if they want to work with people to help them [8: 426-437].

Some referred to the emergence of 'counselling', understood as the formalisation of emotional care-work. One therapeutic radiographer favoured the increased support for patients with cancer.

I have a real interest in emotional, particularly spiritual care of patients which has developed over the years...It used to be that you were not allowed to talk about cancer, even though they were coming to a cancer department for treatment you still didn't mention the word...it made that side of things very difficult... the patient came and had things done to them, never questioned it...It's all changed a lot... opened up...we've had to adapt a lot to the way we approach patients [3: 21-263].

Several highlighted the 'professional' nature of their 'caring relationships'. A few recognised long-term relationships can be difficult. One physiotherapist highlighted problems with the informality that often develops, especially when the work involves a lot of close physical contact, with vulnerable people: she emphasised the need to distinguish friendship from a professional relationship.

It just starts to get over the border and gets that you are friends as well... people are often crossing over the barrier and you've got to step back...to keep yourself that little way back, to keep it professional [10: 297-305].

Some female diagnostic radiographers and a few physiotherapists did not want much involvement, especially if patients were very ill or unlikely to improve substantially. Whilst one physiotherapist enjoyed ongoing care and was 'good at dealing with people' she avoided certain 'types of patient'.

I'm not a respiratory physio...dealing with patients who are on the edge, I find it very stressful. Give me a stroke patient any day... they're not going to die on you...I know where I am going with them and what I'm aiming for and there's a definite end there [2: 131-150].

Others preferred one-off meetings, as they did not want relationships to develop through getting to know the person. They 'loved to chat', and valued their 'rapport with patients' but did not want to get 'too close to them'.

Although most radiography examinations are single brief sessions, many females emphasised the importance of their role as *caring professionals*: they help people by caring both physically and psychologically. Some suggested that as many patients are frightened, in pain or distressed 'the care should predominate' [4]; they should also try to help people relax and feel less self-conscious. A few emphasised good care often meant patients trusted them more, leading them to 'hold better positions' for clearer images: even if procedures took longer, they were more efficient as less repeat tests were needed.

A large proportion of the women criticised the technical imperative as an increasingly common but unwelcome emphasis in radiography: some suggested the degree courses accentuated the scientific bias and many said men were keener on the technological than caring aspects of radiography. Many diagnostic radiographers said most male colleagues talked to patients far less than women, who are 'more understanding and have greater empathy with patients' [4]. Men did not want to work with the elderly or in small units as they were 'less interested in getting to know and chatting with patients': some men 'never go near a patient' [9]. They prefer the faster pace and higher turnover of departments using specialised techniques and the latest technologies.

Many female radiographers liked the challenge of situations where it was difficult to balance the caring and technical demands.

There's good challenges setting up in casualty...you get somebody with a badly broken arm and you've got to work out ways of getting the pictures without obviously disturbing them too much...there's still some thinking in there...you need to put the patient at ease...even if you've done 10 chest x-rays on the trot...I mean you can be really good with the patient but if your pictures are rubbish then you're not serving your patient, but if you produce technically brilliant films and leave your patient in tears, you're not a good radiographer. You've got to find a balance between the two [6:133-140; 153-165].

But opinions differed about gender-related interests and abilities to provide good care. Several suggested men felt awkward with patients so did not enjoy or find caring easy, and therefore avoided it, but a large minority said they were often more patient and compassionate than women. Male preferences were often related to the different types of care-work, again highlighting gender distinctions between physically caring for people, emotional care-work and a caring attitude. A therapeutic radiographer said

They find difficulty with people being sick, whereas women tend to cope with that better, basically cos a lot have had children and...are used to it... but the emotional side they seem very good at...the male radiographers here will spend a long time with patients sitting talking to them and listening to their problems and they are very good at it...the males that do radiotherapy ...perhaps, they're attracted in because of the multiple technology and then find they are able to do the caring side and they are actually probably better than the women [20:776-795].

Several suggested providing good care was not tied to an individual's sex but reflected overall enthusiasm for the job: it encompassed attitudes to professional role and relationships, pay and grading. One who was 'disgusted' by the way some radiographers treat patients related it to a

preoccupation with their 'own interests over those of patients', and thought this might be more common to male staff [4].

Emotional support and physical contact

Many female participants said they touched patients to provide emotional support, and noted patients often respond favourably. This contrasts with male staff's frequent references to problems with touch and physical closeness, and the avoidance of all touch beyond that absolute necessary for the instrumental task. Several suggested that because of sexual ambiguities, male staff rarely used touch as a means of reassurance; patients also responded differently to them. In contrast they generally felt confident about using expressive touch and able to deal with any occasional misunderstandings.

I'm quite a tactile person...so if they're a little worried about something, I'll touch their hand whilst I'm talking, just like a reassurance... And with lifting techniques, people vary and some will grab hold of you and they'll say "Oh thank-you so much" and put their arms round you...I don't think they'll do that to a male radiographer though, they'll probably shake their hands [6: 798-809].

Although females were generally more relaxed than males about expressive touch, one female participant questioned there being any biological basis for this, referring to staff she knew who did not conform to the stereotype.

Of our two male radiographers A would quite happily touch somebody as he's interacting with them, but B I'm not so sure...but then the female radiographers would be exactly the same...I wonder how much it is a gender issue, we think it's a gender issue when it's probably been created...how they've been dealt with as a child...that whole thing about touching people [3: 824-838].

Physical and emotional care-work and a caring attitude: the values of caring

Although several female participants said they were 'fine' with both emotional and physical care-work, most valued the underlying attitude higher than the practical aspects. Some portrayed a caring attitude as a moral virtue and attached higher status to it.

Personal care-work was often described as unattractive and unpopular, even though it was important and showed a 'really caring attitude' [2]. Although 'both sexes had to clear up mess' [17], several females said men did a lot less as they were more negative about it than women. This was related to men generally finding caring *for* patients and 'looking after' people's basic needs 'distasteful' and, in terms of image building and career development, a 'waste of time' [11]. However, sometimes men doing less 'mess work' related to what they were asked to do, because of gender role perceptions, rather than their negative attitudes and active avoidance. A superintendent had not asked one of her staff to clear up 'the mess from someone haemorrhaging on the floor' because of his sex and presumed sensitivities [3]. Patients also asked different things of female and male staff.

A lot of the old biddies think they're doctors to start with...they don't seem to ask them to do all the little things they'll ask me to do, like they'll ask me to pass their drinks or teeth, and get me to help them with things like taking them to the toilet...whereas they wouldn't with A [2: 438-443].

But by being asked to do less of the 'mundane' care-work was seen to increase and even legitimate men's feelings that it wasn't 'their sort of thing', encouraging them to believe it was beneath them and not their responsibility [24].

Despite women generally doing more 'caring for people' than men, some female participants were also unenthusiastic about these aspects, with 'tending' again described as unskilled, basic care and associated with general nursing.

Invariably, discussions of physical and emotional care-work were distinct from those about physical examination and instrumental treatment skills. But a few physiotherapists referred to the similarity and overlap of physical care-work and physical therapy on medical and elderly care wards, with staff practising 'activities of daily living' with patients, 'trotting old people round wards with 'Zimmer frames, all day and every day' and doing manual treatment of 'chronic chests'. Many females said they, like men generally, found these types of work repetitive and dull as they produce slow or minimal objective benefits. Some women, as well as men, described ward work in terms of the 'bread and butter' rather than 'the prize' skills [11]. However, the great patience and emotional fortitude of staff working in those specialities were praised: they were held in high esteem because of their supremely caring attitude.

Despite most female participants saying they were less negative about physical care-work than male colleagues generally, none preferred clinical areas *because* they enjoyed these aspects. Choosing to specialise and work with the elderly, highly dependent, acute or severely ill was not for the greater amounts of personal care-work but for the more intense and involved relationships and important, even if limited, effects on recovery. This emotional dimension of the work was seen to explain the excess of female and absence of male staff in these specialities.

Physical work: contact and closeness

Many female participants described their work as 'quite intimate' and 'very tactile' despite differences between physiotherapy and radiography. Whereas they all used palpation and got physically close - man-handling people (sic) to help them on and off examination couches and get into position - only the physiotherapists used treatment techniques involving prolonged contact. With its emphasis on manual therapies, physiotherapy contrasts with most other health professions.

A few radiographers said nurses were now doing more of the physical care of patients in large departments, such that some radiographers operate the machines and have little direct patient involvement: again gender dimensions were noted.

We've a lot more nurses who deal directly with the patient, they'll undress and get the patient on a table, and explain what is going to happen...then the radiographer just comes in and maybe has a word...but (mainly) sits at the machine and does that. Then you leave the nurse to tidy up...the job has evolved so that you separate the jobs off...if you didn't want, you don't need to have any patient contact...I'm not sure, but the men may prefer that the nurse does the patient contact and you do the radiography [9: 621-645].

As well as considering the different abilities and preferences of the sexes, several female physiotherapists recognised that physical contact was generally devalued and damaged their

professional status. Many contrasted the therapeutic skills of manual physiotherapy techniques with touch in medicine and nursing.

Medics don't have as much hands on contact as the average physio... nowhere near the physical contact...to assess...and the hands on treatments ...I don't know why it should devalue it, but I think we suffer from it being linked in with nursing...as on the same plane as nurses...and we're not...they do lots of hands on but it is all routinely technical...the skills are fewer [21: 723-754].

Some also lamented the negative effect of physiotherapy's association with the 'unfortunate label of massage', widely viewed as an unskilled, feminised and sexualised activity: the distinction between therapeutic touch and massage was recognised as of particular importance to male physiotherapists, and explained men's enthusiastic attitude to manipulative techniques and work producing an objective outcome and visible effect.

Practical work

Several female staff enjoyed the practical nature of their work: one said

I like being a doer not a thinker...I'd rather knuckle down and get on with things... I'm always busy...happy to take on tasks others have put to one side [5: 267-278].

Some said they preferred being 'on the move' rather than in sedentary jobs, whilst others commented on the physically strenuous work of manoeuvring heavy machines and people. A few noted the physicality of the work could be tiring: one compared areas of therapeutic radiography in terms of different physical demands.

It does get you tired...running in and out of the rooms...I've got to an age when I'm not physically fit enough for the physical demands of the job...so doing another qualification meant I could perhaps move out of the practical side into management ...I enjoy the simulator job very much, because it's different day to day and it's more challenging, you've got to think about how to solve problems, whereas on the linear accelerator it's more physically demanding and you are working at a much faster pace [20: 62-110].

A couple suggested having men around was useful as they tended to be taller and stronger than many women: although everyone needed to be fit, they could help with some of the job's more physical aspects.

If you're very short like me, it can be difficult to work single-handed, and it can be handy to get two strong boys to come and help you...they might find it physically less demanding ...occasionally you find yourself in a situation where a patient falls on the floor [5: 793-798].

Physical and emotional care-work: multiple skills and professional expertise

Like many male physiotherapists, several females enjoyed their work because of its diversity and complexity. One said her job was far more than a 'physical making better' because of the highly specialised skills of assessment and treatment *and* patient involvement [21]. She described spending a long time providing a complex 'mix of emotional and physical caring', using professional skills 'founded on science': she stressed the two aspects of care were linked, as 'part and parcel' of each other, and differentiated them from the therapeutic skills.

Others distinguished routine 'basic care' from the knowledge, skills and approach of physiotherapists as professionals. With its intensity, diverse and complex technical skills and academic grounding, physiotherapy was widely seen as emotionally, physically and intellectually

demanding and therefore, stimulating and highly rewarding: 'its a great job because there's a lot to it' [14], and 'on a par with medicine' [21]. Enjoyment was related to the challenges and *intrinsic value* of their *professional expertise*.

Female radiographers' evaluations of their profession-specific skills were mixed. The technical aspects of most radiography were often described as 'very repetitive' and computerisation had made the process increasingly 'automatic' [5]: although the machines look impressive and the technologies behind them are complex, most of the calculations and technical procedures were 'less involved or complicated than they look' [6]. Although some diagnostic radiographers emphasised the job was more 'high tech now', plus they were now fully responsible 'for examinations which radiologists used to do' [1], a couple of therapeutic radiographers were disappointed by the technical-scientific aspects as it was less academic than expected. Despite the profession being more 'scientific, the actual job hasn't changed much' [24].

Notwithstanding the complex technologies and impressive equipment, several female participants emphasised the biggest challenges of radiography and the greatest source of job satisfaction were the patients. Although most were keen to dispel the view of radiography as 'just pressing buttons' [6], one admitted

I don't particularly enjoy the technical side, or a lot of it...but you don't really need to know (much) these days. It's all computerised...basically you need to push a couple of buttons and everything's done for you...I like the caring ...helping...and I do like looking after people [4: 183-208].

Whilst acknowledging the importance and challenge of patient care, a few stressed their intellectual interest was sustained by the 'exciting developments' [18]: to operate the increasingly sophisticated machines skills need to be updated regularly.

Although many females stressed the importance of sensitivity, they identified some staff as inconsiderate about patients' feelings, especially when busy: caring was subordinate and separate from the technical tasks.

It's not they intend to be inconsiderate, it's just they see it as a task to be done and they don't tend to think about how the patient feels...I think if they knew they were upsetting the patient they would be upset, but...the work tends to dominate, the practical side of the work tends to dominate your thinking...sometimes, if it's chaotic [20: 648-653].

Another noted that newly qualified staff are sometimes less concerned about the 'caring as they were often pre-occupied with the technical tasks' [1]. Several of the more experienced radiographers said they had got better at and more aware of the importance of a caring approach for a good technical result and clinical effect; over time they also enjoyed it more.

Although several of the female radiographers recognised gender different preferences regarding the 'care-work' of their job, the diagnostic/therapeutic technical tasks were seen to involve androgynous skills.

Technically I don't think there's any difference...and I think you'd be hard pressed to prove that a man could do the job better than a woman or a woman better than a man...there's good male and female radiographers to be honest [6: 757-763].

However a couple thought men had needed to prove themselves.

I think the job is androgynous...They must be caring, have good caring skills... interest in technology and be able to handle equipment as well as human beings ...if they've got those skills, aptitudes, I'm not bothered if they're male or female ...but they've had to really fight...to show that they can do the job [3: 646-691].

Variety

Several female participants mentioned liking a variety of different types of patients and health problems, and the interest they got from tailoring interventions to individual's needs. More females than males enjoyed maintaining diversity in their careers: although mainly junior grade staff rotate around different hospital specialities, some seniors said they had avoided jobs with a limited range of patients; others focussed on the diverse skills involved in their area. An experienced radiographer preferred her multi-specialist job in a private hospital to senior NHS posts.

Some specialities may be more popular than others but I have liked to do lots of them, CT, angio in the sterile environment, MRI scanning. I really like doing them all and wouldn't want to choose [28: 117-120].

Therapeutic/diagnostic skills: useful and effective

Despite the emphasis on patient care for a sense of personal fulfilment, many stressed the worth of their diagnostic/therapeutic skills. They enjoyed seeing objective outcomes and highlighted their value to both patients and doctors.

Physiotherapists generally liked physical movement: one wanted to 'use movement therapeutically', and was 'interested in people-watching, seeing how they move, analysing their gait' [11]. For some this combination of physicality and effect influenced their preferences for specialities involving active rehabilitation producing significant results. For a few the speed of change was also important.

The movement side of it and just the way the body moves...that is what I am mainly interested in...Stroke patients...the progression developing them back to normal, getting them sitting to standing, to walking and weight transference...it's interesting, but I don't like the slow progress...it can be quite depressing...Amputees...the rehab was good, teaching to walk again...but I don't think I liked it as much as out-patients...I like to be able to put my hands on and...get someone better, to be able to discharge them...they're not on my books till they die [14: 111-113; 290-300].

Using a multiplicity of skills to impact greatly on quality of life was a source of satisfaction to several female physiotherapists: 'drawing on all the little bits of your training and using them all', and having a major role in 'rebuilding lives' was 'brilliant' [10]. Another said

I get to know the patients really well and it's a real mixture of different skills...I feel at the end of the day if it wasn't for physio these patients would never learn anything, some would teach themselves things, basic rules of survival, but if it wasn't for us what type of life would these patients actually have...it's good seeing people ...get their lives back together again...I like to feel I actually had a little bit of input ...it's really satisfying [17: 432-448].

The therapeutic radiographers also stressed their important role, and effective contribution to improve patients' quality of life. One said, with obvious pride and pleasure

There's the feeling of fulfilment you can actually achieve something, which people working outside oncology don't realise, they just think it's a disastrous thing from the time you're diagnosed to death, and wonder what on earth you are doing. But you don't get that...working with oncology, because you know the patients you are aiming for a cure and

you know the patients that aren't going to be cured, but you are actually doing something very positive for them as well [3: 159-170].

Several diagnostic radiographers also emphasised the usefulness of their work: by aiding diagnosis disease can then be treated effectively. One liked radiography as it enabled her to 'help people without hurting them' [1]. Another said the limited involvement meant

There's quite a lot of satisfaction both with the patients and what you are producing at the end...you see an end product pretty soon, you help in the diagnosis of someone who is ill, you see someone who is coming in nervous, frightened, worried in some way...I want to be able to help, to give them something, help them enough, but I don't want to get too involved...too harrowing [4: 97-99; 153-156; 229-231].

Patients' gender preferences and the professional approach

In contrast to the male participants, none of the females had experienced rejection because of their sex, yet far more discussed gender sensitivities and preferences. Nearly all said some patients prefer to be treated by staff of a particular sex, however they described contrasting experiences of patients' preferences and gave various explanations for them. Although a few spoke of their 'professional approach' to relationships with patients, none referred to it as the antidote to gender-related concerns: 'professionalism' was usually mentioned in relation to discussions about their expertise and instrumental skills and to legitimate claims to high status.

Many suggested it was rare for female patients to strongly prefer female staff, and male patients generally had no problems with either sex. They said most patients were not bothered by the sex of staff, providing treatment and care was good. A couple stressed it was important that staff always explain what a consultation involves beforehand, as it is harder for patients to say anything once a session has started. But most female staff agreed that regardless of the patient's sex, they should respect all patient's right to privacy: this was their 'professional approach'.

General respect, not being patronising...being pleasant and polite...and sensitive to individuals' feelings...is my professional role [5: 303-322].

A few of the female staff stressed that not *seeming* bothered was not the same as not *feeling* bothered, and highlighted the unequal power relationship between professionals and patients which prevented many patients from voicing their concerns and preferences: one noted that 'most patients accept what's thrown at them' [6]. They suggested staff should recognise patients' subordinate and difficult position and be sensitive to hidden feelings, so as to prevent or minimise problems.

Although most stressed the growing number of male health professionals meant female patients' gender sensitivities were more often needing to be considered, a few added that it was good to have both sexes in the profession as it increased choice to patients.

For (female) patients it was usually sufficient to be careful about keeping them covered up with blankets, making sure they got changed near x-ray examination rooms, but occasionally alternative arrangements needed to be made by providing an 'escort', or getting men to leave. Specific strategies for avoiding male patients' embarrassment were rarely mentioned with many women saying they thought men were rarely bothered by the intimacy of therapy. However one emphasised how the feelings of radiotherapy patients having 'very personal treatments' needed recognition regardless of their sex: she said 'just for consideration' the lowest number of people

should be in treatment rooms 'because there is nothing worse than it looking like a spectator sport' [20].

Many women said a lot of patients of both sexes seemed to prefer female 'carers' often because it was what they were used to and therefore expected: *tradition* was not the same as a preference. However a couple suggested that because patients were used to female carers some men were 'more prepared to tell you things, which can make a big difference': many men found it hard to show their vulnerability and 'open up' to male staff, and are 'more reserved', even when they need help [5]. Others saw changing gender roles and patterns of employment beginning to impact on social expectations of female carers, and that feelings needed to be ascertained rather than presumed.

Some said that many female patients prefer female staff because they are generally shy and feel embarrassed with men, or have religious or cultural beliefs that prohibit close contact with men outside of marriage; a few added that usually the husbands of Muslim patients rather than the women themselves ask for female staff.

A few female staff questioned whether men generally prefer female carers: one had noticed differences in male patients' language and behaviour when treated by male staff and wondered if they actually preferred a male environment. Others said men seemed to enjoy social relationships with male staff but often felt awkward being touched by them. However some suggested men generally like being looked after by women and this included health care.

