Factors underpinning the work patterns of female community pharmacists over the age of 30

A report detailing a Q-methodology study

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Contents

List of tables

1. Executive Summary

Introduction
This report details the findings of a project entitled "Working patterns of female community pharmacists over the age of 30: an exploration of the factors that motivate working practice" which was funded by the Pharmacy Practice Research Trust via the Sir Hugh Linstead Fellowship 2004.

Background
This study is set against a backdrop of seismic change within the pharmacy profession. Explicitly, the role of the community pharmacist has expanded, following a period of escalating demand for healthcare. This has coincided with the recent initiatives to introduce mandatory continuous professional development (CPD). Currently there are recruitment and retention problems within the community pharmacy sector. It is well established that female pharmacists are more likely to work part time; this is likely to contribute to workforce shortages. This study is particularly relevant and timely because the proportion of female pharmacists has dramatically increased in recent decades worldwide. Specifically, this study was prompted by the paucity of recent robust research indicating what motivates female pharmacists' career choices.

Aims and Objectives

Aims
The aims of this study were to explore the reasons why female community pharmacists adopt their chosen working patterns, and to identify the factors that may influence these choices.

Objectives
1. Which factors motivate female community pharmacists over 30 to work part-time or full-time.
2. What female community pharmacists over 30 perceive to be barriers to full-time working.
3. Which aspects of community pharmacy employment influence women's preferences for employment patterns after the age of 30.
4. The relative importance of factors influencing work patterns in female community pharmacists over the age of 30.

Methodology
This study is comprised of two stages. The first stage consisted of a qualitative exploration of female pharmacists' career choices. This involved face-to-face interviews with 30 female pharmacists from the North West of England. The interview was presented to interviewees as an exercise in gathering data about their experiences of working as community pharmacists. Interviews were recorded, transcribed verbatim and analysed using the constant comparative method. The second stage of this study involved using Q-methodology to quantify and categorise the opinions of a second sample group. This involved generating a number of statements (n=57) from the stage 1 interview data, which 40 female community pharmacists sorted and prioritised using a template. The data from this stage of the study was analysed using PCQ software to identify distinct viewpoints which were described in qualitative detail.

Results and Discussion

This report details the rich qualitative data generated in both stages of the study; this data provides useful information for policy makers and employers. The first stage is exploratory and provides in-depth information of the factors shaping work patterns amongst female pharmacists. The subsequent Q method stage supplements the interviews by providing information on the relative importance of factors shaping work patterns in subgroups of the population. The concluding sections of this paper discuss findings from both stages of this study in the context of previously published studies.

Key findings

The first stage of this study identified a range of factors influencing working practices amongst female community pharmacists over the age of 30. This report outlines the findings in qualitative detail in the form of verbatim quotations to illustrate themes identified from the data. The themes discussed within the report include: motivation for choosing pharmacy; career histories; pharmacists' career plans; and, factors influencing workforce participation (including remuneration and working conditions). Particular reference is made to issues affecting female workers including domestic commitments, lack of flexible working conditions and occupational downgrading. As might be expected our findings suggest that priorities and personal preferences had a strong influence on many interviewees' preferences.

Critically, this study also identified a number of structural features which are specific to community pharmacy that counteract some women working full-time and encourage the uptake of certain roles within the sector. The lack of family-friendly practices, anti-social hours, difficulties accommodating annual leave, and the restrictive legislative framework that necessitates a pharmacist to always be present in a store, all affect their work patterns. The data also indicated that recent changes in the community pharmacy work environment had in some cases exacerbated these issues and increased stress in the workplace. It was apparent that a considerable proportion of the sample opted to work below their potential, at a practitioner level, as opposed to a managerial level.

The second stage of this study added a quantitative indication of the relative importance of the issues, identified in stage 1 of the study, to subgroups of the sample population. Q methodology identified nine distinct viewpoints. These viewpoints express in quantitative terms the relative importance of qualitative statements to subgroups of the study population. The nine identified subgroups, which are described in section 6.3 in qualitative detail, are: fulfilled pharmacists; family first or pharmacy shelved; low stress altruist; permanent part-time employees; focused on free time and finances; pressurised modernisers; wandering wage slaves; overloaded and under resourced for the new contract; and, pin money part-timers. Although the combinations of influential factors varied between individuals and subgroups it was possible to identify themes which resonated with the study population as a whole. Specifically, the majority of respondents worked at a practitioner level part-time often, but not always, to fit in with family circumstances.

This report specifically considers whether these work patterns reflect genuine preferences or whether respondents are reacting to the work environment and structural barriers within the community sector. Importantly, some respondents indicated that high workloads and pressurised working conditions affected levels of job satisfaction and created stress in the workplace. Furthermore, some respondents indicated that management structures were unsupportive and staffing levels were inadequate. As well as this, the new pharmacy contract generated a mixed response amongst respondents. In general, respondents were positive about providing

enhanced services; however, some respondents indicated this added to their workloads making work life more difficult. Some facets of community pharmacy working, such as weekend working and long hours, were unpopular with respondents leading to an overwhelming preference by respondents to work as employees. Levels of financial remuneration were rated as relatively unimportant to respondents. Although it did not deter respondents from practicing, mandatory continuous development generated a number of negative reactions. Nonetheless, it is noteworthy that some respondents were considering leaving pharmacy for other reasons.

Conclusion

Stage 1 of our study identified a number of aspects of community pharmacy working which acted as structural barriers for certain female pharmacists. However, on the face of it, stage 2 of our study suggests that although combining community pharmacy working with family responsibilities presented challenges most respondents considered that they *preferred* to work less hours in lower status jobs. In this respect our data could be interpreted as showing a lack of evidence of *commitment* to pharmacy amongst some respondents. An alternative explanation is that although respondents reported that work patterns were a matter of choice, realistically, working conditions only permitted those with domestic responsibilities the option of pursuing a limited range of roles.

It is noteworthy that the majority of respondents were not particularly motivated by salary levels. This study also suggests that pressure in the workplace was a significant factor affecting working practices for some respondents. Pressure in the workplace arose from increases in prescription numbers, additional services stemming from the new community pharmacy contract, inadequate staffing and poor management support. Employers and those planning pharmacy services must, in the longer term, consider how increased dispensing volumes and recent changes in the English community pharmacy contract are likely to affect workforce participation rates within community pharmacy. Our evidence suggests that employees are likely to work less hours in highly pressurised work environments and some may quit the sector altogether.

Importantly, our research suggests that contrary to recent speculation few respondents were planning to exit the register as a consequence of mandatory continuous professional development.

These findings have important implications for workforce planners and employers who must consider the likely impact of the feminisation of the pharmacy workforce on workforce supply.

2. Introduction

This report details the findings of a project entitled "Working patterns of female community pharmacists over the age of 30: an exploration of the factors that motivate working practice" which was funded by the Pharmacy Practice Research Trust's 2004 Sir Hugh Linstead Fellowship. This two stage study was conducted between January 2005 and June 2006, in which time the author of this report worked three days a week.

This report details the findings of both stages of this study which involved using qualitative methods to explore and quantify the importance of factors underpinning the work patterns of female community pharmacists over the age of thirty. This report will initially consider the first stage of the study, followed by the second stage. Finally the concluding sections of this report will reflect on the two sets of data collectively, draw conclusions and make recommendations.

3. Background

In this section the current community pharmacy work environment is initially discussed with particular reference to workloads, role expansion and the recent move to introduce mandatory CPD. The report goes on to discuss the way the pharmacy workforce has altered in recent years. Finally, the evidence relating to female pharmacists work patterns is considered within the wider context of the female workforce.

3.1 Community pharmacy work environment

In recent years a number of facets of the community pharmacy work environment have altered dramatically. One of the most significant changes affecting the whole of the health service has been the spiraling demand for health related services, which stems from a raft of demographic and social changes. The escalating demand for pharmaceutical services can be seen in the increase in the number of prescriptions dispensed. Between 1994 and 2004 the number of prescription items dispensed increased by 42.9%[1]. During this time the number of community pharmacies in England and Wales remained static.[1] It is noteworthy that although there is no clear indication of the change in UK community pharmacists' earnings over this period, over the ten year period between 1991 and 2001, remuneration levels for community pharmacy in the UK only increased by 4%.[2] In fact, the professional fee per prescription item dispensed dropped from £1.42 in 1991-1992 to 99p in 2001-2002.[3] Consequently, it is possible that English community pharmacists, in common with other European workers, have been working more intensively for the same remuneration.[4, 5]

Coupled with the extra demands of rising prescription volumes was the expansion of the community pharmacists' role in the UK in April 2005 to reduce GP workload.[6] Community pharmacists, in common with other healthcare professions, have extended their role to provide a range of extra services.[6-8] It could be argued that this enhances professional status, increases autonomy and potentially increases job satisfaction. In reality, however, this might result in increased workloads, increased levels of responsibility and increased risk of litigation and exploitation.[7].

3.2 Mandatory CPD

Over recent years a number of precipitating factors have pre-empted the move to mandatory CPD for registered pharmacists. The Kennedy Report into children's heart surgery at Bristol Royal Infirmary advocated compulsory CPD for all healthcare professionals[9]. Additionally, the introduction of clinical governance has reinforced the importance of practitioner competence in the health care environment[10]. The 2000 government document titled "NHS plan: Pharmacy in the future" specified that

pharmacists should have up to date expertise and skill[11]. Consequently, the RPSGB has adopted a scheme of mandatory CPD, which was introduced as a rolling program from 2002. Since January 2005 all practicing pharmacists have been required to sign a declaration that they will undertake and maintain a record of CPD[12, 13]. Registered pharmacists are now obligated to conduct and record CPD and this is due to become mandatory in 2008.

CPD has been defined as "the process through which pharmacists continuously enhance their knowledge, skill and professional qualities throughout their professional careers"[14]. CPD aims to ensure that pharmacists maintain their competency to practice.[15]. Previously pharmacists were annually required to complete 30 hours of continuing education. Under the new system CPD is seen as a proactive process, driven by the individual, which involves a cycle comprising four key stages. These stages include: reflection – identifying training needs; planning - deciding how to meet these training needs; action – taking part in training activities; and, evaluation - evaluating performance. Critically CPD is recorded in a systematic way. The RPSGB suggests that CPD records be submitted electronically using an on-line system.[16]. The RPSGB will be monitoring CPD and it is probable that a random selection process will be used to identify pharmacists to review every five years. Currently, the RPSGB indicates that at a minimum pharmacists should record one CPD entry per month.[13] However the RPSGB indicates that this could change next year when the *CPD Rules* have been issued. In addition, these recent changes in the community pharmacy contract have resulted in pharmacists requiring accreditation to provide many of their services offered; often leading to additional training.[17, 18]

3.3 Women in community pharmacy

This section of the report considers female pharmacists' career trajectories. Initially the shift in the composition of the pharmacy workforce over recent decades is outlined followed by discussions relating to existing theories on issues affecting female workers. Finally, this section reflects on how female pharmacists' career paths differ from other female workers.

The changing profile of the pharmacy workforce

In the last few decades, the proportion of the pharmacy workforce made up by women has increased. In 1941 it is estimated that 10% of the workforce were female.[19] The most recent National Pharmacy Workforce Census (2005) indicated that 55% of respondents were women and over 65 % of pharmacy undergraduates are female.[20] A proportion of female pharmacists tend to work part-time once they reach their 30s, with 44% of female pharmacists between 30 and 40 years old working part-time.[21] In 2005 41% of female pharmacists worked part time.[22] Current recruitment and retention shortages within community pharmacy could be considered to have resulted, in part, from reduced participation rates and an increase in part-time working practices.

This study was prompted by the paucity of recent robust research indicating what motivates female pharmacists specifically to adopt their chosen work patterns. Pharmacy studies from the 1980s have suggested that child bearing is linked with decreased working hours and that women are attracted to pharmacy in the first place by the prospect of being able to work part-time in the future.[23, 24] Symonds (2000) conducted a small-scale qualitative study exploring the nature of part-time working in pharmacy and found that personal circumstances caused women to adopt heterogeneous working patterns.[25] Research evidence also suggests that though female pharmacists tend to be better qualified than their male counterparts evidence suggests that they are disproportionately represented in the lower grade hospital jobs

and in operational level PCT jobs, and in the community sector they are under-represented as owners and senior managers.[26-29] The reasons behind female community pharmacists 'niche' employment in lower status roles is unclear.

The gender pay gap

What is absolutely certain is that there is unequivocal evidence that, in general, women earn less than men, particularly those women who work part-time. The gender pay gap expresses the difference between men and women's median full-time hourly earnings and is evident in pharmacy and other professions. In the UK, 2005 figures indicated this gap is narrowing and women working full-time are currently paid, on average, 87% of men's hourly pay.[30, 31]

Recent evidence indicates that the proportion of female graduates in the lowest-level jobs have more than doubled in 10 years from 5.4% to 13.2%.[32] Furthermore, the number of women in the highest-level jobs fell from 64.9% in 1995 to 45.3% in 2005. The fall comes despite an increase in women graduating in subjects such as business, law and science over the 10-year period. Part-time workers, who work less than 32 hours per week, tend to earn less per hour than full-time workers.[33-35]

Part-time working

Part-time workers are much more likely to be female;[36] 44% of all working women work part-time.[37] Women's work patterns are likely to reflect a mixture of personal factors as well as factors related to working conditions and opportunities. One obvious explanation for lower levels of workforce participation amongst females are the constraints imposed by domestic commitments: women are much more likely to work part-time if they have children or other domestic responsibilities.[38-40] In fact the Equal Opportunities Commission (EOC) report that women most commonly cite domestic or family commitments as the reason they do not want to take, or are prevented from taking, a full-time job.[36] Indeed, recent evidence suggests that part-time working is becoming increasingly popular amongst mothers. Among working mothers with children aged 17 and under, just one-in-five (21%) say full-time work is the ideal situation for them, down from the 32% who said this back in 1997.[41]

It appears that family building forces many women to choose between career and family, commonly it is the second child which precipitates part-time working.[42] In general, the proportion of part-time female workers rises after labour market entry peaking in the late 30s then falling slightly until the age of 50 and then rising again after the age of 60 (these employment patterns occur rather later for better-educated women, on average, tend to reduce working hours later because these women are usually older when they have children).[43]

It is noteworthy that women working part-time are typically less-educated, in a couple with dependent children who are both numerous and young, and in low-level occupations for small scale employers.[44] Indeed, in all age groups more educated women are less likely to be working part-time. Furthermore, part-time working women are much less likely to be managers, professionals and associate professionals and much more likely to be in personal service, sales and elementary occupations. Indeed, 22% of managers and 34% of professional and technical workers work part-time.[43]

Women's career trajectories

It is interesting to consider the existing theories relating to women's work career trajectories. Research suggests that some women experience barriers to career progression and women's concentration in lower status/paid jobs is a consequence of discriminatory employment practices rather than women's preferences for family-

friendly employment conditions.[29] Typically, two forms of gender discrimination have been identified within the employment market: horizontal segmentation and vertical segmentation.[45] Horizontal segmentation occurs when certain professions are 'gender-typed' and usually involves one gender being selectively recruited for specific roles. Traditionally, gender-typing has resulted in a general lowering of the occupational status of women's work. Vertical segmentation describes the situation where women occupy lower level positions within a profession. This generally is as a result of recruitment or promotion practices favouring one gender over another, the so called 'glass ceiling' effect. It is possible that child rearing in particular, is associated with discriminatory practices in the workplace. Interestingly, recent UK based research suggests that women with young children face more discrimination in the workplace than disabled people or those from ethnic minorities in the UK.[46]

A particular area of debate is whether or not women's career trajectories reflect their preferences for certain types of work or discriminatory employment practices. One of the more contentious theories is Hakim's 'preference theory' which explains women's choices between market work and family work.[40] The theory maintains that the vast majority of modern women in rich societies have a range of choices open to them. Women choose one of three different lifestyles: home centred, work centred or adaptive. The highest proportion of women fall into the adaptive group; which is populated by women who want to combine work and family. This group of women's work patterns are highly responsive to government social policy, employment policy, propaganda and economic conditions. Those in this category commonly alter their work patterns to fit in with their domestic arrangements, meaning that they commonly decrease their hours when they have children.[40]

Occupational downgrading

It seems that when women move from full-time to part-time work they often work below their potential, in roles they are sometimes over experienced or over qualified for. This can be described as occupational downgrading.[37, 44] As discussed earlier, better educated women are less likely to work part-time begging the question, why do so few women work part-time in high-level occupations? It could be argued that the more-educated typically earn more and stand to lose more from reducing hours worked; therefore, choosing to work full-time. It might also be that better-educated women are, on average, more career-oriented and part-time work could have an adverse impact on career prospects. When seeking to explain the niche employment of women in lower level occupations, theories based on women's choices contend that highly skilled women who want to work part-time choose to do a lower-level occupation, even though they could retain higher-level positions because they prefer to devote time to their children rather than their career. Consequently, if the choice based explanations are valid then occupational segregation does not seem to be a particular problem for female workers themselves. However, alternative explanations suggest that high-level occupations are simply not available on a part-time basis so that women qualified to do these jobs but who would like, in an ideal world, to work part-time are forced to choose between working full-time in a high-level job or working part-time in a lower-level occupation.

