Gender, work and psychological distress in hospital consultants

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I, Catherine Joanna Taylor confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

Abstract

Background

Hospital consultants, of whom an increasing number are women, have a high prevalence of psychological distress and work is an important aetiological factor. There is a need for effective interventions to reduce occupational stress but theory and evidence examining the relationship between gender, work and psychological distress are sparse.

Aims

To describe the relationship between gender, work and psychological distress in hospital consultants and to explore consultants' views on occupational stress interventions.

Methods

A mixed methods sequential design was employed, informed by a narrative review of theoretical and empirical evidence regarding gender, work and mental health. Three consecutive studies using primary and secondary data from UK male and female hospital consultants were conducted:

1. Quantitative secondary analysis of national survey data from 1308 (19% female) consultants to investigate relationships between gender, job stress, job satisfaction and psychological distress.
2. Structured interviews with consultants sampled from the national survey (n=75) to explore gender differences in experience of work.
3. Semi-structured interviews with consultant surgeons and radiologists from two integrated NHS Trusts (n=22) to test the face validity of an explanatory model of gender, work and psychological distress and ascertain views on interventions.

Results

An explanatory model of the relationship between gender, work and psychological distress was developed. Underpinned by transactional stress theory and prominent occupational stress models this new model includes individual, work content and context, and work-home interface factors. The face validity of constructs was confirmed and the model refined through interviews with consultants in both male-dominated and gender-balanced specialty groups. The interventions they proposed were mostly aimed at primary prevention at an organisational level.

Conclusions

The model provides a framework for evaluating the likely effectiveness of current policy and practice; if further validated it could also inform the design of interventions aimed at improving consultants' wellbeing.

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Chapter One: Introduction

1.1 Context

Medicine is an inherently stressful profession that involves responsibility for life and death decisions involving urgent clinical problems, ethical dilemmas, distressed patients and relatives, conflicting priorities, and habitual long hours. Concern has been expressed about the wellbeing of NHS employees across all grades of medical, nursing and managerial professionals (Boorman, 2009a, 2009b). However good evidence about the wellbeing of many professional groups is lacking (Harvey, Laird, Henderson, & Hotopf, 2009). An exception to this is hospital consultants in whom high levels of psychological distress have been reported in a number of robust studies (Coomber et al., 2002; Ramirez, Graham, Richards, Cull, & Gregory, 1996; Taylor, Graham, Potts, Richards, & Ramirez, 2005), higher than levels reported in the general population using similar measures (Sproston & Primatesta, 2004).

Psychological distress in senior members of the medical workforce has implications for both their own health and the quality of care they can offer their patients. Doctors with high levels of psychological distress are more likely to lack empathy, have poor communication skills, report impaired clinical performance and report harmful consumption of alcohol (Firth-Cozens & Greenhalgh, 1997; Heaven, Maguire, & Clegg, 1998; Ramirez, et al., 1996; Taylor et al., 2007). Psychological distress among hospital consultants may lead to the inability to provide patient care because of long-term sick leave (Kivimaki et al., 2001), early retirement (Pattani, Constantinovici, & Williams, 2001) or premature death through suicide (Aasland, Ekeberg, & Schweder, 2001). It also bears a huge financial cost with stress at work estimated in the Boorman review to cost the NHS £1.7 billion a year (Boorman, 2009b). This is based on sickness absence alone so does not include the cost of 'presenteeism' (working whilst sick) for which doctors are notorious (Forsythe, Calnan, & Wall, 1999; McKevitt, 1996; McKevitt, Morgan, Dundas, & Holland, 1997).

Much has changed in medicine in recent decades, beginning with the purchaser-provider split (shifting decision-making from consultants to managers) resulting from the Conservative Government's 'Working for Patients' policy (Department of Health, 1989), then the implementation of the Labour Government's NHS Plan (Department of Health, 2000b) and most recently by changes resulting from the Coalition Government's 'Liberating the NHS' plans for reform (Department of Health, 2010).

These various policies have led to many changes to working life for consultants, including the introduction of performance targets, National Service Frameworks, NICE guidelines restricting treatment choices, appraisal and revalidation for consultants, clinical governance procedures and policies, a shift in emphasis from uni-disciplinary to multidisciplinary decision-making and provision of care, and changes to consultant's employment contracts.

The purported central aim of the modernisation programme by each Government has been to improve quality of patient care and in particular to ensure that care is "patient-centred". The commitments of successive Governments have also served to raise expectations from patients regarding the quality and type of care they receive, and the speed at which they should receive it. Inadequate resources often prevent patients' expectations from being met and may be beyond the control of the frontline staff who have to explain this to patients. Patients are increasingly better informed, mainly due to the availability of information accessed via the Internet (Diaz et al., 2002; Schwartz et al., 2006). It is unclear whether consultants are equipped to tackle these challenges and adapt to these new ways of working. Indeed in a longitudinal study of consultants' wellbeing, the deterioration in mental health of consultants was particularly evident in cancer specialists who had been particularly targeted for change (Taylor, et al., 2005).

One of the most significant developments within medicine in the past 40 years has been the increase in women entering the profession. The number of women in medicine has been increasing steadily since the early 1970s. By 1991 over 50% of medical students were women and figures from 2009 show that 55.5% of medical students were female (UCAS, 2010). Current projections by the Royal College of Physicians are that by 2017 there will be more female doctors than male doctors for the first time in history (Elston, 2009).

Nevertheless, whilst some specialty groups are reaching gender equality (or even becoming female dominated) such as paediatrics and psychiatry, others such as surgery and cardiology remain very male-dominated with very little change evident (Department of Health, 2009). For example, in 2009 only 8% of consultant surgeons were female (Royal College of Surgeons, 2012). Various explanations have been offered ranging from 'choice' hypotheses (due to women preferring less 'technical' and more 'patient focussed' specialties and/or choosing specialties with more predictable working patterns and less on-call responsibilities) (Elston, 2009) through to 'discrimination' hypotheses, that women are somehow excluded from the 'higher

status' specialities (Bergman, Ahmad, & Stewart, 2003; Department of Health, 2009; Riska, 2001).

1.2 Rationale for PhD thesis

The proportion of women entering the medical profession is increasing steadily and women will soon make up a third of the consultant workforce. Hospital Consultants report higher levels of psychological distress than in the general working population and this excess prevalence is likely to be the consequence of occupational stress. There is a need for effective interventions in the workplace to reduce occupational stress and protect the wellbeing of the workforce in order that they can provide high quality patient care. This first requires a coherent theoretical and empirical basis, but theory and evidence examining the relationship between gender, work and mental health is sparse. This thesis aims to address this deficit by conducting mixed methods research using primary and secondary data to describe the relationship between gender, work and psychological distress in consultants, and explore consultants' views on how best to protect and improve the mental health of their workforce.

1.3 Defining psychological distress

Psychological distress is conceptualised in this thesis as a continuum from no distress to a level of distress at which a person can no longer function in day-to-day activities that are normal for them, and beyond. Symptoms indicative of significant psychological distress include those common to anxiety and depression such as impaired cognitive functioning, disturbed sleep and low mood. Psychological distress is strongly associated with the onset or recurrence of clinically significant mental health problems (Payton, 2009).

1.4 Levels of psychological distress in women

According to the WHO Global Burden of Disease Update in 2004 depression is the leading cause of 'years lost due to disability' and was the fourth leading contributor to the Global Burden of Disease in 2000, and projected to increase to second place by 2020. Although this is true for both men and women, the burden of depression is 50% higher for women than for men, with men having a burden of alcohol and drug

disorders that is seven times higher than women (WHO, 2008). The prevalence of depression in women is typically reported to be between 1.5 and 3 times that of men. However, there are a number of studies that report no such difference (Jenkins, 1985) and the methodological flaws of many studies have been highlighted (Bebbington, 1996; Jenkins, 1985) including having inadequate samples of both men and women, poorly defined criteria and low response rates.

Nevertheless compared to men, women have been found to have higher rates of psychological distress (at least in terms of depression) in the majority of studies, whether studied in relation to their type of contact with services (outpatients, inpatients, GPs), use of antidepressant medication, or through measurement of symptoms in random community samples (Cochrane, 1993). Indeed although prevalence rates vary greatly between countries it is almost always about twice as frequent in women than in men (Astbury, 2001).

1.5 Explanations for gender differences in psychological distress

Although the relationship between work and psychological distress (and how this varies by gender) is central to this thesis, work is only one component of any comprehensive attempt to explain the aetiology of psychological distress. Other, often inter-related, factors must also be considered.

In the past, attempts to explain the onset of psychological distress at least in terms of depression have tended to fall into two distinct 'camps': biomedical and psychosocial. Whilst it is widely accepted that there is more evidence to support psychosocial than biomedical explanations, it is commonly acknowledged that a multi-factorial model, incorporating explanations from both perspectives is the most valid approach. One of the most comprehensive models is provided by Tirril Harris (Figure 1.1). This model incorporates elements of the "inner" (biomedical) and "outer" (psychosocial) world. Dotted lines indicate internal pathways to depression, continuous lines indicate external pathways.

The model is based upon traditional diathesis-stress models, incorporating both recent precipitating factors (such as adversity which includes life events and chronic stressors) and vulnerability factors (such as personality, childhood adversity etc.) that may lead to an individual being more likely to generalise their response to a stressor.

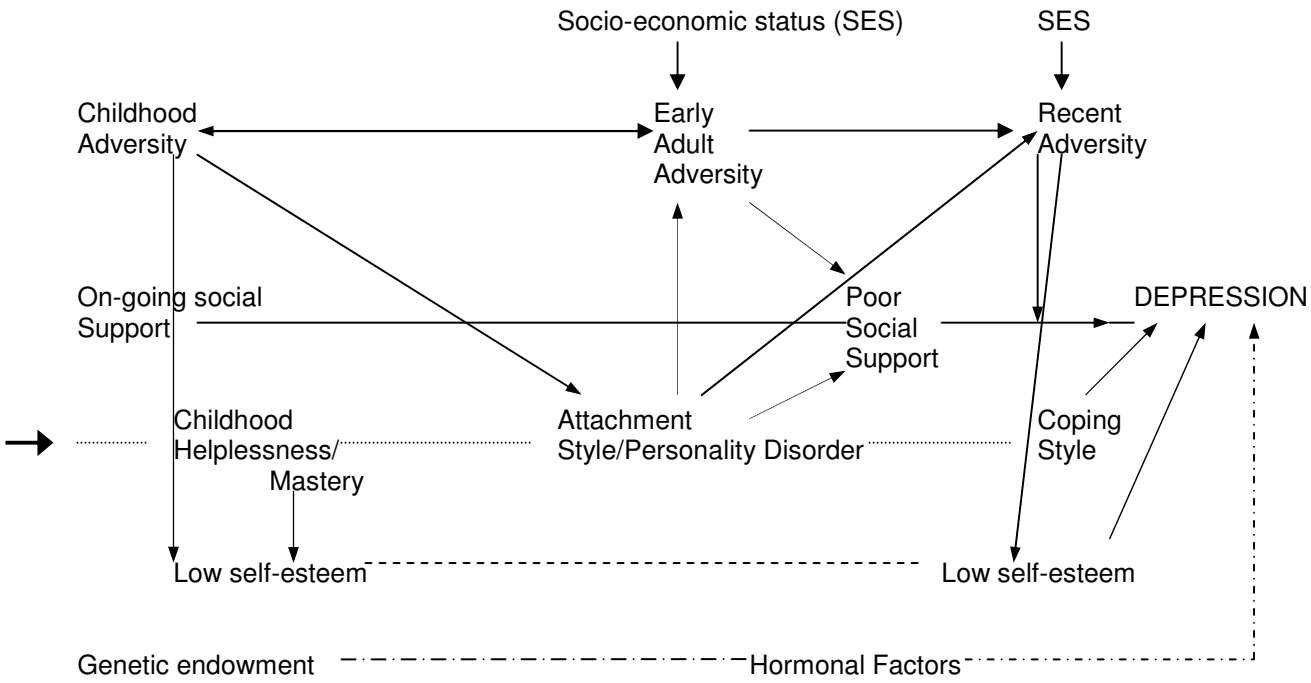


Figure 1.1 Key psychosocial factors in the aetiology of depression: a life-span model (Harris, 2003). *Permission to reproduce figure received from Elsevier Ltd (Licence Number 3000131253025).*

No genetic markers have been identified that account for gender differences, nor do hormonal explanations account for the variation between women (Steiner, Dunn, & Born, 2003) nor the variation in other factors such as socio-economic status. In a comprehensive review of the literature, Bebbington (Bebbington, 1996) argued that it is gender differences in the psychosocial factors related to depression that accounts for women having higher rates than men. The predictive role of psychosocial factors, particularly socio-economic status, in explaining gender differences in depression has been supported by a number of robust epidemiological studies (Leach, Christensen, Mackinnon, Windsor, & Butterworth, 2008; Read & Grundy, 2011; Van de Velde, Bracke, & Levecque, 2010). Until recently, depression was thought to peak at mid-age, but a recent study has shown that this increased prevalence at mid-age is only evident in low income households, again highlighting the significant impact of socio-economic status on health outcomes (Lang, Llewellyn, Hubbard, Langa, & Melzer, 2011).