Contrasting views about the impact of age on attitudes towards and acceptance of male staff were expressed. One suggested that many elderly women love the attention of male staff, whereas another said they tend to be the most embarrassed patient group, especially concerned about being seen undressed. A couple suggested older patients of both sexes were more passive and accepting of professional authority than young patients and rarely complained about male carers because they were less confident or unaware they could ask for someone else.

Although several female participants emphasised the importance of recognising and respecting patients' wishes, a few said health professionals had only recently recognised the extent of patients' feelings going through the ordeal of health care. Due to a friend's traumatic experiences of radiotherapy, one had seriously considered ways the service could be made more sensitive and flexible. But despite changing attitudes, many staff saw patients' 'sensitivities' as 'their problem' and professionals adapted, if possible. However, alternative arrangements were not always feasible given the busyness of staff.

A few suggested female and male staff sometimes achieve different results despite equivalent skill levels, because of different approaches to and responses from patients. Several female participants complained that many patients were more compliant with male staff, following their instructions and advice more closely.

It does matter to some patients...maybe they respond better, quicker if they have a male treating them...they may respect more...or relate better to a male. A newly qualified (woman) trying to tell a 40 year old man what you're wanting him to do, maybe he finds that very difficult coming from a female...It may make a difference if it was a man [17: 666-673].

Some said patients seem to assume male staff know more than they do and are more in awe of their expertise and appreciative of their help. Patients often addressing male staff as “doctor” was seen to confirm this sexist stereotype.

Differences between clinical specialities and gender divisions

Many female participants discussed the gender distribution of staff. Several noted that female staff are generally happy with all forms of patient contact, whereas male staff are not. Male staff were said to generally only enjoy the therapeutic/diagnostic technical skills specific to their professions and distinguish them from physical and emotional care-work. This distinction was widely seen to influence the different specialist areas the two sexes prefer to work in. As indicated above, more females than males enjoy close involvement with people and cope better dealing with physical and psychological aspects of care for patients with severe and chronic illness (etc). The female participants most frequent explanation for gender-different specialisation was the association of care-work with nursing and with femininity. Several recognised that men saw physical and emotional care-work as women’s work and as the occupation of mainly women: together these make care-work potentially damaging to a heterosexual, masculine identity and demeaning as unskilled and low status.

Generally the female participants did not prefer any clinical areas *because* they were predominantly female, but suggested that men find the most heavily female specialities particularly daunting, and occasionally look down on them as well. Certain areas were identified as especially female: ultrasound and mammography; elderly/medical care wards; physical and mental handicap, and domiciliary community work.

Some suggested men tended to decide where to specialise without trying out several areas first, whereas women recognised the need to know ‘the full nitty-gritty to make decisions’ [8]. By avoiding too much care-work and the most heavily female areas, and on the basis of assumed problems, most men took well-trodden paths into outpatients, high technology and management: several women said men might like other areas if only they tried them. One added that female managers should ensure they did not perpetuate sexist traditions by offering training opportunities to male and female staff on the basis of prejudicial assumptions and stereotypes.

Some female participants recognised their preferred specialities were those favoured by men, but unlike their male colleagues, stressed positive characteristics of their least favourite areas, as if to commend those staff that did enjoy and work in them. They also tended to describe their dislike of slow, emotionally involved ward-based caring as a personal failing rather than as a slight to the work. One emphasised that all clinical areas involve caring, and that colleagues of both sexes provide care as ‘caring professionals’. However, this was caring in the attitudinal rather than practical sense.

I think there’s a different personality that goes into things like elderly than goes into sport...but they have still got to have an element of caring, wanting to help people ...you’ve got to like people and be interested in and concerned in them...that’s got to be in your general nature and for a lot of men that’s in their general nature too [14: 442-451; 565-570].

Professional relationships

Compared to the amount of discussion about job content, the female participants spoke far less about their relationships with colleagues and other health care staff. A large minority said nothing about their intra or inter-professional relationships. However, for many of the women an important part of why they enjoyed their jobs related to 'fitting in': several stressed getting on well with their colleagues, with one describing the 'friendly ambience' of departments [20].

Intra-professional relationships

Several female staff said men were commonly assumed to know more about machinery and have higher technical skills than them: male staff were often asked for technical advice even when more senior, expert females were available. As mentioned above, others spoke about patients' greater compliance and respect for male staff, often referred to as "doctor". Although some spoke of these incidents with amused resignation, many said that what annoyed them most about them was that men often left mistakes uncorrected. Some highlighted how male staff often wore white coats - like doctors - rather than the uniform tunic and trousers of their profession. One said feeding into sexist attitudes and traditions tests relationships between colleagues.

(Although) there are fewer males it is still very sexist...the women wear uniforms whereas the men...they're trolling round in their own clothes...It automatically gives us a sort of subservient feeling ...And probably with habit...I'm called nurse... whereas the blokes will get called doctor...I think there's two tiers in there... Some hospitals are putting male radiographers into uniforms but it's a slow process...It's coming to a head in our department now because we've got our new uniforms and a lot of the females are saying why haven't the males got uniforms even if it's their own trousers but a white tunic top, to just say they are a radiographer [6: 545-588].

Traditional sexist attitudes were not limited to patients.

And often you get doctors coming from the wards and they'll see a bloke and they'll see the woman who might be the Senior 1...and they'll automatically go to the bloke ...it's the old Victorian attitude...it's a slow process for the women to be regarded as equal to the men [6: 600-608].

Teamwork and hierarchies

Several female participants mentioned enjoying working in small teams: for a few, teamwork predominated, although most said they worked alone when treating or examining individual patients. The mix of team and independent work was liked as it provided opportunities for problem-solving plus ongoing 'professional development', whilst still having autonomy and responsibility for patient care and outcomes. A few also enjoyed the social support of colleagues when they got together at the start/end of shifts and at breaks especially when they were the only person from their profession on their work unit.

The team approach is especially common in therapeutic radiography.

I like working in a team...we always work in small teams of three or four staff together...although I like to go off and do a project on my own... work with a group of people...is something the whole job is based on, whereas that is not so much in OT or perhaps physio [24: 211-217].

A few of the female participants said male staff were generally unenthusiastic about teamwork, which they related to them liking to be in full control. They said that if men are not in charge of the

team they prefer to work independently. This was suggested as another reason for men preferring to work in out patient and private sector physiotherapy. A diagnostic radiographer said 'men delegate' whereas women 'muck in' and 'get on with most work that comes their way' [28].

Male colleagues

Despite the irritations mentioned above, most female participants spoke positively about their male colleagues, with one physiotherapist linking her feelings to the way 'they they are good with patients' [10]. One said the men in her radiotherapy department all 'pulled their weight', and it was 'helpful to have men around' [3]; another said 'they have something to contribute' [24]. Another 'liked working with men' as they were 'often calmer and less stressed than the female staff', which meant problems were dealt with better when men were around [13].

But a radiographer criticised male colleagues for avoiding patient work.

There's less eagerness to do the more mundane, everyday jobs...it's probably self-importance more than the importance of the jobs, cos...every examination is just as important to the person having it...Down in Casualty...the women will say "Guess who's been doing all the donkey work?" They're all sat...checking processor temperatures, doing computer readouts but not working with patients...I'd feel guilty walking away leaving a patient sat waiting...but they seem to be able to spend more time finding things to do to avoid doing that, than actually getting on with it. I just wouldn't have the energy to, nor would I want to...to avoid doing a patient...I don't understand it a lot of the time I really don't [18: 584-636; 674-684].

A few had more disturbing tales to tell. One recalled a

male radiographer doing salpingograms who said he would rather stand at the front end rather than the bottom. He'd had this fantastic looking woman come in and he says "30 years old, I love them at that age, she's gorgeous"... I think with intimate examinations like that, they've not found the cut off switch. He couldn't concentrate on the examination alone...The other few, yes they've been all right, but there was another one who was interested in photography of the more lurid kind... you get the odd ones that think it's a thrill to see women [1: 388-426].

Social relationships

It's the people, they're a very nice set of radiographers here...dead friendly, we all get on...there's never a day I wake up and think "oh god, I've got to go to work...I'm dead lucky [5: 224-228]

To some female participants, the good atmosphere in their department reflected shared social values and intellectual level; for others it reflected a common professional purpose. A few suggested patients benefited from the ambience, feeling more 'at ease'.

We've a very good relationship in this department...We have a laugh and that boils over on the patients. They come in and we're friendly and joking. That puts them at their ease. A lot of patients really enjoy coming here for an x-ray [1:320-323].

Comparisons between predominant and exclusively female environments were rarely based on personal experience as few female participants had ever worked in all-female departments.

Those who had were ambivalent, although they said it was 'very different'.

I enjoy working in an all female department but there again I got on quite happily where I worked with men...It's enjoyable both ways, but it's very different, in the things you talk about or don't talk about...the social side [4: 547-561].

Most female participants preferred working in mixed departments: the staff-rooms were nicer places to be with a more balanced gender mix, conversations were different, and 'wider perspectives' considered. Although one saw physiotherapy as a 'fun job with fun people', having more men was 'more normal' and 'added something' [17]. Despite some reservations, a diagnostic radiographer said

I would hate to work in a department where it was entirely women...I generally enjoy the company of men and get on well with them. But professionally they can be bloody frustrating. It's all to do with...it's a bit of a boys code...that what they are doing or talking about is more important [5: 419-466].

Several described their male colleagues as sociable, fun and sensitive. A few said the men generally mixed in and that they thought of them as part of the department. One stressed none of the men she had worked with had been 'hung up males' [9]; another said she liked her male colleagues because they were 'not at all macho' [8].

Some said they thought many men continued to find it hard to work in female-majority environments, often because of social difficulties. One said some women were hostile and made it hard for men to survive their minority situations, blaming any problems in departments on gender issues. Although less common now, she recognised how 'mutterings between women' contribute to men avoiding the staff room and social events [3]. Others suggested men must find it unpleasant to be amongst groups of women as they 'often get catty', and 'sometimes teased the men' [4]. But another emphasised how women engaged in 'good hearted banter' and that men were not threatened by women, but 'embarrassed about being seen as effeminate' [1]. She added that some react badly.

One I worked with recently was completely humourless. You couldn't have a joke with him at all. Everything you said was turned into a political argument...people are different, but I treat people as people really, they're genderless to me [1:535-543].

Some female participants commented on the tendency for male staff to stick together, sometimes to discuss work matters, but mostly for mutual support.

It's this male bonding again, because the men are so few and far between they tend to stick together in their own little social groups...and they just seem to consider their own opinions, their approach to things as (better) than us girls [5: 485-490].

Most female staff said nothing about meeting with colleagues out of work time. A few said that despite getting on well during the day most staff did not socialise together after hours, regardless of their sex. But one said male staff socialise with colleagues less than females. Most of those who did get together after work were recently qualified, single female physiotherapists.

Inter-professional relationships

Although a couple of physiotherapists hated being seen as subordinate to doctors, the female participants generally said little about their inter-professional relationships. However several mentioned being annoyed by the way doctors and male staff behaved together, treating each other as professional equals: doctors' often appeared less respectful of female PAMs' professional skills and knowledge and two-way communication was less. One said this difference was particularly extreme with younger female staff.

I think they - some doctors, consultants - don't take us that seriously because we are young females...I know that the consultants look to A first if he's on the ward round and I'm not sure if that's because he's the senior and been here a long time or if there's an element of the fact that he's a male [2: 640-654].

One said that relationships between doctors and radiographers in private hospitals were even more hierarchical than in the NHS, as there was more of a 'beck and call' culture in fee-paying services; she suggested this also affected the way patients treated non-medical staff [28]: she related the absence of male radiographers in her department in part to the lower level of autonomy and respect.

Conclusions: Experiences of Work and their Influence on Gender Patterns in Specialisation and Career Paths

In this chapter examining experiences of physiotherapy and radiography work, I have again revealed several differences between participants' accounts. There are also some differences shown in the explanations for gender patterns of specialisation. Many of the experiences, explanations and emphases are found to vary by sex, but many vary less systematically, highlighting the inadequacy of biological theories of gender difference. However, a high degree of shared understanding about the main influences on gender patterns in career divisions is evident. The main conclusion drawn from this part of the analysis is that care-work tasks and relationships and professional care are commonly differentiated from each other, and that there are hierarchical elements and gender dimensions within this separation. (see appendix 22 for a summary of findings relating to work experiences).

Levels of job satisfaction for male staff, and male career moves, relate largely to 'trade-offs' between three differently valued aspects of their work experience. These involve problems with different types and aspects of care-work, often in relation to associations with sexuality, femininity and/or female gender roles, and enjoyment from clinical work involving a predominance of instrumental work tasks reliant on technical expertise and providing objective effect. Problems with care work relate to difficulties with emotional and physical involvement, and dislike of work perceived as mundane, unskilled and low status domestic types of work. The preferred profession-specific tasks are associated with high levels of achieved skill, expertise and knowledge, informed by scientific theory, and represent the elements of the work afforded the highest status. They also involve attributes associated with maleness and/or male socialisation, and roles and behaviours compatible with hetero-sexual masculinity. Added to these aspects of work experience, many men describe discomfort and difficulties with being minorities in predominantly female environments and a dislike of subordinate positions.

Female staff move into a wide range of clinical specialities, largely through them generally enjoying and valuing many aspects of their work experience. Generally, they value the role of the different aspects of care-work and have few problems or incompatibility with the gender associations of care-work and different levels of 'dependency' of patients in different areas.

Female staff are also unconcerned by the varying predominance of women in different clinical areas or by the sex of managers.

As with the findings relating to factors involved in career selection and experiences of training, the main findings and key themes of this chapter on work experiences will be considered and discussed in Chapter 9 alongside and in relation to the main themes of the analysis.

I now proceed to the concluding chapter of the findings where I examine the participants' descriptions of their career experiences in physiotherapy and radiography and explanations for gender different careers.

Chapter 8

Experiences of Careers in Physiotherapy and Radiography

Having considered the various experiential accounts of physiotherapy and radiography work and relationships, in this final chapter of the analysis I examine the study participants' accounts of their career experiences and see how this often relates to their understanding of physiotherapy and radiography as female-dominated 'caring professions'. The main areas I cover are:

- career development and ambition;
- specialist rotations and post registration training;
- patterns of employment: hours of work and breaks in service;
- pay, prospects and opportunities;
- promotion, career grades and structures;
- management, seniority, and authority, and
- social and economic status

Male Experiences of Career

The male participants gave mixed accounts of their career experiences, although most considered the same topics: some were generally pleased with their careers and career prospects, whereas others were mainly critical. Most were happy about a few aspects but disappointed with others. Some of the differences in career satisfaction corresponded to the individual's occupation, others varied less systematically. Several male participants described reasons for gender different careers.

Career development and ambition - active plans or passive progression

More than half the male interviewees had been clear for some time about what they wanted from their job as a 'career for the future', and once qualified several continued to plan and execute what was necessary to achieve their goals. However the word ambitious was rarely used to describe themselves or their career plans. Several recognised how their own and other men's career experiences had been influenced to a large extent by their sex, with many references made to the 'pressures to conform' and the best ways and easier directions for men to go.

Several highlighted how their career experiences and paths taken were similar to other men in their profession. Although several male physiotherapists said their choices had been influenced by sporting interests, they more generally described how their careers had been influenced by their broader gender role within society and in particular their responsibilities as primary breadwinners. For some it was these aspects that lead to problems or dissatisfaction with their

career. Whereas several said they had started their careers with clinical emphases uppermost in their minds and foremost in their plans, the financial implications of different specialities and grades had grown increasingly important. More than half highlighted how clinical areas and work sectors varied in status and opportunities as demonstrated by some being much better paid than others.

Several males did numerous post-registration courses to develop specific skills but many continued studying primarily to help promotion prospects and earnings potential; others furthered their career aspirations by moving to hospitals that could provide specific types of experience and rotations or high quality in-service training. A few said they had always been conscious of the effects current experiences and choices were having on their future career.

Most of my time has been in out-patients, even though I've done rotations on the wards...and enjoyed neuro...I was there just over a year...and asked if I wanted to do the cardio-thoracic course...I thought...was I going to dedicate 6 months to respiratory...to lose a lot of my out-patient knowledge and not be able to build up on my out-patient skill and knowledge. So...I was sort of forced to make a decision to do ward or outpatient work...I made a specific aim to go to outpatients [15:547-571].

In direct contrast, nearly half the male participants said they had not taken a rigorously pro-active approach to their career. A few said they had only become aware of, or concerned by, longer-term career aspects of decisions after working for some time. These men were more casual, only deciding what to do as opportunities arose, or on the basis of satisfying short-term preferences. A couple spent time 'travelling' early in their careers, with one delaying his first job to take a prolonged holiday break. The other said he had not wanted to settle down, like most of his male colleagues, who worked flat out to earn lots of money and build up their careers by grabbing at promotion opportunities. Nonetheless he recognised a penalty for his time away: although he worked whilst abroad he discovered it 'did not count as experience' on his return to the NHS [22].

Significantly, the passive approach was not a drawback in the long run, with many male participants getting promotions and success regardless of intention or effort. One physiotherapist recalled being asked if he would like to apply for promotion: he saw this was, partly, because he was a man. Having decided in what to specialise he left the NHS hierarchy to set up his own private clinic.

I never intended or planned to work in the private sector but...it has all worked out very well...I worked in an out-patients centre and became increasingly interested in sports injury work, so targeted courses to increase my specialist expertise...I was asked to do some for friends... and the sports team...as an informal arrangement, gradually increasing...I soon had to decide - it became an all or nothing decision - I had a superintendent 3 job at the hospital and wasn't enjoying it...it was worse as I was the only male over an all female staff... meetings and paperwork, management, not my thing...I had been asked to do it and couldn't really turn it down... very surprised to be asked although it was probably more to do with the other possibilities being less suitable...and more neutral than the other man [27: 40-68].

Several male participants spoke about progressing through the career's ranks through 'time served' and continuity of service. Continuity was seen as valuable to a successful career, providing considerable experience and showing long-term commitment. Indeed some had no specific career plans beyond an intention to stay put for several years. Relatedly, it is unclear as to whether the two men who took career breaks to travel abroad had both taken these at the

beginning of their careers because of a prior awareness of the detrimental effect of breaks-in service on career prospects.

A few males suggested that in addition to showing commitment and building up experience, achieving promotion still required effort. One recognised he may have to move hospitals to reach his long-term ambition to be a department head.

You progress through the profession, promotion or whatever, depending on how far you want to go...Obviously one has to have the experience within the profession before you can get that high, which is why it is advisable to come in at an early stage ...I have possibly 20-25 years left in this profession and I would like to think...and it may mean moving...but I am quite prepared to do that, I'd like to get to the point where I could be a superintendent of a department [16: 553-572].

Patterns of employment: maternity leave and part time work. Gender advantage or discrimination

Although a few male participants recognised different work experiences for male and female staff in terms of long-term continuity, related mainly to 'career gaps' for maternity reasons, most did not describe senior management's preference for an uninterrupted career and full time employment as an unfair advantage.

There's more men in management...proportionately than women, but I think that's due to the fact that men haven't got children to look after and maybe have a career gap...so men therefore climb up that much quicker. I don't think that it's due to positive discrimination...I think it's just...there are maybe more advantages in...not having to take career breaks...I'm not saying it is an advantage because he's a man, it's only an advantage because he's got more experience, because he's had more time to build up that experience. I think if you didn't want children probably you would have the same chance [25: 757-777].

However, with more women returning to work after short maternity leave breaks, a few male participants recognised that their advantage in promotion was declining. One radiographer who said he had 'just progressed over time' to the highest superintendent grade recognised 'things have changed dramatically': with fewer posts open to men because of the lower 'numbers of women leaving for family reasons' it wasn't as inevitable that men would rise to the top.

Although a connection was made between hours and promotion - especially beyond the Senior 1 level - it was not mentioned by any of the men as a gender role issue, even though a couple acknowledged most part-time staff are women with children. One of the two male NHS part-timers in the study mentioned how he had been down-graded from a Superintendent 3 to a Senior 1 grade job when he reduced his employment from 5 to 4 days (to do private work); the other also recognised his career prospects were limited as a part timer but the reasons he gave for staying at a low grade were related to his health. As such he thought he had been treated well by management and was fortunate to have a job at all, whatever the grade.