The case of pharmacy

Specifically, this study aimed to uncover the factors underpinning female pharmacists' career trajectories. It is worth considering at this point how female pharmacists' work patterns compare to those of other female workers. The data on female pharmacists' work patterns confound expectations, which predict, on the basis of their educational background, that they will likely work full-time until relatively late in their career; and that they would be more likely to return to work full-time after bearing children.[21, 22, 47] Although comparative data sets are limited, data exists for

female general practitioners, who are perhaps a good comparator. It seems that female GP's work patterns are also atypical for professional women (49.1% of female GPs work part time[48]). It is also important to note that occupational down grading is likely to occur within Pharmacy; only 11% of managers worked part time.[22]

The important question seems to be: do some female pharmacists choose to work below their potential or do structural barriers result in occupational downgrading? Although it is commonly assumed that pharmacy offers women good opportunities to balance work and home life, this study explores how true that is.[25, 49, 50] It is possible that certain aspects of community pharmacy working might impact on female workers differently than their male counterparts. An example of this is provided by Willett (1997) who suggested that a number of aspects of community pharmacy working have been linked with job dissatisfaction, including long and inflexible working hours. Long hours were found to influence women's work patterns more than men's.[51, 52] Specifically, long and inflexible hours might restrict the economic activities of workers dependent on inflexible formal childcare, such as that provided by nurseries and after school clubs. Evidence suggests that women play a greater role in providing care for their families than men, suggesting that these restrictions will apply to women more than to men.[53] Consequently, community pharmacy working might prove more problematic for females than males. It is also worth noting that the increase in the proportion of pharmacy 'chains', the so-called McDonaldisation' of community pharmacy, has increased the proportion of 'employed' pharmacists.[54] Greene (2002) indicates that 80% of pharmacists employed in this sector are female.[55] Opening hours tend to be longer and job satisfaction lower in this sector of community pharmacy than others.[54, 56, 57]

4. Aims and Objectives

This section of the report outlines the aims and objectives of the study.

4.1 Aims

The aims of this study were to:

(1) Explore the reasons why female community pharmacists adopt their chosen working patterns; and,
(2) To identify the factors that may influence these choices and determine the relative importance of these factors.

4.2 Objectives

The objectives of this study were to explore:

1. Which factors motivate female community pharmacists over 30 to work part-time or full-time?
2. What female community pharmacists over 30 perceive to be barriers to full-time working?
3. Which aspects of community pharmacy employment influence women's preferences for employment patterns after the age of 30?
4. The relative importance of factors influencing work patterns in female community pharmacists over the age of 30.

5. Outline of the study

This section of the report discusses the structure and design of the study. This study comprised two stages. The first stage was a qualitative stage, which served a dual purpose:

(1) To explore the factors underpinning the work patterns of female community pharmacists over 30; and,
(2) To generate a set of 'statements', which will be used in stage 2.

The second stage involved using Q-methodology to quantify and categorise the opinions of the sample group.

6. Stage 1

This section of the report describes the first exploratory qualitative stage of this study. Initially the methodology is described. The report goes on to outline the findings; verbatim quotations are used to illustrate themes identified from the data. The results section discusses: motivation for choosing pharmacy; career histories; factors influencing workforce participation which included remuneration and working conditions; and finally, pharmacist's career plans. Particular reference is made to issues affecting female workers including domestic commitments, lack of flexible working conditions and occupational downgrading. The section concludes with a summary of stage 1 findings. The findings of both stages are discussed jointly in section 8.

6.1 Methodology

The study involved face-to-face semi structured interviews with 30 female community pharmacists from a diverse range of backgrounds. Multi-centre research ethics committee (MREC) approval was obtained for this study. This approach was used to gain an in depth understanding of individual's views of community pharmacy working. The value of stand alone qualitative research of this type is increasingly widely recognised in exploratory studies of health service organisation and policy.[58]

The sampling frame was all GB-registered pharmacists. RPSGB registration data was stratified by PCT using the National Pharmacy Workforce Census data. Twelve PCTs in the north west of England acted as the sample frame. The selection process aimed to provide as diverse a sampling frame as possible on the basis of: housing density; deprivation index; ethnic mix; and, proximity to schools of pharmacy. Potential respondents, selected using SPSS software, were contacted by post. Recruitment letters describing the study were sent to all female community pharmacists over the age of 30 years whose registered address (normally their home address) was in the selected PCT. Two hundred and forty two recruitment letters were distributed with consent forms and freepost envelopes. A reminder letter was sent to non-responders two weeks later, and a further reminder was published in the *Pharmaceutical Journal* another two weeks later. The researcher contacted consenting pharmacists by telephone to arrange face-to-face interviews at the interviewees' home or place of work.

The interviews aimed to gather data relating to the respondents' experience of being a pharmacist and working in community pharmacy. Through a discussion of career history and interviewees' experiences it was expected that factors shaping career choices could be identified. The broad-ranging interview schedule was informed by published literature. It was used quite flexibly to ensure that specific themes were discussed, however, participants were encouraged to discuss topics that they felt to be relevant.[59] The interview schedule is appended as appendix 1. The main topics covered by the interview were: motivation for choosing a career in pharmacy; career history; current employment status; feeling about current role and community pharmacy; views on practicalities of combining working with caring responsibilities; thoughts on how community pharmacy working could be improved; future career plans; and, demographic information.

One interviewer (the author) conducted the interviews. Her experience of community pharmacy working was limited, however, most of her recent work experience was in academia and prior to that she worked principally as an industrial pharmacist; consequently it is unlikely that the resulting findings were a co-construction between interviewee and interviewer. Interviews were tape recorded and transcribed verbatim by a professional transcriber. The constant comparative approach was used to identify key themes from interview transcripts.[60] The research team (WG, KH, JD and

KP) reviewed transcripts and discussed emerging themes at regular meetings during the interviewing process. The research team comprised four academic researchers; three were from a pharmacy background (all of whom had limited exposure to community pharmacy), one was a sociologist by training who specialises in pharmacy workforce research. Data gathering continued until the research team considered that no new themes were emerging, that is until theme saturation was reached.

6.2 Stage 1 Results

This section presents and discusses the data gathered in stage 1 of this study. Firstly, the sample group is described followed by a discussion of themes that emerged from the interview data. These themes include: motivation for choosing pharmacy; career histories; factors influencing working patterns; recent changes in community pharmacy; and, future career plans.

Stage 1 respondents' characteristics

Ninety six respondents returned completed consent forms (response rate = 40%). Thirty face-to-face interviews were conducted between February and June 2005. Interviews were between 37 and 88 minutes long; mean interview length was 61 minutes. Respondent characteristics are summarised in Appendix 2. Respondents were selected to provide a diverse range of opinions. The sample group comprised pharmacists from a range of age groups and geographical locations. Most interviewees fell in the 30-39 years (n=14) and 50-59 years (n=10) age brackets. One respondent was aged over 60, the rest were aged between 40 and 49 years (n=5). All but five interviewees were White British. The majority of respondents (n=21) acted as carers for other family members. Most interviewees worked part-time (n=19). Of those interviewed: seven respondents were portfolio workers; three were proprietors; most were employees (n=24). A minority worked exclusively as a locum (n=3). Although, some portfolio workers worked part of the time as a locum (n=4).

Motivation for choosing pharmacy

Very few of those interviewed had actively chosen pharmacy as a profession. Many spoke of failing to achieve the grades for medicine or perceived that they were not good enough for medicine. A minority of interviewees had initially been attracted to scientific disciplines such as pharmacology or toxicology. Two interviewees had changed university course from pharmacology or toxicology to pharmacy and some interviewees had been advised to study pharmacy by careers advisors, teachers, parents or pharmacists. Interviewees had specifically been told that pharmacy was a good choice for a woman because it offered flexible working and permitted career breaks. This interviewee commented that a pharmacist living next door recommended pharmacy for the following reasons:

> *[My neighbour] said, you know, for a woman there's lots of part time opportunities, you can always go back and locum, you know, particularly if you have a family. I think it is a good profession for a female, because of the flexibility. R9*

Other motivating factors included interest in working with people, interest in science/healthcare, having the right A levels, enjoying pharmacy work experience and personal perceptions relating to the compatibility of pharmacy working with having children. One respondent commented that she chose pharmacy because she felt it was compatible with having children:

I knew I was gonna have children, already was sort of engaged to my partner at quite a young age….. I knew that a family would come at some point …. it just seemed the type of career that you can actually drop in and out of and do very, very flexible hours, cos I didn't ever foresee myself working full time forever. R8

Career histories

Interviewees were fairly evenly divided between those who had worked consistently in community pharmacy and those who moved between employment sectors of pharmacy. Interviewees had usually adapted their employment in response to changes in personal circumstance with marriage and children being the most common catalysts for career change. A number of interviewees over the age of 50 indicated that they had moved from hospital pharmacy to community pharmacy early in their career for a combination of financial and personal reasons. One 58 year old pharmacist commented that:

I originally worked in hospital pharmacy and had always intended to work in hospital pharmacy, but after having the children it was actually better from a family life point of view for me to work part time as a locum pharmacist in the community… It was financial, in order to earn the same amount in hospital I'd have to be working full time and in the community I would be doing two to three days. R1

An interesting finding was that some female community pharmacists interviewed had prioritised their husband's career over their own. One female pharmacist, who moved from hospital to community, commented:

My husband was a pharmacist and he wanted to go into industry, which is very poorly paid …….in order to support [my husband's] career I went into community because it was better paid. R24

Moving from community pharmacy to hospital was less common. One pharmacist reported moving to hospital pharmacy because she did not enjoy community pharmacy. However, most community pharmacists said that they enjoyed their job, although there were frustrating factors involved. Portfolio working was fairly common: female pharmacists commonly combined community and PCT pharmacy roles. These portfolio workers usually worked for the majority of their working week for the PCT. They commonly reported that working in community was useful for their PCT work. One part-time PCT pharmacist commented:

In our team I'm the only one with a community background and dare I say, a lot of them, because they're academic, their perception of community pharmacy is totally different and opposite to mine and they often look to me to give advice on community aspects and I think they find that quite useful. R3

The majority of interviewees responded to career opportunities that arose rather than actively planning career moves. A minority were career focused and typically these women were proprietors. One part owner of a pharmacy had clearly strategically planned her career:

I looked at the way that I thought community pharmacy was going to go and decided that I needed a game plan for five years…I'm quite looking forward to the fact that pharmacy's gone the way that I thought it would, and my own little secret development plan that I had

when [child] was born ten years ago, you know, I armed myself well to be able to do what we did, and it's quite satisfying. R28

One former proprietor commented that owning a shop was very restrictive:

Totally inflexible….cos like if something particularly happened and you desperately wanted that day off it was very difficult. Just to quote an example my husband's mum was very, very ill and in (...) hospital, and I literally in a lunch hour had to drive my husband up to the hospital and back, in an hour's lunch hour, because I couldn't get anybody to cover me. So that's the sort of thing you end up doing, you know. You're rushing round all the time. R2

Factors influencing working patterns
Domestic Responsibilities

As might be expected working patterns were strongly influenced by personal circumstances. Family commitments were highly significant to many interviewees with dependant children. Factors such as: age and number of children, availability of informal childcare, views on formal childcare provision, husband's job and his contribution to domestic workload all influenced working patterns. Interviewees commonly stated that their family/children were their priority. A typical comment from a pharmacist with children is:

I mean my major thing is my family. I mean I would give up my work tomorrow if it meant, if staying in work meant that there'd be some hardship for the family. R29

Again some female pharmacists interviewed prioritised their partners' careers above their own:

I think that within partnerships one has to give, don't they, really. And I think that in my situation my husband runs his own business …. I mean basically that's our bread and butter, so it's more important that he is fully focused on that and I fit in. And I think an awful lot of my female friends are in a similar situation. *R12*

Working patterns reflected pharmacists' priorities; most interviewees reduced their working hours after having children. Those who reported working the most hours after having children commonly had access to flexible informal childcare. One respondent, who worked full-time after having her first child was born commented:

I worked up to forty five hours…..It was a long day with the little one ….we was living with my husband's parents. So we have live in childcare, so it was great. R17

Some interviewees commented on how tiring community pharmacy working conditions were:

I didn't go totally full time because the days were quite long, sort of nine till six, and depending on where you were you didn't often get a proper lunch break…... I found four full days was adequate, otherwise I just got so tired, and then of course I didn't have any family life if I worked more than that. R3

Some interviewees reported successfully using formal childcare and working full-time after having children, however, formal childcare was generally supplemented by informal childcare. That is, family members cared for children before or after nursery/school. Formal childcare alone often did not combine well with full-time community pharmacy working because childcare hours are not compatible with the standard community pharmacy day. One interviewee commented that:

> *The hours in pharmacy are very difficult for a female with children to juggle because childcare tends to finish at six o'clock and we're finishing at half past six, and I felt it was very much my husband was having to do an awful lot of the to-ing and fro-ing. R12*

Lack of family friendly working conditions

Other researchers have identified pharmacy as a career which appealed to women offering flexible working conditions,[25] however some respondents considered that this was not the case. This interviewee who chose pharmacy because she expected it to be flexible commented:

> *I think there must be careers which are more flexible and better suited to a woman. I'm quite surprised, actually being in this position now, having to say that, because I was always under the impression that pharmacy was flexible. Which is one of the reasons I sort of thought about it as a long term career. R5*

Most of the women interviewed with dependent children worked as employees. Working conditions varied enormously, however, most worked for large multiples. Large employers operated a diverse range of working arrangements. There was little evidence of a transparent policy governing flexible working patterns for women with children. Working conditions appeared to be negotiated at a local level on an ad hoc basis. Consequently, some employees benefited from family friendly working parent contracts. However, these contracts were not available to all employees with children. One respondent commented on her frustration at the allocation of working conditions:

> *I've asked for a term time contract and I've been told that's fine but it's not good for the business so you'll have to go on a waiting list, there's four people in front of you, when their children leave school you can have it. R5*

Interestingly, many of the interviewees employed by pharmacy multiples reported that prior to having children they had been employed as pharmacy managers. On returning from maternity leave, however, they had usually "lost their shop" and were employed as relief managers. This role involves working in a range of different locations, consequently journey times to and from work varied. Relief management is not only perceived to be a lower status role than store management but is also generally reported to be less enjoyable. This role change was reported to be disruptive and singularly incompatible with rigid formal childcare hours. A number of interviewees reported leaving their employer after having a baby for these very reasons. One pharmacist employed by a large multiple commented:

> *I stayed with [my employer] for a long time, up until I had my first child, so I was there for about ten years, and it was a very difficult decision to actually leave. After going back after maternity leave I was*

doing a lot of relief work which meant you didn't really know whether you were going to Stoke one week or the Wirral the next week, North Wales the week after. It was very difficult to rely on being able to pick my child up from nursery at the right time. R23

Interviewees with dependent children were particularly affected by their inability to leave the workplace. Most formal childcare providers and schools exclude 'sick' children causing significant anxiety for women working in community pharmacy. One interviewee perceived that this was an issue which impacted on women in work more than men. She said:

Once they went to school that's when my problems started….It didn't matter how much I said to somebody at a school, 'I cannot come out of work', you know, like I'm not the type anyway to just abandon a shop, they don't seem to understand how important it is…..there's no understanding of your job, and I found when I was first contact at school they'd ring me up about the silliest things, and then we decided to take my name off the contact and we put my husband's name, they never contacted him because they wouldn't bring him out of work unless it was something important. R27

However, interviewees indicated that some employers managed this situation better than others. Some employers managed emergency cover centrally; employing specific managers and relief pharmacists for this purpose. Some interviewees reported choosing their working hours to ensure that a family member was always available to collect children in an emergency. Others reported that they only worked on weekends and in the evenings whilst their children were young. Conversely, some interviewees with children particularly disliked working "anti-social" hours at the weekend and in the evenings. They considered that this disrupted family life and their partners found caring for children onerous. One pharmacist with two children, who worked 12 hours on a Saturday, commented

We barely see each other at all, the only day we get to spend together, if I'm not working, cos I do work some Sundays as well, is Sunday. So we don't really have much of a family life. It's either me with the children or my husband with the children but never together really. R25

Occupational downgrading

Interviewees with children often reported working as second pharmacists because this allowed them to work a shortened day and leave the workplace in an emergency if necessary. One interviewee commented:

If I have got problems with children I phone [manager] up, also as I am not the manager if I'm ill or the children are ill, it's the manager's responsibility to staff the shop. R7

Female pharmacists with children are often concentrated in lower paid positions in community pharmacy at the practitioner level.[61] However, practitioner level pharmacists working family friendly hours were overwhelmingly satisfied with their working arrangements. A typical comment from one woman who worked family friendly hours was:

It's fantastic. It's wonderful. I come home at two thirty, it's brilliant. R17

However, when asked about remuneration she said:

I think it's appalling. I've never actually thought of the money side of things ever before, especially working full time….but now it's a different dimension cos I've got two children, I've got childcare to pay out…….I mean my hourly rate is £15.88. R17

Some pharmacists explicitly stated that they preferred to work at the practitioner level, earning less money, leaving the responsibility of management to someone else. One pharmacist commented:

I'm quite happy just being the pharmacist, not the pharmacy manager, don't have the hassles, don't have quite as much paperwork. R14

Allocation of annual leave was reported to create difficulties for some interviewees with dependent children. Some employers required community pharmacists to submit holiday requests a year in advance. Furthermore, employed community pharmacists often reported that holidays had to be taken at specific times and restrictions often applied in school holidays times. One pharmacist with school age children, who worked for a large multiple, said that she had been unable to take any time off over the school summer holidays:

This summer coming up, I asked for some weeks in the summer, just thinking, you know, if I put down, cos obviously for childcare, and I've got a week in April and two weeks at the beginning of September when the children go back. So that's my summer holidays. R5

Older interviewees, whose children were independent, generally experienced less difficulty in combining work with domestic responsibilities. However, many still preferred to work part-time. Part-time workers in this age range either: considered their career was winding down; liked to have time to themselves; acted as carers or did voluntary work. A typical comment being:

I think as you get older you don't want to have to spend all your time with work. R2

Some older full-time workers were motivated by financial factors. In some instances personal circumstances had altered; some women reported returning to full-time work following divorce. A number of older interviewees indicated that they needed to work full-time because they had not contributed to a pension earlier in their working lives. One female pharmacist, aged 55, commented that she remained in full-time work to build up a pension:

I've only had a pension since I was with Lloyds, and I didn't take it out straight away, so I've probably only had it four or five years. R27

Some older interviewees found it difficult to reduce their working hours because they did not like turning work down. A minority of older pharmacists worked as proprietors. Interestingly, none of the proprietors interviewed were under the age of 44 years. Only three interviewees had not had children. All of these pharmacists worked full-time, two worked more than 40 hours a week. These interviewees all worked "anti-social" hours and were happy to do so. Interestingly, all of these interviewees considered that community pharmacy working was compatible with being a parent.

Remuneration

A minority of interviewees disclosed levels of pay, those who did were paid between fifteen and twenty pounds an hour. Interviewees were divided on the issue of remuneration. Some considered that community pharmacy paid adequately, particularly those who were locums or received additional payments for weekend working. A typical comment being:

> *On a personal basis I feel quite well remunerated. I'm on a reasonable salary….. I think I sort of benefited from doing some management and that wasn't taken away from me. Plus also I do my Sundays at double time and that really does boost my salary. R8*

Conversely, some interviewees considered that the levels of pay in pharmacy were inadequate. Older interviewees reported that pay levels had declined relative to other professions over recent years. One respondent commented that she felt that this was due to the influx of women:

> *There's so many women have come into the profession that they've brought the price down. When it was mostly men I think it had to be not a second salary, but I do feel that it's not as well paid as it used to be. R18*

Some indicated that their rate of pay had not changed for a number of years. Interviewees most commonly considered dentists and opticians to be equivalent professions and were aware that these professions were more highly remunerated. A particular issue was the disparity between hourly rates for pharmacists and 'tradesmen'; plumbers being the most frequently cited. Typical comments were:

> *Plumbers can earn more money and do less hours and have more flexibility of a life. R27*

> *I always think of solicitors and plumbers and people like that, you think, good God, how much do they get an hour? And you know, they come and lie on the floor and put a bit of tape round a leaking thing and go off and they can forget it, and we've got this intense professional responsibility, and you get less. I think we should get at least as much as a plumber. R13*

Some interviewees with dependant children said that childcare costs discouraged them from working. One female pharmacist commented that childcare costs for more than one child were prohibitive:

> *I think it cost me something like thirty five quid a day, for one child. So by the time I had the second one, plus ten quid of fuel a day to get to Liverpool and back, it just wasn't worth it. I mean we're talking about sixty five, seventy quid a day in childcare and fuel. So I had to give it up really. R25*

One interviewee commented that maternity payments for pharmacists were poor compared with dentists and doctors. She commented that pharmacists only received statutory maternity pay:

> *We only get fifty two pounds a week,…. as pharmacists we have no support from the Society, like dentists and doctors do….. There's no incentives to have a family within pharmacy because really, and I think that also people get quite angry about that whenever they meet their friends who are dentists and doctor. R12*

Some interviewees noted that community pharmacy provided a good starting salary, however, the lack of career structure meant that pay was unlikely to increase. Some interviewees were particularly dissatisfied that rates of pay were higher for locums and that additional training/service provision went unrewarded. Interestingly, one interviewee reported that her employer paid male pharmacists more than female pharmacists for equivalent roles.

Working conditions

Some interviewees commented on deteriorating working conditions in community pharmacy. In particular, there was a concern relating to the reduced number of support staff. This, in combination with increases in workload related to providing advanced and enhanced services, resulted in increased stress in the workplace. One pharmacist employed by a large multiple commented:

> *I've been feeling very pressurised, along with everybody else, because the expected prescription number's increasing all the time, you know, targets like everybody else, and signing people up for repeat prescription items, so we're increasing our numbers all the time. Yet the number of staff is getting less and less, so there's this massive workload and it's constant from the minute you open the door in the morning to the minute you go home, it's a constant ... hundred mile an hour dash, to catch up from the previous day, to do what you've got to do, and it's very intense and ... because of the lack of staff you feel ……well, I made a couple of mistakes a few weeks ago and it made me step back and look at everything. R13*

Some interviewees commented that their working conditions compromised patient safety:

> *I'm quite disillusioned with it at the moment. I've always loved my job and I've worked hard to get my job but over the last year, eighteen months, I just feel like the pressure that I've been put under is awful. In terms of the longer hours, especially when I had to do the ten and a half hour days, that was just too long, without a break, I felt by the end of the day I didn't feel very safe, to be honest, because it was a busy store and I didn't actually feel like I was sort of competent at the end of the day as I was at the beginning, you know. But just in terms of the sort of staffing level of the store's very low. R5*

A minority of interviewees indicated that employers had not increased staff numbers even in the case of long term employee absence. Most interviewees indicated that the quality of support staff was variable. Interviewees were divided on the issue of checking technicians; few were keen to relinquish the 'final check'. Few interviewees thought that checking technicians would significantly improve working conditions for pharmacists. Many interviewees felt that improved IT facilities, particularly internet access, would enable them to work more effectively.

Changes in the community pharmacy working

Many interviewees enjoyed providing enhanced and advanced services; however, few received additional payments for doing so. Interviewees discussed a number of issues relating to CPD and training in general. Most interviewees expressed uncertainties about CPD; recording CPD appeared to be particularly problematic. When asked about mandatory CPD one pharmacist, aged 58, commented:

> *I don't feel that I really understand the modern way of recording things…. it really is quite hard to know what you're actually expected to do and what you're expected to write down. R1*

Some interviewees found it difficult to attend evening training events; this was a particular issue for those with dependent children. Employers varied in the level of support provided for CPD. Some employers only paid for the cost of training courses whereas others provided a variable numbers of paid hours, up to a maximum of thirty, for verified CPD. Pharmacists commented:

> *You see we get no paid CPD time, it's all done, and you know, trying to fit it in with three kids, running a family and working two days a week, it's hard work. I mean I get on the website, CPD website, once in a blue moon, and it's not that I'm not doing it. I am doing it, my thirty hours and more, but I find recording it hard. R11*

> *All the training evenings that are happening with preparation for implementing the new contract, etc. It's a bit difficult when I've worked till six and a lot of them start at seven, and I get to see my son for fifteen minutes and then I have to leave. That makes me feel guilty. R30*

Interviewees commented on the rapid rate of change in recent years. Some felt that this might discourage those currently taking career breaks from returning. One woman commented that:

> *I think that the way that pharmacy's going at the moment that if I stayed out and wasn't becoming committed then I feel that I'd have to go as a non-practising pharmacist …..I think that under the new contract the larger companies are only going to employ pharmacists who have done certain courses, because within their shops, if they're going for advanced payments, then they need all the pharmacists within that shop to have done certain courses. R12*

Another interviewee commented that this issue would prevent her working after retirement age. She said:

> *I think pharmacy's always sort of relied on active retired people to cover for holidays, days off, emergency cover, but things are changing so rapidly that I think if I was away from pharmacy for any length of time I would find it very difficult to go back. So if I was looking at perhaps not working for six weeks and then doing a day here, I think in a few years time that would be impossible. I think you have to keep up to date, you know, at least on a regular weekly basis. R1*

Pharmacists' career plans

Not surprisingly, younger interviewees were more inclined to consider career changes than older interviewees. Several younger interviewees indicated that they were considering leaving the profession. Reasons for wanting to leave included: increased stress in the workplace; changes in working conditions; incompatibility of work with domestic commitments; remuneration; and, lack of status. Typical comments from younger pharmacists with dependent children were:

> *I'm kind of in a bit of a pessimistic phase where I might just give it all up completely and do something completely different, .. you know, it's a lot of hassle for not a lot of financial gain really, when you think about how little it's improved since I qualified…..I dunno, I might just be a housewife. R25*

> *And I think that I would like to continue in pharmacy ….I was thinking about going and doing my health and safety course a year ago…..now and again I do think it's not working for you, can I go and do something else to help within our business, rather than to do pharmacy. R12*

Some interviewees said their plans were strongly dependent on working conditions:

> *I think that if they expect me to do nine to seven then I'd probably never work in pharmacy again……Because I think that I don't have to work, is that an awful thing to say. Yeah, I work because I like working, I like what I do, but if it's going to affect my family life then unfortunately… I think that pharmacy has to be more flexible. R12*

> *If this stays as it is for the next six months I'm looking for, I'm gonna retrain, I'm gonna do something else. And that's really quite upsetting for me because I've spent a long time actually doing it and I do love my job. R5*

It should be noted that a number of part-time community pharmacists interviewed stated that they would cease to practice if the rate of change in community pharmacy meant they perceived training requirements to be too onerous. One female pharmacist commented she would stop working if further services were introduced:

> *They've got all these enhanced and what not services in, whether they then move on a step and we have to do more. I don't really think I'll be wanting to do more. R2*

Another commented that her working patterns would be affected by changes in the profession:

> *I think it just depends how pharmacy goes, you know. It really does depend. You know, there's obviously gonna be a lot of changes over the next few years, you know, when the electronic prescribing comes in and that sort of thing. R3*

Younger pharmacists were also more likely to consider moving out of community pharmacy into other areas of pharmacy. Some indicated that they had sought employment which allowed further study to facilitate future career moves. However,

many of those interviewed were not considering significant career changes. Although interviewees often reported that they would like to increase or, more commonly, decrease hours worked.

6.3 Summary of Stage 1: Key findings

Principally this study found that:

* Female community pharmacists adopt heterogeneous work patterns to fit in with personal circumstances.
* Work patterns altered as a consequence of marital status, children and other caring responsibilities.
* Structural aspects of community pharmacy could act as barriers to full-time employment for some women. These included limited family-friendly contracts, anti-social hours, difficulties accommodating annual leave, and the restrictive legislative framework that necessitates a pharmacist to always be present in a store.
* Structural barriers discouraged some interviewees from working in community pharmacy and in some cases forced female community pharmacists into lower paid roles.
* Interviewees expressed mixed views about remuneration levels, some felt under paid relative to other professions.
* Some interviewees reported working in high pressure working environments.
* Some interviewees reported low levels of job satisfaction as a consequence of high workload and lack of time for patient contact.
* Interviewees were concerned about the effect of workloads on patient safety.
* The majority of interviewees found the principles of CPD confusing.
* Few interviewees planned CPD appropriately; commonly choosing CPD topics on the basis of interest or accessibility.
* The majority of interviewees experienced difficulty in entering CPD online.
* Interviewees, towards the ends of their careers, reported they would cease to practice as a consequence of CPD.

7. Stage 2

This section details the second stage of this study and presents the results. This section opens by explaining Q methodology and how it was used in this study. The results are then outlined in qualitative detail; tables are used to summarise the statements which provoked the strongest reaction amongst subgroups of respondents. Finally the limitations of this method are discussed.