Other psychosocial explanations for gender differences in prevalence of depression have focussed on the differential impact of demographic characteristics such as marital status and having children (termed 'parenthood' in the literature). Marriage is commonly reported to be beneficial to mental and physical health for both men and

women (Hughes & Waite, 2009; Ronald C. Kessler, Chiu, Demler, & Walters, 2005; H. K. Kim & McKenry, 2002). However the advantage of marriage is often reported to be greater for men than for women (Helsing, Szklo, & Comstock, 1981; Umberson, 1992) and the gender difference in depression is often found to be at its largest in married people. An inherent bias in such studies is that comparisons between married men and women have often meant comparing employed men with housewives (Cleary & Mechanic, 1983), thereby confounding with employment status. A small study (60 married couples) that attempted to unpick this found that women in marriages with non-traditional roles (e.g. where the wife worked) had better mental health than their husbands (Rosenfield, 1980). Furthermore, epidemiological evidence has shown that if both marital status and employment status are accounted for in analysis, the gender difference in prevalence of depression disappears (Gutiérrez-Lobos, Wölfl, Scherer, Anderer, & Schmidl-Mohl, 2000).

In relation to parenthood, whilst some studies have found that women are more likely to be affected negatively by having children than men (Gater, Dean, & Morris, 1989), other studies have shown either little impact of having children on wellbeing (Lewis & Cooper, 1988) or no gender differences in the impact of parenthood (e.g. equally bad impact on mental health for men and women) (Evenson & Simon, 2005). Two epidemiological studies using German population cohort data have shown significant interactions between marital status, gender and parenthood in relation to rates of depression. In one it was having children that explained the twice higher odds of depression (having a depressive episode in the previous 6 months) in married females compared to married males (Lucht et al., 2003), suggesting that having children is the risk factor for women (females without children had a similar prevalence of depression to males regardless of their marital status). In contrast, the second study found mental disorders (including depression) were significantly more frequent in non-parents and found no evidence that parenthood was bad for women. They reported that the most important moderating variable was marital status and that being married was positively associated only with parent's mental health (did not impact on non-parents) and had a greater effect on married men compared to married women (Helbig, Lampert, Klose, & Jacobi, 2006). Although they found that low income was associated with poorer mental health in parents and non-parents this did not interact with parental status. The non-comparable methods of categorising individuals (in relation to marital status and social roles) and measuring depression make comparison of these findings challenging. In addition, both were cross-sectional studies. Prospective cohorts may enable a clearer understanding of the impact (if any) of parenthood on risk of psychological distress.

A third key psychosocial factor that has been examined widely in the literature is the role of social support: the availability of informational, practical and/or emotional support from close friends/family/spouse. Support is hypothesised to 'buffer' against stress (Cohen, Gottlieb, & Underwood, 2000). Whilst there may be little robust evidence of gender difference in receipt of social support (Bebbington, 1996), husbands may be less supportive in response to stress in their wives than vice versa (Neff & Karney, 2005). Furthermore, women may have greater emotional involvement in the lives of those around them (R. C. Kessler & McLeod, 1985; Maciejewski, Prigerson, & Mazure, 2001) and they are more likely to hold informal caring roles (Carmichael & Charles, 2003), though the gender gap may not be as wide as once thought (Arber & Ginn, 1995). Informal caring may increase risk of both poor physical and mental health in itself (Pinquart & Sörensen, 2007; Rush Smith, Williamson, Miller, & Schulz, 2011).

Some of the vulnerability factors and precursors to depression are more modifiable than others. Work is one such factor, reflected in Brown & Harris' model by three components: 'adult adversity' (chronic stressors from any domain of life constitute risk factors), the impact of work on 'socio-economic status' (and thereby impacting upon risk of early adult or recent adversity) and through the impact work has upon 'social support', as work colleagues and managers can be an important source of support.

1.6 The relationship between work and health

'Work is the grand cure of all the maladies and miseries that ever beset mankind' (Thomas Carlyle, inaugural address as rector of the University of Edinburgh, Scotland, April 2 1866)

1.6.1 Overview of prominent models and theories

The early attempts at explaining the relationship between work and health focussed mainly on the benefits of work compared to non-work (mostly unemployment), rather than the costs and benefits within work. An example is Jahoda's 'functional' model of work (Jahoda, 1979). Whilst acknowledging that financial reward was the manifest function of work, she argued that there were five 'categories of experience' which were important to health: having structure to the day, an enlarged horizon beyond your primary group, involvement in collective efforts, knowing where you stand in society, and being active. Jahoda's work informed many subsequent theories and

models but was criticised for not recognizing the fact that work can be 'bad' for health too (Ezzy, 1993).

Models that have tried to explain the relationship between work and poor outcomes (work stress models) have been usefully classified into three types by Cox and Griffiths (T. Cox & Griffiths, 1995):

1. Stimulus models: where stress is defined as a feature of the environmental such as pressure or demand (sometimes termed an 'engineering model')
2. Response-based models: where stress is defined by the physiological or biological changes that occur when an individual is in a stressed state
3. Psychological models: where stress is a dynamic process that occurs when an individual interacts with their environment.

Psychological models have gained the most support by occupational health researchers in recent years due to their ability to account for both situational and individual factors. Cox and Griffiths make a further distinction between interactional and transactional psychological models. Interactional models (such as Karasek's Job Demand-Control-Support model (R. A. Karasek, 1979), described below in more detail) focus predominantly on the presence of stressors (demand) and moderators of stressors (control, support) in the external environment and include little/no acknowledgement of the role or influence of internal subjective appraisal of these by an individual. Transactional models particularly emphasise the moderating role of the individual and their subjective appraisal and coping styles when faced with stressors or hazards in their working environment (T Cox, 1987; Folkman & Lazarus, 1980). Transactional models underpin stress management interventions, which are aimed at strengthening an individual's 'internal' resources and ability to cope with external stressors. Although transactional models are argued by some influential authors to be superior, due to their ability to explain variation within and between individuals in response to similar work stressors (Cooper, Dewe, & O'Driscoll, 2001; Yu, Chiu, Lin, Wang, & Chen, 2007), empirical support is sparse (Goh, 2010; G. Mark & Smith, 2011) - perhaps at least in part due to the complexity of the models and difficulty measuring the cognitive elements of the model (G. M. Mark & Smith, 2008). Interaction models (especially Karasek's model) continue to be hugely influential in occupational health research and national and international policy.

By far the most dominant interactional model in terms of citation and influence academically and politically is Karasek's job strain (or Job Demand-Control) model (R.

A. Karasek, 1979). Job strain is proposed to result from occupations characterised by low levels of control combined with high levels of demand. High strain jobs are hypothesised to result in poor physical or mental health outcome. Subsequent research added a third component - 'social support' - to the model (J. J. Johnson, 1986; J. V. Johnson & Hall, 1988). This specifically focussed on the degree of support and integration with colleagues both in and outside of the workplace. Low social support is hypothesised to increase the likelihood of negative health outcomes (R. Karasek & Theorell, 1990).

The independent association of high job demand and low job control with poor physical and/or psychological outcome has been confirmed by a number of studies in diverse populations (Bonde, 2008; De Lange, Taris, Kompier, Houtman, & Bongers, 2003; S. Michie & Williams, 2003; Robone, Jones, & Rice, 2008), including support from prospective studies (Cheng, Kawachi, Coakley, Schwartz, & Colditz, 2000; Datta Gupta & Kristensen, 2008; Ferrie et al., 2004; Kivimaki et al., 2002; Melchoir et al., 2007; Niedhammer & Chea, 2003; Stansfeld, Fuhrer, Shipley, & Marmot, 1999; Warren, 2004). The importance of social support as a third component of the model has also received empirical support from a number of studies including the Whitehall II longitudinal cohort studies (Stansfeld, Fuhrer, & Shipley, 1998). As well as confirming the importance of job demand and control in predicting health outcomes, the Whitehall II studies have shown that having low confiding, low emotional support or high negative close relationships is predictive of psychological distress.

Whilst receiving much empirical support, Karasek's model both in terms of its theoretical underpinnings and empirical support has been criticised (Kristensen, 1995; G. M. Mark & Smith, 2008). Theoretically, the model has been criticised for being too simple; lacking specificity in terms of outcomes; disregarding individual differences in susceptibility and coping; and failing to consider whether the effects of demand/control are curvilinear with optimal levels at the middle of the range. The empirical evidence supporting Karasek's model has been criticised for comparing outcomes within heterogeneous occupational groups; using subjective measures for the main dimensions of the model; implying causation through cross-sectional designs; and the lack of interventional studies based on the model offering support. Even in studies that have supported the importance of demand and control many have failed to support the presence of the hypothesised interaction between demand and control in predicting poor outcome e.g. (Carayon & Zijlstra, 1999; Marmot, Bosma, Hemingway, & Stansfeld, 1997; Marmot, Shipley, & Rose, 1984). More recently, the model has been criticised for its lack of gender-sensitivity (J. V. Johnson & Hall, 1988; Van der

Doef & Maes, 1999). Indeed the model was based upon research with male workers and when validated with female workers the Job Content Questionnaire (developed by Karasek to measure the dimensions in his model) was found to omit some aspects of work important for women such as discrimination, family friendly policies and responsibility for others' welfare (Karen Messing et al., 2003).

In part a response to these criticisms and arising from theories of reciprocity, occupational health research has also favoured Siegrist's 'effort-reward-imbalance' model (Siegrist, 1996). Stress at work is proposed to result from imbalance between high extrinsic effort and low extrinsic reward (or from a high level of over-commitment). Rewards include money (salary, bonuses etc.) and also esteem and career opportunities. Examples of this imbalance are having a demanding but unstable job or achieving at a high level without being offered any promotion prospects. There is empirical support for the relationship between high effort, low reward and poor health outcomes, particularly in relation to coronary heart disease (Hans Bosma, Peter, Siegrist, & Marmot, 1998; R Peter et al., 1998; R. Peter, Geissler, & Siegrist, 1998; Tsutsumi & Kawakami, 2004). The impact of unfair treatment and importance of equity at work – termed organisational justice (Greenberg, 1987) – is integral to this model, and has been associated with work motivation (Latham & Pinder, 2005), job satisfaction (Al-Zu'bi, 2010), and burnout (Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Liljegren & Ekberg, 2009).

Some authors have examined the synergy between Karasek's Job Demand-Control model and Siegrist's model. These show that the two models identify different aspects of occupational stress (Michael Calnan, Wadsworth, May, Smith, & Wainwright, 2004; Tsutsumi, Kayaba, Theorell, & Siegrist, 2001) and may have better predictive validity if combined (M. Calnan, Wainright, & Almond, 2000; G. Mark & Smith, 2011; Ostry, Kelly, Demers, Mustard, & Hertzman, 2003; R Peter, Siegrist, Hallqvist, Reuterwall, & Theorell, 2002; A. P. Smith, McNamara, & Wellens, 2011), though this may depend on occupational group (Michael Calnan, et al., 2004). Indeed, Calnan and colleagues found that combining the two models resulted in a better predictive model in a study of GPs (M. Calnan, 2002), but in a general population study they found the Effort Reward Imbalance model alone was the best predictor in non-managerial/professional groups (Michael Calnan, et al., 2004). Karasek and Siegrist have themselves issued a joint statement (R. Karasek, Siegrist, & Theorell, 1998) regarding the complementary nature of their models and acknowledging that the components of each are important in predicting the impact of work on health outcomes.

A third model, described as “a reaction and an addition” (Jeurissen & Nyklíček, 2001) to Karasek’s Job-Demand-Control model is the Vitamin model proposed by Warr (Peter Warr, 1987; Peter Warr, 1994). In common with Karasek and Siegrist, Warr also highlights the importance of job control. He conceptualises nine job characteristics as having an effect on wellbeing in the same way as vitamins effect physical health. Each characteristic is hypothesised to be particularly harmful at low levels, but can be grouped into two types depending on their effect at high levels. One group is described as having a constant effect (including money, physical security and having a valued social position) in that once a minimum level is reached no further changes are noted. The others (including opportunity for control, opportunity for skill use, externally generated goals, variety, environmental clarity, and opportunity for interpersonal contact) can be ‘toxic’ in high doses, such that opportunities can become ‘unavoidable requirements’ at high levels and behaviour can become coerced rather than encouraged or facilitated. These characteristics are thereby proposed to have a curvilinear relationship with outcome. Very few studies have tested Warr’s model empirically and no longitudinal prospective studies were identified in the literature searches completed for this thesis. Cross-sectional studies have provided mixed support particularly in relation to a curvilinear relationship between social support and psychological outcomes (De Jonge, Reuvers, Houtman, Bongers, & Kompier, 2000; De Jonge & Schaufeli, 1998; Parkes, 1991).

1.7 Women, work and health

Little is known about the impact of work on women’s health as robust research is sparse (McDonough & Walters, 2001; Karen Messing & Östlin, 2006). The need for more gender-sensitive occupational health research was highlighted in a recent WHO report (WHO, 2011). In general, studies of the relationship between work and physical or mental health have historically used predominantly male samples, not examined gender differences or been methodologically weak (Karen Messing & Östlin, 2006; Karen Messing, et al., 2003). In particular few studies examining gender, work and health have been underpinned by theoretical models of occupational stress. In relation to Karasek’s model, it has been suggested that women are less vulnerable to poor outcome from high demand, low control, and low support than men and that Karasek’s model is a ‘male model’ (J. V. Johnson & Hall, 1988). The findings from a narrative synthesis of 20-years of studies examining the relationship between the model and psychological outcomes were argued to support

this hypothesis (Van der Doef & Maes, 1999). Studies that were least likely to support the model included those with female (or predominantly female) samples, and the authors conclude that high strain work may affect male and female workers differently.

Other studies conflict with this hypothesis. The Whitehall II cohort studies that include male and female civil servants (e.g. (Marmot, et al., 1997)) found few gender differences in levels of job demand, control, and social support (adjusting for job grade), and low control predicted poor outcome (coronary heart disease) equally in male and female participants (H. Bosma et al., 1997; Marmot, et al., 1997). Furthermore a recent cross-sectional study involving nearly 3000 teachers from 13 European countries found levels of demand and control explained an equal amount of variance in outcome (dimensions of burnout) for male and female teachers (Verhoeven, Maes, Kraaij, & Joekes, 2003).