Whilst several understood men's enhanced promotion as a gender 'advantage' and some saw this showed how a predominantly female profession provided an 'easy career for men', very few mentioned discrimination: nonetheless one acknowledged reaching the top could involve male bosses providing jobs for the boys.

I think that if there is already males on the interview panel perhaps they are more likely to give promotion to a man. Especially if he's done courses and researched, and men tend to perhaps be more ambitious than women, male aggression or something, wanting to prove themselves or whatever [19: 806-828].

Pay, prospects and opportunities

The biggest career issue for the male participants, being the topic most frequently and extensively discussed, was money. Only two mentioned nothing about finance in their interview. One was a single man in his early twenties, working in his first physiotherapy job since qualifying; the other was a diagnostic radiographer who had reached the top superintendent level but then left hospital management as jobs were cut back.

Despite being a very common topic, a number of different views were expressed about pay levels and prospects. For more than half the males, money was a problematic part of their career experiences. For a few it was such a big concern they spent a large proportion of their interview talking about it, coming back to the subject many times and in different ways.

A large majority related their discussions about money to gender: the professions' income levels were often criticised and seen to suffer from detrimental assumptions relating to the work as 'caring' and therefore women's occupations. Many spoke about the negative consequences for men working in non-traditional gender roles often referring to the notion of the male breadwinner.

It's relatively badly paid...I know as a man with a wife and two children to support, a mortgage etc...For women the salary isn't as important because they either live on their own or haven't got dependants or whatever, or it's a second wage [12: 467-476].

One physiotherapist said that although he was personally satisfied with his salary, he recognised money was problematic for men with families to support.

I think a lot of it is to do with money, because a lot of men still are the breadwinners and particularly men with families...I don't have a family or plan to have one at this point so it isn't an issue for me [23: 352-363].

Only a small minority of male participants were satisfied with their pay and financial prospects. Although a couple of these were married, none mentioned having children to support. A diagnostic radiographer, whose wife also worked as a health professional, also thought the money good. As a double income household he emphasised

It's a reasonably secure job and the money is good and I come to work to allow myself to enjoy myself outside...I've categorised where I want work to come in my priority of things...it's a means to give me enough money and enjoyment and stability to do other things...We have to do on-call sessions ...and it's more money, as it's overtime...I don't want to do them but...that little bit of extra money helps us enjoy and afford doing the things with my wife [22: 484-522].

One therapeutic radiographer said

It's more than adequate for me...the starting off pay is £12,025...Now that in my mind is a comfortable salary...and as you progress through the profession... depending if you want to...to regional superintendent, divisional superintendent, the money's there. You can earn in excess of £60,000 comfortably...at that level...but money's not everything...it's not so important to me [16: 547-583].

Despite money being described as the 'main motivator for men' [12], and the widespread recognition of difficulties fulfilling the breadwinner role, more than half the male participants said

money was not their most important concern for either job satisfaction or a 'good career'. A couple stressed their career experience was good because of its compatibility with their religious convictions; one referred to his wish to 'give something back to my community' [16], and another said he was happy because he could balance his career with his 'life and social interests' [22].

Prospects and opportunities

Although not everyone's main concern, most male participants were critical of their careers as low paid in the long-term. Many mentioned problems with the NHS career structure and pay scale and several contrasted their career prospects and long term pay growth with other professions.

I think physio as a profession is badly paid...not necessarily the starting salary, but the potential of financial rewards within the health service, in the future...You start with Basic grade, Senior 2, then...four years as a Senior 1 and that's it as regards increments. I've been on the top of Senior 1 totalling 5, 6 years so...I've stopped getting any extra...It cheeses me off...after 10 years or so...I'm not going to get any more increments, whereas if I went into the police force, or even as a teacher I'd get annual increments for much, much longer. The potential to earn more without going into management and stay in it clinically is better elsewhere...in the health service it's difficult to progress [12: 862-888].

Despite common dissatisfaction with income levels and prospects, all the male participants were positive about other aspects of their career. Between them they mentioned a wide range of positive attributes including the plentiful amount of jobs, both in the NHS and elsewhere in the UK. Many also valued the opportunity to work abroad, with an internationally recognised qualification. Despite criticisms of the NHS career structure, careers in physiotherapy and radiography stayed rewarding in the long term as even low grade positions were neither boring nor 'dead end' jobs. A few highlighted that the continuing opportunity to study and develop skills contributed to long term job satisfaction.

Managerial and clinical careers: differences by occupation

Substantial differences between the financial opportunities and career moves of male physiotherapists, diagnostic and therapeutic radiographers emerged with regard to promotion, clinical specialisation and the public/private sector.

Physiotherapy

Like several female participants, a few male physiotherapists noted promotion beyond the Senior 1 grade in the NHS invariably means little clinical work and a predominantly managerial-administrative role. Many preferred the opportunity to earn considerably more in a clinical career working independently in the growing private sector. It was widely acknowledged that most men choose out-patient, orthopaedic/sports injuries specialities - areas with higher proportions of men than the NHS generally, and with a more dynamic and prestigious image than 'caring' - so all that is needed is staff grade experience and training to develop the necessary skills before moving into better paid employment. However, many only work privately part-time, at least in the first instance: some male participants worked evenings/weekends on top of their full-time NHS job and others had two part-time jobs operating in series within the more conventional 5 day week. Either way, private work increased income above that of full-time NHS employment. Although a poor career in terms of remuneration, the NHS was nonetheless recognised to provide good professional support and usually covered the cost of specialist training courses.

For physiotherapists who chose not to work in orthopaedic/out patient fields, private sector options were not available. The interviewee most frustrated by his poor prospects and limited choices said his options were to either stay on low NHS pay working in paediatrics, or move to better paid management. However, others who were less disgruntled mentioned there was also the possibility of teaching or research, although that still involves leaving clinical work. A few also noted that whilst they had seen disproportionate numbers of physiotherapists working at Senior 1 and lower level Superintendent grades, very few male staff chose to stay in the NHS and go into the most senior management positions. One said this was a shame as it would be 'good to have males in higher positions' as they were 'responded to more by a lot of the old school executives' describing NHS management as 'more male-oriented' [15].

Radiography

There were several differences between the two radiography groups' views of current pay and both financial and clinical prospects.

Although both branches share the same career structure/hierarchy and pay scale - along with other PAMs - the (albeit small number of) male therapy radiographers were generally more positive about their current career experiences and future prospects than their diagnostic counterparts. This was despite the former having fewer clinical areas from which to choose a speciality, and no overtime work. Overall, much less was said about career experiences by the therapists than diagnosticians.

In contrast to physiotherapy, the self-employed private sector option was not available to radiographers, from either branch. Although private hospitals employ diagnostic radiographers, no male participants worked in, or mentioned it as a career option.

For the male diagnostic radiographers, career advancement and its associated increased remuneration was generally very important, and recognised to come quite quickly to many through promotion to senior positions in the NHS hierarchy or by moving into education. The majority acknowledged the higher ratio of men to women in senior and superintendent appointments and most, but not all, saw promotion as the best way to earn a reasonably good income as a male breadwinner.

Attempts to reach the top grades as quickly as possible - by doing lots of courses and getting innovative ideas and expertise recognised - were therefore widely accepted and seen as almost inevitable. However, some preferred to move up slowly, gradually acquiring a solid base of expertise. A couple added that although money for senior staff was much better, job security was lower in the top managerial posts, due to financial cutbacks.

Several diagnostic radiographers - and some physiotherapists - stressed that men were under considerable pressure to conform to gender role stereotypes and were expected to have ambitious career plans. One who personally rejected what he saw as a 'mainly social pressure' questioned whether men generally want the greater responsibility of a high level job [19]. Whilst he accepted a lot of male radiographers - and some women - enjoy the 'ego trip' of being 'in charge' of junior staff, he suggested many just want or need a higher income. Many simply went along with the expectation that they would scale the career ladder finding it quite easy to do.

Whilst he had to put up with 'frequent remarks' from people of both sexes who thought he ought to go for promotion, he preferred to stay as a clinical, non-specialist Senior 2 and resisted 'the pressure to conform', despite being frustrated by the financial penalty. Instead he did

a massive amount of extra duties...because I couldn't manage without the money... All the male radiographers do it...and some of the females, but some don't, presumably because of their kids or their husbands earning enough for them not to need...The only other people who don't are those at the higher grades...The basic salary isn't very good in comparison to other people of a vaguely similar kind of profession... When I compare what I earn to friends who...got the same kind of qualifications...they are a long way ahead. I'm perhaps drawing even with the amount of overtime I do, but I'm always working weekends and a lot of nights and getting called in from home in the middle of the night...It's okay if you're single with no commitments but...if you've got a family and a mortgage then I don't think it's very good, in relation to a similar professional sort of job [19: 507-564].

Social and economic status

Income levels were assessed by many male participants not only for their economic but social value: most male participants highlighted how their income and income potential was low in relation to similar or equivalent professions and emphasised the extent of their knowledge and length of training, the complexity of skills and valuable effect of their treatment and/or diagnostic work. Nearly half also mentioned how the pay was low considering their levels of autonomy and responsibility.

Many of the males' criticisms of the professions' remuneration were not so much about pay levels in relation to fulfilling the breadwinner role per se, but more about getting what they considered a middle class, educated and skilled professional (man) should earn. Their income was widely seen as an objective indicator of their (undervalued) social prestige and status. Even those who did not consider their own income level a problem, recognised the professions' relatively low pay in comparison to other professions and understood it in socio-political terms.

As such, career experiences and satisfaction relating to professional identity and status were discussed largely in relation to economic rewards by most of the men, with half saying very little about non-economic aspects of their professional career as free-standing topics: professional issues such as amounts and experiences of responsibility, autonomy, authority and knowledge were invariably tied to comments about resource implications.

Gender and status

A large proportion of the male participants recognised their problems of relative low pay and status were a direct consequence of them choosing a career in a traditionally female profession. Whilst some related the 'knock down' pay levels and limited career structure to the low economic value and inferior social status associated historically with women's occupations generally, and feminine, unskilled caring work especially, a few linked poor remuneration and professional recognition to female physiotherapists and radiographers rarely being militant, even in the modern 'feminist' era. Individual apathy and 'professional inertia' was related commonly to women's 'secondary wage' role. Several said that nearly all their female colleagues were much less bothered than they were about pay, as it was of less importance.

It's historical...I think the reason physiotherapy is badly paid, is because they're health care workers...and predominantly female professions ...It goes back over the years...I think it will

always be a problem...because we've been female dominated profession and females...are usually single or second wage earners...We need more men in to get the staff motivated...men who are the main breadwinners and their salaries matter a lot...to make them pro-active [12: 903-907; 1075-1084].

They don't put their foot down where their rights are affected, like at the moment with the pay situation they don't seem to stand up and be counted. So it's almost like they let things happen...I think if there were more men there would be more impetus. I think females are less militant ...when it comes to things like pay men are more likely to take strike action or do something about it [7: various lines].

For some, the vicious circle of low status, poor pay and inadequate recognition of knowledge and expert skills also related to the small numbers and 'low profile' of their professions, especially compared to nursing and medicine. Whilst physiotherapy was seen to have benefited from a significantly improved public profile, radiographers were concerned about the negative consequences of being relatively unknown. This particularly concerned the therapists who attached great significance to working in a very small profession. As such no male participants identified their limited numbers as grounds for being promoted as an 'elite occupation'. However, several highlighted how the number of recruits is linked to the number of staff needed by the NHS thus providing safe almost guaranteed employment. This was identified as a valuable career asset.

Several males said the professional image and status had improved in recent years when (coincidentally?) more men had joined their professions. A few mentioned the failure of historically weak, largely ineffective professional associations to improve the professions' profile and career. A couple recognised more assertive, campaigning work had more recently been undertaken by their respective professional bodies to fight for better pay and conditions and improved career structures, as well as having better promoted university based education and degree qualifications. Several also identified how a higher public/media profile and academic-research reputation had increased and improved awareness of what their work involved. This was thought an effective way to build respect for their skill and thus enhance professional reputation, status and career. However, despite these improvements, pay levels still lag behind those of other professions. Being seen as 'caring professions' and 'female-dominated professions' meant successful claims for higher professional status had not extended to better money, the male measure of a successful career.

Non-economic issues: careers with professional status

As the experience of status was recognised by many of the men in economic terms, it was rarely described independently of money matters. Nonetheless, characteristics of professional status such as autonomy and authority, self-regulation, respect and scientific knowledge, and differences between private and NHS sector careers were mentioned occasionally.

A small number of male participants discussed the status of physiotherapy/ radiography in relation to other health professions in terms of a complex 'health care hierarchy'. As 'professions allied to medicine' both were seen as subordinate to medicine but superior to nursing, partly because of their different but connected histories and roles as care providers, but also because of the working relationships and referral processes between professions. A few also recognised a strong gender element within the hierarchy.

Medicine it's still got the hierarchy...they still sort of dictate low down...it's still a male-dominated area in the fact that it's...“We'll tell you what to do”. And a lot of the time physios, nurses, have to rely on what the doctor, the consultant says, so in that respect medicine sort of mainly dominates, by the fact that more males are there, so therefore they've got a higher profile as well [15: 859-867].

Increased managerial authority and self-regulation, the growth of clinical specialist grades and roles, and responsibility for autonomous work with patients - particularly in private sector physiotherapy - along with the more equal and respectful relationship with individual doctors and the medical profession generally, were recognised by several of the men as recent, substantial and generally welcome changes. These represented important elements for a personally satisfying and intellectually rewarding 'professional career' to most, although discussed less extensively and passionately than monetary issues.

One described his career in terms of changing roles and responsibilities, both for himself, his profession and the NHS at large.

When I first started the rules and regulations were much tighter...being questioned by the doctors all the time...checking up on us...there to do whatever they wanted ...nowadays radiographers are much more assertive and will stand up for themselves and the patients ...By 1975...there was more and more responsibility for administrative duties, perhaps not budgetary decisions...but ordering...Then with the amalgamation of three departments...I was in charge of sorting it all out...to get the service to work...Over the years we became responsible for our own budgets...I still did some clinical work but that got less...junior superintendents...were just responsible for those in their clinical area...Then 5 years ago the Trusts came...with business managers and directorates...now I spend my entire time on management and service issues...I never would have envisaged the way either technical or management aspects would have changed so much [30:119-205].

Female experiences of career

Compared to the male participants, the females were generally more satisfied with their careers and more positive about their prospects and opportunities. They emphasised and prioritised different aspects to the males and contrasted the sexes' career experiences, satisfaction and orientation more often and extensively. Although the vast majority said something about monetary issues they did not attach such social significance or personal importance to money as the males. Instead many focussed on status-related issues in non-economic terms, emphasising the importance of working in careers that remained interesting and fulfilling in the long term, by virtue of their autonomy, knowledge and skill, as responsible and respected professionals. However, several spoke about differences between women and men's careers and identified many components of disadvantage and discrimination as important issues in women's professional careers.

Despite dissatisfaction related to gender discrimination, most female participants were settled and happy with their careers. However, a few were disappointed and/or frustrated: one diagnostic radiographer said she was probably going to leave because of her increasing dissatisfaction.

Career development and ambition

Many female participants said they, and most of their female colleagues, were far less ambitious than their male counterparts. Some suggested that whilst most were keen to progress, women's

concerns involved developing a clinical career that was interesting, rewarding and valued - by patients and other health professionals - in the short term, and respected and intellectually demanding in the long term.

You can still be ambitious and yet still...be assessing and treating this and deciding what you are going to do with patients. Even on the wards or down in the department you are organising yourself...and interacting with the doctors and nurses [13: 596-600].

Female ambitions contrast with male: the vast majority of female participants were far less interested in achieving highly paid or powerful positions, recognised as the foci of 'conventional' ambition. Some mentioned women having lower grade appointments because they balance professional and family life.

There are a lot of good radiographers that have been qualified 10,15 years and still only at junior grade...only one man has stayed as junior grade, the majority are women. Because they are quiet and settled in their home life and...have a more balanced view...They consider their home lives just as important, if not more important, than their profession. Although...they're glad they are working...If you have the attitude "My career is more important than home", then you dig your heels in and get on with it [5: 495-510].

(Men) go for promotion earlier than we would...I could never see myself as head of department because I don't want...that kind of responsibility, but...they go for it more than we do, just to go to the top...they're more assertive from that point of view [8: 578-589].

In being less ambitious, women were often less proactive than men and most female participants said they responded to rather than set up opportunities: many valued experience over speed. They spoke of 'gradually progressing over time', 'by chance' or 'by accident', and tended to 'just go along': they thought about promotion when they 'got bored', 'felt ready for a change' and had 'enough experience'.

Specialist rotations and post registration training

Commonly the female participants referred to appraising clinical areas *after* they had done a staff grade rotation in it, to decide if they had enjoyed or been good at the work. These were the main criteria in deciding if they wanted to develop a specialist expertise. However this was a fairly haphazard approach, as many women tended to only think about whether to specialise or go for promotion once a vacancy was advertised. Only rarely did they build up their chances in advance by attending courses or moving to hospitals/clinics that provided rotations with a narrow, more specialised focus. Indeed a number of the women mentioned how they had deliberately kept a wide range of options open for some time as they didn't want to close down options prematurely.

A couple were concerned about managers' increasing preference for validated courses and certificates to get promotion, as it tended to devalue experience: they saw this trend favours men who often have more time to study. Men tend to always be 'working on their careers', by going on lots of courses and doing more out of hours work and were often described as more dynamic than women.

They seem much keener to do courses...a much more set pattern of what they are going to do and where they are going to get to...more ambitious really...doing a bit at the sports club...when you go for a drink they say about their plans [13: 433-442].

Men's career orientation also meant they were more likely than women to move around the country for promotion, even if it meant uprooting their family: achieving a successful career was seen as a higher priority for most men than most women.

Management, seniority and authority

A few female participants mentioned that many men spend time discussing technical issues and developments rather than quietly getting on with the patient work. They were seen as busy getting their ideas, face and name known to those in positions of authority, so they could get to be in charge.

They're the ones who come and say "lets do it this way" or "lets change that". They tend to get noticed by the people who promote them, whereas a girl who is taking about 20 patients and helping them get undressed doesn't...So they can shine in someone's eyes then, when that promotion, that job comes up [4: 384-391].

Several females suggested that high income was the main factor in men's ambition, and that courses men choose are commonly in areas linked to jobs with better pay and promotion prospects. Another important aspect - again contrasted for the sexes - was the desire for power and authority.

One radiographer recalled how superintendents were treated like gods - and often behaved - in the early years of her career. Whilst juniors did the patient work, 'the gods', worked closely with radiologists, as partners directing the radiographic process [1]. Although lower grade radiographers now have more contact with doctors, in the past it was exclusively between consultants and the heads of department. Both had different areas of responsibility and control, but they shared mutual territory and were co-dependent. As such this participant considered the superintendents saw themselves on an equal footing to medical consultants, in positions of authority and enjoyed considerable power and influence. She added that both partners were nearly always men, and recognised gender as an important dimension of the relationship.

Although several female participants said they wanted and enjoyed having a career with some authority, this mainly involved having the power to produce an effect through the autonomous application of knowledge and skill. Power and authority were implied through working as experts, and as responsible professionals. Many said these were the most important elements of their long-term job satisfaction, particularly as they increased over the years.

I like to be in control of...what you are doing, who you see and when...I'm an organiser...having your own caseload and going off and doing it...I quite like that. Whereas I'd hate someone telling me..."Now you go off and do this and this and after you've done that..." (Also) the patient contact...knowing you are making a difference...I like the thought of being the one on-call for the hospital, going up to intensive care [13: 385-400].

For many female participants, the successful and satisfying career involved various aspects of 'being a professional'. For some, their enthusiasm to reach and enjoy senior grade positions was because it involved greater responsibility for patients and staff, with an increased management and teaching role.

As I'm getting higher this job's quite managerial...and I like that...I like the teaching ...and helping out the staff physios, having that bit more responsibility. But I don't think I'd go any higher than Senior 1...I still like the patient contact [13: 400-407].