7.1 Q Methodology

The second stage of this study used Q methodology. William Stephenson introduced the Q method in 1935.[62, 63] The method has been used in practice based research studies, particularly in nursing[64] and psychiatry,[65] but in recent times the method has been used in pharmacy practice research.[66] The method combines the strengths of both qualitative and quantitative research, specifically it is a technique for accessing subjectivity.[64] The two strengths of Q methodology are that it is exploratory and theory-generating. The aim of Q methodology is to access as many alternative views as possible and describe them in order to map the subjective scope of the topic. The underpinning philosophy being that no one viewpoint is superior or objective. The method is useful for highlighting "inner discursive conflict" and deals with complex conflicting opinions and personal beliefs.[67] Consequently, it is a more sensitive method than survey or interview methods.

Q methodology is commonly classed as a quantitative method because it uses factor analysis as a statistical technique. However, Q methodology is fundamentally a qualitative technique.[68] Q analysis differs from traditional factor analysis in that subjects rather than items are subject to factoring. Respondents sort a number of statements. Clusters of respondents with similar views can be identified from sorting patterns. It is then possible to determine associations between demographic characteristics and sorting patterns. Two important facets of Q method are that: statements are generated in the language and context relevant to respondents; and, respondents consider all statements together and rank those that they feel are most important.

Designing the Q method instrument

The first step involved in Q methodology is to derive 'statements' which are representative of the views on the given subject from as wide a range of opinions as possible.[69] In this study, items were selected from the stage 1 interviews with female community pharmacists. Initially transcripts from 20 respondents were analysed by two members of the research team to identify broad themes. Seven themes were identified from the transcript data. These were: attitude to CPD; career pathway; current working conditions; future of pharmacy; job satisfaction; motivators for choosing pharmacy; and, recording CPD. Statements were extracted from the transcripts and were categorised by three researchers (WG, JD and KP were involved in this stage). Within categories subcategories were created to further describe the range of opinions. Examples of these include "enhanced services", "support staff" and "management support". Subcategories were generated until no new categories emerged from the material. Three researchers (WG, KH and JD) selected 57 statements which best represented the themes most relevant to the research questions. Items were checked to ensure that they were unambiguous. The initial Q statements were piloted on five individuals and re-worded if required, although original quotations were used as much as possible. The Q statements used are listed below in Table 1:

Table 1: Q Statements

1. Although I enjoyed working as a locum I prefer the security of being employed
2. There aren't enough family friendly or term time contracts for everyone who wants one to get one
3. I prefer to be a second pharmacist – then if the kids are ill it isn't my job to sort out cover
4. I'm quite happy just being the pharmacist, not the pharmacy manager, don't have the hassles, don't have quite as much paperwork
5. Pharmacy lived up to my expectations until I had children. Now it's just a means to an end
6. When I had children I knew I couldn't stay at home, I enjoy my job
7. I think as you have children, you have to stop working long hours – it just isn't fair on your children
8. I wouldn't want to work at the weekend. It's the only time we have as a family
9. It's more important that my partner is fully focused on his career and I fit in
10. When I had a career break to have children I didn't want to go back to work because I lost confidence
11. Part time staff get the less attractive jobs
12. The hours in pharmacy are hard for a female with children to juggle because childcare tends to finish at six o'clock and we're finishing later
13. The demands a store makes on you – you would have to be very single-minded to have a family and be a manager
14. I might just give pharmacy up and do something completely different
15. Its okay in community pharmacy for a woman if you want to mix it with family. Women don't want a career – they want an interesting job that fits in with family life
16. I loved working in hospital but community paid better
17. I could never work full time in community pharmacy
18. I feel I need to keep my hand in pharmacy – if I stop it will be difficult to get back in. I am just biding my time until I decide what to do
19. The expense of childcare is huge, it puts me off working
20. If you have the part time fee more people might just do the odd bit
21. It's great that people can be second pharmacists, then people don't have to have overall responsibility while they've got other home commitments
22. I don't mind being paid less than the manager because I have less responsibility
23. I would really like to cut down my hours and have a shorter working week
24. Owning my own pharmacy would be too much hassle
25. I prefer to be an employed pharmacist so that I get a pension
26. The work that I am doing at the moment is too demanding for me to be able to balance my work-life
27. I work because I want to work and I enjoy it, I don't have to work

28. I feel I should have time in work to do CPD
29. I work long hours and then to come home and do CPD is really hard
30. I work part time and I am having to put in time to do CPD. Technically that is lowering my hourly rate
31. I quite enjoy providing enhanced services – I'm hoping that they will become a reasonable part of my working day and will make things more interesting
32. I find it frustrating that you've not enough staff to do the job properly
33. I'm a little jaded with the profession – I expected to be keen and enthusiastic but further down the line I'm not
34. Working conditions put me off working in community pharmacy
35. What I don't like about community pharmacy are the extra demands – the feeling that you are overloaded with work
36. In a supermarket you work shifts, it suits me

Table 1: Q Statements (continued)

37. I don't mind working long hours, it suits me
38. I am restricted when I can take holidays, which can be inconvenient
39. I think they try and accommodate people with children's holidays first
40. I am put off working part time because part time workers are not really included in company training events
41. I like to feel in control without being too pressured, and I think just with the volume of scripts and enhanced services – it is too much
42. You start seeing the extended role as another thing to make your life more difficult, rather than enhancing your professionalism
43. I find I work outside my paid time, to provide enhanced services
44. I think training for enhanced services has really geared me up again to be interested in Pharmacy
45. I find community pharmacy tedious
46. Just because you have children doesn't mean you can't dedicate yourself 100% to your career
47. It suits me to work at the weekend
48. I don't see why people with children should have more flexible working arrangements than anyone else
49. Part time working results in a lack of continuity and that's bad for other staff and the business in general
50. I am less motivated by rates of pay than most men
51. When I had my baby I didn't want to go back to work, but I needed the money
52. I like working full time
53. When my children get older I will definitely increase my hours
54. I plan to give up working as a pharmacist, CPD is the last straw
55. I moan to management about the working conditions all the time but it is like banging your head against a brick wall
56. At the moment salary is an important factor in choosing where I work
57. I would choose to work for someone who would pay my registration fee

Study Sample

Q methodology does not require a large population, a sample of 30 to 50 individuals is usually used.[70] A relatively small sample is acceptable because Q methodology aims to explore diversity of understanding rather than prevalence of understanding. The stage 1 sample frame was used to identify the sample for the Q methodology stage (this is described in section 5). Respondents were purposively sampled from a range of demographic groups and geographical locations. The sample for this study comprised 40 female pharmacists over the age of 30. Respondents were contacted by phone by the researcher who explained the study method prior to gaining consent. Q sorts were conducted between January and May 2006.

Gathering Q-sort data

Multi-centre research committee (MREC) approved the second stage of this study. The study was conducted face-to-face in the respondent's own home. It was considered that this approach would be more convenient for respondents and it would allow respondents to comment on statements and clarify instructions if necessary. The researcher (WG) provided a set of statements and a sorting template to respondents and then explained the process. The researcher asked the respondent to read the statements several times before sorting them. Initially respondents were asked to sort statements into three categories. The sorting options were: agree; disagree; and, neutral/not applicable. Subsequently, respondents sorted statements into a pre-determined pattern using a template (see appendix 3). The template represented a quasi normal distribution.[67] The template ranged from -5

(strongly disagree) through 0 (neutral/not applicable) to +5 (strongly agree). Respondents chose the two statements that they most strongly agreed with out of all the statements and placed them at the +5 position. Then they chose the four statements that they were in strong agreement with and placed them at the +4 position. This carried on until all the statements they agreed with were placed on the template. This process was repeated with the disagree statements starting with those that they most disagreed with. Finally, the neutral statements were placed at the 0 position. On some occasions the number of statements did not fit exactly, for example there were more or less than 9 neutral statements. In this situation statements were placed in the nearest available space (usually between –1 and +1). The respondent was free to rearrange the order of the statements at any time.

7.2 Stage 2 Data analysis

Data were analysed by Q factor analysis using PCQ software version 1.41.[71] Each of the completed Q-sorts represents an individual point of view about the topic considered and a group of similarly sorted Q-sorts, or a factor, represents a shared viewpoint. Thus, if a number of factors are identified in the analysis it indicates that there are multiple viewpoints about the study topic.[68] There are three stages to analysing Q-sorts: (1) correlation; (2) factor analysis; and, (3) factor score determination.

Correlation

Firstly, the Q-sorts are correlated with one another to indicate the degree of similarity between Q-sorts. Highly correlated Q-sorts are likely to load on the same factor.[72] The aim of analysis is to identify Q-sorts with similar distributions with the data being interpreted on the basis of patterns of Q-sorts.

Factor analysis

When factors have been identified they were rotated orthogonally using “varimax” rotation. This aims to find the best fit with the data. The process is iterative such that variance is distributed across the factor structure so that each Q-sort has the highest degree of association with only one factor, when all sorts and factors (loadings) are considered.[71] This generates factor scores, which indicate the association between factors and participants.

Calculating the factor score

Following factor extraction and rotation, a model or synthetic Q-sort is generated to represent each factor, based on the Q-sorts of the respondents defining the factor. The factor arrays were calculated according to a process of weighted averaging.[73] That is the higher loading exemplars are given more weight in the averaging process since they better exemplify the factor. The merged average factor sort resembles a single Q-sort. Thus each factor is represented by a Q-sort containing all of the Q-sort statements. The factors are then interpreted, in the first instance principally on the basis of the extremes of the factor array. The statements at the extreme of the array are most important because these are most significant to the respondent. Respondents’ comments and demographic information were used to aid factor interpretation. Secondly, the researcher examined the statements for which all factor scores were significantly positive or negative to identify which statements elicited similar responses from most respondents.

7.3 Results

The following section firstly describes the sample group and then details the factors identified.

7.3.1 Stage 2: Respondent characteristics

Forty face-to-face Q-sorts were conducted between January and May 2006. Respondent characteristics are summarised in appendix 4. Respondents fell into the following age ranges: 30-39 years (n=15); 40 and 49 years (n=10); and, 50-59 years (n=12) age brackets. Three respondents were aged over 60 years. The majority of respondents (n=30) acted as carers for other family members. Most respondents worked part-time (n=24), defined as less than 32 hours per week. Of those interviewed, 21 were employed, 14 worked as locums, 8 worked for the Primary Care Trust (PCT) and 8 had more than one employer.

7.3.2 Stage 2: Factor interpretation

Using the PCQ method program, nine factors were identified indicating nine distinct viewpoints amongst the sample population. These factors accounted for 58% of the variance in the data. The resulting synthetic Q-sorts in appendix 5 and factor arrays in appendix 6 formed the basis for interpretation of the data. It is common practice in Q-methodology to title each factor; the aim of this is to provide a condensed version of the core themes which define the factor. The nine identified factors were: fulfilled pharmacists; family first or pharmacy shelved; low stress altruist; permanent part-time employees; focused on free time and finances; pressurised modernisers; wandering wage slaves; overloaded and under resourced for the new contract; and, pin money part-timers.

Factor 1: Fulfilled pharmacists
Table 2 details the statements which were important to exemplars of factor 1. For the full factor array see appendix 5.

Table 2: Factor 1 array poles

Strongly Agree	Agree	Disagree	Strongly Disagree
+5	+4	-4	-5
6. When I had children I knew I couldn't stay at home, I enjoy my job	9. It's more important that my partner is fully focused on his career and I fit in	5. Pharmacy lived up to my expectations until I had children. Now it's just a means to an end	14. I might just give pharmacy up and do something completely different
27. I work because I want to work and I enjoy it, I don't have to work	15. It's okay in community pharmacy for a woman if you want to mix it with family. Women don't want a career – they want an interesting job that fits in with family life	17. I could never work full time in community pharmacy	45. I find community pharmacy tedious
	46. Just because you have children doesn't mean you can't dedicate yourself 100% to your career	54. I plan to give up working as a pharmacist, CPD is the last straw	
	50. I am less motivated by rates of pay than most men	56. At the moment salary is an important factor in choosing where I work	

Exemplars of this factor showed a marked enthusiasm for community pharmacy working; strongly disagreeing with the statement "I find community pharmacy tedious". Furthermore, they strongly agreed with statement 27, "I work because I want to work and I enjoy it, I don't have to work". Consequently, it is not surprising that mandatory CPD has not deterred those who loaded on this factor from working as pharmacists. Indeed those who loaded on this factor moderately agreed that training to provide services under the new contract had increased their interest in pharmacy. Additionally, exemplars of this factor agreed with statement 6, "When I had children I knew I couldn't stay at home, I enjoy my job".

Exemplars of this factor also strongly agreed with statement 46, "Just because you have children doesn't mean you can't dedicate yourself 100% to your career". However, they also strongly agreed to statements which appeared to contradict that viewpoint; "It's more important that my partner is fully focused on his career and I fit in" and "It's okay in community pharmacy for a woman if you want to mix it with family. Women don't want a career – they want an interesting job that fits in with family life". This suggests rather complex and conflicted attitudes on career commitment.

Interestingly those who loaded on this factor were not financially motivated, disagreeing with statement 56, "At the moment salary is an important factor in choosing where I work". Exemplars also strongly agreed with the statement "It's more important that my partner is fully focused on his career and I fit in," implying that exemplars values on remuneration were strongly shaped by their stance on their partner's role as the primary bread winner.

More respondents loaded on this factor exclusively than any other factor (n=5). Those who loaded on this factor fell into two demographic groups. Three exemplars were over 50 years and worked over 27 hours a week, the other two were both 38 years old and did not work directly in a community pharmacy. It is noteworthy that,

exemplars moderately agreed that the hours in community pharmacy may not combine well with formal childcare, although none of these people experienced conflicts with childcare and community pharmacy working because either children were older or they did not work in community pharmacy.

Factor 2: Family first or pharmacy shelved?
Table 3 details the statements which were important to exemplars of factor 2. For the full factor array see appendix 5.

Table 3: Factor 2 array poles

Strongly Agree	Agree	Disagree	Strongly Disagree
+5	**+4**	**-4**	**-5**
21. It's great that people can be second pharmacists, then people don't have to have overall responsibility while they've got other home commitments	7. I think as you have children, you have to stop working long hours – it just isn't fair on your children	10. When I had a career break to have children I didn't want to go back to work because I lost confidence	9. It's more important that my partner is fully focused on his career and I fit in
24. Owning my own pharmacy would be too much hassle	8. I wouldn't want to work at the weekend. It's the only time we have as a family	47. It suits me to work at the weekend	37. I don't mind working long hours, it suits me
	12. The hours in pharmacy are hard for a female with children to juggle because childcare tends to finish at six o'clock and we're finishing later	48. I don't see why people with children should have more flexible working arrangements than anyone else	
	28. I feel I should have time in work to do CPD	53. When my children get older I will definitely increase my hours	

Factor 2 exemplars strongly agreed with statement 24, "Owning my own pharmacy would be too much hassle," as well as 21, "It's great that people can be second pharmacists, then people don't have to have overall responsibility while they've got other home commitments". This suggests that exemplars sought to minimise levels of personal responsibility in the workplace, preferring to work at a practitioner level. In fact this factor was defined by statements indicating a willingness to shape work patterns to accommodate family commitments. By way of example those loading on this factor strongly agreed with statement 8, "I wouldn't want to work at the weekend. It's the only time we have as a family". Exemplars overwhelmingly preferred not to work long or anti-social hours. This is possibly explained by exemplars agreement with statement 7, "I think as you have children, you have to stop working long hours – it just isn't fair on your children".