Women engaged in paid work have been found to have better mental and physical health than full-time homemakers (McMunn, Bartley, Hardy, & Kuh, 2006; Verbrugge, 1983). Some studies have found that, when occupation is controlled for, there is no gender difference in depression, suggesting that it is employment (lower grade or unemployment) that is the key factor explaining women's increased prevalence of depression (Cochrane & Stopes-Roe, 1981; Gutiérrez-Lobos, et al., 2000; Jenkins, 1985).

1.7.1 Gender and work-related vulnerability/protective factors

It has been suggested that women who are socialised to be less assertive and have lower status jobs (in line with traditional gender stereotypes) may have a relatively low capacity to influence their environment and control their own lives (Cochrane, 1993). Indeed Karasek & Theorell (R. Karasek & Theorell, 1990) suggested that women have lower levels of decision latitude and control than men despite similar psychological demands at work. This hypothesis was tested and supported in a study of professional managerial and executive women who had better mental health (compared to norm data), which was explained in relation to the higher control awarded by their higher occupational status (Beatty, 1996). However, others have suggested that the unique pressures, conflicts, prejudices and isolation they may encounter in a male-dominated workplace may make them more vulnerable to poor health (Buono & Kamm, 1983; Cooper & Davidson, 1983).

In relation to gender differences in levels of job stress and satisfaction the results are inconclusive; there appears to be no consistent pattern in relation to levels of job stress (Martocchio & O'Leary, 1989); but women generally report higher job satisfaction than men (A. E. Clark, 1997; Sloane & Williams, 2000). Clark (A. E. Clark, 1997), using data from the then nationally representative British Household Panel Survey, found that the gender satisfaction differential disappeared for younger workers, higher educated workers, those in professional or managerial positions, those whose mothers had a professional job and those working in male-dominated workplaces. Clark explains this finding in relation to expectations of work – stating that women in these jobs would have higher expectations of what their jobs should entail - whereas in all other jobs the higher job satisfaction arises from women having lower expectations of work rather than a better experience of work. Few studies have examined gender differences in job satisfaction matched for occupational group but the finding that gender satisfaction differential disappears for those in managerial posts was concurred in a small study of the leadership team of a US health and human services agency (Manning, 2002).

Some studies have investigated gender differences in the *sources* of work from which job satisfaction or job stress are experienced. The evidence is similarly inconclusive but there is a suggestion that men may be more concerned with the extrinsic aspects of work (such as pay and promotion) whereas women are more likely to value the intrinsic aspects (such as having good relationships with colleagues) (A. E. Clark, 1997; Sloane & Williams, 2000).

1.7.2 Gender and home/work interface

“Work-life balance” has become a burgeoning area of research in recent decades, influenced greatly by women increasingly entering the workforce. The traditional social expectation in the UK is that women’s occupational interests will be secondary to their family roles. Some authors argue that the boundaries of work and home are more permeable for women than men (Doyal, 1994; Pleck, 1977). This ‘spillover theory’ (Staines, 1980) has not been confirmed by other studies that have either found no gender differences (Frone, Russell, & Cooper, 1992), or have suggested an additivity rather than spillover effect whereby both work and home stressors are independently related to psychological distress, but there is no interaction between them (Jönsson, Johansson, Rosengren, Lappas, & Wilhelmsen, 2003; Parasuraman, Greenhaus, & Granrose, 1992).

More recently there has been a focus on the impact on wellbeing of flexible working. Flexible working can include a vast array of different working arrangements including: part-time working, term-time working, job-sharing, working from home, working flexitime, and others. Whilst there are a number of studies suggesting that working full time is more detrimental to health than working part time (e.g. (Benach, Gimeno, & Benavides, 2004)) or that it is at least equivalent (e.g. (Rodriguez, 2002)), a common finding across a number of studies relates to 'choice': if the employee is working the number of hours that they choose (whether full or part-time) they are more likely to have favourable outcomes in terms of various indices (psychological wellbeing, work-life balance etc). This has been confirmed in a longitudinal study that included 12 waves of British Household Panel data (an annual longitudinal survey including 10,000 adults) where part-time workers reported significantly better psychological wellbeing than full time workers *but* only if they were satisfied with the number of hours they worked or did not have children (Robone, et al., 2008). An interview study comparing dual earner physician couples who worked full or part-time concurred with this finding, reporting that working the number of hours preferred was the most important factor in relation to risk of burnout and life satisfaction (Carr, Gareis, & Barnett, 2003). Further evidence supporting this finding comes from a Cochrane review of flexible working interventions. All were controlled before-after study designs with a range of methodological weaknesses but authors tentatively concluded that flexible working interventions that increased worker control and choice were likely to be related to positive health outcomes, whereas those motivated by organisational interests had equivocal or negative impacts (Joyce, Pabayo, Critchley, & Bambra, 2010).

Alongside these epidemiological and intervention studies, there is emerging evidence from qualitative research regarding other impacts of part-time working, particularly in relation to Class 1A professionals. Interviews with male and female chartered accountants regarding the impact of flexible working revealed perceptions that working part-time was associated not only with having a lower current salary but also a negative impact on future salary and with worse career prospects. Furthermore, these negative perceptions of part-time working created barriers to access of flexible working policies for both male and female accountants (Smithson, Lewis, Cooper, & Dyer, 2004).

1.7.3 Gender inequalities and discrimination at work

Gender discrimination within the work domain can take many different forms and, whilst this can be targeted at either men or women, the majority of literature is focussed on the impact of discrimination on women. Women tend to earn less than men, even when education, occupational status, experience and hours are controlled for (Hegewisch, Williams, & Zhang, 2012; Myck & Paull, 2004; Parasuraman, et al., 1992; G. N. Powell, 1990). In a study of over 500 male and female MBA graduates, female and male managers of similar age, education, experience, performance and career paths did not differ in relation to 'overall' number of promotions or career satisfaction but women did experience lower salary increases, fewer management promotions and worked at lower hierarchical levels (T. H. Cox & Harquail, 1991). All of these factors have been associated with variety of stress symptoms (Esther R. Greenglass, 1991; Pavalko, Mossakowski, & Hamilton, 2003).

1.7.4 Gender, work and psychological distress in hospital consultants

The prevalence of significant psychological distress (measured using valid standardised measures) in hospital consultants is reported to be between 25-33% in most studies conducted in the UK (Coomber, et al., 2002; Ramirez, et al., 1996; Taylor, et al., 2005; Wall et al., 1997) and in other countries e.g. Switzerland (Arigoni, Bovier, Mermillod, Waltz, & Sappino, 2009); Italy (Bressi et al., 2008). This is considerably higher than the 11-15% reported in the general population using similar measures (Sproston & Primatesta, 2004). The majority of studies have omitted investigation of gender differences, instead focussing on specialty differences, or the impact of other factors such as age, grade or number of years as a consultant. In those that have investigated the impact of gender and report no gender difference (e.g. (Ramirez, et al., 1996)) it is likely there was insufficient power to detect a difference due to the low numbers of female consultants in the sample compared to male.

In the first of two large studies involving a large number of NHS hospital Trusts (Borrill et al., 1996) it was only among the doctors and managers that a gender difference in the prevalence of psychological distress was found (women reported a higher prevalence of distress). There was no such difference amongst nurses (although there were very few male nurses). This suggested that senior positions within the NHS may be particularly detrimental to the mental health of women. However, in their

follow-up study (Borrill et al., 1998) they failed to replicate the gender difference for doctors, only replicating the finding for female senior managers.

Many studies have reported that doctors are more at risk of suicide when compared to the general population and compared to other professional groups (Lindeman, Laara, Hakko, & Lonnqvist, 1996). Estimates of the relative risk of male and female doctors compared to other groups vary but whilst a few studies have reported a lower or equivalent risk of suicide in male doctors compared to the general male population (Lindeman, Laara, Hirvonen, & Lonnqvist, 1997; Petersen & Burnett, 2008; Rich & Pitts, 1979), the direction of the relationship for female doctors has been unequivocal: that they are at increased risk. A meta-analysis concluded that the aggregate suicide risk compared to the general population was 1.4 for men and 2.3 for women (Schernhammer & Colditz, 2004). Taking suicide as a proxy for psychological distress, this indicates that female doctors may be at least at more risk of psychological distress than women in the general population if not at more risk than their male consultant counterparts.

Female doctors are less likely to be married than male doctors and are more likely to be divorced (Bergman, et al., 2003; Dumelow, 2000). If marriage is protective of mental health (regardless of whether it is less so for women or not), then fewer female hospital consultants will be 'protected' by marriage than male hospital consultants. In addition, the majority of married female doctors have a professional full-time working spouse, with approximately half being married to doctors (Bergman, et al., 2003; Bowman & Allen, 1990), whereas wives of male doctors are often not employed outside the home and if so they are most likely to work part-time (Ogle, Henry, Durda, & Zivick, 1986). This may lead to gender differences in relation to receipt of practical (and emotional) support at home (Burke & Weir, 1976; E. R. Greenglass, 1993).

With regard to parenthood, female doctors generally have fewer children than male doctors and have them later in life (Dumelow, 2000; Elisabeth Gjerberg, 2003). A large Canadian study found that female physicians also spent far more time on childcare and housework than male physicians. Women in their study worked 22 hours more than men per week when summing hours spent at work, providing childcare and doing housework (Woodward, Williams, Ferrier, & Cohen, 1996). This fits with recent data from a study conducted by the Organisation for Economic Co-operation and Development (OECD) (Miranda, 2011) involving 29 countries showing women do more unpaid work than men. Female doctors have reported more stress from combining work and family than male doctors in a survey of over 600 physicians

in the US (Warde, Moonesinghe, Allen, & Gelberg, 1999) and reported having made more compromises between family and work than men based upon a national survey involving over 3000 physicians in Finland (Töyry et al., 2004) and semi-structured interviews with over 200 consultants in the UK (Dumelow, 2000).

1.7.5 Work-related vulnerability and protective factors

The excess prevalence of psychological distress amongst hospital consultants compared to the general working population indicates that work is an important aetiological factor. In some studies, consultant-specific measures of job stress and satisfaction have been used to enable a degree of specificity about the components of work that may be related to poorer or better outcome. Such studies have identified that being overloaded with work and its effect on home-life, being poorly managed and resourced, feeling insufficiently trained in management and communication skills, lacking recognition of one's own contribution by others and having too much responsibility relate to a higher risk of psychological distress (Coomber, et al., 2002; Ramirez, et al., 1996).

The importance of job satisfaction in moderating the relationship between job stress and psychological distress has been demonstrated in a large study of hospital consultants (Ramirez, et al., 1996). In this study, a high level of job stress was related to psychological distress, however if consultants also had a high level of job satisfaction this relationship weakened significantly. The sources of job satisfaction that contributed most to consultants' overall satisfaction were having good relationships with patients, relatives and staff, and having professional status and esteem. This moderating relationship has yet to be examined by gender.

1.7.6 Gender inequalities or discrimination at work

The gender differences in pay and status reported in the general working population are reflected in the medical workforce. The under-representation of women in higher positions in medical hierarchy and in the most prestigious specialities has been reported in a number of high profile reports (Department of Health, 2009; Elston, 2009; Royal College of Physicians, 2001). There are fewer women than expected in the acute medical specialties, academia and positions of seniority. A study in 2000 explored the career progression in female doctors and concluded that there was some evidence of disproportionate promotion particularly in certain specialties such as surgery and hospital medicine (I. C. McManus, Gordon, & Winder, 2000; I C McManus

& Sproston, 2000) and the under-representation of women in academia led to the publication of a working group report by the BMA (BMA, 2004) and continues to be raised as a concern in the most recent publications regarding the NHS workforce and gender (e.g. (Department of Health, 2009)). A report published by the BMA in 2009 shows there is a pay-gap of between 13-18% between male and female doctors, only 40% of which could be accounted for by gender differences in characteristics known to impact on income (Connolly & Holdcroft, 2009). This pay-gap may be in part explained by gender differences in merit awards. A report in the mid-1990s stated that only 20% female consultants held the awards compared with about 37% of male consultants (Beecham, 1994). Female doctors have fewer failed promotion attempts than men, according to the recent Royal College report (Department of Health, 2009; Elston, 2009) yet they progress more slowly. The working group concludes that perhaps women were more hesitant to try for promotion and wait longer than they need to. An alternative interpretation could be that they are 'unsupported' or 'dissuaded' before applying. Similar promotion/award gender gaps have been reported outside the UK (Dresler, Padgett, MacKinnon, & Patterson, 1996; Elisabeth Gjerberg, 2003; Lorber, 1993; Riska, 2001).

1.8 Conclusion

Work can be both beneficial and harmful to health. There exist empirically supported theoretical models that help to explain the occupational risk factors for poor mental health but both the models and the empirical support has mostly failed to consider gender. Indeed very little research has explored the relationship between gender, work and mental health but evidence is accruing to suggest that men and women may have different experiences of work.

Focussing on medicine specifically, doctors have a higher rate of psychological distress than the general population and it is likely that occupational stress is a major contributory factor to this. Despite inconclusive findings regarding gender differences in consultants' levels of psychological distress, there appear to be gender differences in some of the vulnerability or protective factors related to psychological distress (namely marital status and parenthood). Furthermore, female consultants may be disadvantaged at work via lower status, pay and career progression. In view of this, it is likely that the relationship between work and mental health requires a gender-sensitive perspective. Effective interventions aimed at preventing or treating poor mental health in the workplace should be informed by gender-sensitive theoretical models.