You've autonomy in radiotherapy...and if you're a senior grade you've got sole responsibility for that course of treatment and supervising, training the junior staff...it's up to the radiographers to make the decisions... whether to continue treatments in the times between the doctor appointment [3: 144-148]

But a number stressed they did not want careers with too much responsibility, preferring not to have primary control over patients or staff. Many enjoyed being, or wanted to become clinical team leaders but the vast majority did not want to be top-level managers. These notions of female ambition for authority in clinical careers were contrasted with male ambition that related more to managerial aspects of authority as leadership. For some female participants this difference partly explained why more men moved away from patient work into positions with management responsibility.

They like to have a lot of power...having the autonomy and the power, that's what they are after. Being a (clinical) physio is not seen as that...not being in charge [2: 434-438].

A few emphasised that although management posts were at the top of the career structure it did not mean they were more difficult. One radiographer said she found her superintendent job was easier than the Senior 1 clinical grade as it was 'less stressful': it was 'possible to escape into your office and shut the door' when situations got 'tricky' [20]; another mentioned the 'common view' that superintendent physiotherapists were often in management *because* they were poor clinicians [13].

Women at the top

Men...are more determined, they're more ambitious, to be managers, because it's more money, and it's better status isn't it?...And there are some women who'll want to do that, but most don't, definitely there is a bias [9: 523-528].

Some women were seen as ambitious to reach the top of the career ladder. However, they were often described as an atypical, small minority, being 'hard, ambitious and usually single', having 'more drive' and 'career women'. A physiotherapist referred to one of her colleagues as a 'fast track, ambitious woman' and as such considered her 'like the men' [13].

But 'drive and ambition' were recognised as not the only factors affecting women's promotion. Indeed, nearly all the women in the study who were Senior 1 grade or above, were either single or married without children and had worked for many years in full time work without career breaks. A few highlighted how their prospects had been stymied by only being able to work part-time after having children: several recognised part-timers were all but guaranteed an upper limit of a Senior 1 appointment, but most worked as Senior 2 or staff grades. This was often despite many years of directly relevant experience and in some cases an impressive CV filled with post registration activity. They said the 'career ladder was bigger' and 'harder to climb' for women than men, and their 'promotion was very slow' [6]. They went 'back to the bottom of the ladder' after taking time off and 'lost vital contacts', which were seen by several women as important for getting a 'foot in the door' [9].

A senior superintendent recognised she was a rarity as most people at the top of management scales were men. She did not describe her lofty career as one involving determined efforts and high ambition, but said it was the outcome of a 'long career in departments with very few men' [3].

This had been facilitated by 'swapping family roles' with her husband, so she had not taken career breaks.

Several radiographers mentioned how most female bosses worked as lower level managers, with very few as heads of department, or in hospital or regional management; a few also highlighted how women mostly headed less prestigious specialities which often had few, if any, male staff. All succeeded in reaching (lower) management for easily identifiable reasons, and still worked clinically. One described angrily how

One's in breast screening so they can't stop her...that's one area men can't do...and most blokes put breast-screening down because it's an area they have no control over...So it's a non-entity, a two-bit job, it's only good enough for women...They disregard it as highly repetitive... which it is, but you have to be absolutely brilliant in your technique...work at high speed...always get it right first time...But to put it in their terms, "Oh it's just x-raying tits, it doesn't matter"...I think some of it is jealousy...or a lack of understanding through ignorance...So if you are a superintendent in breast-screening then you're not a real superintendent, because you're only head in that area... A lot of the time she doesn't get invited to the superintendents' meetings...The other...is in ultrasound...the radiographer input is basically female, so that's where females get promoted because it is more predominantly female than radiography generally. The only other...is in CT and that's basically because she's worked there so long and she is so good they couldn't not give her a superintendent's job...They've all worked full time...and if they've been away they've been back a long time back...so they've got on, *despite* being a woman [6: 648-718].

Despite (men's) negative attitudes to female-dominated areas, none of the female participants mentioned any instances of men being overtly disrespectful to their female managers.

Men at the top

Despite the small number of men in the professions overall, all the female participants had experienced working under male managers. Nearly all said they had soon recognised the disproportionate number of male managers, with an increasing bias at the highest grades; nonetheless, many spoke of the phenomenon in casual terms that suggested it was not only frequent and obvious but also seen as inevitable, normal, even natural.

My boss was male, the head of department...the only man...when I first started...I worked with three males, and my head again was male...It's funny, the head of my department is male and the two bosses before were male...I don't know...they're just more assertive [8: 298-300; 582-58].

Whilst some related men's higher position to their levels of ambition and efforts, for egotistical or family role reasons, many females highlighted other reasons. A substantial proportion spoke critically of 'men's meteoric rise in career' and added that despite the rapid ascent many left their jobs, still unsatisfied with their lot. However different patterns emerged for the two professions: male radiographers were still the large majority of department heads, despite some leaving the profession, mainly to work in better paid commercial and/or industrial science-related jobs; in physiotherapy there were more women in top appointments which was explained by the very high ratio of men leaving after reaching Senior 1 level, most often quitting the NHS for the private sector. In both professions, a large proportion of men felt 'stuck in the NHS and could earn more elsewhere' [6].

Despite the numbers of men leaving the NHS, several female participants said that many bosses still favoured men over women, as 'men don't go off on maternity leave'. One suggested 'bosses

need to have a belief in a person to promote them' [5], and as there was a long-established 'male-dominated hierarchy despite all the other structures being female' this invariably meant 'men favour other men' [1]. This was seen as unfair and discriminatory, as women often got 'passed over': consequently, they had to

Really claw their way through to get there...to make a fuss to be able to get on the courses, to take up opportunities, to do the...new skill mixing...Of the people who did the courses for the new (techniques), they were both men. There were women in the department who were perfectly capable and would have been just as good... but they weren't approached... The clinical director, he had particular people in mind that he thought were good and yes, they were perfectly capable, but there were women who were just as capable and didn't even get considered [5: 576-593].

Whilst several recognised discrimination, there was little they felt they could do to challenge it. A radiographer said 'I don't want to feel victimised' as she explained her own and other women's reactions.

We tend to just accept it, a bit laughingly really, to try not to take it too seriously, otherwise you could get really pissed off about it...so we might make the odd snide remark about how the next promotion will go...to the next set of testicles, but really we do accept it a lot. We accept it as the done thing, even though we may not like it, and occasionally we'll go out of our way to say we don't like it. But it's such a historical ingrained thing you've got to accept it to a certain extent, otherwise you'd just feel constantly frustrated, at work, all the time [5: 596-608].

More optimistically, a physiotherapist suggested that although there was still a problem, it was getting harder for men to 'winkle their way up there', as increasingly more women have

The drive and will easily stand up for themselves and say "No way!"...And there are a lot of single-minded women, focussed on what they want... It's just in the past they haven't been given the chance to be like that and go for top jobs [11: 606-613].

Individual men

Although many female participants were critical of men's enhanced career opportunities and criticised men who were especially ambitious, finance and power-driven, several stressed they got on well with the men they had worked with, as they were quite 'docile and reserved' rather than 'thrusting, egotistical types'. Despite their negative feelings towards men as a group, men as individuals were described positively, as well qualified and likeable, hard working and motivated. In contrast to men having gender/sexual identity problems with being identified as caring/carers, some female participants indicated being impressed by men who care, even if this is mostly 'about' rather than 'for' patients. Indeed, one of the most vehement critics of sex discrimination said

I've worked with some brilliant male qualified physios. I am at the moment, he's my senior and there's no problems...at all. He gets right in there [2: 491-493].

Patterns of employment

Part-time work

Part-time work and its effect on careers was mentioned by several female participants, and far more often than by the males. Whereas male participants saw part time work as an unproblematic opportunity, females expressed divergent views.

Some described part time work as a bonus as it means these professions provide good, long-term careers for women. Compared to many predominantly female occupations, physiotherapy and radiography are far more interesting and rewarding, and several said it was good to be able to continue working in a professional career after children.

Women tend to stay here cos it's, you can get part-time work, you can have your kids and you can come back with two days or whatever, and a lot of women in the department do that [24: 633-636].

A few mentioned how they were surprised by the limited number of part-time jobs in their professions considering the predominance of women. Despite staffing problems for management and wastage to the NHS from women leaving careers soon after expensive training, the conventional notion of a professional career as a full time commitment prevailed. Some of the longer qualified staff recalled there being no part-time jobs at the start of their careers and said that when they were first introduced - mostly in the late 1980s - the women in those jobs were often poorly treated and considered inferior amateurs, dabbling in the profession for something to do, or for 'pin money' [17]. The convention for full time careers lasted longest in physiotherapy and negative attitudes to part-timers were reported as ongoing in some departments to the current day.

Several females highlighted other negative aspects to part-time work: the jobs were widely seen as incompatible with management responsibilities and a few said the requirement for full-time managers is a questionable tradition and to some extent represent a male conspiracy.

But a few females suggested that although many part-timers and job sharers had long-term experience, they were often less up-to-date with their skills and out of touch with professional developments, as they rarely attended courses or departmental training. Although part-time work fell to women by virtue of traditional parenting roles, lower grading was 'reasonable in most cases' as it was 'better for the department': as such it was viewed as unfortunate for women rather than sex discrimination [6]. Nonetheless it was acknowledged as unpalatable, and the question of part-timers rarely being offered course places was considered an important part of the equation.

As indicated above, some female participants accepted their disadvantaged career positions as an inevitable outcome of their primary role in the family. But others were angry about women's restricted opportunities and wanted change.

As it is, all the men get the top jobs and women, no matter how qualified, end up with the lower paid jobs because they often...come back part time after having children...It makes me really angry in a profession dominated by women that there isn't provision to go and have babies and come back...in a job share...at an equally senior grade. They suddenly drop down a grade and start to be messed about, put to fill in the gaps rather than given their own ward...penalised for going and having children. I think if there were more males it would be even worse, well it can't get much worse, but there wouldn't be anything about it addressed at all [2: 670-688].

Career breaks

Generally, breaks in service were seen as damaging to prospects, above and beyond a delay in promotion. Several female participants suggested maternity leave was seen as a nuisance by management as it required them to organise cover. Even the expectation of women taking

maternity leave was seen to influence managers: women were assumed to have low work commitment and bound to leave to have children at some stage.

Of the people I trained with, the men have done better and got higher... There is the obvious factor that a lot of women after a while get married and when they have children take maternity leave...so they are employed under different circumstances. No employer is going to see two people the same if one is pregnant or if they are going to lose her for nine months or whatever, even in five years time... They value someone who is going to be there, someone you can rely on more [28: 93-101].

For radiographers, because of the dangers of radiation, the period of maternity leave was extended. The general negative effects of breaks were therefore aggravated. One recalled how she was pregnant when she graduated which delayed the start of her career for more than a year. She found it very difficult to get her first job and had a precarious start to her career as a part-time locum [5].

Breaks in service to travel abroad were mentioned by a few of the women, with two mentioning personal experiences of this. Neither recognised any downsides to this type of break from their jobs and both had their jobs kept open for them, one as a Senior 2 and the other a Senior 1. Despite the different consequences of maternity leave and travel breaks, no participants of either sex identified a gender dimension to the attitudes to and management of different types of break in service.

Clinical specialities

No particular clinical area or type of work was identified as a particularly popular career choice, targeted by a majority of women. The female participants worked in many different clinical areas, in outpatient clinics, the community and in acute and long-term hospital services. A couple of physiotherapists did a small amount of private work in addition to their part-time NHS employment, and two diagnostic radiographers worked in a private hospital. Although many were specialists, a large minority were generalists. This broad distribution was recognised as very different to the narrow range of clinical placing of men, where opportunities to earn more and have greater power and influence were seen as the major concern and restricting considerations for many. None of them could recall any men working as Basic Grade staff beyond the first few years of their careers and they knew of only one who had stayed as a Senior 2.

One physiotherapist said she had seen quite a few men who had initially liked ward work, but for financial reasons and, to a lesser extent, a problem with the feminine and non-authoritative image of caring for the sick, all moved away into out-patient/orthopaedic specialities to increase their chances of private work. But a couple mentioned how, in recent years, more men were going into neurological 'specialist rehab units': they enjoyed the challenge of 'working with strokes' and the focus on rehabilitation rather than 'caring', and liked the predominant role of physiotherapists within the team. 'Neuro rehab' was 'on the up', as an increasingly prestigious and popular area in which to specialise: consequently, it was attracting men [17].

As indicated previously, women's career moves were not only governed by therapeutic aspects, but also involved considerations regarding the varying levels of autonomy, responsibility and respect associated with different clinical areas and grades. This was an important aspect of being recognised as professionals: the status of the work mattered to many women.

Out in the community it's much more holistic, you are involved with the person as a whole, in their own environment...we rehabilitate...we assess ...Doctors in the community have a far different attitude to us than those in hospital, where doctor is still spelt G-O-D and everyone else is below. A community doctor quite happily comes ...to ask your opinion where that never happens in the hospital situation, never in a million years. Here we are treated as clinicians and diagnosticians, not just technicians...If more people realise how autonomously we work...make our decisions and stand or fall by them... then the cudos will happen [21: 632-668; 805-843].

Another mentioned how her choice had been influenced by the ease with which different areas fitted into her life: she wanted a flexible, part-time senior position and therefore needed a speciality where she could organise her own schedule. She too decided to move into the community.

Pay, prospects and opportunities

The female participants discussed financial topics far less than the male, although all except the highest paid woman in the study said something about them. They expressed mixed opinions about the levels of remuneration, and considered pay and financial prospects in relation to the levels of education, skill, autonomy, role and effect; other occupations and professions, and the different social significance and personal importance of money to women and men.

Women and men having different priorities was widely recognised as the root cause of many of the gender differences in careers: money was the top priority for men in their plans and moves within and out of the NHS.

In the career patterns and the way they actually progress, I think it's the financial element...the job opportunities, in terms of up the scale, but also in terms of diversifying...I think the earning power is much, an awful lot more (important)...I know these things are stereotypical issues in terms of gender, but they still go on...they are still important [24: 537-569].

Although several spoke negatively about men's financial priority, the majority recognised that men and women' have different social and economic roles and responsibilities and that these influence their ambitions, priorities and opinions about current and future earnings.

Many said money was a fairly low priority for most women, and more than half said they thought their pay level was reasonably good. However, most qualified these remarks with reference to the fact they were women, were single or had a partner who was also working. Very few considered the adequacy of earnings without provisos, although they all agreed physiotherapy/radiography is not a high paid career for anyone.

However, one suggested that pay becomes an increasingly common concern and source of dissatisfaction for women 'once they reached their thirties' [28]. As very few students mentioned the role of money in their career decisions and of those that did, most gave positive assessments, and most of the critics of the pay and prospects were out of their twenties, this view seems plausible.

Although never the primary concern, some of the women talked about money as contributing to their career satisfaction. One physiotherapist said she had been extremely lucky in achieving an unusually rapid promotion to the Senior 1 grade that meant she earned much more than others with similar amounts of experience. She stressed her good fortune was not due to her own efforts or ability but because of 'a management experiment that failed'. Whilst it was 'brilliant at the time'

she reached the top of the scale within four years, and got increasingly frustrated: 'I soon got stuck' [21].

Others mentioned their concern about the limited pay structure, as wages 'bottomed out' within a few years of promotion. Many said the restricted points in the scale for each grade combined with the few opportunities for women to get promotions beyond Senior 1: a radiographer said the financial prospects were 'dismal' [1].

But another said that as hers was one of two incomes, her earnings were fine. However, if the only wage to support a family, it required 'a hell of a lot of overtime' and damaged relationships.

Anyone with a wife and children to support would find it bloody hard on what we earn...you can earn reasonable money if you're prepared to flog yourself to death doing over-time but...as far as basic pay, it's very poor... and with all the overtime...the marriages they have must be really crap [5: 727-763].

The female participants judged their income level and potential from different starting points to the men. Many were single and none were supporting unpaid partners. The single parents highlighted their concerns about the grading penalty of part-time hours and the limited incremental scale blocking pay increases after a few years. One added that whilst physiotherapy provide 'a good career in terms of responsibility and autonomy', the professions were not for the 'materially ambitious' [21].

Whilst recognising there were problems for men with families, one radiographer highlighted the unwarranted tendency of men, *regardless* of their situation, to complain about low pay.

Personally I've lived on my wage as a single person and bought myself houses and run a car and this, that and the other. I've always managed quite well...so I don't see why a (single) male...should regard it as not good enough...And if he's got a wife that's got a wage as well, then what's the problem [6].

A few also highlighted class dimensions to the levels of men's satisfaction with earnings. The prospect of reaching an upper pay limit within a decade was seen as incompatible with middle class men's expectations of well paid professional careers spanning more than 30 years.

Most expect to get a job and be doing it full time until they retire...The sort of men who will go into physiotherapy tend to be well educated, probably middle class people, who'll expect a career that will be earning them at least 20 thousand after a short time [14: 352-365].

Professional income

Several female participants considered physiotherapy and radiography are poorly paid, as *professions*, highlighting the extent of training and degree level, the complex skills, and important, autonomous roles in health care. Although relatively unconcerned about money, many compared the professions' earnings to other 'equivalent' professions and concluded they were considerably lower paid than many others were in the short and long term.

One of my sisters is a lawyer, and I've always known I was never going to earn the money potentially that she can [17: 643-645].

Paramedic professions are traditionally very poorly paid...compared to what people in other public service professions get, we don't earn that much money [5:738-740].

Several recognised the level of earnings and status associated with different professions related closely to the sex of the people who did the work and the gendered image of the occupational

tasks. As predominantly female professions, doing work perceived as 'caring', under the overarching authority of medicine, resulted in their identification as low status semi-professions and reduced their remuneration.

Despite not being as well paid as higher status, predominantly male, elite professions their earnings were still viewed favourably by most women. For many, because of other priorities, it was not so important a grievance as to damage their overall career satisfaction: some were content with the level as it was 'well above pin money' and above many other predominantly female occupations. They did not perceive status in purely financial terms. But, a few noted that as more men worked in caring professions there might be a dilution of the female characterisation and similarly, if the scientific elements of the work were emphasised, the caring image may become less dominant: both changes could help raise status and pay levels.

A couple mentioned the universities and professional associations having crucial roles in promoting the professions' academic and clinical worth, thereby improving status, career and pay structures, and a few described various local and national campaign efforts: they highlighted some important changes that had been achieved in recent years regarding both professional status and the public profile, and some enhancement of their professional careers. Compared to the male participants, they did not criticise their representatives for their ineffectual or negative role.

They raise the profile...tell people what it's about and that it's not just pressing buttons and about who does it...I think it helps [20: 828-842].

Differences by occupation

The female physiotherapists and radiographers emphasised different aspects of careers: their career patterns varied by professional group, and they were concerned about different career issues and disadvantages within them.

Most of the physiotherapists were already clinical specialists or had started to focus on a clinical area for their future. Many had experienced promotion fairly quickly, with very few reaching the top of the Basic and Senior 2 incremental pay scales before moving up a grade. A few of the large number working as Senior 1s were 'stuck' at the top of their scale, and this was highlighted as an irritation. Very few worked part-time and none were at superintendent grade.

Most of the physiotherapists mentioned the numbers of early promotions for men to senior grades, and the (mainly inferred) superior status of out-patient/sport specialities and private sector employment. But the damaging effects of part-time work on grading and pay, and the differential respect shown to male and female physiotherapists by (some) doctors provoked the most anger. Several highlighted the equivalence of physiotherapy's academic knowledge to that of medicine in their claims to high status and respect.

For the radiographers from both branches, experiences of promotion were far slower than for the physiotherapists. Many were long-experienced staff still working as non-specialists, some by choice; several had taken many years to reach the Senior 1 level. A large minority worked as part-timers, including some as Senior 1s. Some of the therapeutic radiographers were superintendents, all working full time.

The female radiographers were mainly concerned about the high proportion of men at senior and superintendent grades, but also by the speed of men's promotion through the ranks: several identified discriminatory elements to these trends. Many also referred to the blocking of opportunities for promotion beyond Senior 1 to part-timers and the negative attitudes of many men to female superintendents and predominantly female work areas.

Social and economic status

The female participants generally recognised that men commonly understood and measured 'a good career' in economic terms: money was the indicator of social status for men. By contrast, they suggested that most women derive satisfaction and assess their careers quite differently.