There was some indication that those loading on this factor were career motivated. They disagreed with statement 9, "It's more important that my partner is fully focused on his career and I fit in" and 10, "When I had a career break to have children I didn't want to go back to work because I lost confidence". Furthermore, there was moderate disagreement with statement 15, "It's okay in community pharmacy for a woman if you want to mix it with family. Women don't want a career – they want an interesting job that fits in with family life". However, exemplars were less dedicated to pharmacy than other factor exemplars; there was agreement with statement 14, "I might just give pharmacy up and do something completely different". This could reflect exemplars' opinion that community pharmacy was difficult to combine with

having children; they agreed with statement 12, “The hours in pharmacy are hard for a female with children to juggle because childcare tends to finish at six o’clock and we’re finishing later”. The two respondents who loaded on this factor both had dependent children. One exemplar had four school age children and worked school hours; the other had two children and was currently on maternity leave and was trying to reduce her working hours.

Those who loaded on this factor moderately agreed with statement 42, “You start seeing the extended role as another thing to make your life more difficult, rather than enhancing your professionalism”. Exemplars also moderately agreed that it was difficult to combine CPD with work and family commitments. So, it seems the introduction of mandatory CPD and the advent of the new community contract might have exacerbated existing difficulties in combining pharmacy working with family commitments for those loading on this factor.

Factor 3: Low stress altruist

Table 4 details the statements which were important to exemplars of factor 3. For the full factor array see appendix 5.

Table 4: Factor 3 array poles

Strongly Agree	Agree	Disagree	Strongly Disagree
+5	**+4**	**-4**	**-5**
7. I think as you have children, you have to stop working long hours – it just isn’t fair on your children	4. I’m quite happy just being the pharmacist, not the pharmacy manager, don’t have the hassles, don’t have quite as much paperwork	6. When I had children I knew I couldn’t stay at home, I enjoy my job	37. I don’t mind working long hours, it suits me
41. I like to feel in control without being too pressured, and I think just with the volume of scripts and enhanced services – it is too much	13. The demands a store makes on you – you would have to be very single-minded to have a family and be a manager	26. The work that I am doing at the moment is too demanding for me to be able to balance my work-life	56. At the moment salary is an important factor in choosing where I work
	15. It’s okay in community pharmacy for a woman if you want to mix it with family. Women don’t want a career – they want an interesting job that fits in with family life	46. Just because you have children doesn’t mean you can’t dedicate yourself 100% to your career	
	20. If you have the part time fee more people might just do the odd bit	52. I like working full time	

This factor was defined by statements inferring that exemplars favoured a low pressure work environment. Specifically, those loading on this factor strongly agreed with statement 41, “I like to feel in control without being too pressured, and I think just with the volume of scripts and enhanced services – it is too much”. There were a number of areas of consensus between this factor and factor 2. Exemplars of both strongly agreed with statement 7, “I think as you have children, you have to stop working long hours – it just isn’t fair on your children”. However, factor 3 exemplars were less career committed in general, agreeing with statement 15, “It’s okay in community pharmacy for a woman if you want to mix it with family. Women don’t want a career – they want an interesting job that fits in with family life”. Exemplars also strongly disagreed with statement 46, “Just because you have children doesn’t mean you can’t dedicate yourself 100% to your career”.

Those who loaded on this factor appeared to have little desire for career progression, they concurred with statements 4,"I'm quite happy just being the pharmacist, not the pharmacy manager, don't have the hassles, don't have quite as much paperwork" and 13, "The demands a store makes on you – you would have to be very single-minded to have a family and be a manager". Strikingly, this is the only factor to strongly disagree with the statement "When I had children I knew I couldn't stay at home, I enjoy my job." Suggesting perhaps that factor 3 exemplars had been more motivated to stay at home with children than other respondents.

Exemplars of this factor preferred to work reduced hours disagreeing with statements 37, "I don't mind working long hours, it suits me" and 52, "I like working full time". Rates of pay were not important to factor 3 exemplars who strongly disagreed with statement 56, "At the moment salary is an important factor in choosing where I work". Three respondents loaded exclusively on this factor.

There did not appear to be a clear link between factor exemplars' demographic factors. Two factor exemplars worked part-time as locums, in one case combining this with PCT work. One was aged 39 and had dependent children. The other was 50 and her children were 21 and 19 years old. The other was 62 years old and at the time of the interview she worked full time as a manager; she worked full time in response to financial pressures, her husband had lost his job and pension provision.

Factor 4 Permanent part time employees

Table 5 details the statements which were important to exemplars of factor 4. For the full factor array see appendix 5.

Table 5: Factor 4 array poles

Strongly Agree	Agree	Disagree	Strongly Disagree
+5	**+4**	**-4**	**-5**
24. Owning my own pharmacy would be too much hassle	7. I think as you have children, you have to stop working long hours – it just isn't fair on your children	42. You start seeing the extended role as another thing to make your life more difficult, rather than enhancing your professionalism	48. I don't see why people with children should have more flexible working arrangements than anyone else
32. I find it frustrating that you've not enough staff to do the job properly	17. I could never work full time in community pharmacy	49. Part time working results in a lack of continuity and that's bad for other staff and the business in general	54. I plan to give up working as a pharmacist, CPD is the last straw
	22. I don't mind being paid less than the manager because I have less responsibility	50. I am less motivated by rates of pay than most men	
	47. It suits me to work at the weekend	53. When my children get older I will definitely increase my hours	

Those who loaded on this factor planned to work part-time for their entire career and strongly disagreed with statement 53, "When my children get older I will definitely increase my hours," whilst strongly agreeing with statement 17, "I could never work full-time in community pharmacy". Exemplars considered that part-time work was not detrimental to other staff or the business in community pharmacy. They also considered that flexible working conditions should be available for parents, disagreeing with statement 48, "I don't see why people with children should have more flexible working arrangements than anyone else".

This group strongly disagreed with statement 50, “I am less motivated by rates of pay than most men”. However, there was only weak agreement that “At the moment salary is an important factor in choosing where I work,” perhaps indicating that exemplars disagreed with the “sexist” element of statement 50 rather than the pay component. Additionally, exemplars were prepared to accept lower rates of remuneration for less responsibility; there was strong agreement with statement 22, “I don’t mind being paid less than the manager because I have less responsibility”. Exemplars preferred to work as practitioners, they strongly agreed that “Owning my own pharmacy would be too much hassle,” and moderately agreed with statement 25, ”I prefer to be an employed pharmacist so that I get a pension”.

It is noteworthy that exemplars strongly agreed with statement 32, “I find it frustrating that you’ve not enough staff to do the job properly”. Perhaps this indicates the importance of adequate support staff to part-time community pharmacists. CPD did not deter exemplars of this factor from working in community pharmacy who strongly disagreed with statement 54, “I plan to give up working as a pharmacist, CPD is the last straw”. Three part-time employees, aged between 35 and 43, loaded exclusively on this factor, all had dependent children.

Factor 5 Focused on free time and finance

Table 6 details the statements which were important to exemplars of factor 5. For the full factor array see appendix 5.

Table 6: Factor 5 array poles

Strongly Agree	Agree	Disagree	Strongly Disagree
+5	**+4**	**-4**	**-5**
8. I wouldn’t want to work at the weekend. It’s the only time we have as a family	18. I feel I need to keep my hand in pharmacy – If I stop it will be difficult to get back in. I am just biding my time until I decide what to do	9. It’s more important that my partner is fully focused on his career and I fit in	47. It suits me to work at the weekend
38. I am restricted when I can take holidays, which can be inconvenient	29. I work long hours and then to come home and do CPD is really hard.	33. I’m a little jaded with the profession – I expected to be keen and enthusiastic but further down the line I’m not	54. I plan to give up working as a pharmacist, CPD is the last straw
	44. I think training for enhanced services has really geared me up again to be interested in Pharmacy	35. What I don’t like about community pharmacy are the extra demands – the feeling that you are overloaded with work	
	56. At the moment salary is an important factor in choosing where I work	42. You start seeing the extended role as another thing to make your life more difficult, rather than enhancing your professionalism	

This factor had some areas of consensus with previous factors; specifically the exemplar did not want to work at the weekend, strongly agreeing with statement 8, “I wouldn’t want to work at the weekend. It’s the only time we have as a family,” whilst strongly disagreeing with statement 47, “It suits me to work at the weekend”. This factor was quite distinct from other factors in that remuneration rates were highly important; there was strong agreement with statement 56, “At the moment salary is an important factor in choosing where I work”. The exemplar of this factor was the sole bread winner which possibly explains this aspect.

At the time of the interview, the respondent worked as a group manager working between 50 and 60 hours a week. Based on this it would appear that this respondent was ambitious and career driven, however, she agreed with statement 24, “Owning my own pharmacy would be too much hassle,” and preferred to be employed to gain pension benefits. Furthermore, she wanted to reduce her hours, moderately agreeing with statement 23, “I would really like to cut down my hours and have a shorter working week”. Additionally, the exemplar agreed with statement 18, “I feel I need to keep my hand in pharmacy – If I stop it will be difficult to get back in. I am just biding my time until I decide what to do” suggesting that a career change was imminent.

The exemplar of this factor valued free time, strongly agreeing with the statements 8, “I wouldn’t want to work at the weekend. It’s the only time we have as a family” whilst strongly disagreeing with statement 47, “It suits me to work at the weekend”. The exemplar of this factor agreed with statement 29, “I work long hours and then to come home and do CPD is really hard”. However, this principally reflected her current role. In spite of this she disagreed with statement 54, “I plan to give up working as a pharmacist, CPD is the last straw”. In fact she was enthusiastic about the new contract concurring with statement 44, “I think training for enhanced services has really geared me up again to be interested in Pharmacy” whilst disagreeing with statement 42, “You start seeing the extended role as another thing to make your life more difficult, rather than enhancing your professionalism”.

It is interesting that despite the long hours she worked the exemplar of this factor disagreed with statement 35, “What I don’t like about community pharmacy are the extra demands – the feeling that you are overloaded with work”. Furthermore she seemed to accept her role as the main earner in her relationship by strongly disagreeing with statement 9, “It’s more important that my partner is fully focused on his career and I fit in”. However, this respondent indicated that she was unwilling to continue working in her current role; rather it was a means to an end. In fact she was planning to immigrate to New Zealand with the aim of starting a family; consequently her priorities are perhaps subject to change. However, she planned to continue working as a pharmacist.

Factor 6: Pressurised modernisers

Table 7 details the statements which were important to exemplars of factor 6. For the full factor array see appendix 5.

Table 7: Factor 6 array poles

Strongly Agree	Agree	Disagree	Strongly Disagree
+5	**+4**	**-4**	**-5**
31. I quite enjoy providing enhanced services – I'm hoping that they will become a reasonable part of my working day and will make things more interesting	4. I'm quite happy just being the pharmacist, not the pharmacy manager, don't have the hassles, don't have quite as much paperwork	9. It's more important that my partner is fully focused on his career and I fit in	37. I don't mind working long hours, it suits me
44. I think training for enhanced services has really geared me up again to be interested in Pharmacy	32. I find it frustrating that you've not enough staff to do the job properly	45. I find community pharmacy tedious	54. I plan to give up working as a pharmacist, CPD is the last straw
	41. I like to feel in control without being too pressured, and I think just with the volume of scripts and enhanced services – it is too much	47. It suits me to work at the weekend	
	55. I moan to management about the working conditions all the time but it is like banging your head against a brick wall	52. I like working full time	

What distinguishes this factor from other factors is a marked enthusiasm for the new community pharmacy contract. Exemplars strongly agreed with statements 31, "I quite enjoy providing enhanced services – I'm hoping that they will become a reasonable part of my working day and will make things more interesting" and 44, "I think training for enhanced services has really geared me up again to be interested in Pharmacy". However, they also agreed with statements 32, "I find it frustrating that you've not enough staff to do the job properly" and 41, "I like to feel in control without being too pressured, and I think just with the volume of scripts and enhanced services – it is too much". This suggests implementing the new contract acted to increase pressure in the workplace. Furthermore it appears that staffing levels were inadequate to deal with their workload.

Additionally, exemplars of this factor agreed with statement 55, "I moan to management about the working conditions all the time but it is like banging your head against a brick wall" indicating that management structures were unresponsive and unsupportive. This points to a willingness to deliver the new contract which is undermined by structural barriers within the workplace.

Exemplars of this factor demonstrated commitment to pharmacy in a number of respects. Specifically, they disagreed with statement 54, "I plan to give up working as a pharmacist, CPD is the last straw" and statement 45, "I find community pharmacy tedious". Moreover, exemplars of this factor appear to be career motivated by strongly disagreeing with statement 9, "It's more important that my partner is fully focused on his career and I fit in". However, exemplars were unwilling to work long hours, full-time or at the weekend and agreed with statement 4, "I'm quite happy just being the pharmacist, not the pharmacy manager, don't have the hassles, don't have quite as much paperwork". It is not surprising that all of those who loaded on this factor worked part-time.

Factor 7: Wandering wage slaves

Table 8 details the statements which were important to exemplars of factor 7. For the full factor array see appendix 5.

Table 8: Factor 7 array poles

Strongly Agree	Agree	Disagree	Strongly Disagree
+5	**+4**	**-4**	**-5**
7. I think as you have children, you have to stop working long hours – it just isn't fair on your children	17. I could never work full time in community pharmacy	5. Pharmacy lived up to my expectations until I had children. Now it's just a means to an end	27. I work because I want to work and I enjoy it, I don't have to work
32. I find it frustrating that you've not enough staff to do the job properly	21. It's great that people can be second pharmacists, then people don't have to have overall responsibility while they've got other home commitments	14. I might just give pharmacy up and do something completely different	54. I plan to give up working as a pharmacist, CPD is the last straw
	24. Owning my own pharmacy would be too much hassle	15. It's okay in community pharmacy for a woman if you want to mix it with family. Women don't want a career – they want an interesting job that fits in with family life	
	28. I feel I should have time in work to do CPD	55. I moan to management about the working conditions all the time but it is like banging your head against a brick wall	

What differentiated exemplars of this factor from most others was a strong disagreement with statement 27, "I work because I want to work and I enjoy it, I don't have to work". In common with other factors, exemplars agreed with statement 7, "I think as you have children, you have to stop working long hours – it just isn't fair on your children". Exemplars also agreed with statement 21, "It's great that people can be second pharmacists, then people don't have to have overall responsibility while they've got other home commitments," and statement 24, "Owning my own pharmacy would be too much hassle". When considered together these statements suggest that exemplars prioritised their family commitments and would prefer to work in less demanding roles as a consequence. It also seems that exemplars would be unlikely to work full-time because they agreed with statement 17, "I could never work full-time in community pharmacy".

In common with other subgroups of respondents, those who loaded on factor 7 did not intend to give up pharmacy and were undeterred by mandatory CPD disagreeing with statement 54, "I plan to give up working as a pharmacist, CPD is the last straw". Although exemplars agreed with statement 28, "I feel I should have time in work to do CPD". Interestingly, although exemplars of this factor strongly agreed with statement 32, "I find it frustrating that you've not enough staff to do the job properly," they strongly disagreed with statement 55, "I moan to management about the working conditions all the time but it is like banging your head against a brick wall". Apparently, those who loaded on this factor were dissatisfied with aspects of community pharmacy working, but rather that complain they sought out other employment opportunities. In fact all three exemplars of this factor had recently changed employer or moved out of community pharmacy totally into PCT roles.