This thesis aims to address the deficit in the literature regarding this important health and policy issue.

1.9 Aim and objectives of thesis

The overarching aim of this thesis is to describe the relationship between gender, work and psychological distress in hospital consultants and from this to determine how best to improve and protect the mental health of the consultant workforce.

Underpinned by a transactional approach to work stress, the objectives are to:

- Investigate gender differences in levels and sources of job stress and job satisfaction reported by male and female consultants, and the relationship these have with psychological distress using quantitative and qualitative methods and primary and secondary data sources
- Develop an explanatory model, underpinned empirically and theoretically, that comprehensively explains the relationship between work and psychological distress for male and female consultants
- Test the face validity of the explanatory model with a purposive sample of male and female consultants from male dominated and gender-balanced specialty groups
- Explore consultants' views on potential interventions for preventing work-related psychological distress in hospital consultants

1.9.1 Epistemological stance

Defined as a position or stance on what should be considered as "acceptable" or legitimate knowledge. It is important to be explicit about this otherwise "*the reader is not given an adequate basis for evaluating the study or knowing where to and (conceptually) to judge the study*" (Potter, 1996) p.283).

Rigid distinctions between quantitative and qualitative methods are increasingly accepted to be inappropriate and "mixed methods" (using qualitative and quantitative methods simultaneously or sequentially in a research study) are now argued by some to be a third research design in their own right. As a mixed methods researcher my epistemological stance is pragmatism. Taken from Greene (Greene, 2007) my approach to research is that it is legitimate to have multiple ways of knowing and understanding and is important to actively engage with epistemological differences

such that you a) respect multiple ways of knowing; b) understand and respect some of the deep contradictions posed by different epistemological traditions; c) not get stuck in these contradictions or feel forced to take sides and instead; d) invite multiple ways of knowing into the study to enrich it. In summary, the view I share with pragmatists is that there is no absolutely 'best' method but that "*different methods are appropriate for different situations*" (Patton, 1990).

1.9.2 Design

A sequential mixed model study (mixing qualitative and quantitative methods within and between studies) was conducted (Abbas Tashakkori & Teddlie, 1998). Each study is designed to explore or confirm questions emerging from previous studies. A simplified conceptual representation of the research process is provided in Figure 1.2). This body of work consists of a narrative literature review of relevant theoretical and empirical evidence regarding gender, work and mental health, followed by three sequential studies utilising mixed quantitative and qualitative methods and primary and secondary data sources:

1. Secondary analysis of national survey data from 1308 UK hospital consultants.
2. Structured interviews with a national sample of male and female UK hospital consultants drawn from the national survey.
3. In-depth interviews with UK consultant surgeons and radiologists from two integrated NHS Trusts.

1.10 Research Questions

1.10.1 Primary research questions

The overriding research questions were:

What constructs should be included in a gender-sensitive model of the relationship between work and psychological distress in hospital consultants?

How can the mental health of the consultant workforce be improved?

1.10.2 Secondary research questions

The research questions specific to each study were:

Study 1: secondary analysis of national survey data

Primary research question:

- What is the relationship between gender, work (job stress and job satisfaction) and psychological distress?

Secondary research questions:

- Do female consultants have a higher prevalence of psychological distress compared to male consultants?
- Do male and female consultants report different levels or sources of job stress and job satisfaction?
- Can the relationship between gender, work and psychological distress be explained with reference to prominent occupational stress theories (particularly Karasek and Siegrist's models)?

Study 2: national structured interview study

Primary research question:

- Do female consultant's report similar levels of job stress but lower job satisfaction in comparison to male consultants, particularly in relation to '*perceived control and esteem derived from work*'?

Secondary research questions:

- What is the explanation for the lower satisfaction reported by female consultants in Study 1, specifically with regard to their perception of control and esteem derived from work?
- Do male and female consultants perceive that there are differences in job stress according to gender?

Study 3: in-depth interview study

Primary research question:

- Does the gender-sensitive explanatory model have face validity to male and female consultants working in male-dominated and less male-dominated specialty groups?

Secondary research questions:

- Do any elements of the model require refinement to more accurately reflect experiences reported by consultants?

- Are there any relationships in the model that are disconfirmed by experiences reported by consultants?
- Are there differences in perception of face validity of the model by gender or by specialty group?
- What interventions or strategies are proposed by consultants' to reduce risk of work-related psychological distress?

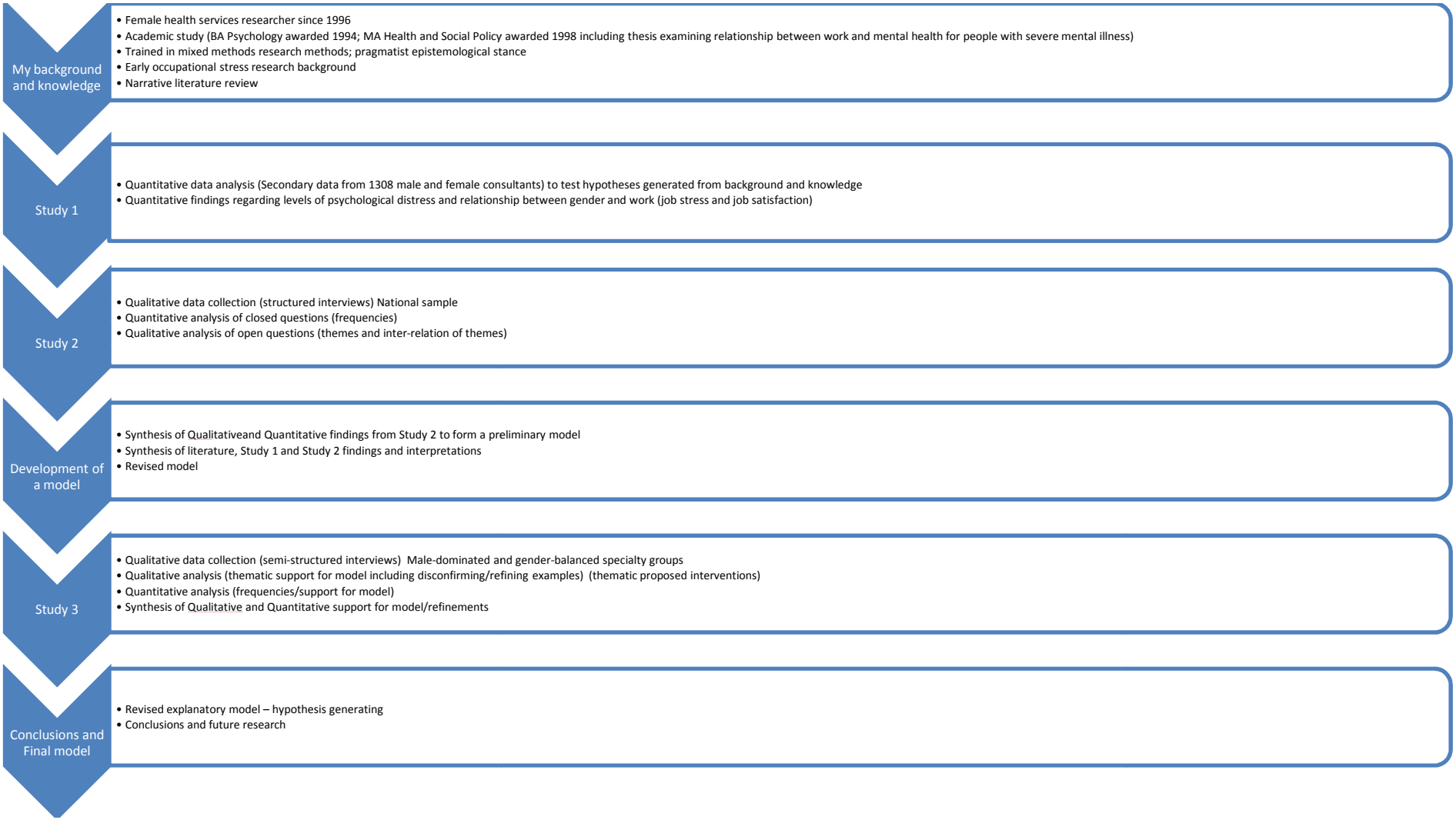


Figure 1.2 Simplified conceptual model of the research process

1.11 Statement of involvement

The work contained within this thesis began in 2003. I was employed full-time by the Cancer Research UK London Psychosocial Group, Kings College London from April 2002 to August 2009. During this time I had responsibility for leading a programme of research aimed at understanding the relationship between work and psychological distress in hospital consultants. This included managing the national survey study that is used in Study 1 and the national interview study that formed the basis for Study 2. The national survey study was designed to re-assess consultants who had been surveyed in 1994 (prior to my involvement) in addition to a cohort of consultants new to the grade since 1994. The aim was to assess changes in the mental health of comparable cohorts of consultants across time. The interview study was designed to assess the relative contribution of work and home stressors to poor mental health in consultants. Neither study had a gender focus. My involvement in each of the studies contained in this PhD is as follows:

Study 1: I led the development work to refine and update the job stress and satisfaction measures used in the survey, collected all data, initiated and formulated the gender-specific research questions and completed all analyses.

Study 2: I initiated and formulated the gender-specific research questions, developed the interview schedule, applied for an extension to the ethics approval for the study, conducted a third of the interviews and completed all analyses (*with quality assurance and validation provided by both PhD supervisors SM and MH*).

Study 3: I initiated and formulated the research questions, designed the study, developed all study materials (topic guide, information sheets, consent forms etc.), applied for ethics committee approval, conducted all interviews and completed all analyses (*with quality assurance validation provided by an independent qualitative researcher CCB*).

Chapter Two: Gender differences in the association between job stress, job satisfaction and psychological distress amongst hospital consultants: secondary analysis of a large cross-sectional sample

2.1 Introduction

Hospital consultants are commonly reported to have a higher prevalence of significant psychological distress than the general working population, and this has been related to the distinct nature of their work (Ramirez, et al., 1996; Taylor, et al., 2005). Doctors' poor mental health may compromise the quality of care they are able to offer to their patients, perhaps even resulting in them leaving the profession (Taylor, et al., 2007). This, coupled with the current need to expand the consultant workforce (Federation of the Royal Colleges of Physicians of the UK, 2010), makes it an important public health concern.

Prominent occupational stress models postulate that the psychosocial work environment can explain the relationship between work and health. Specifically attention has mostly focussed on imbalances between perceived job demand, control and support (R. Karasek, et al., 1998; R. Karasek & Theorell, 1990; R. A. Karasek, 1979), or between extrinsic effort and rewards from work (Siegrist, 1996). These situational approaches to understanding the relationship between work and poor outcome have empirical support but studies have rarely considered gender (J. V. Johnson & Hall, 1988; Van der Doef & Maes, 1999). Indeed we know little about the relationship between gender, work and mental health.

Gender is of particular relevance in medicine due to the changing demographic profile of the workforce: women now outnumber men at medical school and comprise almost a third of the consultant workforce (Department of Health, 2009). Effective workplace interventions to protect consultants' mental health are urgently needed. Design of such interventions first requires a coherent theoretical and empirical base. The lack of evidence regarding the applicability of the prominent occupational stress models to the female workforce (Karen Messing, et al., 2003) makes this an important area to investigate. Indeed, although women are increasingly joining the medical workforce there are significant gender differences in relation to some job and demographic characteristics such as marital status, parenthood, specialty, and seniority of post. These differences may be independently associated with risk of psychological distress, or may act as moderators of other work risk factors. Furthermore there may

be gender differences in relation to the constructs within the proven occupational stress models: levels and sources of perceived demand (or effort), control (or reward) and support at work.

This study will use the most robust dataset available at the time (to my knowledge) to investigate gender differences in (1) prevalence of psychological distress and (2) the relationship between work (in terms of levels and sources of job stress and satisfaction) and psychological distress in hospital consultants.

2.2 Research questions

2.2.1 Primary research question:

What is the relationship between gender, work (job stress and job satisfaction) and psychological distress?

2.2.2 Secondary questions:

- Do female consultants have a higher prevalence of psychological distress compared to male consultants?
- Do male and female consultants' report different levels or sources of job stress and job satisfaction?
- Can the relationship between gender, work and psychological distress be explained with reference to prominent occupational stress theories (particularly Karasek and Siegrist's models)?

2.3 Aims and hypotheses

- to compare the job and demographic profiles of male and female hospital consultants

- to compare the prevalence of significant psychological distress in male and female hospital consultants

  H_1 the prevalence of significant psychological distress in female consultants will be higher than in male consultants (using cut-off ≥4 on the GHQ-12, see section 2.4.3)

- to investigate levels and sources of job stress and satisfaction for male and female consultants

  H_2 overall levels of job stress and job satisfaction will vary by gender

  H_3 the sources of work from which consultants experience job stress and satisfaction will vary by gender

- to investigate the relationship between job and demographic variables, job stress, job satisfaction and psychological distress for male and female consultants

  H_4 Based on Karasek's job demand-control model, levels of job stress and satisfaction will mediate relationships between job or demographic variables and psychological distress

2.4 Method

2.4.1 Design

Secondary analysis of a cross-sectional postal survey sent to UK hospital consultants from five specialties.

2.4.2 Participants

A confidential postal survey was sent to 1794 hospital consultants from five specialties in late 2002. The survey was a repetition of a survey sent to 1133 hospital consultants in 1994 where the specialties were chosen to enable comparison of cancer vs. non-cancer specialties. 360 consultants from the 1994 cohort had retired or left the profession by 2002. Therefore the 2002 survey was sent to the remaining 773 consultants from the 1994 cohort in addition to 1021 consultants who had become consultants since 1994, in order to provide a comparable cohort. They were sampled in the same way as the original cohort, namely:

Gastroenterology: via the British Society of Gastroenterology – a 2 in 3 random sample.