Most said they enjoyed their careers because of *how* they worked and *what* they did. For *long term* satisfaction the vast majority emphasised being respected and valued socially: their social role and position was both the source and indicator of value and satisfaction, rather than the size of their current and future pay packets.

The vast majority focussed on their experiences of the specialist divisions and grading structures within the profession, highlighting the ongoing satisfaction they derived from doing interesting, challenging and worthwhile work, as autonomous and increasingly skilled, effective experts. Their career experiences were only tempered by a wish to be better recognised and respected as highly skilled. As such the women's notion and appreciation of a good career was, like the men, related to status but it was described in terms of social rather than economic value. They emphasised their knowledge and expertise and the way they worked as autonomous and authoritative professionals: they enjoyed their careers as their work remained interesting and challenging, and because of their significant contribution to health care.

For higher levels of career satisfaction many wanted their work to be better respected by employers, patients and other professionals: they were dismayed by the lower status of women in relation to their male colleagues and other professions. Several women referred to their annoyance at being treated with less respect than their male colleagues, assumed to know less or be the junior team member.

Several suggested women had to *earn* respect and had to work harder to get high status: men were *given* it automatically. This illustrates direct recognition of the differential social status afforded the two sexes. Being seen as less knowledgeable and authoritative *because* they were women produced considerable resentment and anger: this was highlighted as a problem by a few and mentioned briefly or hinted at by many more.

As soon as we have a male student here...the doctors automatically quite often ask them for their opinion, and they've only been here for two days, but they assume because they're a man that they must be qualified and bet they must be more senior than the female staff...It makes me very angry...It's the automatic thing that it's a male boss and a female worker [17: 590-599].

As mentioned previously, despite experiencing prejudicial attitudes and behaviours from men, a few suggested that getting more men into their professions could be advantageous, as they tend to attract more status simply by 'being there': having a higher proportion of men theoretically

decreased the problem of dismissive attitudes to the professions collectively, arising out of the predominance of women.

Others also suggested that having more men in the profession might decrease their advantage in promotions, as there would be increased competition amongst the men. Currently there are often one male and several female candidates applying for a job and it is easy to 'justify' the man's appointment: sexist assumptions of men's higher levels of long term commitment were commonplace. If there were several men, it was more likely that each applicant would need to be assessed on their actual merit.

I think it would be a good thing...Rather than a boss equalling male and a radiographer being female the roles would even out...appointments would be fairer...men wouldn't automatically get the promotion [9: 661-664].

Other ideas on ways to improve professional status were shared by many of the women. Like the men, getting the professions better recognised was a common theme, and again, the smallness of the therapy branch of radiography was emphasised as an extra problem. More positively, several female physiotherapists mentioned recent achievements in their profession.

We have achieved improvements in status, over the years...because our skills... are now recognised as being effective...we're actually a recognised profession, as we get people better... We've promoted the profession... although there is a long way to go...we've gained recognition for...our place in the rehab team...and can build on that...A lot of the public used to say "What does a physiotherapist do?"...I vividly remember hearing this patient say "This physiotherapist business is really good" yet they'd never heard of it before they came into hospital and had it...As we educate the public and promote ourselves better, people will be aware of the role of the physiotherapist...This is probably an old-fashioned attitude, but I think if more men come into the profession it's showing the status is improving because men are wanting to do it [8: 371-388].

The female participants held contrasting views of the direction of the relationship between professional status and gender composition. Whilst some suggested the increased numbers and efforts of men who had recently joined the professions had contributed significantly to their improved status, others said the rising numbers of men in the professions had only happened *after* the status began to improve: they highlighted the increased number of male students since the qualification was upgraded to a degree.

Female profession; caring profession

Although many female participants recognised the role of gender in being devalued both individually and collectively, *none* of the qualified staff used the term '*female profession*' at any point in their interviews: they saw no necessary or inevitable connection between what they did in their professional work and their sex, despite the persistent and sizeable female majority. As such their use of language suggests they understood at some level the incompatibility of high professional status with a female identification and, like the men, recognised the negative consequences for a high status career.

Instead of focussing on the low status of the profession as it relates to the gender composition of the workforce, several female participants highlighted the gender imagery of their work. They were commonly identified as '*caring professions*' and consequently recognised as low status professions because caring work was not valued as skilled or expert and generally associated with femininity. Although some challenged the notion that caring was easy or a natural female

ability, the vast majority subscribed to the general view that separates care-work from skills requiring learned competence or expertise.

Despite many female participants choosing clinical specialities and career paths that involved staying in hands-on patient care, *none* considered a more positive evaluation of care-work as complex and skilled could assist their professions claims to higher status. Several said that although *they* personally recognised care as a crucial and skilful part of their work, they believed nothing could be done to promote the value and status of care-work in professional terms.

Therefore to elevate status, the female participants, like the males, advocated the promotion of their particular academic and scientific knowledge, effective diagnostic/therapeutic skills, and professional ways of working.

It's the higher profile with medical staff, the general public...to sell ourselves, the skills we have to offer...I would hope that the caring attitude and aspects will always be there...but I don't think that alone will promote the status...its having our own area of knowledge and distinct range of skills and our sort of organisation that we need to promote ourselves, and the professionalism, things like that [8: 535-541].

Conclusions: Experiences of and Approaches to Career, and their Influence on Gender-Different Career Paths

In this final findings chapter, I have shown that male and female experiences of and approaches to careers in physiotherapy and radiography are quite different. (see appendix 23 for summary of findings relating to career experiences). My interpretation of the findings shows that male career patterns in physiotherapy and radiography are generally quite similar, with many achieving promotion and positions of authority quickly. Most male staff from both professions move swiftly into senior grade positions, and the majority are in the highest paid jobs. Although some men study and work hard, many achieve 'success' in their careers quite easily, regardless of personal effort or ability, or markedly high levels of career focus and ambition. However, most men work continuously and in full-time contracts that are seen to enhance opportunities for promotion.

Female careers in physiotherapy and radiography are far more varied than male, and progress through the career structure is often quite slow to develop, with only a very few reaching senior management positions. Although many junior management and clinical team leader positions are held by female staff, a substantial number never progress beyond staff or senior clinical grades, despite experience and expertise. Many female staff take breaks in service to raise children and work part-time, both of which are seen to damage chances for promotion. Female managers invariably work full time and have none or very limited breaks in service. Discrimination against female staff regardless of their personal employment history or qualifications is recognised, involving presumptions that any woman may at some stage leave for family reasons.

Despite the above, physiotherapy and radiography - as 'caring professions' - are seen as relatively poor professional careers for men, even if experienced as interesting work and therapeutically valuable work. Conversely, they are recognised and experienced as good careers and professions for women.

The basis of the above contradiction and main issues arising in this chapter will be discussed in the next and penultimate chapter of the thesis, chapter 9. I recap the main findings of the different sections of the analysis and consider the main themes and issues identified (see appendices 22, 23 and 24) for a summary of findings from this chapter), and discuss the theoretical contribution and links between the study and the literature.

Following this I conclude the thesis with its overall conclusions, plus some thoughts about implications of the findings, and topic areas that might benefit from further research.

Part Three

Discussion of the findings, and conclusions of the study

In this final part of the thesis, I firstly bring together the findings of the study to highlight the main themes and core issues identified within the evaluations and experiences of physiotherapy and radiography. I also consider the findings in relation to key literature.

Following this, in the final chapter of the thesis, I describe how this research supplements an established body of knowledge about gender aspects of care-work, and gender divisions of labour in health care, by adding both depth and breadth to current knowledge and uncovering unique insights by examining two previously under-explored 'Professions Allied to Medicine'.

I identify the most significant elements for understanding the evaluations and experiences of physiotherapy and radiography, their overall gender composition, and the vertical and horizontal gender divisions within the two professions. I conclude the chapter and thesis by considering policy implications of findings from this study and suggest some possible topics for future research arising, in part, from the project.

Chapter 9

The Gender Divisions of Labour in Physiotherapy and Radiography: overview and discussion of the findings

In this chapter I bring together the findings to highlight the main themes and core issues I have identified within the evaluations and experiences of, and gender divisions within, physiotherapy and radiography and consider them in relation to key literature.

The first part of the chapter is divided into two sections, with issues relating to the accounts of 'career selection' separated from those relating to experiences of training, working, and careers in physiotherapy and radiography. Following this, the specific details of the different elements are highlighted.

The chronological organisation of the material in four 'findings' chapters has illustrated how, with increasing personal experience of physiotherapy and radiography (as people 'discover', apply for and achieve a place, start and progress through their training, then advance as qualified staff in their careers), ideas, expectations and evaluations of the professions and their work, and explanations for the gender divisions gradually develop, modify or even change. Some people develop different views of their profession/work and the gender composition of the workforce, and their perspectives on work and approach to life change, such that their evaluations of the various aspects of physiotherapy and radiography alter, along with their plans for the future. However, for most, initial or early impressions and expectations of the work and profession are confirmed, and opinions about the gender mix remain consistent over time, with specific and personal experiences supporting and building on their original understandings and views and plans, by providing concrete and finer detail.

Overall, my interpretation of the findings leads me to conclude:

- Caring/people work, caring/therapeutic tasks and relationships, expression of feelings/emotions, along with caring ability and social skills are widely and commonly associated with women, the female gender role and femininity, and often with low status. These aspects of physiotherapy and radiography are therefore perceived generally as difficult, inappropriate and/or odd for men and, feasible, appropriate and normal for women.
- Professions, science, technology and careers, along with caring/social/moral attitudes, authority and autonomy/independence, knowledge and instrumental expertise are often associated with high status, and to varying degrees with men and masculinity and the male gender role. In a sexist world that favours masculinity, professional and 'scientific' careers are attractive to both sexes, and appropriate for men.

Choosing to study and work in physiotherapy, therapeutic or diagnostic radiography

The data relating to career selection and its contribution to the gender composition of physiotherapy and radiography, clearly shows many issues and numerous factors are involved. Some, but certainly not all, of the details vary by sex, however, common themes and a basic process are identified. Albeit in different ways and extents, and with varying degrees of recognition or explicit acknowledgement, I conclude the different perceptions and evaluations of the many elements involved in the decision-making of those considering training for physiotherapy/radiography all involve or invoke notions of gender. With masculinity and femininity afforded different social value, physiotherapy and radiography are seen as more or less appropriate or desirable professions and careers for men and women to choose.

Generally, physiotherapy and radiography are perceived and evaluated by both sexes in terms of their knowledge base, the work tasks and relationships involved, and the intrinsic satisfaction and extrinsic benefits they are seen to offer in the short and long term. It is evident that the different elements of the work tasks, and role and relationships with service users and other health professionals, are the foremost and most common aspects that are thought about, and judged mainly in relation to their compatibility with individuals' personal qualities, interests and qualifications. In addition, a few consider the 'fit' of occupations with expected future roles and/or desired social position. Only very occasionally are the gender composition; professional status and public profile; and/or financial prospects provided by different occupations taken into account to any substantial degree.

Despite some differences in explanations for the gender patterns of recruitment; the participants' individualistic and largely gender blind accounts of their own career decision-making, plus some variations in emphasis by sex, a substantial degree of shared understanding about the main influences on gender patterns in recruitment is demonstrated. Differences in experience and explanations are seen to enrich rather than refute conclusions, and demonstrate the complexity, range and diversity of ideas about the study subject. Nonetheless, patterns within the findings show how popular discourses of sex and gender - as gender talk and lived experience - involve some shared understanding of gender as a social entity but that this varies by particular perspective, informed and influenced by personal experience and identity (Kennedy, 1998). Essentialist perspectives on gender difference are common even though quite often questioned or disputed through experiences that simply don't fit.

To summarise, the main aspects of career selection contributing to explanations for the relatively small number of male physiotherapists and radiographers are:

- Physiotherapy and radiography being rarely suggested to and considered by boys or young men because they are generally identified as caring and female professions (rather than science-based and gender-mixed);
- Physiotherapy and radiography generally being seen as low status/unattractive and difficult occupations for men because of perceptions of the work as caring for patients,

similar to nursing, and because of the socio-sexual stigma for men, especially in adolescence, from the association of caring with femininity;

- Men being deterred by the predominance of women in the workforce because of anticipated problems with social and intra-professional relationships, and
- The social and economic costs of working in occupations/professions that are female.

Conversely, in relation to career selection, the predominance of females in physiotherapy and radiography is explained by:

- The careers often being suggested and generally acceptable/attractive to girls, because they involve skills and behaviours perceived as compatible with female nature, abilities, interests and identity (as naturally or socially caring);
- Them not representing poor or low status employment options for women, being rather better than many other female occupations (as professions);
- Them providing various benefits associated with professional careers.

The enduring gender patterns of recruitment into physiotherapy and radiography reflect and relate to the way that the majority of people of both sexes choose occupations conforming to traditional gender roles informed by ideological notions of gender different attitudes and abilities. Traditional patterns of behaviour are therefore prone to inertia. Nonetheless, and importantly, the findings reveal that several participants recognise that the tradition is based on false essentialist stereotypes and sexist notions of gender different roles, responsibilities and abilities. Indeed, the job satisfaction, competence and success of both sexes in physiotherapy/radiography confirm how a person's sex itself is an inefficient screen for the attributes required for doing the job, as discussed previously by Bielby and Baron (1984).

Nonetheless, the male study participants - and other men in these professions - contrast with most men as they chose physiotherapy/radiography as atypical male careers, and, given the recruitment statistics, were offered a place to train against the odds. However, being atypical minorities does not mean they are strange, inherently pathological, or homosexual. Instead, and based on my interpretation of the findings; perceptions of the male interview participants; and of male students and staff I have worked with previously, certain characteristics and/or life experiences appear typical of them. Generally, they know more/earlier about health/caring professions than most young men; disagree (to some degree) with notions of gender different abilities and interests, or gender appropriate roles and behaviours; have abilities and interests compatible with the work of physiotherapy/radiography (that most men – stereotypically - do not have); and, anticipate enjoyment from the course/work/profession from sources most other young men do not envisage or value. In addition, they often apply to colleges identified as having positive attitudes towards and a tradition of above-average rates of male recruitment.

Although many participants of both sexes had especially wanted a career working with people, providing a helpful, effective service and some form of science-based 'professional' employment, some recognised that caring for people was low status work. Work caring for people was often equated with nursing, seen as the archetype caring occupation with a low status and skill base,

and an especially feminine association (which was problematic for some men). Physiotherapy and radiography were often favoured over nursing, being perceived - to varying degrees - as higher status, more scientific, less overtly caring/essentially feminine, health care professions. Importantly, the findings challenge traditional functionalist theories that propose young women choose types of jobs and employment *mainly* to enable them to fulfil their primary domestic/maternal role and utilise their natural abilities. This is often subsumed within discussions of the notion of gender-different labour market commitment - with women having less - and linked to the idea that women perpetuate gender-segregated employment by freely choosing traditional female occupations and preferring to work as 'secondary earners', accepting the sexual division of labour (Hakim, 1996). The findings show the majority of physiotherapists and radiographers of both sexes as career-oriented, with most taking time and trouble to actively seek out information and choose an occupation perceived as enjoyable, interesting and rewarding, for both the immediate and long term future. Although a few female participants had perceived (or assumed) employment arrangements and organisational aspects of physiotherapy/radiography would fit well with female gender roles in the family, because of the predominance of women in them, this factor never contributed substantially to their choice of career/profession.

Like those in Gaskell's study (1992) of career choice, the participants in this study generally described 'good' personal reasons for their subject and career choices, presenting them as largely individual, 'free' and rational decisions. But in contrast to those in Gaskell's study, some participants in this study acknowledged structural factors and gender-based aspects and influences on their own and others' subject and career choices. Whilst the participants' choices of physiotherapy or radiography were neither pre-determined nor externally imposed outcomes, the findings show they were far from free. Instead they were made on the basis of the skills they had, the knowledge made available to them and perceptions of what was thought best personally, with each incorporating some notion of expected roles and relationships in later life. Despite some differences between Gaskell's and the findings from this study - with more in this study recognising the impact of structural and gender influences - the approach to career selection I identify corresponds closely to the 'social reproduction scenario' Gaskell describes. Choices are influenced and constrained by the socio-cultural and historical context, involving conscious and 'self-preserving calculations' based on concrete and 'realistic' impressions, experiences and established patterns of social life that vary by gender (and class and ethnicity). As such school subject and career decisions 'help to reproduce gender segregation'. Choices are not predetermined or imposed but made on the basis of perceptions of what is thought best personally, which incorporates some notion of expected roles and relationships in later life.

However my interpretation of the findings contrasts with Gaskell's view of a balance between structure and agency, contained within her idea of 'constrained conscious choice'. Despite claims to free will and following of individual preferences, I would argue that the enduring and relatively constant gender balance at course application stages suggests external influences and circumstances are of major importance. During adolescence, issues of developing sexual identity and their relationship to notions of gender-appropriate attitudes and behaviours are increasingly

significant. Many of the 'choices' described in this study reflect awareness of and conformity to social attitudes and norms relating to gender and sexuality in adult roles and relationships, and the extent of influence on adolescents from peers, parents and educational information and advice.

Some of my findings regarding external pressures to conform in adolescence to 'appropriate' employment choices are similar to those reported by Devine (1994). In both studies, some females, and no males, who had liked and were good at science, reported feeling pressured to choose vocational courses, for teaching or health care careers, rather than pure science or engineering degrees/occupations. In Devine's study, it was those who had the support of their family that continued with their preferred option.

This example from the findings challenges the notion of voluntary choice in career selection, and shows that rational choice theories are simplistic as they ignore the way complex economic and non-economic influences limit options and affect decisions. Like Devine, I conclude from my findings that most people do not plan their education or careers in highly calculated, tidily planned ways and, as young adults, are not fully aware of the implications of their decisions, although recognising that some choices provide wider or narrower career options and prospects. Most career choices are based on perceptions of generally interesting and intrinsically rewarding work, and, to varying degrees, the appeal of many occupations relates, at some level, to imagery incorporating notions of differential status and gender-appropriateness. It is only later, once in training or after qualifying, that finer details relating to longer-term implications and gender associations of different aspects of the work and profession become more apparent and more important.

Notwithstanding similarities shown between female and male interest in wanting rewarding careers, two substantial differences between the sexes in relation to career selection are revealed by this study. Far more female than male physiotherapists and radiographers chose their occupation exclusively from a selection of health professions, with females, generally, having earlier, more gradual development of awareness of, and education facilitating, caring professions as possible career options as compared to males. Most male physiotherapists and radiographers reported remaining largely unaware of the range of health related occupations, and did not consider or study for caring professions until something or someone specific 'introduced' and recommended them. Related to this, many more females than males decided to do physiotherapy/radiography before leaving school.

In this way, the study provides a specific example that supports Buswell's (1991) work about the ways young people observe and pick up on ideas of gender-appropriate work, roles and behaviours during childhood and adolescence. It illustrates how, during adolescence, personal experiences, and the experiences and attitudes of family and friends, and of those in education and employment, plus indirect media messages about gender identity, role and responsibilities all contribute towards differences between female and male awareness of and attitudes towards different employment options. Also, the study demonstrates how girls and boys are given different opportunities and encouraged to develop different skills, interests and attitudes that lead to different employment options being considered, feasible or attractive.

Whilst few study participants identified gender as a major influence or conscious aspect of their career selection, the analysis highlights its relevance. It is at the conceptual level that the role and influence of gender (on socialisation, experiences, opportunities, attitudes (own and others), abilities and gender role expectations) for the differential status, appeal and rewards of caring and professional work and careers, is seen to influence and constrain female and male career choices. The details and emphases highlighted about different aspects of physiotherapy and radiography, the work and about the workers that do or 'fill' the jobs demonstrate the reality of work and workers as 'embodied'. Tasks and occupations are not 'abstract or neutral spaces to be filled by disembodied people' even though 'organisational logic' presents them that way (Acker 1990). The study illustrates how the concept of 'a job' and 'career' is indeed 'gendered'.

In summary, the factors and processes involved in choosing a career in physiotherapy and radiography relate primarily to the differential values attached and status afforded different aspects of the work tasks, relationships and workers of physiotherapy and radiography, and that these are implicitly and explicitly gendered or sexualised. At the career selection stage it appears the foremost impressions of physiotherapy and radiography is that they are jobs that involve a lot of caring work, working with people, and are predominantly female occupations; subsidiary impressions are of them as professional, science-based careers. I conclude that this explains, at least in part, the predominance of female applicants to the professions.