Interestingly, all of those who loaded on this factor worked more than 32 hours a week even though they agreed with statement 17. This indicates that exemplars were resistant to working more than part-time hours in community pharmacy specifically. However, exemplars disagreed with statement 5, “Pharmacy lived up to my expectations until I had children. Now it’s just a means to an end” indicating that pharmacy itself still provided career satisfaction.

Factor 8: Overloaded and understaffed for the new contract
Table 9 details the statements which were important to exemplars of factor 8. For the full factor array see appendix 5.

Table 9: Factor 8 array poles

Strongly Agree	Agree	Disagree	Strongly Disagree
+5	**+4**	**-4**	**-5**
29. I work long hours and then to come home and do CPD is really hard	28. I feel I should have time in work to do CPD	37. I don’t mind working long hours, it suits me	17. I could never work full time in community pharmacy
32. I find it frustrating that you’ve not enough staff to do the job properly	35. What I don’t like about community pharmacy are the extra demands – the feeling that you are overloaded with work	38. I am restricted when I can take holidays, which can be inconvenient	45. I find community pharmacy tedious
	41. I like to feel in control without being too pressured, and I think just with the volume of scripts and enhanced services – it is too much	47. It suits me to work at the weekend	
	43. I find I work outside my paid time, to provide enhanced services	56. At the moment salary is an important factor in choosing where I work	

The exemplar of this factor demonstrated commitment to community pharmacy working in that she disagreed with statement 17, “I could never work full-time in community pharmacy” and statement 45, “I find community pharmacy tedious”. This factor resonated with others in that the exemplar preferred not to work long anti-social hours; she disagreed with statement 37,”I don’t mind working long hours, it suits me” and statement 47, “It suits me to work at the weekend”. Additionally, financial incentives were unlikely to motivate those loading on this factor who disagreed with statement 56, “At the moment salary is an important factor in choosing where I work”.

Importantly, recent changes in community pharmacy working had significantly affected those who loaded on this factor. In particular, the introduction of mandatory CPD had served as a disincentive, the exemplar agreed with statement 28, “I feel I should have time in work to do CPD,” statement 29, “I work long hours and then to come home and do CPD is really hard” as well as statement 54, “I plan to give up working as a pharmacist, CPD is the last straw”. Furthermore, in common with factor 7, changes in the community pharmacy contract had negatively affected her view of community pharmacy working. The exemplar of this factor agreed with statement 43, “I find I work outside my paid time, to provide enhanced services,” and 41,” I like to feel in control without being too pressured, and I think just with the volume of scripts and enhanced services – it is too much,” and disagreed with statement 44,”I think training for enhanced services has really geared me up again to be interested in Pharmacy”.

This factor concurs with factor 6 in some respects, in that staffing levels were critical. She agreed with statement 32, “I find it frustrating that you’ve not enough staff to do the job properly”. This exemplar also agreed with statement 14, “I might just give pharmacy up and do something completely different”. The respondent who loaded exclusively on this factor was 59 years old and was nearing retirement. She currently worked 42 hours a week as a manager and she indicated that following recent changes in community pharmacy, she had changed her plans to work part-time past the age of 60.

Factor 9: Pin money part timer

Table 10 details the statements which were important to exemplars of factor 9. For the full factor array see appendix 5.

Table 10: Factor 9 array poles

Strongly Agree	Agree	Disagree	Strongly Disagree
+5	**+4**	**-4**	**-5**
9. It’s more important that my partner is fully focused on his career and I fit in	4. I’m quite happy just being the pharmacist, not the pharmacy manager, don’t have the hassles, don’t have quite as much paperwork	14. I might just give pharmacy up and do something completely different	37. I don’t mind working long hours, it suits me
24. Owning my own pharmacy would be too much hassle	21. It’s great that people can be second pharmacists, then people don’t have to have overall responsibility while they’ve got other home commitments	28. I feel I should have time in work to do CPD	45. I find community pharmacy tedious
	29. I work long hours and then to come home and do CPD is really hard	34. Working conditions put me off working in community pharmacy	
	42. You start seeing the extended role as another thing to make your life more difficult, rather than enhancing your professionalism	53. When my children get older I will definitely increase my hours	

The exemplar of this factor saw her career as secondary to her partner’s, agreeing with statement 9, “It’s more important that my partner is fully focused on his career and I fit in”. Consequently, it is not surprising that she also agreed with statement 24, “Owning my own pharmacy would be too much hassle”. Those who loaded on this factor favoured practitioner level roles. The exemplar agreed with statements 4, ”I’m quite happy just being the pharmacist, not the pharmacy manager, don’t have the hassles, don’t have quite as much paperwork” and 21, ”It’s great that people can be second pharmacists, then people don’t have to have overall responsibility while they’ve got other home commitments”.

In common with other factors this factor demonstrated that mandatory CPD had created difficulties. There was strong agreement with statement 29, “I work long hours and then to come home and do CPD is really hard”. Conversely, however, strongly disagreeing with statement 28, “I feel I should have time in work to do CPD”. These apparently conflicting viewpoints are possibly a reflection of the exemplar’s employment status. She worked as a self employed locum and would therefore not have expected benefits such as payments for completing CPD. Additionally, the exemplar of this factor agreed with statement 42, “You start seeing the extended role as another thing to make your life more difficult, rather than enhancing your

professionalism" indicating uncertainty about the new contract. Although the exemplar of this factor could be considered to be committed to pharmacy because she disagreed with statements 14, "I might just give pharmacy up and do something completely different" and 45, "I find community pharmacy tedious".

Those who loaded on this factor preferred part-time working disagreeing with statements 37, "I don't mind working long hours, it suits me" and 53, "When my children get older I will definitely increase my hours". The exemplar had worked as part-time for the same two employers for many years. She appeared to be generally resistant to change, by way of example, although she considered that her career was "in a rut", but had no desire to alter her working arrangements.

8. Study limitations

This section outlines the limitation of the study. This study involved using qualitative techniques in small samples (n=30 and n=40) of women working in pharmacy. Qualitative studies are not designed to be generalisable, but enable the identification of key topics perceived to be important by the study sample. It is not appropriate or possible to generalise these findings to the entire population of women working in community pharmacy. However, purposive sampling ensured the inclusion of a diverse range of individuals and theme saturation was reached. Additionally, the majority of interviewees were of White British origin; this is recognised as being a potential weakness in the research. This research did not explore the views of those from diverse ethnic backgrounds. Clearly this research was designed to explore female pharmacists' view point; male pharmacists' perspective of community pharmacy working is not considered. A future study could be designed to explore male pharmacists' views.

The second stage of the study identified nine ways of understanding factors influencing work patterns of female community pharmacy. However, it is possible that other viewpoints exist that have not been identified in this study. In particular, female pharmacists from other parts of the country may hold different views. For this reason this study should be seen as a starting point rather than as a definitive study. It is also important to remember that the sample was purposive and not random, therefore one not to draw conclusions on about the proportions of people who might subscribe to each viewpoint.

9. Discussion of study findings

The application of the methodology

This section of the report discusses the findings of both stages of the study. To assist and direct the reader, key findings from the Q method stage of the study have been highlighted throughout the discussion. This study succeeded in its aims of identifying and quantifying factors which influence work patterns within community pharmacy. Specifically, a range of structural barriers and fundamental features of community pharmacy working were found to shape career choices amongst interviewees in the initial interview stage of the study. The second stage of the study succeeded in identifying nine separate and distinct accounts or factors which described, in qualitative detail, influential factors determining respondents' career trajectories. The value of the second stage of this study is that it elucidated a number of discrete viewpoints rather than giving a mass of contradictory opinions. The viewpoints identified in this Q-method study indicate that multiple factors work in combination to influence female community pharmacists' work pattern choices. Specifically what this stage of the study demonstrates is that subgroups of respondents were influenced by specific combinations of factors. In some cases viewpoints were linked to respondents' demographic characteristics or personal circumstances.

The real strength of stage 2 of this study is that it indicates which factors were most critical in shaping individuals' career decisions. Q-methodology asked respondents to consider a range of aspects of community pharmacy working simultaneously and provides information of subgroups' relative preferences for career attributes. This allows us to consider factors motivating career choices in context. The following examples illustrate the advantage of this technique. If the interview data were considered in isolation, one might imagine that remuneration rates strongly influenced some respondents' career decisions.[74] However, Q-methodology data indicate that most interviewees either strongly disagreed with statement 56, "At the moment salary is an important factor in choosing where I work" or gave it a neutral rating (see appendix 6). This confirms previous research suggesting that female pharmacists' career choices are not strongly influenced by rates of pay.[75] Similarly, the method allows us to consider whether rates of pay might influence work patterns by more complex mechanisms. Previous research has suggested that there is a direct, causal relationship between levels of workforce participation and the cost of childcare and higher levels of childcare costs act to discourage women from working.[76-78] In the UK, the cost of childcare has risen at a much higher rate than inflation in recent years,[79] such that UK parents pay a higher proportion of their salaries in childcare costs than parents of most other nationalities.[80] Despite this respondents in the Q method study indicated that statement 19, "The expense of childcare is huge, it puts me off working" was relatively unimportant to them.

Key finding: Most respondents strongly disagreed or were neutral about statement 56, "At the moment salary is an important factor in choosing where I work".

Factors shaping women's work patterns

Importantly this study adds to the debate surrounding whether women's work patterns are driven by choice.[40] The findings of this study was convergent with previous research indicating that female community pharmacists adopt heterogeneous work patterns to fit in with personal circumstances.[40, 81] Specifically, previous studies indicate clearly that child rearing influences female community pharmacists' work patterns.[23-25] Furthermore, our findings indicate that a proportion of women perceived that they had made a positive choice to occupy part-time and second pharmacist positions because they wanted to spend time with their children. Subgroups of respondents agreed with statements 4, 15, 21, and 22 suggesting a preference for practitioner level working. Consequently, when we consider respondents' ratings of statements in stage 2, it appears that female community pharmacists report occupying lower status, less well paid positions by choice rather than as a consequence of discrimination, which would support Hakim's preference theory.

Key finding: Most respondents strongly agreed with statement 7, "I think as you have children, you have to stop working long hours – it just isn't fair on your children".

However, as discussed in section 2.3, research has offered conflicting explanations of women's career trajectories.[40, 82] It is important, however, to consider whether the alternatives to occupational downgrading are really acceptable to women with conflicting responsibilities and whether female pharmacists have really chosen their work patterns. Houston and Marks have shown that much occupational down-grading suffered by women returning to work part-time after maternity leave is quite subtle and not always a matter of choice.[83]

It appears from stage 1 of our study that structural aspects of community pharmacy could act as barriers to full-time employment as well as career advancement for

some female pharmacists. In particular, limited family-friendly contracts, anti-social hours, difficulties accommodating annual leave, and the restrictive legislative framework that necessitates a pharmacist to always be present in a store forced some female community pharmacists into lower paid, lower status roles. Indeed, structural barriers discouraged some interviewees from working in community pharmacy at all.

The data from stage 2 of this study allows us to unpack this issue further. Respondents overwhelmingly agreed that "Owning my own pharmacy would be too much hassle". Moreover, long hours and weekend working were unpopular with some subgroups of respondents. Furthermore, some respondents ranked statements relating to high workloads and inadequate staffing levels as just as important. In fact, these facets of community pharmacy working were more influential in determining career choices than issues which might be traditionally seen as structural barriers. To illustrate this point, in general there was only moderate agreement with "The hours in pharmacy are hard for a female with children to juggle because childcare tends to finish at six o'clock and we're finishing later" and a neutral response to "The expense of childcare is huge, it puts me off working". This could indicate that recent increases in workload in community pharmacy have exacerbated the situation, as discussed later, perhaps persuading an increasing proportion of female workers to participate less in the workforce. Additionally it has been reported that women working part time often work below their potential as a consequence of restricted opportunities and unacceptable work intensity in higher grade jobs. Our data certainly supports these findings.[84, 85] Thus, from this data it might appear that the community pharmacy workforce was segmented, to an extent, as a consequence of discriminatory employment practices.

Research indicates that women working in other feminising healthcare professions have encountered different, but related, difficulties in balancing domestic responsibilities with their working lives.[86-88] This study suggests that to an extent, some female pharmacists are unable to capitalise on their professional status to the same extent as their male colleagues as a consequence of their out of work responsibilities. Although female pharmacists themselves might fatalistically accept this situation, ultimately as the proportion of women in the pharmacy workforce and other healthcare professions increase, employers and policy makers will need to consider the women's perspectives and priorities.

Key finding: No identified factors disagreed with statement 4, "I'm quite happy just being the pharmacist, not the pharmacy manager, don't have the hassles, don't have quite as much paperwork".

Key finding: Most respondents agreed with statement 24, "Owning my own pharmacy would be too much hassle".

Key finding: Most respondents disagreed with statement 37, "I don't mind working long hours, it suits me".

Key finding: Most respondents disagreed or gave a neutral response to statement 47, "It suits me to work at the weekend".

It is worth considering at this point whether or not female pharmacists consider they experience discrimination. It was clear from the interview data that few interviewees discussed discrimination. In fact research indicates that sex discrimination is less

prevalent in pharmacy than in other professions.[89, 90] Rather, women conceptualised their difficulties in balancing work and home life as being a result of their personal choices. It is possible that pharmacy appeals to women who seek to balance family and work by working part-time. Pharmacy has always offered reasonably paid, part-time work opportunities, for a role with professional status.[45] Indeed, Crompton wrote that:

> *Pharmacy is described as a good job for a woman [because] it is an occupation where [women] can do a job whilst remaining a woman – bringing up her children and responding to domestic responsibilities.*[45]

Indeed, the proportion of part-time workers might be higher than expected in pharmacy because, as a profession, it is more amenable to that type of working than other professions. The relative lack of career structure within community pharmacy means that although female workers might have to work below potential for periods of time, the cost of occupational downgrading is relatively low compared to other professions. Consequently, pharmacy allows female workers to occupy lower status roles when they need to without precluding the realistic possibility of higher status roles at a point in the future.

Key finding: No factors disagreed with statement 21, "It's great that people can be second pharmacists, then people don't have to have overall responsibility while they've got other home commitments".

The new community pharmacy contract

Interestingly the study provided some conflicting data about pharmacists' views on the new community pharmacy contract. Most study respondents were often positive about providing enhanced services. No Q method respondent disagreed with statement 31, "I quite enjoy providing enhanced services – I'm hoping that they will become a reasonable part of my working day and will make things more interesting". Similarly most agreed with statement 44, "I think training for enhanced services has really geared me up again to be interested in Pharmacy". However, in both stages of the study respondents indicated that providing enhanced services had 'intensified' their workloads and, consequently, made life more difficult. A number of stage 1 interviewees reported working in high pressure working environments; some reported low levels of job satisfaction as a consequence of high workloads and the resulting lack of time for patient contact. It is also concerning to note that interviewees in stage 1 of the study were concerned about the effect of workloads on patient safety.

Work intensification

The Q-methodology data further emphasise the importance of job related stress to respondents. Some respondents felt overloaded and pressurised by: prescription volumes, staffing levels and extra services originating from the new pharmacy contract. Statements relating to these factors were highly important in a number of factor arrays. Previous research, preceding the introduction of the new pharmacy contract, has indicated that community pharmacy workers experience significant levels of stress in the workplace. It seems that this situation may have changed for the worse.[57]

Non-pharmacy studies from the 1990's have linked 'work intensification' with increased levels of stress, decreased levels of health and well-being and decreased job satisfaction.[5, 91] Although this is a small sample, respondents' comments could in some cases be linked to employment status. It appeared that respondents working for some multiples experienced greater stress in the workplace. Greene reports that

women make up 80% of pharmacists employed by multiples, so women will be disproportionately affected by these working conditions.[55] Our respondents appeared to react in two ways to this work related pressure; either by complaining to management or by moving employer or sector. This might explain in part why some respondents prefer to remain part-time workers throughout their career and other respondents are considering quitting pharmacy altogether.