Radiology: via the Royal College of Radiologists – a 1 in 5 random sample.

Surgical Oncology: via the British Association of Surgical Oncologists – all consultants.

Clinical Oncology: via the Royal College of Radiologists – all consultants.

Medical Oncology: via the Royal College of Physicians – all consultants.

Gastroenterologists and Radiologists were sampled randomly due to the discrepant size of the specialties compared with the other three. By sampling randomly it ensured that the number of consultants within each specialty were as similar as possible allowing for meaningful comparison between specialties.

2.4.3 Measures

The survey assessed:

- ***Psychological distress*** using the 12-item version of the General Health Questionnaire (GHQ-12) (D. P. Goldberg, 1972). The GHQ-12 was originally developed to screen for psychiatric cases but has also been found to be a reliable and valid measure of the continuum of psychological distress. 12 symptoms of psychological distress (such as depression, inability to cope, and anxiety-based insomnia) are rated according to whether they have been experienced '*not at all*', '*the same as usual*', '*rather more than usual*', or '*much more than usual*' in the past few weeks. Endorsement of the first two response categories is scored 0, and the second two as 1. Although psychological distress is viewed as a continuum in this thesis, a threshold cut-off of ≥4 is applied to identify consultants reporting a level of distress that is likely to interfere with their functioning at work. This threshold is based upon studies that have validated the GHQ-12 scores against structured clinical interviews, including one validation study in a population of NHS staff who reported good psychometric properties with sensitivity at 73% and specificity of 86% (Borrill, et al., 1996).

- ***Job stress and job satisfaction*** using a consultant-specific self-complete questionnaire developed originally for a national survey conducted in 1994 and updated in 2002 (Teasdale, Drew, Taylor, & Ramirez, 2008). The questionnaire contains 36 sources of job stress and 22 sources of job satisfaction (Appendix I). Principal components factor analysis (using direct oblimin rotations) resulted in 28 of the 36 sources of job stress loading to one of 7 job stress factors: *feeling overloaded with work and its impact on home-life; feeling poorly managed and resourced; dealing with blame and anger from patients and relatives; dealing with changes in clinical practice; encountering difficulties in relationships with NHS staff/colleagues; dealing with patients' suffering; having managerial responsibilities.* 15 of the 22 sources of job satisfaction loaded onto one of 4 job satisfaction factors: *Feeling well managed and resourced; having good relationships with patients and relatives; having professional status and esteem;*

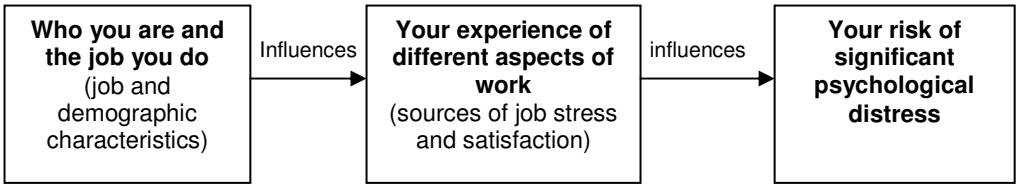
deriving intellectual stimulation. Each source is rated according to the extent it contributes to overall job stress or satisfaction experienced at work during the past few months on a scale of 0 ("not at all") to 3 ("a lot"). Total scores refer to the summation of ratings given to all individual items. Factor scores refer to the summation of ratings given to each item within each factor.

- ***Job characteristics*** – type of post (clinical vs. academic); full or part time working; whether they have a lead role e.g. clinical director, medical director, lead clinician (yes/no)

- ***Demographic characteristics*** – age (≤35, 36-45, 46-55, >55); marital status (married, single, separated/divorced/widowed); number of children <18 years old living at home.

2.4.4 Statistical methods

Analysis was underpinned by a transactional approach to work stress, that work stress is the result of a complex transaction between the individual and their work environment. The lack of measures in relation to coping and other relevant cognitive processes in this study meant that the approach to analysis was informed by the following simplified model:



1. Describing the job and demographic profiles of male and female hospital consultants: Pearson's X^2 were used to compare categorical variables and Fisher's exact tests were used to compare binary variables.

2. Comparison of the prevalence of significant psychological distress between male and female hospital consultants: Fisher's exact test was used to compare the proportion of male vs. female consultants scoring ≥4 on GHQ.

3. Comparison of levels and sources of job stress and satisfaction for male and female consultants: Total and factor scores were compared using independent t-tests. NB: For each source of job stress and satisfaction the percentage of consultants scoring items as contributing "quite a bit" (scored 2) or "a lot" (scored 3) was calculated and is presented graphically as it is felt to be more comprehensible than mean scores.

4. To investigate the relationship between job and demographic variables, job stress, job satisfaction and psychological distress: Hierarchical logistic regression models were built as follows:

    a. GHQ score (≤3 vs. ≥4) was entered as the dependent variable and each job and demographic variable was entered to test bivariate relationships in the first instance. All significant variables were then entered hierarchically (fixed variables such as gender and age were entered before job characteristics) into a multivariate regression, remaining in the model according to the significance of change to r^2 (Cox & Snell), used to estimate effect size.
    b. Job stress and satisfaction scores were entered into a separate block to establish if they mediated the relationships previously identified, thereby rendering any previously significant relationships non-significant and/or reducing the size of their effect (Baron & Kenny, 1986).

Results from regression analyses are presented diagrammatically, where all figures are OR (95% CI) and the r^2 and significance of model are shown against each model.

A 5% significance level was used throughout. All analysis was completed using SPSS 10.0 (SPSS Inc., 1989-1999)

2.5 Results

2.5.1 Response rates

1308 of 1794 (73%) responded to the survey. 19% (251) of consultants were female. This is representative of the consultant body as a whole at that time. In 1999 21% of consultants in hospital medicine were women (and 17% in medical specialties) (Royal College of Physicians, 2001). Female consultants were predominately working in

radiology, clinical oncology or medical oncology, with a very small proportion working in gastroenterology or surgical oncology (see Figure 2.1). This reflects the gender proportions in each specialty at that time with female consultants comprising 9% of gastroenterologists; 6% of general surgeons; 27% of clinical radiologists; 31% of clinical oncologists and 28% of medical oncologists (Department of Health, 2002).

2.5.2 Job and demographic profiles of male and female hospital consultants

The job and demographic profile of female consultants was notably different to that of male consultants. In addition to the gender differences by specialty shown in Figure 2.1, female consultants were younger in age, less likely to be married, and more likely to be single; they were less likely to have children; less likely to hold a lead or academic post; and were more likely to work part-time (Table 2.1).

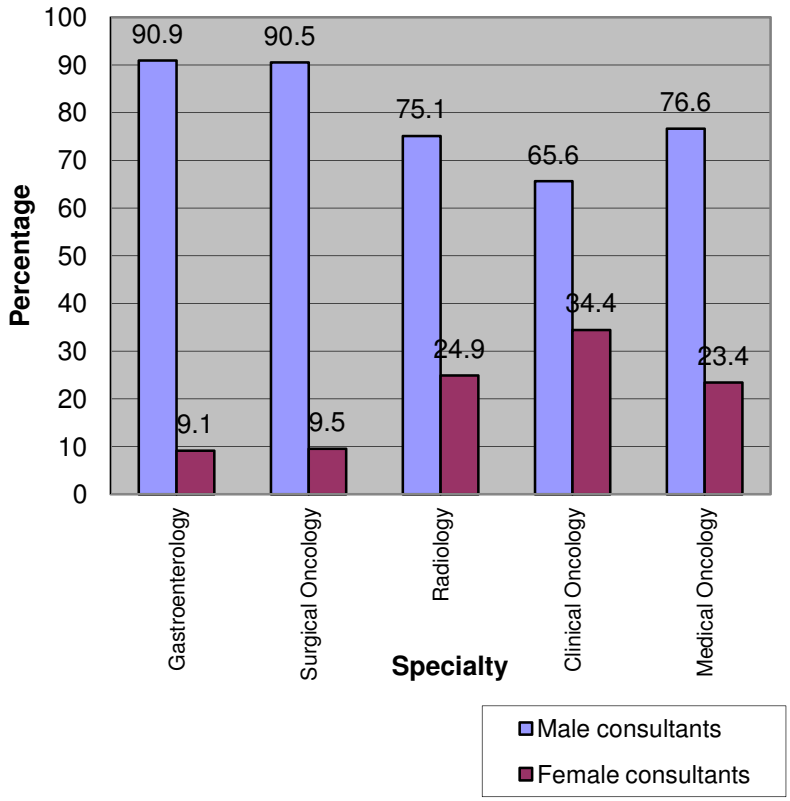


Figure 2.1 Male and female consultants by specialty

Table 2.1 Demographic and job characteristics of male and female consultants

	Male consultants n=1057 Number (%)	Female consultants n=251 Number (%)	Significance of gender difference (*p*)
Marital status: Single Married/cohabiting Separated/divorced/widowed	 46(4) 957(92) 43(4)	 47(19) 193(77) 12(5)	$X^2(2)= 62.9$ p<0.001
Age: Under 35 36-45 46-55 Over 55	 33(3) 387(37) 406(39) 220 (21)	 19(8) 146(58) 67(27) 21(8)	$X^2(3)= 57.3$, p<0.001
Have at least one child aged <18 living at home with them	640(62)	132(53)	Fisher's exact p=0.02
Type of post: Clinical Academic NHS	 123(12) 922(88)	 15(6) 238(94)	Fisher's exact p=0.01
Full or part-time working: Full-time Part-time (<10sessions/wk)	 971(93) 75(7)	 186(74) 67(27)	Fisher's exact p<0.001
Have a lead role (clinical director, medical director, lead clinician)	462(44)	72(29)	Fisher's exact p<0.001

2.5.3 The prevalence of significant psychological distress in male and female hospital consultants

H_1 the prevalence of significant psychological distress in female consultants will be higher than in male consultants

Female consultants were significantly more likely to score ≥4 on the GHQ-12 (Table 2.2) indicative of significant psychological distress. Figure 2.2 shows the number of symptoms reported by male and female consultants. It shows that female consultants were more likely than male consultants to report symptoms at almost every threshold from 4 symptoms upwards.

Table 2.2 Prevalence of psychological distress according to gender

	Male consultants	Female consultants	Significance of difference (p)
Significant psychological distress (% GHQ ≥ 4)	31%	39%	Fisher's exact p=0.02

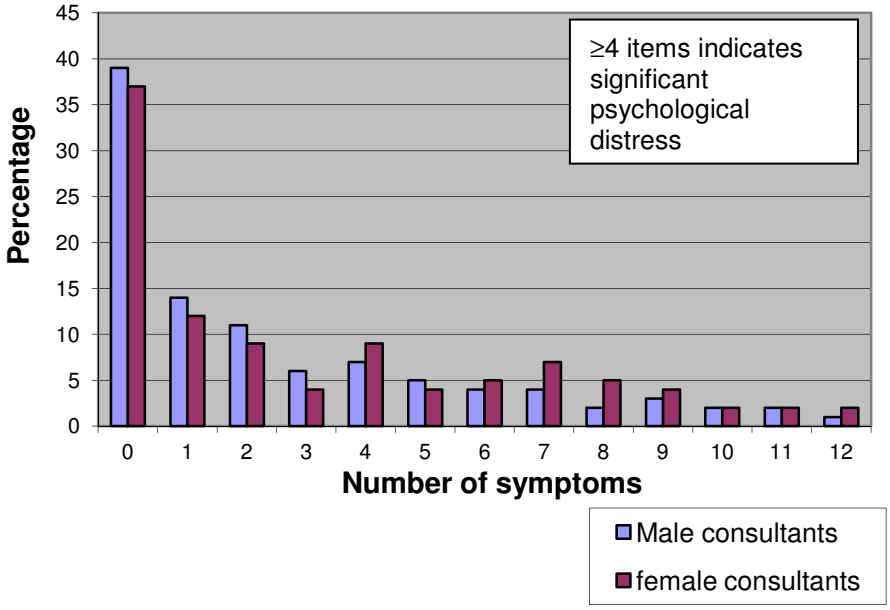


Figure 2.2 Number of symptoms experienced 'rather' or 'much' more than usual on GHQ-12

2.5.4 Levels and sources of job stress and satisfaction for male and female hospital consultants

Job stress and satisfaction scores were not related to each other, resulting in correlation coefficients of r=0.03, *p*=0.40 and r=0.02, *p*=0.73 for male and female consultants respectively. This suggests they were not merely mirror images of each other and are instead measuring different, albeit related, components of consultants' work.

H_2 Levels of job stress and satisfaction will vary by gender

There was no difference in total job stress scores between male and female consultants. However, there was a small but significant difference in total job

satisfaction scores. Female consultants reported significantly lower job satisfaction than male consultants (Table 2.3).

Table 2.3 Total job stress and satisfaction scores for male and female hospital consultants

	Male Consultants mean (SD)	Female Consultants mean (SD)	Significance of difference (p)
Total job stress	48.80 (17.33)	48.38 (17.36)	t_{1249}=0.34, p=0.733
Total job satisfaction	**40.43 (10.03)**	**37.78 (10.21)**	**$t_{1235=}$3.62, p<0.001**

H_3 The sources of work from which consultants experience job stress and job satisfaction will vary by gender

Further exploration of the components of work that contributed to job stress confirmed that there were few gender differences. Male and female consultants reported similar levels of overall stress, and similar levels within each job stress factor with the exception of stress resulting from '*dealing with changes to clinical practice'* which was rated significantly higher by female consultants (Figure 2.3, Table 2.4).