Training, working and careers in physiotherapy, therapeutic and diagnostic radiography

Female and male physiotherapy and radiography students and staff often experience and highlight various aspects of their training, work and careers differently. Despite some differences relating to specific context, plus various differences in emphasis by sex, a high degree of consensus about gender preferences and problems is shown, as well as shared understanding of their contribution to gender divisions within the professions.

Training

Despite having the qualifications and enthusiasm to apply and get accepted onto courses and embark on their training, most of the gender different experiences during training involve the same attitudes and abilities, concerns and preferences identified in gender patterns in recruitment. The aspects of the course that male and female students enjoy the most/least or find the easiest/hardest tend to confirm their expected difficulties and concerns and anticipated sources of job satisfaction, and continue to influence developing career plans. Many of the gender different training experiences contribute towards the patterns of employment of staff within the professions, influencing both vertical and horizontal gender divisions of labour.

Notwithstanding individual variation - that in themselves challenge the validity of essentialist ideologies of sex different abilities and attitudes to explain gender divisions - the main gender differences in training relate to:

- **'Theoretical' coursework generally being more difficult, onerous and excessive for male than female students;**
- **Touch and physical closeness in practical classes being more difficult for more male than female students, and getting undressed more embarrassing for more females than males. With repetition, and as they became more familiar with each other, both sexes soon felt more comfortable. In addition, male students often emphasised the importance and value of a 'professional approach' and quickly learned and felt encouraged to appear as detached, focussed experts. They found this the best way to minimise embarrassment – of both parties – and avoid or defuse awkward or sexually ambiguous situations that arose predominantly with female patients, but not exclusively. In contrast to the males, very few females mention the importance or value of a professional approach.**
- **Relationships with academic and clinical/supervisory staff being generally satisfactory and unremarkable for female students, and variable for male. Whilst some male students are encouraged and actively helped along, others are treated harshly or feel victimised. Female students generally get on well with each other, but are more closely involved with other female students; many socialise together after hours and/or share student accommodation. Male students often stick together at first, mixing with female students later; many highlight the importance of their relationships with other male students in college; some socialise with their group after hours, but few share accommodation with fellow students.**
- **Despite both sexes choosing to work in a health care profession, both felt nervous about first placements and work with patients. Generally more male than female students find the physical and emotional closeness of work caring for sick and dependent people unattractive and difficult. In addition, only male students experience general and individually requested exclusions from work with some (female) patients and treatments, and several refer to leaving patients to undress, to reduce embarrassment. Although several male students support gender-sensitive patients' 'right to choose' the sex of their professional, the (gender-blind) quick, detached, purposeful and expert professional approach is seen generally as the best way to work, and sufficient reassurance for 'normal' patients. Although stated explicitly rarely, by either sex, I conclude 'blanket' exclusion policies are unpopular as they suggest there is a genuine risk/problem for patients with male staff/students, and make them feel even more anxious and exposed as atypical minorities. Generally, female students find patients of both sexes accept and seemingly trust them, and are sympathetic to male students' problem of exclusion, seeing suspicions about their behaviour as an extra anxiety and burden to those relating to learning the skills of the job. Relatedly, female students refer rarely to professionalism or being professional in relation to working with patients, although some begin to refer to it in the context of technical expertise and occupation-specific skills. More female than male students see general respect and providing explanations and reassurance - as well as privacy - as the best way to reduce patients' embarrassment and inhibitions generally, and build trust and confidence.**
- **There is no indication that one sex of students, generally, has either more or less plans for their futures than the other. However, the detail within ambitions does vary by sex.**

Although the majority of male students have clear ideas and ambitions, several have few or only vague plans for their future, only beginning to consider the openings provided by their qualification after graduating. Those who look forward generally identify similar visions. Male students' frequent problems with and dislike of 'involved' care-work and 'dependent' patients often influence plans for the future: some physiotherapy students start to develop specific therapeutic skills, choosing assignment projects and placements involving mainly technical interventions and more independent patients. This facilitates many male students' plans to specialise in orthopaedic out patient work, often involving sports injury patients in the more lucrative private sector. Some forward-looking radiographers mention plans to do lots of post registration training courses to facilitate moves up the NHS career structure to quickly reach senior grade positions involving staff management (rather than patient care).

Most female students identify plans for the future, with a balance between those who focus on intrinsic job satisfaction relating to the clinical work and those who emphasise extrinsic aspects. Many plan to continue developing their expertise and build up skills by attending courses but also through practice, hoping to eventually become a clinical specialist; some see this will maintain their interest over many years. In contrast to male students, few females decide in advance of qualifying which type of work or patients they will move towards, preferring to work around different clinical areas before deciding; many want to stay in the NHS, working on the wards with high dependency in-patients. Some females, in contrast to males, say how they want to maintain a balance between their home/social life and employment and see their profession will enable them to earn enough money to maintain a comfortable, independent lifestyle.

In conclusion, a wide range of training experiences has been demonstrated, with many varying by sex. Generally, male students find the formal coursework and involved patient care-work and relationships more difficult and unappealing than female students. Work and social relationships with patients, staff and other students are quite varied for male students and generally positive and unremarkable for females. As a consequence, many male students quickly aim to work in clinical fields and career positions with the highest proportions of male staff, and the least involved patient care-work. In contrast, few female students formulate very specific career plans in advance of qualifying. These early trends contribute to both the vertical and horizontal gender divisions of labour within the two professions.

Whereas both sexes enthuse about achieving expertise in useful, objectively effective profession-specific skills, the professional approach and notions of professionalism and relationship of their skills to (high) professional status are recognised, interpreted and emphasised differently by male and female students. Male students often stress professionalism as a way of behaving with patients, incorporating a coping strategy with a way of behaving that alludes to high status with its echoes of the medical model. An authoritative, detached and purposeful manner reduces or removes problems associated with the emotional stress and sexual ambiguities arising through the closeness of the therapeutic encounter, and also enhances impressions of a knowledgeable, goal-oriented expert. The professional approach also facilitates the demonstration of a caring attitude, seen as a high status, pro-social, moral position, whilst appearing devoid of associations

with femininity. Whilst students, and in contrast to their male counterparts, females rarely mention notions of professionalism, the professional approach and claims to professional status.

Work

As with experiences of training, several differences between experiences of working in physiotherapy and radiography once qualified are found. Many of the participants' experiences vary by sex, but many vary less systematically, again highlighting the inadequacy of explanations for the gender composition and divisions of labour reliant on biological theories of gender difference. And, although there are some differences in the prioritisation and detail of explanations for the gender patterns of specialisation, overall, a high degree of shared understanding about the main influences is evident (see appendix 24 for summaries of female and male explanations).

I conclude that male physiotherapists and radiographers' levels of job satisfaction and moves into a narrow range of clinical specialities relate largely to 'trade-offs' between three differently valued aspects of their work. These involve:

1. Many men continuing to have various problems with different types and aspects of care-work, which can be related to their associations with sexuality, femininity and/or female gender roles. To varying degrees, their problems relate to continuing:
 - difficulties coping with the emotional stress of involvement with sick and dependent people;
 - feelings of embarrassment, awkwardness and a sense of risk with the sexual overtones of physical exposure, closeness and contact; and
 - dislike of work perceived as mundane, unskilled and low status, involving personal-domestic routine and direct involvement with bodily functions and 'mess'.

Despite emphasising their caring attitude and use of a gender-blind 'professional approach' - working as detached and focussed experts, treating people as sexless 'patients' - and the caring skills some men demonstrate, most male staff still experience or fear problems. Consequently, they prefer specialities that avoid or minimise difficulties with gender-associated and stigmatised dimensions of care-work through being low status, sexualised and/or 'involved'.

2. The enjoyment male staff - similar to male students - derive from clinical work involving a predominance of instrumental tasks reliant on technical expertise and an objective effect. These are described as the profession-specific tasks and associated with high levels of achieved skill, expertise and knowledge, informed by scientific theory. As such they represent the elements of the work afforded the highest status, and indicate how the popular notions of and public discourse about 'professions' correspond to traditional conceptualisations that emphasise required characteristics and distinctive traits (e.g. Carr-Saunders and Wilson, 1933; Goode, 1960; Greenwood, 1957). Interestingly however, some participants also seem to recognise gender associations of professions with maleness and/or male socialisation, as indicated by their adoption of and advocacy for detached professional

behaviour which seems to be interpreted as demonstrative of, or compatible with, heterosexual masculinity. The significance of gender dimensions for professionalisation and status is largely absent from traditional perspectives, only emerging in recent years within the iconoclastic works of writers such as Crompton (1987), Witz (1990, 1992) and Davies (1995).

Most physiotherapists move into orthopaedic specialities and rehabilitation services, mainly working with out-patients. Most radiographers specialise in work involving 'extended' or innovative roles, new/developing technologies, and/or indirect or limited patient contact. An interesting spin on this is found within therapeutic radiography where men are choosing to work in the new 'counselling' role. The ability and enthusiasm of male staff to provide and cope with this type of ongoing, involved and difficult care-work shows how emotional care and close relationships do not involve 'natural' female abilities. Instead it does perhaps relate to emotional care-work in this instance being afforded high status as professional care, being formally acknowledged as an explicit and important aspect of cancer/terminal care-work.

3. The discomfort and difficulties many men have with being minorities in predominantly female environments and dislike of subordinate positions. Despite no reports of experiencing harassment or discriminatory treatment, most male physiotherapists prefer to work in clinical areas with several other male staff and/or male manager, generally preferring to not be trailblazers, the only male, or part of a very small group, unless they are team leaders or working alone. Similarly, most male radiographers move away from the most heavily female specialities (which tend to also be those involving the most patient contact and involved care), or move 'up' into 'management', education or research. Rather than problems and career moves always relating to the 'femininity of caring', and despite having felt comfortable with the idea of working in an occupation recognised as female-dominated, most of the male minority tend to move into areas providing more conventional gender dynamics, finding positions subordinate to women are sources of discomfort. In this way, I see reasons behind male career moves into areas with more, or senior, men, as ways to resolve their ambiguous position. This interpretation corresponds to that of Witz (1992) who refers to the 'dislocation of the patriarchal ordering of occupational roles and authority relations' for men in subordinate positions in predominantly female caring professions (p190-191). I also see that male career moves identified in this study support Savage's (1987) view of moves relating to the preservation of a positive self concept, whereby doubts about any aspects of the self as a sexual being induced by working in an opposite sex-dominated environment, are seen to undermine self concept and damage identity.

In contrast to their male colleagues, female physiotherapists and radiographers move into a wide range of clinical specialities. I relate this largely to them generally continuing to enjoy and value all aspects of their work. Generally, female staff in both professions value the role of the different aspects of care-work although - as with female students - the different types and amounts of care-work are popular to varying extents, and female caring skills are not always superior to male. I conclude that having few problems with the different levels of 'dependency' of patients in different areas, or incompatibility with the gender associations of care-work, explains the later decisions and wider spread of female staff around clinical specialities and settings. But also as part of the

majority, female staff are also unconcerned by the varying predominance of women in different clinical areas or by the sex of managers.

Consequently, female staff, generally, take time to try out and assess the pace of work, specific skill mix and particular contribution to patients' lives/ill health of different specialities for themselves. However, some differences in sources of job satisfaction and discontent between female physiotherapists and radiographers are indicated which impact to some extent on their decisions on specialisation.

Female physiotherapists identify how they enjoy direct involvement in affecting therapeutic change that patients recognise and appreciate. Like several male staff, they highlight the professional role and skills of the physical therapist, emphasising their clinical autonomy and objective effectiveness: many welcome the increasing emphasis on 'evidence-based research' that confirms the value of physiotherapy empirically, providing a solid scientific basis for claims to high professional status. Caring skills and a caring attitude are seen to provide the foundation of effective professional skills although optional extras: a caring approach is important for good therapeutic relationships, but not crucial for clinical progress. In contrast to male perspectives, care-work represents a laudable activity as it involves demonstrating a high moral standpoint and pro-social caring attitude. Nonetheless, female physiotherapists' emphasis on the value and role of care-work is increasingly replaced by an emphasis on profession-specific skills and expertise with therapeutic effect. The increasing distancing from low status care-work, especially physical care and 'tending' tasks, and increasing aspirations to professional work relate to their growing appreciation of their useful and objective effectiveness, expertise and profession-specific skills. These demonstrate how the female participants' view professionalisation as a gender-blind process, with high professional status the entitlement of any occupation that is suitably qualified. Despite disquiet relating to difficulties getting the full respect and status they believe their work entitles them to, female physiotherapists, generally, do not seem to entertain the idea that their profession will never achieve full professional status, through its lack of an exclusive or autonomous body of knowledge, practical skill base and personal focus thereby rejecting the analysis of Freidson (1970). Instead the physiotherapists' view corresponds more closely to that optimistic apolitical approach described by Wilensky (1964) and, interestingly, is the perspective on professionalisation adopted by Barclay (1994) in her historical review of the physiotherapy profession. Despite several participants noting female staff often get treated less respectfully than males, few identify the predominance of women in the profession as explaining professional status problems. Care-work being associated with low skill is seen as the problem for the success of their professional project. Relatedly, female physiotherapists' decisions regarding moves into specialities often reflect and incorporate the different degrees of recognition and status afforded the effectiveness and range of technical skills involved in different clinical areas, and level of autonomy.

Whilst stressing their valuable contribution to health care, female radiographers acknowledge and generally accept their support role and subordinate position in inter-professional teams with a medical-led hierarchy. Therapy radiographers emphasise how they are responsible for the planning and delivery of radiation treatments prescribed by doctors to cure/ease cancer

symptoms; diagnostic radiographers highlight their pivotal role in the therapeutic process, producing high quality technical images for doctors to use to diagnose or monitor disease and inform treatment decisions. Despite the use of machines involving advanced technologies and short time periods with patients, female radiographers value the 'integral role' of their caring attitude and skills for top quality work. Personal and technical skills combine to produce an indirect but important effect on health. Doing therapeutically useful, technically skilled work with people in stressful conditions provide high levels of job satisfaction and are the main components of female radiographers' claims to social value and professional status. In comparison to female physiotherapists few radiographers appear substantially concerned about gaining more public recognition for their technical skill, many never specialise, and those that do, tend to do so later.

Despite some differences by sex and profession, the overall findings suggest there is a growing hierarchical distinction between the status of care-work tasks and relationships, and professional care and relationships over time in the professions, with the gender associations of both gradually becoming more recognised more explicitly, but far more extensively in relation to caring. These contribute to the ways female and male staff experience and value the range of physiotherapy and radiography work tasks and relationships with patients and other health professionals differently, and to the gender patterns of career paths that develop. Nonetheless, individual differences in caring abilities emphasise the flaws within essentialist ideologies that identify sex differences in abilities to care for people.

Careers

Career patterns of male staff in physiotherapy and radiography are generally quite similar, with many achieving promotion and positions of authority quickly. Most males from both professions move swiftly into senior grade positions, and many radiographers carry on up the NHS career ladder, with a substantial proportion of male staff moving up from junior to middle and senior management. The proportion of physiotherapists that go into or stay in middle and senior management positions is lower than in radiography, with many leaving the NHS to work independently as private practitioners, most often being self-employed and commonly employing other staff to work in the practices they set up. The majority of males in both professions are in the highest paid jobs, and those in lower grades with lower pay tend to do overtime or private work to supplement income (except those in therapeutic radiography). Although some men study and work hard, many achieve 'success' quite easily, regardless of personal effort or ability, or markedly high levels of career focus and ambition. Importantly, most men have continuous employment and full-time appointments allowing management (with its excess of males) to often favour male staff in promotion/appointments and further training opportunities without fear of accusations of direct discrimination

Significantly, physiotherapy/radiography are often described and experienced by male staff as restricted, frustrating and/or unsatisfactory professional career even although male physiotherapists and radiographers value the effect and enjoy practising their instrumental skills; welcome their relationships with doctors and other staff; enjoy working independently with patients as professional experts; and are over-represented in high paid and leadership positions. This experience of dissatisfaction is often the consequence of the careers being compared to those of

professionals in occupations at an equivalent academic level with higher social status, better pay and longer-term prospects of progress.

Overall, physiotherapy and radiography - as 'caring professions' - are seen by both sexes and experienced by male staff as relatively poor professional careers for men, even if providing interesting and therapeutically valuable work. To make the best of their situation, male physiotherapists and radiographers generally work full-time and many strive to advance quickly into the most senior jobs and/or highest paid areas within the professions, taking advantage of female absences and male inter- and intra-professional support and networks. Only if these career routes are taken do physiotherapy and radiography provide sufficient material rewards to fulfil the middle class graduates' version of the male 'breadwinner' role and gender-appropriate positions for men in terms of social hierarchy. In this way the study findings confirm Hakim's (1990) comments regarding the pressure on men, and conformity of most to, the breadwinner role.

In contrast to their male counterparts, females in physiotherapy and radiography experience far more varied careers, and their progress through the career structure is often quite slow, with very few reaching senior management positions. Although many junior management/ clinical team leader positions are held by female staff, a substantial proportion never progress beyond staff or senior clinical grades despite many years of experience and expertise. Many female staff balance their home and work life, and the study findings confirm the view that breaks-in-service to raise children, along with part-time employment, damage impressions of work commitment, as highlighted by Acker (1990). The study reveals how assumptions by management regarding women's lower work commitment are seen to prevent many part-time (who are almost always female) staff from getting further training and therefore obstruct opportunities for gaining promotion, corresponding to Cockburn's analyses of gender discrimination in careers (1981, 1985, 1991). In the study, part-time staff are recognised for having the lower 'Cinderella' status described by Swiss and Walker (1993), and some are well aware of the 'glass ceiling' discussed by Davidson and Cooper (1992) in their writing on material and ideological barriers to career progress

Worryingly, some managers, and not exclusively male, are also said to discriminate against female staff regardless of their personal employment history or qualifications, presuming they may at some stage in the future leave to have children. Virtually all female managers work full time, and have usually taken no breaks in service, for example for maternity leave.

In this way, these findings endorse Acker's (1990) ideas on the continuing dominance of masculinist conceptions of career (as full time and continuous) by managers of both sexes. Management is reported and demonstrated in the study to assume organisational problems arise out of employing part-time staff rather than seeing them in more positive terms as useful and qualified contributors to departments, providing evidence that confirms Acker and also Secombe and Ball's (1995) analyses.

Despite all the above, generally, female physiotherapists and radiographers seem to enjoy their work - including the care-work and profession-specific skills - and are largely satisfied with their careers, with some recognising they are considerably better than those of many women.

Compared to many other female-dominated occupations, physiotherapy and radiography provide opportunities for careers that are interesting and rewarding, with substantial responsibility, authority and autonomy and above-average female income. Nonetheless, many women highlight and are critical of disrespectful attitudes and discrimination that limit personal and professional opportunities for advancement and high status. Some identify problems with men in their profession and in other health professions, and a few criticise traditional management/employment structures generally for their gender bias. However, most accept women's traditional gender role as wives and mothers, even though recognising it disadvantages them in achieving top positions in professional careers. In this way the female participants can be seen as examples of the non-feminist and conservative women described by Hakim (1996) for their acceptance of traditional gender divisions of labour and role as 'secondary earners'. Indeed, there are instances in the data that show some of the women seeming to accept discrimination and take it 'on the chin', rather than letting themselves get upset by it, not wanting to 'waste their energies' fighting it. Instead of challenging employment discrimination, most prefer to concentrate on enhancing their professions' social status via promotion of their effective and valuable skills, expertise and authority and deal with individual problems individually. Meritocratic notions of entitlement to respect, autonomy and professional status are the way many female physiotherapists seek to increase their personal career satisfaction, with status primarily emphasised in social rather than economic terms.

Changing perceptions and evaluations of different elements of caring and care work, professions, and careers

At the career selection and application stages, the 'caring' aspect of physiotherapy and radiography is described often as a desirable feature of the work and the predominant characteristic of the occupation. However, caring is described fairly generally, usually in terms of it involving 'people work' looking after/helping. It is often associated with women/femininity. Fairly soon into training, and onward through qualified staff's working lives, caring becomes more differentiated, with many different types and ways of being and doing caring. The concept of caring becomes far more complex, as through experience it begins to be recognised in terms of involving attitudes and approach, and many different skills and abilities. Caring is found to incorporate physical tending and 'mess' work, physical-technical tasks, physical contact/touch, emotional support and involvement, communication and relationships. Increasingly, the numerous elements identified are evaluated and enjoyed differently, and this assessment often varies by the sex of the student. It also involves the perceived status of the different elements, derived in part from the weight of skill attached, but also, albeit sometimes implicitly, from their association with sex, gender and/or sexuality.