Key finding: No respondents disagreed with statement 31, "I quite enjoy providing enhanced services – I'm hoping that they will become a reasonable part of my working day and will make things more interesting".

Key finding: Respondents gave mixed responses to statement 14, "I might just give up pharmacy and do something different altogether".

Mandatory CPD

This study also provided some useful data on the impact of the introduction of mandatory CPD. The majority of stage 1 interviewees found the principles of CPD confusing. Few interviewees planned CPD appropriately; commonly choosing CPD topics on the basis of interest or accessibility. This supports previous research suggesting that pharmacists fail to grasp the principles of CPD.[92, 93]

The majority of interviewees experienced difficulty in entering CPD online. The RPSGB suggests that CPD records are submitted electronically using an on-line system.[16] How this will affect female pharmacists is uncertain. On the one hand research indicates that female community pharmacists undertake more CPD than male pharmacists.[92] On the other, evidence suggests that women have less access to and knowledge of information technology than men.[94] Some commentators suggested that the introduction of mandatory CPD might be accompanied by a mass exodus from the RPSGB register.[95] Although stage 1 interviewees, towards the ends of their careers, reported they would cease to practice as a consequence of CPD, most factor arrays demonstrated strong disagreement with statement 54, "I plan to give up working as a pharmacist, CPD is the last straw".

Some subgroups of respondents considered that it was difficult to find time to do CPD and that it would be beneficial to have time in work to complete CPD. On a more positive note, some respondents considered that training for the new contract had reawakened their interest in pharmacy. Mandatory CPD might be considered to deter those who work limited hours or were at the end of their careers from participating in the workforce. The majority of our respondents, many of whom worked part-time and were from mid-career onwards, were not planning to alter their work patterns as a consequence of CPD. In fact most respondents had a neutral response to the statement "I work part-time and I am having to put in time to do CPD technically that is lowering my hourly rate". Considering all of the CPD related statements, it seems that mandatory CPD in itself, is unlikely to deter female community pharmacists from working.

Key finding: Most respondents disagreed with statement 54, "I plan to give up working as a pharmacist, CPD is the last straw".

10. Policy implications

This section outlines the policy implications for employers and workforce planners.

For employers:

This study has a number of policy implications for employers. Employers should be aware that the pharmacy workforce is feminising and our study indicates that participating female pharmacists overwhelming preferred to work for others. Consequently, employers need to accommodate the needs of female workers. It is clear from our data that female community pharmacists work in a way that accommodates their domestic circumstances, either by choice or because prevailing working conditions preclude greater engagement. It is possible that if employers minimised structural barriers, female pharmacists working patterns would alter. Employers need to recognise that institutional cultures and embedded practices, such as working long and anti-social hours, weekend working variable workplaces, working away from home, and irregular hours, can serve as barriers to women and especially to those with out of work responsibilities. The long-term employment trajectories of women could be improved by concerted efforts to achieve a more family-friendly workplace culture.

Our study provided evidence that work related pressure was highly significant to a number of subgroups of pharmacists. In particular it seems probable that stress in the workplace associated with high workloads and inadequate levels of support staff might reduce participation rates amongst women. Consequently, unless employers act to reduce the demands placed on community pharmacists it is likely that participation rates will be reduced in some subgroups of female community pharmacists. In fact, some respondents intended to work reduced hours for their whole career. Moreover, a proportion of respondents were considering leaving pharmacy altogether. Employers should ensure not only that suitable support staff are provided, but also that management structures and processes support pharmacists. Furthermore, our data seems to suggest that remuneration levels are relatively unimportant to female pharmacists. Rather, respondents appeared to derive job satisfaction from interactions with patients; employers should ensure that the working environment supports exchanges between the pharmacist and patients.

For workforce planners/policy makers:

It might appear that workforce shortages are becoming less of a problem in community pharmacy as the number of vacancies has decreased recently.[96] However, it is also important to bear in mind that weekend working and long hours proved to be unpopular with respondents. This raises questions about how employers will fill some community pharmacy posts in the future as the proportion of female pharmacists rises.[20] This is a particularly salient point considering recent initiatives to improve access to community pharmacy services by extending opening hours to 100 hours a week.[97] Interestingly, extending community pharmacy opening hours also seems to be at odds with current Government policy which aims to improve recruitment and retention within the NHS by supporting family-friendly working practices.[98] Workforce planners and policy makers need to consider how to assist community pharmacists in balancing domestic and work commitments.

Importantly, our research suggests that contrary to recent speculation few respondents were planning to exit the register as a consequence of mandatory CPD.[95] Those planning pharmacy services should also be aware that our study suggests that female community pharmacists had little interest in owning their own pharmacy. Thus, it would seem that as the pharmacy profession feminises the demand for practices is likely to decline; this might act to counterbalance the

expansion of corporate community pharmacy chain stores and the diminishing opportunities for practice ownership.

11. Conclusion

Stage 1 of our study identified a number of facets of community pharmacy working which acted as structural barriers for certain female pharmacists. However, on the face of it, stage 2 of our study suggests that although combining community pharmacy working with family responsibilities presented challenges; most respondents considered that they *preferred* to work less hours in lower status jobs. In this respect our data could be interpreted as showing a lack of evidence of *commitment* to pharmacy amongst some respondents. An alternative explanation is that although respondents reported that work patterns were a matter of choice, realistically, working conditions only permitted those with domestic responsibilities the option of pursuing a limited range of roles.

It is noteworthy that the majority of our respondents were not particularly motivated by salary levels. This study also suggests that pressure in the workplace was a significant factor affecting working practices for some respondents. Pressure in the workplace arose from increases in prescription numbers, additional services stemming from the new community pharmacy contract, inadequate staffing and poor management support. Employers and those planning pharmacy services must in the longer term consider how increased dispensing volumes and recent changes in the English community pharmacy contract are likely to affect workforce participation rates within community pharmacy. Our evidence suggests that employees are likely to work less hours in highly pressurised work environments and some may quit the sector altogether.

Importantly our research suggests that contrary to recent speculation few respondents were planning to exit the register as a consequence of mandatory continuous professional development. However, in some cases CPD in combination with training to deliver services under the new community pharmacy contract added to workplace pressures. Furthermore, in certain subgroups of respondents who have competing demands on their time, training related activities might act to reduce the time devoted to community pharmacy working.

These findings have important implications for workforce planners and employers who must consider the likely impact of the feminisation of the pharmacy workforce on workforce supply.

12. Future research

Future studies could expand on the study described in this report in two ways:

(1) By exploring male community pharmacists' views; and,
(2) By using a larger scale quantitative study to yield data which will be applicable to the whole population of community pharmacist residents in England.

13. Dissemination of findings

The results of this study have been widely disseminated. Dr Gidman gave an oral presentation and a poster presentation at 2006 Health Services Research and Pharmacy Practice (HSRPP) conference.[74, 99] Additionally, she gave an oral presentation and a poster presentation and has had two abstracts accepted for the British Pharmaceutical (BPC) 2006 conference..[100, 101] Furthermore, Dr Gidman was invited to present her study at the Pharmacy Practice Research Awards in May 2006. Following on from this, her findings were reported in the *Pharmaceutical Journal*, the

Chemist and Druggist, in the local press and on local radio. The results of this study have been disseminated in peer reviewed journals. One paper has been published by the *International Journal of Pharmacy Practice* with another being published in *Research in Social and Administrative Pharmacy*.[84, 85] Two further papers have been published in *Pharmacy Education* and the *Pharmaceutical Journal*. Dr Gidman is currently drafting a further paper based on the stage 2 Q-methodology findings. She gave an oral presentation at the 2007 HSRPP conference and has submitted an abstract to the 2008 HSRPP conference. In addition to this, Dr Gidman published two Broad-spectrum opinion pieces in the *Pharmaceutical Journal* discussing women's role in pharmacy and work intensification.[102, 103]

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Appendix 1: Interview schedule, initial questions

1. Choice of pharmacy as a career

So thinking back why did you choose pharmacy as a career?
Did you speak to a pharmacist about your choice? (What was their influence?)
Can you think of anyone who influenced your choice of career?
(Parents/teachers/friends)
Tell me about any pharmacy work experience before or during your degree.
Was pharmacy your first choice of career?

2. Choice of pharmacy sector

What made you choose to work in community pharmacy?
Tell me about the roles you have done since you graduated.
Please explain any career turning points.

3. Current role

Tell me about the job you do currently.
How many hours/days do you work?
How are you employed? (Locum/employed)
Tell me what your job involves in an average day.

4. Opinions of current role

How do you feel about your current role?
What do you really love about your current role?
What do you really dislike about your current role?
What do you think about remuneration levels for community pharmacists?
What do you think about your hours?
Tell me about how well your job works with your out of work commitments.
What do you think about the working conditions in community pharmacy? (Positives and negatives)
How do you find dealing with the general public at work?
Tell me about your thoughts on the public perception of pharmacy.
Tell me about your relationship with other health care professionals.
Tell me about the training and development that has been available to you as a community pharmacist.
Tell me about your views on recent changes to the role of community pharmacists. (new contract/extended role)
How do you feel about the changes in the registration fee?

5. How do you think community pharmacy working could be improved?

6. So where do you see your self in five years time?

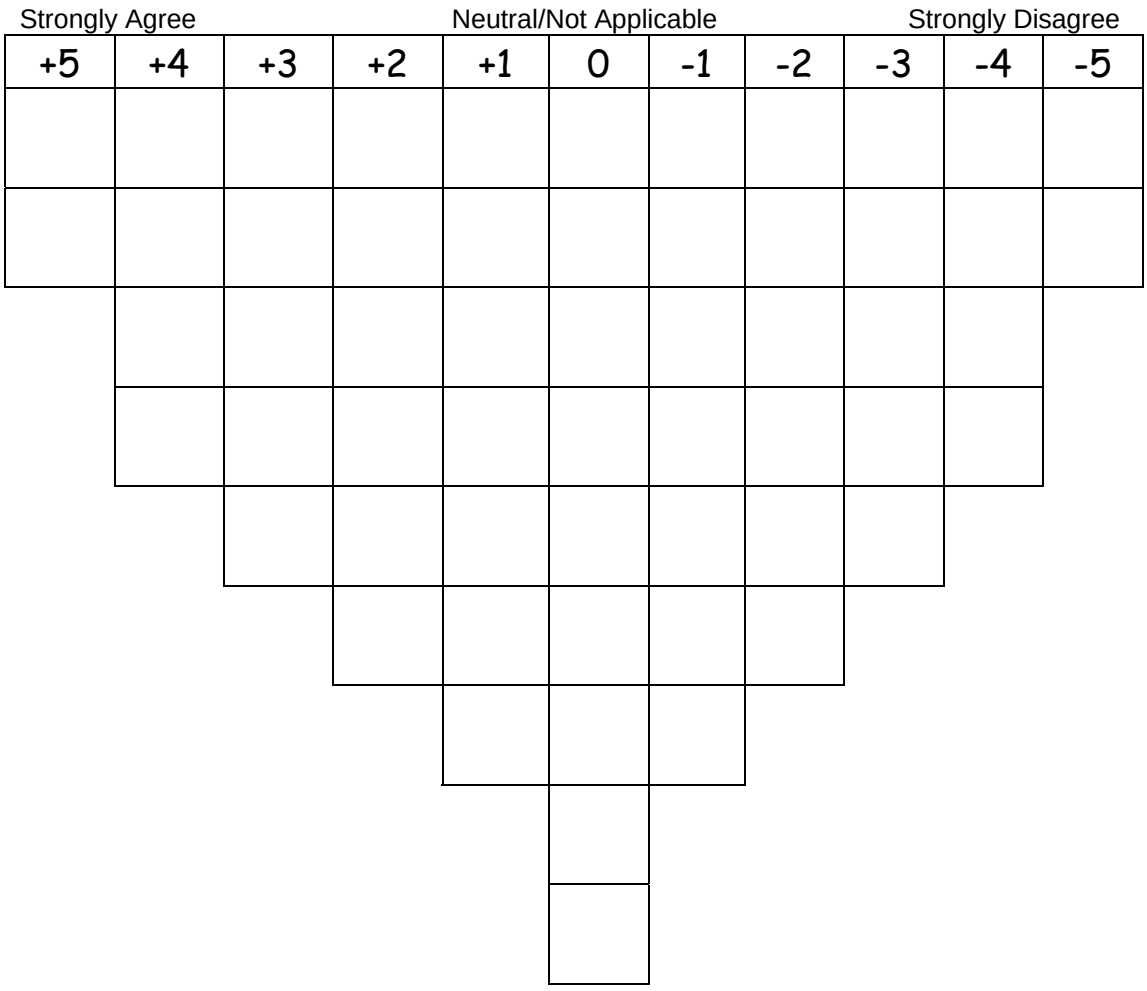
What hours/job will you be doing?
Tell me about any ambitions/career plans/training plans you might have.
Tell me about your long term career plans.
Tell me how you feel pharmacy working has met with your expectations.
How good a career choice is pharmacy for a woman?
Would you recommend it?