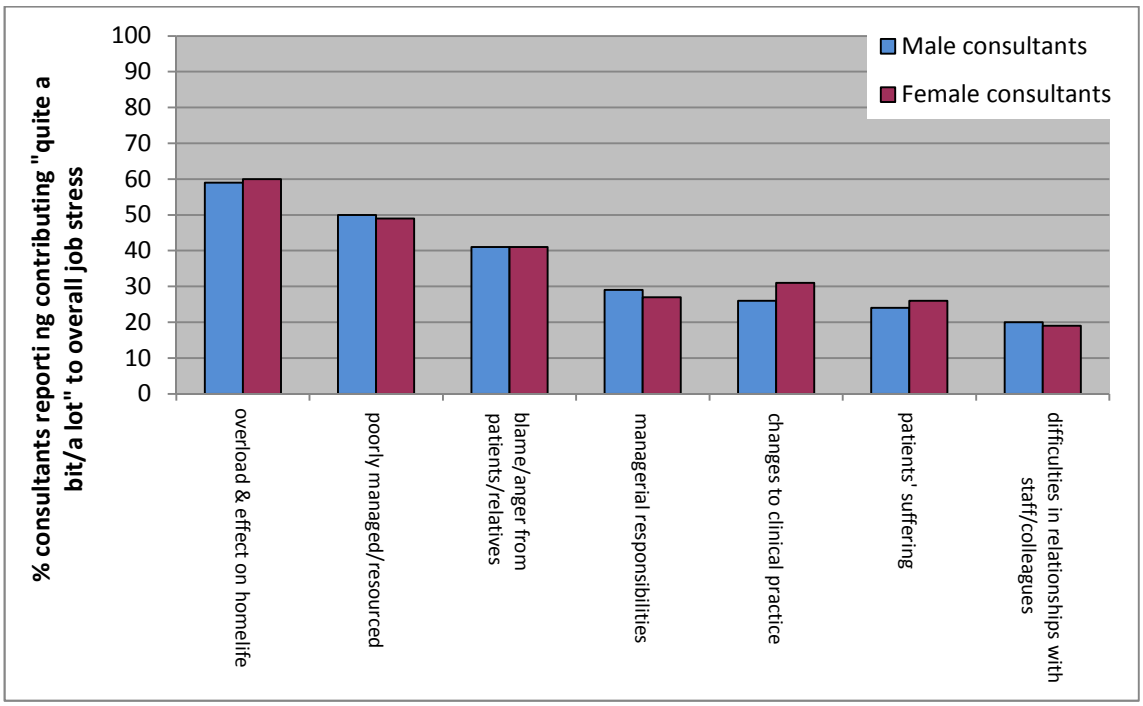


Figure 2.3 Sources of job stress by gender

The top three sources of job stress for both male and female consultants were: '*feeling overloaded with work and its effect on homelife*', '*feeling poorly managed and resourced*', and '*dealing with anger and blame from patients and relatives*'. At least 40% consultants rated these components of their work as contributing '*quite a bit*' or '*a lot*' to overall job stress they experienced.

With regard to job satisfaction, female consultants reported significantly lower satisfaction scores from two main areas of their work, namely: '*having professional status and esteem*' and '*deriving intellectual stimulation from work*' (Figure 2.4, Table 2.4). The importance of different components of work in relation to their contribution to job satisfaction did not differ by gender. The most important component for male and female consultants was '*having good relationships with patients, relatives and staff*', closely followed by '*having professional status and esteem*'.

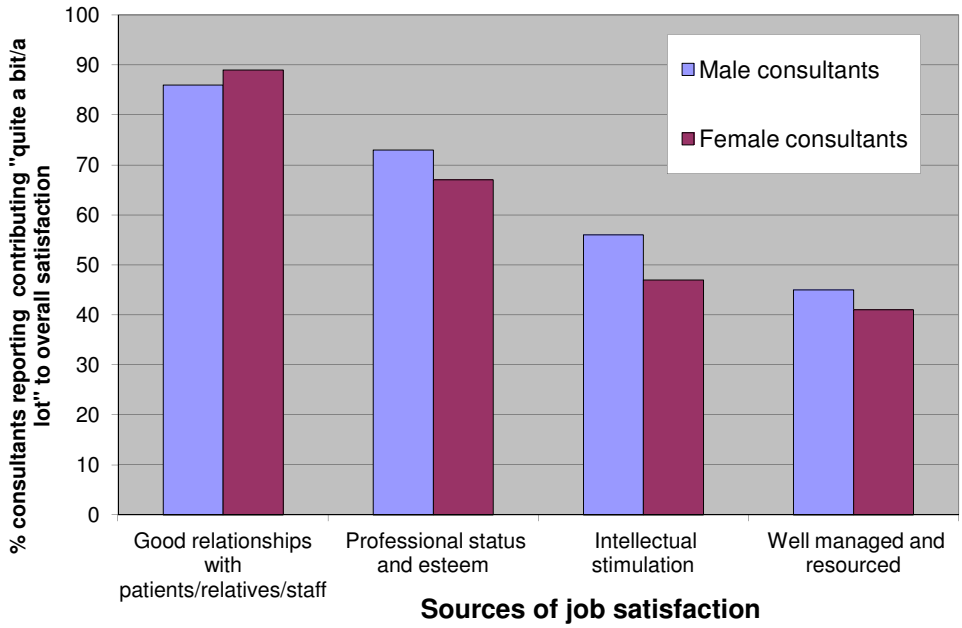


Figure 2.4 Sources of job satisfaction by gender

Table 2.4 Comparison of sources of job stress and satisfaction for male and female hospital consultants

	Male Consultants mean score on 0-3 scale (SD)	Female Consultants mean score on 0-3 scale (SD)	Significance of difference (*p*)
Job stress factors:			
Feeling overloaded with work and its effect on home life	1.75 (0.70)	1.77 (0.68)	t_{1285}= -0.31, p=0.76
Feeling poorly managed and resourced	1.53 (0.66)	1.51 (0.67)	t_{1283}=0.40, p=0.69
Dealing with anger and blame from patients' and relatives	1.39 (0.75)	1.42 (0.78)	t_{1291}= -0.61, p=0.54
Dealing with changes to clinical practice	**0.98 (0.63)**	**1.07 (0.58)**	**t_{1289}=-1.98, p=0.05**
Having difficulties in relationships with patients, relatives and staff	0.86 (0.60)	0.82 (0.61)	t_{1291}=0.97, p=0.33
Dealing with patients' suffering	1.08 (0.69)	1.15 (0.77)	t_{1296}= -1.46, p=0.15
Having managerial responsibilities	1.04 (0.70)	1.01 (0.62)	t_{1294}=0.76, p=0.45
Job satisfaction factors:			
Having good relationships with patients, relatives and staff	2.34 (0.59)	2.39 (0.55)	t_{1275}=-1.38, p=0.17
Having professional status and esteem	**2.0 (0.63)**	**1.85 (0.65)**	**t_{1281}=3.25, p=0.001**
Deriving intellectual stimulation from work	**1.66 (0.66)**	**1.47 (0.70)**	**t_{1276}=4.14, p<0.001**
Feeling well managed and resourced	1.35 (0.72)	1.27 (0.74)	t_{1272}=1.45, p=0.15

2.5.5 The relationship between job and demographic characteristics, job stress, job satisfaction and psychological distress

2.5.5.1 Gender differences in the relationship between job and demographic characteristics, job stress, job satisfaction and psychological distress

The bivariate relationships between job and demographic characteristics and psychological distress for male and female consultants are shown in Table 2.5.

Table 2.5 Bivariate relationships with psychological distress for male and female hospital consultants

Independent variable	Male consultants		Female consultants	
	Psychological Distress (GHQ≥4)		Psychological Distress (GHQ≥4)	
Demographic characteristics	**OR (95% CI)**	***p***	**OR (95% CI)**	***p***
Age	1.03 (0.88-1.22)	0.70	0.88 (0.62-1.25)	0.49
Marital status (single as baseline) Married Separated/divorced/widowed	 **0.55 (0.30-1.01)** **1.04 (0.45-2.43)**	 **0.03**	 1.52 (0.76-3.04) 2.29 (0.63-8.34)	 0.34
Have children	**0.75 (0.57-0.98)**	**0.03**	1.01 (0.61-1.70)	0.96
Job characteristics				
Academic post	1.19 (0.80-1.78)	0.39	0.88 (0.29-2.71)	0.82
Work part-time	1.01 (0.60-1.67)	0.98	0.65 (0.36-1.18)	0.15
Clinical director, medical director or lead clinician	0.98 (0.75-1.29)	0.91	1.52 (0.87-2.67)	0.14
Job stress and satisfaction				
Total job stress	**1.05 (1.04-1.06)**	**<0.001**	**1.05 (1.03-1.07)**	**<0.001**
Total job satisfaction	**0.96 (0.95-0.97)**	**<0.001**	**0.97 (0.95-1.0)**	**0.04**

OR= Odds Ratio (1 = no change)

Female consultants:

No job or demographic variables were associated with psychological distress for female consultants. However the wide confidence intervals for female consultants, compared to male, highlights the uncertainty about these relationships. Job stress and job satisfaction scores were both bivariately related to psychological distress. Job stress was positively related, and job satisfaction negatively related.

When entered into multivariate regression models, job stress and job satisfaction scores were both independently associated with female consultants having GHQ scores ≥4 (Figure 2.5).

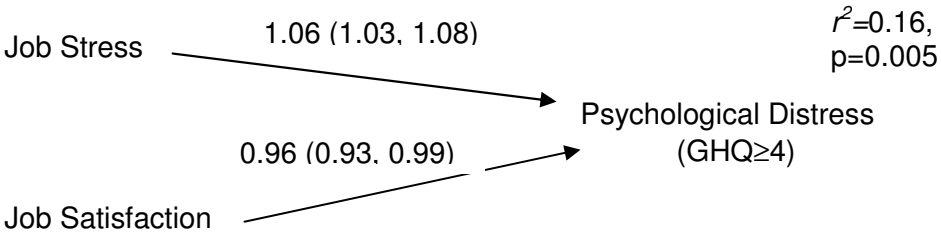


Figure 2.5 Multivariate relationships with psychological distress in female consultants

Male consultants:

For male consultants, psychological distress was related to their marital status (being unmarried or previously married) and to *not* having children (having children was protective for male consultants, table 2.5). When entered into a multivariate regression they were found to co-lineate (both were independently significant and explain the effect of the other one and there was no significant interaction between them). Being married and having children are highly correlated – 97% of male consultants who have children are married. Therefore both models must be considered as it is unclear which is the strongest predictor variable. Job stress and satisfaction scores were both bivariately related to psychological distress, as with female consultants.

In multivariate analysis, job stress and satisfaction were independently associated with having GHQ scores ≥4 and neither explained the effect of being married (model 1) or having children (model 2) which remained predictive (Table 2.6).

2.5.5.2 Analysis of the whole dataset (male and female consultants)

The previous analysis indicates that male and female consultants may have differing predictors of psychological distress although there is insufficient power to test this directly due to the much smaller sample of female compared to male consultants. Job stress and job satisfaction appear to have a similar relation to psychological distress in male and female consultants. It is unclear from the analysis undertaken so far what the relative contribution of gender is, compared to job stress and satisfaction, in accounting for levels of psychological distress. Therefore the following analysis uses the whole dataset to explore this.

Table 2.6 Multivariate relationships with psychological distress in male consultants

Independent variables	Male Consultants Psychological Distress (GHQ≥4)		
	OR (95% CI)	r^2	***P***
Model 1: marital status*:			
married	0.73 (0.36-1.5)	0.16	**<0.001**
separated, divorced or widowed	1.68 (0.64-4.4)		
total job stress	1.06 (1.05, 1.07)		
total job satisfaction	0.95 (0.93, 0.96)		
Model 2: having children	0.63 (0.46-0.86)	0.17	**<0.001**
total job stress	1.06 (1.05-1.07)		
total job satisfaction	0.95 (0.93-0.96)		

*single marital status is baseline

For the whole sample, gender (being female), marital status (being non-married) and not having children are all bivariately associated with psychological distress. Higher job stress, and lower job satisfaction scores are also bivariately associated with psychological distress (Table 2.7).

Table 2.7 Bivariate relationships with psychological distress

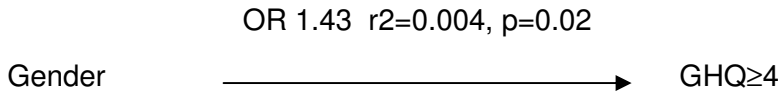
Independent variable	Dependent variable: GHQ≥4	
Demographic characteristics	**OR (95% CI)**	***p***
Gender (being female)	**1.43 (1.07 – 1.90)**	**0.02**
Age	0.96 (0.83 - 1.11)	0.61
Marital status (single as baseline)		
Married	**0.78 (0.50 – 1.22)**	**0.04**
Separated/divorced/widowed	**1.50 (0.76 – 2.95)**	
Have children	**0.78 (0.62 – 0.99)**	**0.04**
Job characteristics		
Academic post	1.10 (0.75 – 1.60)	0.63
Work part-time	0.93 (0.64 – 1.35)	0.68
Clinical director, medical director or lead clinician	1.03 (0.81 – 1.30)	0.83
Job stress and satisfaction		
Total job stress	**1.05 (1.04 – 1.06)**	**<0.001**
Total job satisfaction	**0.96 (0.95 – 0.97)**	**<0.001**

OR= Odds Ratio (1 = no change)

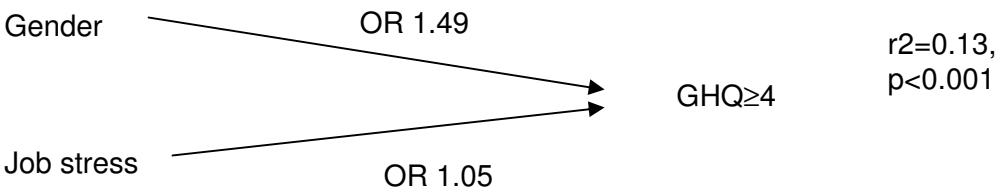
In multivariate analysis, with psychological distress as the dependent variable and gender as the first independent variable, neither marital status nor having children remain significant. Therefore neither marital status nor having children accounts for the effect of gender on psychological distress. Having already shown that gender and job satisfaction are related, the mediational properties of job satisfaction were tested using Baron and Kenny's method (Baron & Kenny, 1986) and the results are illustrated overleaf (Figure 2.6).