In this way the study builds on the established care literature as it provides numerous detailed and new insights into specific and personal experiences of professional care-work, and explores and evaluates various different aspects of caring and awareness of gender associations from the insider experts' perspective. From the analysis, I have shown that certain types of care-work are also experienced as problematic for men through their associations with sexuality; others are

unpopular or experienced as difficult because of their associations with domesticity and bodily functions.

The study links to and expands on the work of James (1992), by identifying and examining the organisation, physical labour and emotional labour contained within care-work and builds on the work of Graham (1983) and Ungerson (1983, 1985 and 1987) who identify the gender dimensions and differential status of different types and ways of caring. The study has also referred to Graham's helpful distinctions between 'caring as love' and 'caring as labour', and extended her work on informal care to examine the different feelings, motivations and tasks involved in different types of caring within professional care. I have also applied and built on Ungerson's gender-based distinction between 'caring for and caring about' into this study, to focus on who and where, as well as what is involved and valued in the different types of work of physiotherapy and radiography. I have drawn especially on the work of Davies (1992, 1995), with many of the findings supporting her discussion of the gender dimensions and hierarchical distinctions between care-giving, care-work and professional care.

In addition, the study has extended Mayeroff's work on the significance of 'commitment' and pro-social attitude of professionals, by examining the social, moral and intellectual bases of the caring professional attitude and role, and skills and abilities of physiotherapy/radiography and contradictions for them as caring professions.

In contrast to the impressions and predominant images of physiotherapy and radiography work and occupations at the pre-applicant stages - as caring and helping people, and as female-dominated - the scientific, technical, professional and career aspects are far less prominent to most people. Despite widespread and frequent use of the word 'profession', confirming Hugman's view of its lay popularity (1991), professions - like caring - are understood and referred to by the study participants in non-specific terms. They simply represent good quality jobs involving qualifications and skill, and some usually vague sense of high status and social value.

Professions are mainly discussed without explicit associations or references to gender. Similarly, differences between occupations as jobs and/or careers are also under-emphasised and gender dimensions largely ignored. However, once into training, and onward through the working life, these other aspects become more apparent, and also more important to many staff, who increasingly emphasise their contribution and relevance to job satisfaction.

Caring and different elements and aspects of care-work

Emotional care

Emotional labour in care-work is recognised in the study as different to 'love' or affection, as it involves the maintenance of 'social distance' (Graham, 1983). James (1989) emphasises that emotional care is work, describing it as emotional labour, and sees it is just as difficult as physical and technical labour and the findings suggest that this view is shared by physiotherapists and radiographers.

The study reveals that male students/staff only use 'instrumental' touch that is narrowly focussed, strictly time-limited and involving techniques that deal specifically with the objectively-defined clinical problem. 'Expressive' touch and showing warmth, concern and support to people in

distress through physical contact, makes an emotional connection, and is identified in the study as used to widely varying extents by female and male students and staff. Expressive touch is largely avoided by males as it is seen as inappropriate, risky, disallowed, and/or difficult. Findings indicate that the widespread concerns are invariably related to sexual connotations that arise with male touch, and parallel Savage's (1987) observations of similar problems with male touch in nursing relating to its associations with a predatory male sexuality.

This study shows that many students/staff are concerned about spending prolonged time or having repeated contacts with patients for fear of getting emotionally upset or involved. In these situations, relationships and feelings can go beyond purely professional-clinical, goal-oriented, detached helping concern. The 'patient' becomes a person and the professional becomes more like a friend. The risk of getting emotionally involved, feeling stressed or upset is especially high in situations involving problems or illnesses where the carer may empathise rather than sympathise, for example when the problem resonates with an aspect of her/his personal/family history, or reminds her/him of their own vulnerability and mortality. Some health professionals seem to fear feeling emotions because of their effect on self-control, and challenges to their sense of autonomy as boundedness, worrying they might show signs of weakness, vulnerability and in-discipline. These indications are seen as inappropriate and completely at odds with the professional care role of effective and rational expert providing for the patients' objectively defined needs. Importantly, this study has found that more men than women experience and avoid specialities involving the most or most likely chances of emotional involvement, although some women also have problems, and some men don't. Problems with feeling upset are especially identified in specialities providing care to highly dependent or extremely sick people, the elderly, children and those who are dying. In other words, those patients who are most in need of emotional and physical care.

I interpret concerns about and - predominantly male - avoidance of emotional involvement to avoid the risk of developing feelings for patients as relating partly to the way that emotionality is associated with femininity and irrationality, and appropriate for the private, domestic world rather than the public world, or professional work. This aspect of my interpretation draws on Davies' (1995) work on the differences in settings and gender dimensions of informal, home-based care-giving, and care-work and professional care relationships. She interprets the fear and inappropriateness of emotions intruding into professional care as an indication of the contempt, fear and/or suppression of qualities culturally expressed as femininity.

In addition to the damaging link between emotions and femininity, the study shows how there is a problem of emotions also being associated with and stigmatised as base and primitive sexual urges, again inappropriate for the masculine, public world of detached professional work. Several of the participants refer to the dangers of getting too involved with patients referring to sexual dilemmas that can arise with long-term care relationships with patients through misunderstanding or misinterpreting friendly concern and interest as a sign of sexual interest. The significance of sexuality for carers and evaluations and experiences of various types and levels of care-work in this study leads me to conclude that Davies' emphasis on gender for the different evaluations and contradictory experiences missed out on one important element.

The gender different experiences of emotional involvement in care-work relationships lend weight to psychological theories that highlight the different experiences and consequences of connection and attachment, and separation and autonomy, in childhood developmental trajectories for male and female children (Chodorow 1978, 1989 Gilligan, 1982). These highlight how boys' experience of earlier and more complete pushing away from their mothers than girls, and with sons as different rather than girls as similar to their mothers, mean boys have to attend to issues of separation and autonomy. Consequently, as men with a 'bounded sense of self', male carers find the expression of connection with another as more threatening, as their 'needs for intimacy' have (long) been suppressed. Psychological theories can result in seeing masculinity and femininity as different but equal, by not taking male as normative and female as inferior or negative.

However the findings of the study illustrate that different values are associated with masculinity and femininity and emotional involvement is associated with the latter. The gender differences in the level and frequency of concerns about getting emotionally upset or involved, and avoidance of situations and low status of specialities where there is a high risk of this, support the analysis of Bologh (1990) who recognises masculinity as involving 'isolation and a lonely struggle where...masculinity and femininity are cultural ideas that are locked together and...masculinity...given meaning via the repression of femininity'. This provides a more political perspective on gender different evaluations, in recognising a generalised contempt for all things female, that Davies (1995) describes as 'part of our cultural heritage' (p 36). This interpretation recognises not only the 'masculine separation and firming of ego boundaries', but also the creation of 'rational and autonomous subjects' in a public world built on the Weberian principle of 'hostile strangers' and a culture of competitive, distant and hierarchical social relations. Emotions are not for the competitive and emotionally controlled environment of work in the public sphere where men (sic) 'make a difference in/on the real/public world of action and greatness. Getting involved with the feelings of others obstructs the achievement of 'goals'. and it is the role of women 'to fulfil (men's) personal and domestic needs' and maintain relationships and sustain life, within the private sphere (Bologh, p242 and 257).

Learning to care, and valuing the skill and labour of emotional care

Hochschild (1983) described emotion management, or emotion work and feeling rules, differentiating work on surface emotions from work on deep emotions. Surface acting is to change your outer look to correspond to how you are feeling, whereas deep acting is to change inner feelings by distracting yourself, to feel what we want to feel and show it on our face. For example, health care workers strive to not appear shocked or revolted by horrific sights of disease and trauma. The key aspects of this are that emotion management can be unconscious or semi-conscious and, importantly, it can be learned and taught. Smith (1992) highlights how care-providers themselves need support and care to cope with the stress of dealing with difficult situations and others' emotions, suggesting lecturers and qualified staff should provide juniors the time for feelings to be acknowledged and dealt with and recognise learning to manage emotions as an explicit aspect of learning to do care-work.

In this study I have observed an emphasis on the exclusive knowledge base and skill of objectively effective techniques in physiotherapy and radiography in bids for higher status. This corresponds to Smith's (1992) discussion of the technical focus of the 'task allocation approach' to nursing, which she links to them gaining higher professional status. Technical skill tasks were allocated to qualified nurses and their work involved less emotional involvement, and unqualified staff were left to provide care and look after the personal needs of patients, providing the 'little things' that make patients feel comfortable/happy/relaxed.

Smith argues there is a need for emotion work to be viewed as work requiring skill and not be seen as part of the package of nurses' 'natural' abilities. With the increasing tendency for the nursing profession to emphasise technical skills and medical knowledge, Smith concludes care has consequently been devalued, even though still recognised as important. In contrast to the female physiotherapists in this study, but similar to the radiographers, Smith reports that nurses often recognise their technical and physical work is enhanced when underpinned by an emotionally explicit caring style. However, nursing courses give little attention and formal training on the theoretical base of emotional caring grounded in psychological and sociological theory, and generally ignore the complexity and importance of good communication and interpersonal skills. By considering gender dimensions of differences in learning to care and experiences of professional socialisation, this study extends Smith's work on nursing, and also that of Oakley (1974) on 'invisible work' and consequent low status of women's work. Similar to the conclusions Smith draws, this study demonstrates the need for the uncoded, tacit knowledge of caring - as a key component of physiotherapists and radiographers' skills that is highly valued by patients, but devalued by the professionals - to be made explicit and 'de-sexed'.

Although both sexes go through several stages before they reach levels of intuition and ease with caring, most ignore or forget the learning processes involved, with most seeing caring as experiential and accepting that caring is easier and better suited to women through their childhood socialisation. Most students and staff in this study reject the idea of needing to be formally taught how to care and 'react' to feelings that caring for people provoke, and see feelings as inconvenient, painful and inappropriate for professionals and unnecessary for the delivery of effective health care. Because students' feelings arising from the emotional stress of care-work are rarely acknowledged or supported, as part of their professional socialisation they learn to distance themselves and manage their emotions to try and keep them from getting upset. Because of the gender associations of caring, male carers tend to boycott caring, aspiring to the professional approaches associated with self-control and detached objectivity. I conclude that this study, along with that of Smith, shows there is a need to integrate intuitive insights with systematic knowledge in order that caring is explicitly recognised as a learned and important skill for physiotherapists and radiographers of both sexes - even if learned at different times - and afforded due status.

Care work as service work; service work and sexuality

Findings in the study relating to the relationships between physiotherapists and radiographers and patients apply and extend Adkins' (1995) analysis of service work in the leisure industry and the relevance of sexuality. Like this study, she finds men are excluded from certain kinds of work that

women are obliged to do as part of their job, even when located in same jobs. Also, men don't have to conform to regulations applied to female staff - e.g. Adkins observes different rules regarding uniforms. She sees that work cannot be just understood in terms of economic relations, and recognises gender and sexual dimensions in the spatial and temporal aspects of relationships between service providers and consumers, and concludes that the quality of the interaction is part of what is being produced. Similar to this study, Adkins also observes a requirement for staff to consider their appearance and manner and develop 'appropriate' ways of dealing with consumers. Even though the work she studies is not explicitly sexual, Adkins sees the service relationship as sexual labour, as it is women rather than men who are implicated in the mediation between user and provider, with the quality or type of interaction part of what is being 'sold'.

The study endorses Adkins conclusions that specific conditions and regulations for women are attached to their labour, with work being gender-divided in terms of sexual relations. Relations of production within the labour market are not just capitalist but also patriarchal, and gendered work relations contribute to the production and maintenance of hetero-sexuality. Sexuality operates as a gendered form of control in the labour market, producing occupational segregation, and a role in the creation of sexuality itself by constructing and reinforcing ideas and norms of appropriate sexual behaviour for men and women. Whereas Adkins focuses on the control and shaping of women's lives, in this study I have shown how both sexes are affected by sexuality, with men in physiotherapy and radiography constrained and directed in their career paths in relation to avoiding specialities and tasks associated with sexuality.

The study findings support Adkins' view of the failure of explanations for gender divisions of labour that focus on waged work and the exclusion from access to wages, by showing the relevance of the social construction of gender relations. Sexuality and gender are not separate from economic relations of work and production and men in physiotherapy and radiography benefit from women being left the lower status 'sexual' work. The appropriation of sexuality is itself gendered and contributes to the construction of power relations between men and women in and out of work. The study findings also replicate Adkins observation that men are given greater access to labour market resources such as skills acquired through further training, which Cockburn (1991) also highlights in her work on male resistance to female advances in careers.

Importantly, the sexualisation of certain practices within the workplace contributes to men's material advantage over women as the 'sexual risk' areas of physiotherapy and radiography are not only defined as women's, but also as lower status than those involving limited, none or only instrumental personal contact and physical closeness. Consequently, men predominate in management involving distant, authority relationships and espouse the virtues and preferential status of areas requiring detached professionalism. In this way, my understanding of problems and denigration of close work and the higher status of management and less involved work also corresponds to Burrell's (1984) explanation for the distancing of men from sexuality at work. He sees the 'suppression of sexuality is one of the first tasks that bureaucracy sets itself' with the negative associations and rejection of physical closeness relating to men's fear of behaviours invoking the sexualised stigma of base emotions deemed appropriate only for the private sphere and incompatibility of sexuality with the public world of work, profession and bureaucracies.

This study also shows how adjunct and support work in health care is mainly done by female students and staff and is barely recognised for its contribution to the overall functioning of the service and the recovery and/or comfort of patients. Doctors and (male) managers often claim their successes (etc) without acknowledging the extent of support work from nurses and PAMs, especially that carried out by the juniors and females within the professions who provide the majority of direct 'hands on' patient care, doing most of the emotional and physical mess and preparatory and follow up adjunct work. In this way this study on specific areas of employment in the health service applies Adkins' interpretation of gender relations and the social meaning and experience of gender as an outcome of the ways in which production is organised in terms of a patriarchal family where husbands (as the doctors and managers) control and appropriate the work of wives (as the nurses and PAMs). This supports Adkins view that there is not just appropriation of women's 'sexual' or 'sexualised' work but also the appropriation of other 'straightforwardly occupational work'.

In this study, the female participants report no problems with sexual harassment or sexually inappropriate behaviours from male staff or patients, although some hint at being annoyed on occasions with men. None refer to any experiences of sensing anything threatening. Indeed some of the women seem amused and even enjoy the sexual overtones of interactions with some men. Whereas Adkins (1995) suggests women in traditional care and service jobs almost expect sexual harassment and so do not complain or report it, being seen as part of the job, and flirting situations are tolerated rather than enjoyed by female staff, I conclude the lack of problems and complaints may reflect the different power relationship and control over events that physiotherapy and radiography staff have over patients in clinical encounters (in pain, undressed, weak, disabled etc), compared to the more vulnerable and subordinate service position of waitresses (etc) with paying customers. Differences may also reflect the weakness that men feel with their minority position in an established majority female community. However, that sexual harassment by female colleagues/managers does not appear to happen to men as the minority shows that sexual power, as male, is not overthrown and that sexual interactions overall are structured by the same power relations as in broader society. When male students/staff are pursued by old ladies this is referred to as a joke, and sexual advances by young females or 'predatory' women are avoided at all costs by using the detached professional approach.

In this study, sexuality in the workplace is described in positive as well as negative ways, with more men in the professions seen by both sexes to improve sociability and pleasure, and defuse petty squabbling amongst women by achieving what is described as a more natural sex balance. The female participants are generally pro-men despite recognising career advantages of male staff over them, and men are generally welcomed into the professions because their presence is seen to facilitate claims to higher status. In this way, the study findings challenge Stanko's (1988) concern about the problems that inevitably arise with the configuration of gender, power and sexuality in the workplace, relating to her identifying a continuum between coercive and non coercive heterosexuality. As comparatively successful professional and career women, these women do not seem to be unduly worried by the greater success of the male minority. But I conclude their enthusiasm for men is probably also a reflection of them seeming to be predominantly 'traditional, non-feminist women' with a primary orientation to the home and family

and acceptance of a secondary earning position relative to men, with my interpretation corresponding and supplementing Hakim's (1996) description of women in traditional female occupations.

Physical care work

In this study, both sexes generally see 'male with male' and 'male with female' touch as a problematic aspect of the physical care work of physiotherapy and radiography for male carers. As indicated in relation to 'expressive touch', male touch is interpreted in terms of associations with sexuality and potentially perceived by patients as something predatory, as sexual harassment or an abuse of power. Touch by males to either sex is seen as an expression of emotions that always involve some degree of sexual motivation. Interestingly the study demonstrates no references to lesbian associations with touch between females, with female touch for both sexes being perceived as neither threatening nor sexual. Female touch is interpreted as a nurturing form of emotional support and an accepted and inevitable part of physical care tasks. In this way the study highlights the invisibility of lesbian existence, and non-conflation of gender with female sexuality, similarly identified by Savage (1987) in her discussions of gender and sexuality in nursing, where she also notes the absence of discussion about lesbian nurses and the frequent stereotype of male nurses as gay men.

Tending, as another type of physical care work, is the work of helping people with their bodily functions and 'mess' and carrying out of routine tasks associated with 'activities of daily living'. It is widely seen as the least desirable aspect of the work and evaluated as unskilled/low status work. As the least favoured type of work for both sexes in the study, it is often equated with basic nursing and domesticity. The tasks and relationships involved are devalued as they are widely associated with mundane chores and linked to the domestic/maternal role of women, there to serve the needs of others/men. The work tasks are considered insubstantial as they have no lasting impact, and need doing again and again, and are unskilled and routine as they can be done by anyone and everyone without formal education, as they use acquired abilities not achieved skills. Close contact with bodily functions and mess, involvement with symptoms of sickness, plus providing emotional and physical support for dependants are seen to involve tasks and relationships belonging to the private, natural world, female gender role and inferior femininity. As such, the study confirms the view of a gender basis in the hierarchical distinction between the natural, private world and society, culture and the public, civilised world as described by Acker (1991).

The findings correspond to Acker's analysis of the mismatch of emotional and bodily needs and the workplace (as part of the public world), with the feminisation of the body and emotions meaning they are seen as 'suspect, stigmatised and..as grounds for control and exclusion' from the workplace (Acker, 1991, p173). Femininity is incompatible with the civilising process of the masculine public world of agency, action and greatness. The male project is to be in control, act as rational, autonomous, independent, with goal-oriented means and ends, to make a difference. Tasks associated with femininity are adjudged inferior as they lack the discipline and struggle that allows the development of intellect and include those concerned with the day to day, the practical and the pleasurable. This results in the contrasting of 'care' with the 'curative orientation' of health

professionals providing treatment involving the rational, scientific biomedical model of disease. Both physical and emotional touch and 'tending' are distinguished from profession-specific manual techniques

Aspects and elements of professions, professional work and professionals

Interestingly, and although participants do not define profession or professional formally, when discussing problematic aspects of their careers, the terms '*caring profession*' and '*female-dominated profession*' are used frequently by the male participants. In contrast, when positive aspects of their career and valued elements of their skills, approach or role are described, the phrases used are '*as a professional*', '*being professional*', '*as a profession*'. Also, '*therapeutic*'; '*paramedical*'; '*allied to medicine*'; '*worthwhile*'; '*effective*', '*health*' (not health care); '*technical*'; and '*scientific*' professions are the preferred terms used to convey positive images and higher status. As indicated previously, the language used by female participants is different, with *none* of the female staff using the term '*female profession*' at any point in their interviews: they recognised no necessary or inevitable connection between what they did in their professional work and their sex, despite the persistent and sizeable female majority. As such, their use of language suggests they perhaps understood at some level the incompatibility of high professional status with a female identification and, like the men, recognised the negative consequences for a high status career.