Appendix 2: Stage 1 Interviewee characteristics

Interviewee	Age (years)	Carer	Current role
R1	58	Yes, elderly parents\ grandchildren	Part-time manager (2-3 days per week) medium sized multiple
R2	53	Yes, handicapped child	Locum part-time (typically 6 days per week currently)
R3	49	Yes, teenage son	1 day employed community - independent 2 days PCT
R4	54	Yes, 3 children	1 day employed - large multiple 1-2 days locum - independent
R5	37	Yes, 2 children	Employed 2-3 days per week - large multiple
R6	37	Yes, 3 children	1 day employed community (term time contract) – large multiple 2 days PCT
R7	36	Yes, 3 children	2 days community locum
R8	36	Yes, 2 children	Employed 2 days 10a.m. to 2p.m. and full day Sunday – large multiple
R9	37	No	Full time PCT Saturday locum – large multiple
R10	51	Adult son lives at home	Proprietor
R11	43	Yes, 2 children	Locums 3 regular days - independent
R12	36	Yes, 3 children	Out of hours centre Second pharmacist (school hours) – large multiple
R13	41	Yes, 2 children, sister and father ill	Employed 3 days per week (and extra days) – large multiple
R14	52	Yes, teenage child at home	Employed works shifts (2 late and 2 early) - supermarket
R15	33	No	Employed full time (shift worker) - supermarket
R16	34	No	Employed full-time – large multiple
R17	36	Yes, 2 children	Employed 24 hours per week during school hours in managed care centre (term time contract) – large multiple

Interviewee	Age (years)	Carer	Current role
R18	63	No	Employed 30 hours per week - supermarket
R19	38	Yes, 2 children	Employed 2 days hospital 1 day (Sunday) community - large multiple
R20	52	No	Employed 3 days per week – large multiple
R21	54	No	Employed full-time as superintendent pharmacist by doctor's surgery
R22	52	No	Employed full-time - small multiple
R23	44	Yes, 2 children	Proprietor
R24	56	No	Employed full-time as relief manager – large multiple
R25	35	Yes, children	Employed works part-time shifts - supermarket
R26	32	Yes, 1 child	Employed 4 days hospital 1 day community locum – small multiple
R27	55	No	Employed full-time pharmacy manager for large multiple
R28	44	Yes, 3 children	Proprietor, half share in business
R29	39	Yes, 2 children	Employed, 2 days school hours (term time contract) and full day Saturday – large multiple
R30	32	Yes, 1 child	Employed full-time pharmacy manager – large multiple

Appendix 3: Response Matrix



Appendix 4: Respondent characteristics

Respondent	Age (years)	Carer	Hours worked	Factor loading	Current role
R1	50	1 child age 18yrs	30	Confounded 1,6,9	PCT pharmacist, recently stopped community work
R2	41	2 children ages 5yrs and 1yr	20	Confounded 1,2,6	PCT pharmacist, recently stopped community work
R3	39	3 children ages 12yrs, 9yrs and 8yrs	16	Confounded 4,6	PCT pharmacist, recently stopped community work
R4	37	3 children ages 6yrs, 4yrs and 1yrs	18	Confounded 2,9	Community locum
R5	44	2 children ages both 16yrs	26	9	Community locum
R6	35	2 children ages 7yrs and 2yrs	25	4	PCT pharmacist and community locum (9 hours)
R7	53	No	24	6	Recently left employment in community pharmacy, now PCT pharmacist and locum (8 hours)
R8	43	2 children ages 9yrs and 5yrs	16	4	Community pharmacist, flexible parent contract – 4 hours a day
R9	44	1 child age 12yrs	36	7	Full time community pharmacist manager
R10	37	No	50-60	5	Group store manager community pharmacy
R11	38	No	42	Confounded 5,9	Community pharmacy manager
R12	35	1 child age 13yrs	26	Confounded 1,6	Academia (18.5 hours), employed community pharmacist (7.5 hours)
R13	50	2 children ages 20yrs and 16yrs	24	Confounded 1,6	Locum community pharmacist

Respondent	Age (years)	Carer	Hours worked	Factor loading	Current role
R14	46	No	24-32	Confounded 1,9	Locum community pharmacist
R15	51	Elderly parents	16	Confounded 6,9	Locum community pharmacist
R16	50	2 children ages 21yrs and 17yrs	28	6	Relief manager for multiple
R17	62	No	36	3	Community pharmacy manager
R18	63	No	42	8	Community pharmacy manager
R19	61	No	35	Confounded 1,3	Locum community pharmacist
R20	45	2 children ages 9yrs and 7yrs	12	2	Locum community pharmacist
R21	36	No	55	Confounded 1,5	Locum community pharmacist
R22	39	2 children ages 13yrs and 11yrs	15	3	PCT pharmacist and community locum (3 hours)
R23	50	4 school age children	20	2	Community (second) pharmacist, school hours
R24	41	1 child age 7yrs	22	6	Community pharmacist, 12 hours employed, 10 hours locum
R25	38	2 children ages 10yrs and 7yrs	20	Confounded 6,7	Employed community pharmacist
R26	55	No	44	7	PCT pharmacist, recently stopped community locum
R27	48	2 children ages 21yrs and 19yrs	32-36	Confounded 1,8	Community pharmacist
R28	44	2 children ages 17yrs and 14yrs	37.5	Confounded 1,2	Hospital pharmacist, recently stopped community locum
R29	57	Elderly parent	27	1	Locum community pharmacist

Respondent	Age (years)	Carer	Hours worked	Factor loading	Current role
R30	59	No	37	1	Community pharmacist, 2 employers
R31	50	2 children ages 21yrs and 19yrs	16-24	3	Locum community pharmacist
R32	38	2 children ages 6yrs and 4yrs	36	1	Employed in community pharmacy in head office, works 16 hours from home
R33	33	2 children ages 3yrs and 1yr	15	Confounded 2,6,7	Relief community pharmacist
R34	47	2 children ages 21yrs and 19yrs	33	Confounded 1,7	Employed community pharmacist
R35	56	No	36	1	Community pharmacy manager
R36	59	Elderly parents, grandchildren	26	Confounded 2,7,8	Community pharmacy manager
R37	38	2 children ages 12yrs and 2yr	30	1	Community pharmacy – in monitored dose unit and as locum (4 hours)
R38	39	2 children	32	7	Employed by PCT community pharmacy (8hours)
R39	37	2 children	19.5	4	Employed community pharmacist
R40	33	2 children ages 7yrs and 3mths	35.5, wants to reduce	2	Community pharmacist manager – on maternity leave

Appendix 5: Matrix for Factor 1 (Fulfilled pharmacists)

Strongly Agree — Neutral/Not Applicable — Strongly Disagree

+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5
6	9	12	3	4	1	2	8	11	5	14
27	15	21	7	18	30	10	13	42	17	45
	46	24	32	20	35	16	19	48	54	
	50	31	37	22	38	25	23	51	56	
		44	52	28	39	34	26	55		
			53	29	41	40	33			
				36	43	49				
					47					
					57					

Appendix 6: Matrix for Factor 2 *(*Family first or pharmacy shelved?)

Strongly Agree — Neutral/Not Applicable — Strongly Disagree

+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5
21	7	6	2	3	1	5	11	15	10	9
24	8	14	4	19	13	22	16	26	47	37
	12	29	18	20	25	32	17	51	48	
	28	42	33	23	39	34	27	52	53	
		46	35	30	44	40	36	56		
			38	31	49	43	45			
				41	50	54				
					55					
					57					

Appendix 7: Matrix for Factor 3 (Low stress altruist)

Strongly Agree — Neutral/Not Applicable — Strongly Disagree

+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5
7	4	9	8	12	2	1	11	5	6	37
41	13	18	10	22	16	3	23	47	26	56
	15	21	14	32	17	19	27	48	46	
	20	36	25	34	29	24	40	49	52	
		50	28	35	30	38	43	51		
			33	44	31	39	54			
				57	42	45				
					53					
					55					

Appendix 8: Matrix for Factor 4 (Permanent part time employees)

Strongly Agree — Neutral/Not Applicable — Strongly Disagree

+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5
24	7	4	3	1	5	9	2	8	42	48
32	17	21	13	28	12	10	6	26	49	54
	22	25	14	31	16	11	23	30	50	
	47	46	41	33	18	15	24	34	53	
		51	55	39	20	19	40	45		
			56	44	36	29	52			
				57	37	35				
					38					
					43					

Appendix 9: Matrix for Factor 5 (Focused on free time and finance)

Strongly Agree — Neutral/Not Applicable — Strongly Disagree

+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5
8	18	23	12	1	4	2	11	14	9	47
38	29	24	13	6	5	3	17	16	33	54
	44	25	15	7	10	27	32	34	35	
	56	31	20	26	19	39	37	45	42	
		52	21	28	22	41	40	50		
			57	36	30	43	55			
				46	48	49				
					51					
					53					

Appendix 10: Matrix for Factor 6 (Pressurised modernisers)

Strongly Agree — Neutral/Not Applicable — Strongly Disagree

+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5
31	4	1	2	6	10	15	29	5	9	37
44	32	17	3	7	13	18	34	14	45	54
	41	27	16	8	20	19	36	23	47	
	55	35	22	11	21	33	42	25	52	
		43	24	12	30	39	53	26		
			49	28	40	46	57			
				38	50	48				
					51					
					56					

Appendix 11: Matrix for Factor 7 (Wandering wage slaves)

Strongly Agree — Neutral/Not Applicable — Strongly Disagree

+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5
7	17	6	4	3	1	20	2	18	5	27
32	21	8	25	12	9	30	10	26	14	54
	24	22	35	39	13	33	11	36	15	
	28	29	41	43	16	34	19	37	55	
		31	45	49	44	42	23	40		
			52	53	46	48	38			
				56	47	51				
					50					
					57					

Appendix 12: Matrix for Factor 8 (Overloaded and understaffed for the new contract)

Strongly Agree — Neutral/Not Applicable — Strongly Disagree

+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5
29	28	23	7	8	2	1	10	11	37	17
32	35	26	14	13	4	3	15	22	38	45
	41	52	24	18	6	5	25	39	47	
	43	54	31	20	12	9	34	42	56	
		55	33	21	16	19	46	44		
			50	27	30	36	48			
				53	49	40				
					51					
					57					

Appendix 13: Matrix for Factor 9 (Pin money part timer)

Strongly Agree — Neutral/Not Applicable — Strongly Disagree

+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5
9	4	5	13	2	11	3	12	1	14	37
24	21	8	20	6	16	7	25	38	28	45
	29	18	23	19	17	10	35	43	34	
	42	33	31	27	22	15	41	47	53	
		48	39	32	36	26	56	54		
			49	40	46	30	57			
				44	50	51				
					52					
					55					

Appendix 14: Factor arrays score against each item by factor

Q-statement	Factors								
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
1. Although I enjoyed working as a locum I prefer the security of being employed	0	0	-1	1	1	3	0	-1	-3
2. There aren't enough family friendly or term time contracts for everyone who wants one to get one	-1	2	0	-2	-1	2	-2	0	1
3. I prefer to be a second pharmacist – then if the kids are ill it isn't my job to sort out cover	2	1	-1	2	-1	2	1	-1	-1
4. I'm quite happy just being the pharmacist, not the pharmacy manager, don't have the hassles, don't have quite as much paperwork	1	2	4	3	0	4	2	0	4
5. Pharmacy lived up to my expectations until I had children. Now it's just a means to an end	-4	-1	-3	0	0	-3	-4	-1	3
6. When I had children I knew I couldn't stay at home, I enjoy my job	5	3	-4	-2	1	1	3	0	1
7. I think as you have children, you have to stop working long hours – it just isn't fair on your children	2	4	5	4	1	1	3	1	3
8. I wouldn't want to work at the weekend. It's the only time we have as a family	-2	4	2	-3	5	1	3	1	3
9. It's more important that my partner is fully focused on his career and I fit in	4	-5	3	-1	-4	-4	0	1	-5
10. When I had a career break to have children I didn't want to go back to work because I lost confidence	-1	-4	2	-1	-2	0	-2	-2	-1
11. Part time staff get the less attractive jobs	-3	-2	-2	-1	-2	1	-2	-3	0
12. The hours in pharmacy are hard for a female with children to juggle because childcare tends to finish at six o'clock and we're finishing later	3	4	1	0	2	1	1	0	-2
13. The demands a store makes on you – you would have to be very single-minded to have a family and be a manager	-2	0	4	2	-2	0	0	1	2
14. I might just give pharmacy up and do something completely different	-5	3	2	2	-3	-3	-4	2	-4
15. It's okay in community pharmacy for a woman if you want to mix it with family. Women don't want a career – they want an interesting job that fits in with family life	4	-3	4	-1	2	-1	-4	-2	-1
16. I loved working in hospital but community paid better	-1	-2	0	0	-3	2	0	0	0
17. I could never work full time in community pharmacy	-4	-2	0	4	-2	3	4	-5	0
18. I feel I need to keep my hand in pharmacy – If I stop it will be difficult to get back in. I am just biding my time until I decide what to do	1	2	3	0	4	-1	-3	1	3
19. The expense of childcare is huge, it puts me off working	-2	1	-1	-1	0	-1	-2	-1	1
20. If you have the part time fee more people might just do the odd bit	1	1	4	0	-2	0	-1	1	2
21. It's great that people can be second pharmacists, then people don't have to have overall responsibility while they've got other home commitments	3	5	3	3	2	0	4	1	4
22. I don't mind being paid less than the manager because I have less responsibility	1	-1	1	4	0	2	3	-3	0

Q-statement	Factors								
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
23. I would really like to cut down my hours and have a shorter working week	-2	1	-2	-2	3	-3	-2	3	2
24. Owning my own pharmacy would be too much hassle	3	5	-1	5	3	2	4	2	5
25. I prefer to be an employed pharmacist so that I get a pension	-1	0	2	3	3	-3	2	-2	-2
26. The work that I am doing at the moment is too demanding for me to be able to balance my work-life	-2	-3	-4	-3	1	-3	-3	3	-1
27. I work because I want to work and I enjoy it, I don't have to work	5	-2	-2	-2	1	3	-5	1	1
28. I feel I should have time in work to do CPD	1	4	2	1	1	1	4	-4	4
29. I work long hours and then to come home and do CPD is really hard	1	3	0	-1	4	-2	3	5	4
30. I work part time and I am having to put in time to do CPD. Technically that is lowering my hourly rate	0	1	0	-3	0	0	-1	0	-1
31. I quite enjoy providing enhanced services – I'm hoping that they will become a reasonable part of my working day and will make things more interesting	3	1	0	1	3	5	3	2	2
32. I find it frustrating that you've not enough staff to do the job properly	2	-1	1	5	-2	4	5	5	1
33. I'm a little jaded with the profession – I expected to be keen and enthusiastic but further down the line I'm not	-2	2	2	1	-4	-1	-1	2	3
34. Working conditions put me off working in community pharmacy	-1	-1	1	-3	-3	-2	-1	-2	-4
35. What I don't like about community pharmacy are the extra demands – the feeling that you are overloaded with work	0	2	1	-1	-4	3	2	4	-2
36. In a supermarket you work shifts, it suits me	1	-2	3	0	1	-5	-3	-4	-5
37. I don't mind working long hours, it suits me	2	-5	-5	0	-2	-5	-3	-4	-5
38. I am restricted when I can take holidays, which can be inconvenient	0	2	-1	0	5	1	-2	-4	-3
39. I think they try and accommodate people with children's holidays first	0	0	-1	1	-1	-1	1	-3	2
40. I am put off working part time because part time workers are not really included in company training events	-1	-1	-2	-2	-2	0	-3	-1	1
41. I like to feel in control without being too pressured, and I think just with the volume of scripts and enhanced services – it is too much	0	1	5	2	-1	4	2	4	-2
42. You start seeing the extended role as another thing to make your life more difficult, rather than enhancing your professionalism	-3	3	0	-4	-4	-2	-1	-3	4
43. I find I work outside my paid time, to provide enhanced services	0	-1	-2	0	-1	3	1	4	-3
44. I think training for enhanced services has really geared me up again to be interested in Pharmacy	3	0	1	1	4	5	0	-3	1
45. I find community pharmacy tedious	-5	-2	-1	-3	-3	-4	2	-5	-5

Q-statement	Factors								
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
46. Just because you have children doesn't mean you can't dedicate yourself 100% to your career	4	3	-4	3	1	-1	0	-2	0
47. It suits me to work at the weekend	0	-4	-3	4	-5	-4	0	-4	-3
48. I don't see why people with children should have more flexible working arrangements than anyone else	-3	-4	-3	-5	0	-1	-1	-2	-3
49. Part time working results in a lack of continuity and that's bad for other staff and the business in general	-1	0	-3	-4	-1	2	1	0	2
50. I am less motivated by rates of pay than most men	4	0	3	-4	-3	0	0	2	0
51. When I had my baby I didn't want to go back to work, but I needed the money	-3	-3	-3	3	0	0	-1	0	-1
52. I like working full time	2	-3	-4	-2	3	-4	2	3	0
53. When my children get older I will definitely increase my hours	2	-4	0	-4	0	-2	1	1	-4
54. I plan to give up working as a pharmacist, CPD is the last straw	-4	-1	-2	-5	-5	-5	-5	3	-3
55. I moan to management about the working conditions all the time but it is like banging your head against a brick wall	-3	0	0	2	-2	4	-4	3	0
56. At the moment salary is an important factor in choosing where I work	-4	-3	-5	2	4	0	1	-4	-2
57. I would choose to work for someone who would pay my registration fee	0	0	1	1	-2	-2	0	0	-2