These models indicate that gender (being female) and higher job stress are independently associated with significant psychological distress, but once job satisfaction is included in the model it partially mediates the effect of gender, rendering it non-significant. The size of the effect of gender is very small however, explaining very little of the variance in GHQ scores, whereas job stress and satisfaction explain a relatively large amount in comparison. It would therefore appear that gender is not the important variable in explaining GHQ scores, but job stress and job satisfaction are, and they are independent from each other (as the size of the effect of job stress did not change once job satisfaction was added to the model).

a. Gender was regressed as independent variable onto GHQ as dependent variable



b. Job stress was entered into the model as a second independent variable



Job stress was related to GHQ independently of gender, and did not impact on the strength of the relationship between gender and risk of psychological distress (GHQ≥4).

c. Job satisfaction was entered into the model as the third independent variable

Figure 2.6 The relationship between gender, job stress, job satisfaction and psychological distress

2.6 Discussion

What is known already?

- Hospital consultants report significantly higher levels of psychological distress than the general working population and it is likely that work is an aetiological factor
- Although theories of occupational stress have empirical support few studies have examined gender, and their relevance to explaining work-related stress in women (and subsequent outcomes such as psychological distress) is therefore unclear
- Gender differences in some job and demographic characteristics may increase female consultants' risk of psychological distress

What this study adds

- Female consultants reported a higher prevalence of psychological distress compared to male consultants, which was associated with lower self-reported job satisfaction
- In particular female consultants reported lower job satisfaction from '*having professional status and esteem*' and from '*deriving intellectual stimulation from work*'
- The findings provide some support for prominent occupational stress models regarding the impact of an imbalance between demand/control or effort/reward but do not help explain why there might be gender differences in job satisfaction
- Job satisfaction theories purport that differences in job satisfaction can be explained with reference to aspects of the job/work conditions, individual differences (such as personality) or a combination of both, but do not specifically incorporate gender. Empirical support for the different theoretical models is also lacking
- Further investigation of gender differences in experience of work, and in particular in relation to the dimensions of satisfaction relating to status and esteem, is warranted in order to inform effective interventions to improve and protect consultants' mental health

Female consultants reported a higher prevalence of psychological distress compared to male consultants and this gender difference in prevalence was associated with lower self-reported job satisfaction.

The gender difference in prevalence of psychological distress remains unexplained by any job or demographic characteristics despite distinct differences in job and demographic profiles for men and women: female consultants were more likely to work part-time, were younger in age, more likely to be single and less likely to have a lead or academic post. Levels of job stress were related to risk of psychological distress but did not explain the higher prevalence in female consultants. Levels of job

satisfaction, however, do at least partially explain this relationship. Female consultant's report small but significantly lower levels of job satisfaction, particularly with regard to their perceived professional status and esteem, and the intellectual stimulation they derive from work, and this is associated with a higher prevalence of psychological distress.

The importance of job satisfaction in protecting consultants' mental health against the harmful impact of job stress was previously demonstrated in the analysis of the whole dataset (Ramirez, et al., 1996; Taylor, et al., 2005) and further strengthened by the findings of this study, showing that this relationship stands for male and female consultants separately as well as together. The findings also lend support to the occupational stress models of both Karasek (R. A. Karasek, 1979) and Siegrist (Siegrist, 1996) whereby consultants would be predicted to be at an increased risk of psychological distress if their job demand (or effort) was imbalanced by insufficient job control (or reward). Previous studies have provided mixed support for Karasek's model when examined by gender, leading to it being named a 'male model' by some (J. J. Johnson, 1986; J. V. Johnson & Hall, 1988; J. V. Johnson et al., 1995; W. Johnson, 1991). In this study an equal amount of variance in psychological distress was explained by levels of job stress and job satisfaction for female as for male consultants.

The mixed findings in relation to support for Karasek's model are at least in part explained by methodological differences across studies including heterogeneous samples of workers and incomparable measures for the predictors ('job demand' and 'job control') and outcomes (psychological distress or other health outcomes). In the present study, the sample was reasonably homogenous: they were all hospital consultants and all from one of five specialist groups. Nevertheless, even within this sample there existed quite wide heterogeneity in job characteristics, though many of these characteristics were measured and included in the analytic models (for example in relation to differences in rank or superiority, consultants were asked whether they were a 'clinical director, medical director or lead clinician' and this variable was examined as a potential predictor). Karasek's Job Demand Control (JDC) questionnaire was not selected by the principal investigators for the study as it was felt to lack the specificity required to robustly measure consultants' perceptions of their job. Instead a consultant-specific questionnaire of job stress and job satisfaction was developed (Teasdale, et al., 2008) which included a wide range of dimensions of work including those that relate to demand and control.

Limitations of this study include the unbalanced dataset in relation to gender due to being secondary analysis of a dataset that was not originally designed to investigate gender (instead sampling on the basis of specialty group). This resulted in less power to detect relationships between variables in female consultants compared to male consultants, and may have led to some relationships being undetected. However, to my knowledge this study utilised the largest UK consultant dataset that had included standardised valid measures for mental health and robust measurement of work (job stress and satisfaction). A further study was undertaken to attempt to redress the power limitation by using National NHS Staff Survey data from the same time period. Unfortunately, the poor quality of the National NHS Staff Survey data in relation to accuracy (many respondents were categorised incorrectly as consultants and once data was cleaned the dataset was similar in size and gender proportions to the current one), coupled with the use of non-standardised non-validated measures meant that this further study could not help strengthen confidence in the findings.

Secondly, whilst it is possible that levels and sources of job stress and satisfaction vary by specialty the disproportionate clustering of women across the 5 specialty groups (in particular the low proportions in surgery and gastroenterology) did not permit meaningful analysis by specialty. Finally, the dataset is cross-sectional and therefore direction of causality in relationships cannot be determined with any degree of certainty. These limitations should be considered alongside strengths of the study which include the size of the dataset and its representativeness of the sample population (attaining a 73% response rate from either whole or randomly selected samples), and the use of a standardised validated measure of psychological distress. The measures of job stress and job satisfaction were specifically designed to measure consultants' perceptions of the stress and satisfaction they experience in regard to the many different components of their work. Both male and female consultants were involved in the development and piloting of the questionnaire and the detailed nature of the measure enables a high degree of specificity in describing experiences of work.

The gender differences in job satisfaction warrant further attention. Analogous to theories of job stress, there exist a range of theories of job satisfaction, none of which exhibits superior empirical or theoretical support. Theories have been categorised by Judge (T. A. Judge, Parker, S. K., Colbert, A. E., Heller, D., & Ilies, R., 2001) according to whether they perceive satisfaction as resulting from: a) **the external environment** for example the nature of job and/or work environment. These are named situational theories and include Herzberg's Two Factor Theory (Herzberg, 1959) and Hackman et al's Job characteristics model, (Hackman & Lawler, 1971;

Hackman & Oldham, 1976); b) **the individual** for example due to personality or other individual characteristics. These are named dispositional theories which have shown for example that lower neuroticism is related to higher job satisfaction (T. A. Judge, Heller, & Mount, 2002); or c) **both the external environment and individual** (named interactive theories) and include for example Cornell Integrative Model, (Hulin, 1991) and Locke's value-percept theory, (T. A. Judge, Parker, S. K., Colbert, A. E., Heller, D., & Ilies, R., 2001; Locke, 1976). A review of studies that have tested theories of job satisfaction concluded that most were methodologically weak, many including small heterogeneous samples (T. A. Judge, Parker, S. K., Colbert, A. E., Heller, D., & Ilies, R., 2001). Additionally, whilst the sampling may be described in terms of gender, few studies have investigated the relationship between gender and job satisfaction (S. Kim, 2005).

There have been many studies examining the relationship between job satisfaction and gender that have not been explicitly informed or underpinned by any particular theory. Akin to other areas of occupational health research, there is wide methodological variability in these studies, and many are methodologically flawed (for example being underpowered to detect gender differences; having very poor response rates), but the generally accepted conclusion is that findings are inconsistent, a large proportion reporting no gender difference, but some reporting men having higher levels of satisfaction, and others women having higher satisfaction (Chiu, 1998; S. Kim, 2005).

In the current study, many of the aspects of work that are rated lower in satisfaction by female consultants require time outside of clinical hours (e.g. being involved in research, teaching and keeping up to date with skills). This may be particularly challenging for consultants with restrictions on the time they can spend working due to responsibilities for children or other dependents. These aspects of work also provide variety to a consultant's job, which is an important source of satisfaction for consultants (Ramirez, et al., 1996). It is less clear why female consultant's report lower job satisfaction from having professional status and esteem (which included having a high level of responsibility and autonomy, being well regarded by your colleagues and able to bring about positive change at work). This is of particular interest due to its overlap conceptually with Karasek's definition of job control which comprises having the ability to use discretion, having authority (in relation to their own job and ability to influence the work of others) and decision latitude. Decision latitude in this context would refer to consultants' control over their tasks and how their tasks are executed (including the amount of variety they have in the job and opportunities to

be creative or learn new skills). There is much empirical support for the impact of low control on health (including psychological distress) in studies with wide ranging occupational groups (see Chapter 1).

Using the classification system for the prominent theories of job satisfaction to aid interpretation of the findings from this study, possible explanations for female consultants' lower job satisfaction could include:

- Situational explanations: Female consultants' lower job satisfaction reflects a real difference in the NHS in the amount of responsibility, autonomy, status and esteem given to male and female consultants. This could perhaps be as a result of gender discrimination.
- Dispositional explanations: Female consultants' lower job satisfaction reflects a difference in their perception of the amount of responsibility, autonomy, status and esteem they have, or a difference in the importance they place on these aspects of work, due to gender differences in disposition (e.g. nature, character, personality).
- Interactive explanations: Female and male consultants have similar objective and perceived levels of responsibility, autonomy, status and esteem in reality but female consultants' lower job satisfaction reflects a mismatch between their expectations of these aspects of work and reality.

In conclusion, this study concurs with previous studies that report high levels of psychological distress in hospital consultants, and reports a higher prevalence for female consultants than male consultants. The difference in prevalence is not as large as that found in the general population (typically studies report females experiencing major depression about twice as often as men) but this might be expected since occupation and thereby socio-economic status are controlled for in this study. The findings from this study suggest that job stress and job satisfaction are both independently associated with psychological distress. There is a trend for female consultants to report lower job satisfaction than male consultants, which is associated with a higher prevalence of psychological distress among them. Two specific components of their work: '*having professional status and esteem'* and '*deriving intellectual stimulation from work*', are rated lower. These findings fit with the occupational stress models proposed by Karasek and Siegrist: that imbalance between demand and control (or effort and reward) would be related to a higher risk of psychological distress. Whilst these models are at least partially supported by the findings of this study, a more detailed exploration of the reasons for female

consultants' lower satisfaction in these aspects of work, and of male and female consultants' experiences of work and of occupational stress is warranted. A gender and consultant-specific understanding of the relationship between work and poor mental health in hospital consultants should be used to underpin interventions aimed at improving the working lives of consultants, thereby protecting their mental health and improving their ability to provide high quality patient care.

Chapter Three: What factors might explain female consultants reporting lower job satisfaction?

3.1 Introduction

In the previous study (Chapter 2) female consultants were found to have a higher prevalence of psychological distress compared to their male colleagues, and this was associated with lower self-reported job satisfaction. In particular this comprised lower satisfaction from '*having professional status and esteem*' and '*deriving intellectual stimulation from work*'.

It is unclear why female consultants reported lower job satisfaction than male consultants. Of particular interest is the lower job satisfaction reported by female consultants in relation to their *professional status and esteem* due to the overlap conceptually between this and Karasek's definition of job control.

The prominent theoretical models of job satisfaction, summarized in the previous chapter, are not gender-specific. Gender differences in job satisfaction would instead be explained in relation to situational (gender differences in the nature of the job and/or work environment), dispositional (for example gender differences in personality) or interactional (gender differences in both situation and disposition) factors. Few studies have specifically tested the proposed theoretical models, and even fewer have examined the influence of gender (T. A. Judge, Parker, S. K., Colbert, A. E., Heller, D., & Ilies, R., 2001). Most empirical research regarding job satisfaction and gender has been atheoretical and has produced conflicting findings which cannot be readily synthesised due both to the lack of a standardised measurement of job satisfaction and also their use of heterogeneous research designs and study populations. In particular, few studies have attempted to 'control' for other known confounders such as level of responsibility or status in the organisation.