Instead, several women highlight the gendered imagery of their work and many refer to '*caring professions*' when discussing issues and problems of low status, recognising how caring work is not valued as skilled or expert. Although several women challenge the notion that caring involves natural, female abilities, most subscribe to the general view that separates caring from learned competence or expertise and *none* consider a more positive evaluation of caring - as complex and skilled - could assist their professions' claims to higher status. Although several recognise caring as a crucial and skilful part of their work, the women generally seem to believe nothing can be done to elevate the status of their professions via better recognition and promotion of the skills of caring, primarily as it involves different types and levels of knowledge to the formal, scientific knowledge behind the expertise of the professional. They fully endorse and adopt the traditional perspectives on professions without recognition of or concern about the masculinist bias within the concept as highlighted by Davies (1995).

The study demonstrates various ways of, and problems with, talking about sex and gender, and differences in detail and emphasis, style and content between male and female accounts of the same phenomenon (Kennedy, 1999). Some of the differences between male and female perspectives on and explanations for the gender composition of physiotherapy and radiography are illustrated in appendix 24. Overall the data lend weight to the view that there are 'difficulties with expressing and valuing things associated with 'the feminine' because the relationship between masculinity and femininity involves 'denial and denigration of the feminine'. The role, place and work of women and 'public language and vision of proper public conduct (ie at work/activities) are saturated with gender' (Davies 1995a, p21). As such, the association of caring with the feminine is inevitably negative and makes caring work and relationships difficult and/or unattractive to men.

Generally, despite little explicit recognition of the masculinity of profession, the concept is shown to become increasingly important to male staff in two distinct ways. Firstly, professionalism provides a detached way of working that minimises sex and gender-related problems with physically and emotionally close work; and secondly, it is associated with validating claims to superior status, via the application of instrumental expertise based on scientific knowledge. Therefore, by demonstrating professionalism, claims to better pay and career structures are enhanced. Amongst females generally, there is less concern with professionalism in terms of ways of behaving and higher economic rewards. But some, especially physiotherapists, increasingly aspire to the high social status and greater respect given to professionals, professional work and organisations, and therefore emphasise the autonomous use of complex skills and expertise involved in their work, and promote the scientific knowledge base and objective effect of their interventions.

This study draws on and usefully contributes to a body of work on various aspects of professions, professionalism and professionalisation. I have shown that hierarchical relationships between health care occupations/professions contribute to the experiences and frustrations of physiotherapists and radiographers, both individually and collectively. The study participants demonstrate increasing awareness of and resistance to the traditional power and control of the medical profession, with the findings corresponding to the key features of dominant, established professional occupations identified by writers such as Hugman (1991), Freidson (1970a & b), and Turner (1987). This manifests itself in terms of physiotherapists and radiographers wanting greater respect for their skills and knowledge and contribution to health, and their professional organisations campaigning for both clinical and managerial autonomy. Nonetheless, there is considerable gender blindness demonstrated in the study to the gender dimensions of professional status, even though the high status, dominant medicinal profession is recognised for its predominance of men, and lower status, subordinate health care/caring professions such as nursing and PAMs are predominantly female occupations.

Although many study participants stress the differences between and some acknowledge gender dimensions of the caring and profession-specific instrumental skills/tasks in their descriptions of their experiences and explanations for the status and gender divisions of physiotherapy and radiography, a few emphasise the role and influence of the social relationships involved within and between health professions. This position mirrors that described by Hearn (1982) and Witz (1990, 1992), who see inter- and intra-occupational relations and the gender dimensions within them are just as important as the gender associations of tasks for occupational status and gender divisions. They refer to the notion of 'semi-professions' emphasising how they are invariably female and subordinate occupations in areas of health and welfare, involving domestic, nurturing and emotional work and service/support relationships previously performed by women in the private sphere. The development, scope and status of work and subordinate position of (female) semi-professions in health care has depended largely on the established (male dominated) medical profession 'restricting the space' and defining the boundaries between health care professions and actively maintaining their position as leaders by controlling the division of labour. With the participants' comments about disrespect for their skills, knowledge and contribution, and lack of two-way communication between some medics and PAMs showing marked differences by

sex, lends supports to these perspectives even though their own understanding of their experiences fall short of the gender distinction of professions and semi professions. The findings also correspond to Adkins (1995) analysis of gender and sexual dimensions of the different types of involvement and relationships in leisure industry occupations, and 'service employment relationships'.

The emphasis by several of the study participants on promoting their expertise, and the centrality of their claims in science and knowledge derived from formal education, confirms Davies' (1995) recognition of the elevation of mastery, control and technical rationality in the drive for professional status via pursuit of excellence. This emphasis on the importance of science for professional status and recognition has also been identified by Bebbington (1994) who has written about the prioritisation of science by Speech and Communication Therapy resulting in it being the first graduate non-medical health profession.

In addition, the increasing recognition and emphasis of many participants on the importance of skills and formal knowledge, and enthusiasm for post-registration training to advance careers and professional status, supports the view of a 'rush for qualifications' of caring professionals in the 1990s as identified by Blakemore and Symons (1993). Also, references to the growth and importance of research and 'evidence based practice' by several study participants illustrate their belief in the potential for research to improve professional status and claims to better pay and greater autonomy, corresponding to those found in the professional bodies' academic journals and official committee documents (CSP 1996; Mead 1996 Robinson 1996 Gray 1998).

Professional approach, gender-blindness and sensitivity

From the study findings, I interpret the gender-blind, detached approach to caring for people, described as the professional approach or bedside manner, as a strategic response to the problematic associations of gender and sexuality with emotional and physical care and indirectly these relate to difficulties in achieving high professional status (Kennedy, 1997; 1998). The participants in this study often emphasise difficulties and dilemmas relating to issues of sexuality for male carers associated with male - male and male to female touch, and many consequently avoid prolonged touch. Physical contact by males is kept to a minimum, explicitly purposeful, focussed and task-oriented. In the process of being assessed and treated, sick women and men are desexed into 'patients'. Whilst some students and staff maintain the professional approach is a gender-blind, universal non-discriminatory way of providing best quality treatment, I conclude the detail of explanations about, and the various experiences of the different elements of personal care-work, and variations by sex, show clearly how 'professionalism' is an individual coping strategy that develops in response to the stress of coping with inescapable gender and sexuality-related problems/feelings and this approach has been incorporated and formalised into a desired/essential characteristic of the professional demeanour.

Most importantly, the detached, objective approach and display of skilful expertise is associated with higher status. By highlighting the achieved skill and knowledge-base of the work/worker, using his (sic) goal-oriented expertise and rationally-based instrumental, profession-specific skills for an objective diagnostic and/or therapeutic outcome/effect, the attitude of a detached professional is afforded social value through working impartially and universalistically for both the

individual and collective good. As such the professional approach incorporates a social dimension described by Marshall (1939) as the 'service ethic' and a moral stance described by Crompton (1987, 1990) as 'institutional altruism', in their discussions of the elite characteristics of true professions/professionals. This notion of 'doing good' is highlighted in the study by several participants as an important and highly valued aspect of their work and role as caring professionals (and major source of job satisfaction to some).

Also, and as stated previously, the study findings show how the participants are very keen to highlight the objective effectiveness, instrumental skills and curative orientation of their work as professional, with many stressing how they value being able to 'make a difference', both to individuals and to the world more generally. The caring aspects of their work are recognised generally as negative and largely unskilled dimensions of the work. Despite a general lack of awareness amongst the study participants regarding the masculinity of profession, I see the findings correspond to the ideas of Davies (1995) themselves drawn from Bologh's (1990) interpretation of Weber's analyses of bureaucracy and professions. Instrumentality and agency are associated with the public sphere of productive work and a competitive and rational masculinity, whereas support and nurturing are associated with the private sphere of domestic routine, emotion and intimacy and associated with an inferior, sexualised and stigmatised femininity.

From the many experiences and various evaluations of the work and careers and the different positions of staff within the professions, the study shows how patriarchal divisions and arrangements within and outside of the labour market and masculinist notions of gender difference advantage men at the expense of women, such that gender contributes in many ways to horizontal and vertical divisions within physiotherapy and radiography. It shows how gender different roles and responsibilities in the family influence the positions, ambitions, sources and levels of job satisfaction of men and women in physiotherapy and radiography. It also shows how associations of various aspects of the tasks and relationships of physiotherapy and radiography with gender and sexuality influence the level of skill recognised, status afforded and gender composition of the different employment areas and grades. In this way the study contributes a range of specific details and examples to the more general literature on gender divisions of labour. The study endorses the view that the economic structure and occupational hierarchies are intrinsically structured by patriarchal social relations. Women are not free wage earners because of their outside unpaid work and within the workplace 'sexual' labour is left for women to do but neither recognised nor valued as work. There is a different 'constitution' of labour for men and women. The study builds on Adkins (1995), Pringle (1989 and Cockburn's (1988) discussions of sexuality as an important but neglected constituent of gender divisions in labour market, and supports Adkins' view that Cockburn and Pringle understate its relationship to male advantage in economic and political terms.

Overall, physiotherapy and radiography are recognised and experienced as good careers and professions for women; yet, despite some employment advantages, poor professional careers for men. I conclude this view relates specifically to the gender-based differential status afforded caring, care-work and professional care work previously identified and discussed by Davies

(1992, 1995) and gender-different aims and experiences of women and men in physiotherapy/radiography employment and careers. Generally these relate to the tradition, expectation and overall conformity of both sexes to gender-different family and employment roles and responsibilities - influenced by dominant ideologies of gender difference - and the range of formal and informal organisational arrangements in the family and labour market that support them.

In terms of both economic rewards and social prestige, it appears that the status of the physiotherapy and radiography professions is 'damaged' by various inter-related factors. These are the predominance of female members; the predominant identification of the work as care-based and involving unskilled and mundane tasks; and the associations of care-work with subordinate or service relationships, the female gender role, femininity and sexuality, involving the 'base emotions' and functions of the private and irrational world of the domestic sphere.

Chapter 10 Conclusions of the study

This research supplements an established body of knowledge about gender aspects of care-work, and gender divisions of labour in health care. In particular, it adds breadth to current knowledge and uncovers unique insights by examining two 'Professions Allied to Medicine' instead of the usual informal care, nursing and medicine. This exploratory qualitative study has produced a detailed examination of the physiotherapy and radiography professions, focussing on female and male students and staff experiences and evaluations of their work tasks and relationships, to explain the gender composition of the professions, and the gender divisions of labour in them. By analysing findings from a purposive sample of experiential accounts and a range of workforce data, to consider both what people say and what they do in their professional careers, the study provides greater understanding of experiences of and reasons for gender divisions.

From my analysis I conclude that the following are the most significant elements for understanding the evaluations and experiences of physiotherapy and radiography, their overall gender composition, and the vertical and horizontal gender divisions within the two professions:

- That different types of care work comprise varying amounts of emotional involvement; physical closeness/touch; and tending as 'mess'/routine/domestic/unskilled work; and involve different types and intensity of social relationships;
- That the different aspects of care work are variously associated with the female gender role, femininity and sexuality, are consequently devalued generally, and problematic for men in different ways and extents;
- That there are differences between a caring attitude and approach, and caring abilities and skills, and a professional approach and professional skills, that relate to issues of status and gender roles in public and private spheres and link to differences in the status and gender associations of care-giving; care work, and professional care and those that provide and/or manage it;
- That there are contrasting gender associations and status between caring and profession which result in a problematic and ambiguous status for caring professions and caring professionals;
- That sources of, and routes to, (high) professional status, are influenced by associations of the work tasks and relationships and the workforce, with sex, gender and sexuality;
- That gender dimensions of occupational hierarchies and in inter/intra-professional relationships in health care (for example in relation to nursing and medicine) influence the role, status, gender composition and work experiences of physiotherapists and radiographers; that differences between jobs, careers and professional employment, and sources, types and experiences of job satisfaction involve gender dimensions.
- That facilitators and barriers to career development vary by sex and relate to dominant ideologies of gender different abilities, roles and responsibilities being manifest both materially and ideologically.

In addition, the study has provided many examples of how people understand and talk about sex, gender and sexuality in various biological and social, and often contradictory ways, and shown that evaluations of tasks and abstract concepts often involve associations with gender characteristics as hierarchical. It has also revealed some differences between male and female accounts, experiences and perspectives on gender relations and socio-political dimensions of gender inequalities, in relation to both their analysis of them and the forms of expression of their ideas through different uses of language.

The study has also provided some interesting, concrete examples of the influence of and relationships between education and other aspects of childhood/adolescence and home/family life on gender patterns of employment, as well as relationships between adult family and employment roles and responsibilities and gender divisions of labour. In particular, the slow rates of change in the gender composition of physiotherapy and radiography, and the relative positions of the sexes within them highlighted in the study, confirm Acker's (1992; 1994) view that changes in education only slowly influence patterns of employment and that material changes such as those in the economy at large, or in personal circumstances specifically, precede and provide the impetus for individual and social changes in attitudes, beliefs, and patterns of behaviour.

Nonetheless, I see the most interesting and possibly main contribution of this study as derived from the detailed accounts of personal experiences and evaluations of the caring aspects of physiotherapy and radiography work. In moving from nursing and medicine, and informal care, the study provides different and new insights into various aspects and gender dimensions of health care work.

In particular the work of Davies on the professional predicament in nursing (1992, 1995) has provided key insights that have facilitated my understanding of the gender composition and different experiences and evaluations of physiotherapy and radiography, and the individual and organisational struggles for professional identity, autonomy, recognition and rewards. I, too, interpret the various experiences and problems in terms of the gender basis of the differential status of profession and caring, to recognise how these relate to ideas about roles and responsibilities, traits, abilities, and skills, and hierarchical distinctions between acquired and achieved knowledge; objectivity, science and rationality, and subjectivity, emotions and irrationality.

The focus on gender in the study supplements earlier work that tends to under-emphasise its significance for the experiences, value and (in)visibility of labour in care-work and labour of 'emotion management' by staff involved in looking after people in distress. The study provides new insights on the role and importance of sexuality for gender different experiences and divisions of labour in physical care-work especially in relation to touch. It highlights the low skill and female status of tending care-work through its associations with the female domestic and maternal/nurturing role and their supposed incompatibility with the public sphere of production.

Because many studies looking at gender aspects of employment focus on problems in women's work and career experiences, they often ignore the problems men can have at work, especially when working in mixed or female majority occupations. For example, material rewards may be lower than those of other men, career options be more limited or proscribed for men than those of

female colleagues, and they may be seen as odd misfits, sexual deviants or Lotharios. However, as indicated in this study where I have considered both female and male experiences, it is evident that men move up rather than out of difficult situations or lower status areas. Even as minorities, men do not really experience marginality in physiotherapy and radiography as they nearly all work at the top or in the most publicised, high profile or best paid areas of their professions.

Through examining the detail and diversity of the data, and comparing the findings by sex and occupation and in relation to different career stages, a complex combination of personal, social and structural factors has been identified as influences on the overall gender composition and different distribution of the sexes in the various working areas and career grades of the professions. Through the grounded theory approach, I conclude that the different evaluations and experiences of physiotherapy and radiography of female and male students and staff, and the gender composition of the occupations, relate to various properties and dimensions of 'caring' and 'professions' being saturated with gender associations and (therefore) afforded differential status. Gender divisions and gender different career paths link partly to the various work tasks and relationships associations with gender, and partly to the way traditional divisions of labour have developed, are organised, arranged and evaluated on the basis of essentialist notions of gender different work roles and responsibilities of women and men. Together, the differential status of 'caring', 'profession' and 'career', as differently gendered constructs, represent the overarching themes and core categories of the explanatory theory for the gender divisions of labour in physiotherapy and radiography.

I conclude that perceptions, expectations and experiences of physiotherapy and radiography and reasons behind their gender composition relate to the differentially evaluated gender associations of caring, profession and career. Whilst I recognise caring, profession and career represent gendered concepts that in a world of gender inequality invoke differential status, it is evident that how far they are understood or acknowledged as such by physiotherapists and radiographers varies widely.

Whereas caring is commonly identified and discussed in terms of femininity, women's gender role and low status, and careers are widely recognised and experienced as high status, male-oriented patterns of employment, professions and professionals are widely recognised as high status but far less often explicitly linked to gender.

Profession is implicitly linked with masculinity through being defined in terms of and associated with many characteristics attributed to men or associated with their gender role. In a world that values and promotes masculinity, the status of profession is high. For example, professions are afforded high status, power and authority through being linked with the mastery (sic) of scientific, theory based knowledge and the acquisition of instrumentally effective skills; professionals are seen as autonomous, responsible experts, detached and rational in control of their emotions as they provide a service that 'makes a difference' in or to the public world.

By contrast, caring is explicitly and often linked with women, femininity and the female gender role being associated with the physical and sexual intimacy and emotional involvement of the private, domestic sphere and a mundane, natural world. In a gendered world that devalues women and the work they do, the feminisation of caring is the source of its low status.

Importantly, and regardless of how far individuals recognise the gender dimensions of these concepts, it is through the associations of caring and profession with femininity and masculinity respectively that physiotherapy and radiography as predominantly female occupations, and physiotherapists and radiographers as females and males experience and are afforded status. The status and gender mix of physiotherapy and radiography reflect the inherent gender-based contradictions of their work and identity as 'caring professions', such that there is a problem of caring for professional status at both the individual and collective level. Caring professions involve a contradiction in terms.

Policy implications of the study, and recommendations for further research

Finally, I conclude the thesis with a brief consideration of some policy implications arising out of the study and recommendations for further research.

With the rising demand for health care with population changes and changing balance of medical to non medical care professionals, the NHS needs help to establish more effectively how to encourage sufficient numbers of (the right) people in, and more importantly, given the high drop-out rate, how to keep them. This study has highlighted the need for greater and explicit attention to the gender dimensions of roles and responsibilities without recourse to stereotypes in studies of recruitment, retention and returns and a more sensitive analysis of 'wastage' to ensure policies introduced are realistic, effective, efficient and fair. Studies could involve potential entrants to consider what stops them applying or accepting an offer of a training place, and question the role of pay on recruitment and the influence it has on staff retention. (The CSP and Society of Radiographers seem to emphasise different issues to the nursing profession/RCN, who focus mainly on improving pay to retain staff and reduce staff shortages, and midwives who attend to increasing their autonomy and role via claims to exclusive and expert knowledge). Relatedly, there is a need for more research on the sources and relative importance of (social and economic) 'status' to pre-applicants and staff, and sources and problems with job satisfaction etc, etc. Importantly, research must always be sensitive to gender issues in both its questions and analysis.

Studies could also examine the qualifications and training that are really needed for effective and safe practice as compared to those that facilitate the professions/individual practitioners' claims to high status/good pay/clinical and managerial autonomy. There has already been an increase in the number and opportunities for training and organisation of physiotherapy and radiography assistants over past few years, but there has been little systematic research about the role and acceptability of changes to qualified professionals and patients (apart from Shield, 2002). With assistants tending to: have lower rates of staff turnover; be cheaper than professionally qualified staff (in wages and training); be from a broader/more representative class, age, ethnic and gender mix it has been suggested they may popular with patients and the costs obviously make them attractive to resource allocators. The best balance between the number of trained general health care assistants and graduate health professionals needs to be explored as do decisions about the clinical areas can and/or should assistants work in. Employers need to consider the potential risk from changing the skill-mix for exacerbating existing qualified staff shortage problems that are

especially acute in 'cinderella' areas such as care of the elderly and those with chronic illnesses, especially for the mid and longer-term.

I suggest it would also be useful for recruitment and retention for studies to be set up to quantify the extent of gender differences in specialities, and examine career paths in terms of gender. Also, there is a need for more qualitative research on inter/intra-professional relationships and health care hierarchy, focussing on multi-disciplinary team work in health care to establish whether this is a reality, myth or ideal, and the contribution of gender to professional relationships.

Despite the substantial increase in size of the overall workforce in recent years, the ratio of male to female staff has remained relatively constant, especially if compared to changes in several other occupations, including the medical profession. However, the change for medicine is in the opposite direction to that for caring professions, with completely different professional and personal status and identity issues involved. As none of the study participants appeared to recognise that proportionately more female than male applicants get offered and accept places on physiotherapy and radiography courses and views of the desirability and consequences of changes in gender composition vary, detailed studies of the actual processes of student selection would help establish whether/how much direct or indirect discrimination is involved in the persistent large majority of female students of physiotherapy and radiography.