Furthermore, there has been little research focussed specifically on professional men and women, and any such studies have tended to produce conflicting findings. Variances in both study design and measures of job satisfaction make the interpretation of these conflicting findings challenging. A study of 73 pairs of University Professors matched in terms of academic department, rank, highest degree and years of service found no gender differences in satisfaction (D. B. Smith & Plant,

1982), whereas a larger but non-matched study involving 346 female and 346 male engineers that also found no gender difference in job satisfaction, discovered that higher scores on a 'masculinity' scale were related to higher job satisfaction (Jagacinski, 1987). A review of job satisfaction in lawyers found that in the most robust studies (reporting on three different national surveys in the US and Canada) female lawyers reported lower job satisfaction than their male counterparts (Chiu, 1998). Chiu (Chiu, 1998) examined gender differences in relation to specific aspects of work in a cohort of young lawyers (≤10 years' experience), and found that female lawyers reported lower satisfaction in relation to influence/promotional opportunity, financial rewards, having a non-competitive atmosphere, and having time for self and family. Multivariate regression analyses showed that female lawyers' lower job satisfaction was mostly explained by their lower satisfaction in relation to 'financial compensation' and 'influence/promotional opportunity' (i.e. once job satisfaction scores in relation to these two aspects of work were added to the model the female coefficient was no longer significant). 'Influence/promotional opportunity' consisted of opportunity for advancement, opportunity for professional development, being respected by superiors, having input into management decisions, warmth in the workplace and having control over cases. These elements of job satisfaction fit conceptually with the job control element of Karasek's model, perhaps lending further support that it is this aspect of work where the gender differences are most evident and/or impactful.

There is a need to understand why female consultants reported lower job satisfaction in the national survey described in Chapter 2. The lack of research involving consultant doctors (and other comparable professional groups) and the conflicting findings in relation to gender and job satisfaction within studies of other workers as well their atheoretical basis supports a qualitative rather than quantitative approach. Although informed and influenced by relevant occupational health theory, previous literature and the findings from Study 1 (and is hence partly deductive), a qualitative approach to this phenomenon will enable the experiences and perceptions of consultants to influence the topics discussed, and therefore may help to develop or refine existing theories in order to better explain the relationship between work and wellbeing in consultants. Having a robust theoretical and empirical understanding of the relationship between gender, work and health is necessary to inform effective interventions which protect and improve the wellbeing of the consultant workforce.

3.2 Aim

To investigate the experience of work for female consultants compared with male consultants in relation to their levels and sources of job stress and satisfaction.

3.2.1 Primary research question:

Do female consultant's report similar levels of job stress but lower job satisfaction in comparison to male consultants, particularly with regard to '*perceived control and esteem derived from work*'?

3.2.2 Secondary research questions:

What is the explanation for the lower job satisfaction reported by female consultants in Study 1, specifically with regard to their perception of the control and esteem derived from work?

Do male and female consultants perceive that there are differences in job stress according to gender?

3.3 Method

3.3.1 Design

A national interview study was conducted, taking the opportunity of a larger study of over 200 participants (a sub-sample of respondents to the survey described in Chapter 2). A structured interview schedule was conducted for the following reasons:

a) A key aim was to explore whether the survey findings (Chapter 2) were supported. A structured approach with closed questions as initial entry points provided a framework to explore perceptions of gender differences with regard to the specific aspects of work which emerged from the survey data.
b) The interviews were very brief (lasting a maximum of 10mins). This is because they were conducted alongside the larger study interviews which lasted 45-60mins. The structured design ensured consistency across interviews in regard to the topics covered. Open questions were designed to enable participants to explain their responses to closed questions and

encourage the introduction of topics which had not been anticipated by the researcher.

c) Due to the size and national design of the study, interviews were conducted by three different researchers (including CT), all of whom were trained in qualitative interview methods, and the structured design helped to ensure a degree of consistency in the approach taken by each of them.

3.3.2 Participants

All participants had completed the postal survey (described in Chapter 2) and agreed to participate in a follow-on interview study. Approval to append the short interview schedule to the larger study was obtained from South Thames MREC (Ref: MREC 00/1/93).

49 male and 26 female consultants from across the UK were recruited sequentially through their involvement in the larger study. This included all female consultants invited to participate in the larger study between October 2003 and November 2004 (N=26). Male consultants were also recruited sequentially until 28 consultants had been interviewed to provide an approximately equal sample size. A further 21 male consultants were recruited due to the addition of a new interview question part-way through the study (further details are provided below). This sample of male consultants was recruited consecutively from the time the decision was taken to include this new question until 21 consultants had been interviewed (based on estimated projections about the female consultant sample size). The flow of participants from completion of the national survey through to this study is illustrated in Figure 3.1.

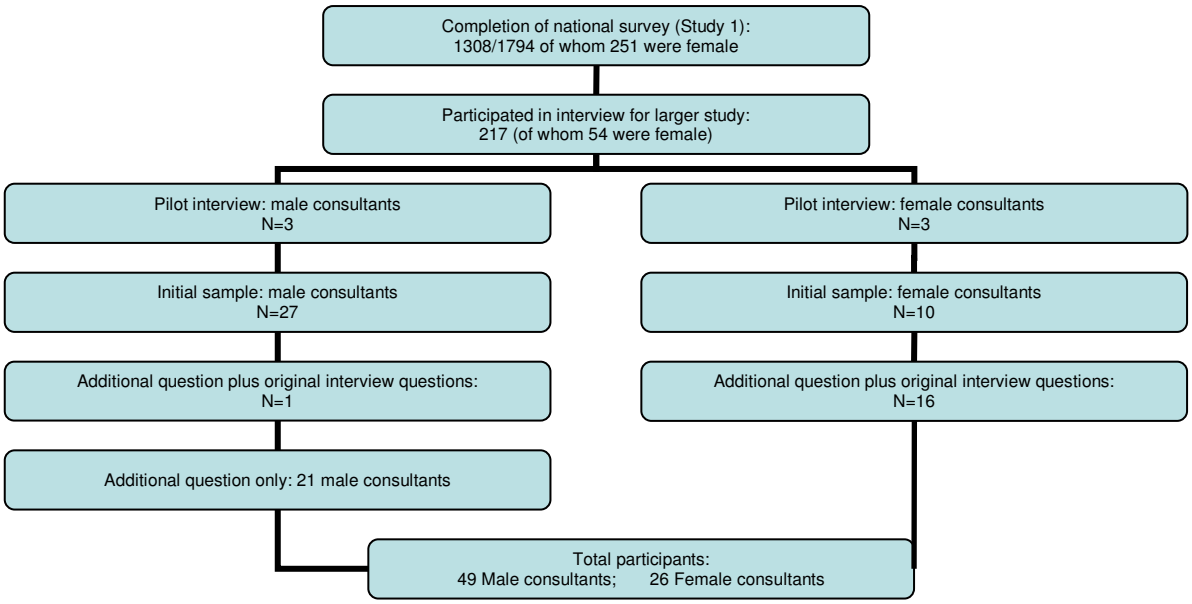


Figure 3.1 Flow of participants through the studies

3.3.3 Procedure

A study information sheet was sent to each consultant (Appendix II). Consultants indicated on a reply slip their willingness to participate and, if willing, their contact details for arranging the interview. Written consent was obtained prior to starting each interview (Appendix III). Interviews were conducted in consultant's workplaces in a private space free from interruptions, usually their office.

3.3.4 Content of the interview

The structured interview was designed to explore the main findings from the previous study (chapter 2): that female consultants reported lower job satisfaction from their perceived control at work and professional esteem, and from intellectual stimulation derived from work. The interview specifically probed around the aspects of their job which relate to perceived control and professional esteem, including the satisfaction derived from:

- having a high level of responsibility
- having autonomy in their work
- having the ability to influence positive change at work, and
- being perceived to do the job well by their colleagues.

An interview schedule was developed and piloted with 6 consultants (3 male and 3 female). Consultants were initially asked to comment on the answers they had

provided in their postal questionnaire and to explain the ratings that they had given. This was amended for two main reasons:

1. The questionnaires had been completed between October and December 2002, which was 1-2 years prior to the interviews. Consequently, consultants expressed difficulty in remembering the exact circumstances at work which had led them to provide their ratings, and referred instead to their recent experiences, and to general feelings about their sources of satisfaction, rather than specifically relating back to their questionnaire answers.

2. The aim of this study is to explore the reasons why female consultants reported lower satisfaction from these specific sources of satisfaction, and therefore the decision was taken to make the gender focus more explicit within the interview. Direct closed questions, followed by more exploratory open questions, were asked in order to determine whether the findings from the survey were supported.

The interview schedule was therefore amended to include:

1. Consultants' satisfaction with each of the key components of satisfaction relating to perceived control at work and professional esteem. This included the amount of responsibility and autonomy they had at work, their ability to influence positive change and whether they felt well regarded by their colleagues.
2. Whether consultants perceived that there were gender differences in any of these areas of work.
3. Whether consultants perceived that there were gender differences in the experience of work in terms of job stress
4. Part-way through the study, upon reflection of the main themes emerging from transcripts of interviews with my primary supervisor, a further question was added to explore explicitly how gender is perceived to impact upon an individual's overall experience at work.

Each aspect of the interview began with a 'closed' question. Further exploration of their answer was then sought using open question prompts (see Appendix IV for interview schedule).

All interviewers (CT, JH & LH) were researchers from a psychology background with experience of conducting research interviews. Each interview lasted approximately 5-10 minutes and was tape-recorded and subsequently transcribed (transcripts are available upon request).

3.3.5 Analysis

Two analytical approaches were used. The responses to closed questions were categorised and quantified using thematic content analysis. The unit of analysis was the sentence directly following each closed question and the purpose of the analysis was to categorise responses into pre-determined categories. By quantifying themes this served to prevent any over- or under- weighting of the support for the findings from Study 1 (Sandelowski, 2000). In addition, the entire transcripts (including any explanatory or lengthy responses to closed questions as well as all responses to open questions) were analysed using the Framework Analysis approach (Ritchie & Lewis, 2003; Ritchie & Spencer, 1994). The Framework method is a matrix-based method of ordering and synthesising data, enabling qualitative data to be managed so as to facilitate comparisons within and between cases. This allowed comparisons within and between consultants across different characteristics (most notably gender, but also age and specialty) and also helped to organise the data from the large number of interviews. The analysis followed a staged approach, starting with familiarisation with the transcripts, from which a thematic framework was identified, applied and refined. Once finalised, charts (or matrices) were developed which took the form of spreadsheets, with each row representing an interviewee, and each column representing a theme. Direct quotations were entered into cells where relevant. This method is described in more detail below.

1. All transcripts were individually read and re-read. Observations (themes, summaries, questions etc) were noted down on the transcripts. "*Attempts were made to look at each interview afresh, and in particular, to keep the coding emergent from the interview text*" (J. A. Smith, 1999), p.230). Themes were then identified and each section was referenced according to the theme(s) which characterised it. The themes emerging from each transcript were listed and compared, and the relationships between them were considered. A particular emphasis was placed on identify and examining 'deviant' cases – experiences which did not fit with any previously noted themes (Mays & Pope, 1995). The themes arising from this first stage of analysis are provided in Appendix V.

2. This procedure was also completed by a second independent researcher who had not been involved in collecting the data and who was an experienced qualitative researcher (SM). CT and SM shared their independent analyses and discussed common and unique themes. Any differences were discussed further, referring back to the transcripts until consensus was reached. A provisional thematic framework resulted from this process. The framework is provided in Appendix V.

3. CT then re-read transcripts alongside the thematic framework, to ensure it accurately reflected the meanings conveyed in each interview. This resulted in the refinement of framework, including emergence of new themes, and splitting of some themes into sub-themes. The thematic framework was then reviewed by the second researcher (SM) who also reflected back on the complete transcripts to ensure that the data remained grounded in the entire interview transcript. Themes were further clarified in discussion and a final coding framework was agreed (Figure 3.2).

Theme	**Sub-Theme/s**
Male consultants having a negative perception	a) of female qualities
	b) of part-time working
	c) compatibility between working as a consultant and having a family
	d) of female consultants' ability to have good quality relationships with other female staff
Female consultants' behaviour at work and experience of work	a) having to work harder to be as good
	b) using feminised behaviour to achieve goals and not challenging male behaviour
	c) being excluded from decision-making activities
Objective situation for female consultants	a) working part-time
	b) lack of family-friendly policies (the long-hours culture)
	c) lack of support - no wife at home

Figure 3.2 Final thematic framework

4. As a further check on the validity of the thematic framework a third independent researcher (MH), who was also experienced in qualitative research methods, analysed a random sample of 8 male and 8 female consultant transcripts (Barbour, 2001; Mays & Pope, 1995). Transcripts were selected at random but stratified by gender to ensure an equal gender spilt. MH had no prior knowledge of the coding

framework agreed by CT and SM. All key themes identified by CT and SM were confirmed by MH and no new themes were uncovered.

5. Matrices were developed which charted each theme against each consultant and provided verbatim quotations taken directly from the transcripts in order to illustrate the individual consultants' perceptions of each theme/sub-theme where relevant. Due to the emphasis on gender comparison separate matrices for male and female consultants were completed (see Appendix VI and VII for matrices). Transcripts were purposively searched for disconfirming as well as confirming cases and verbatim quotations were included in the matrices as described above.

6. The matrices were reviewed by CT, SM and MH. The relationship between the themes was discussed, based on the transcripts and relevant literature (theories and empirical findings which had been reviewed and highlighted prior to undertaking this study). This led to the development of an explanatory model illustrating the themes and their relationships with one another, and the relationship of findings to those in Study 1 (Chapter 2). Figure 3.3 illustrates this model.

7. The model was reviewed in relation to the wider literature and occupational stress theoretical frameworks, as well as the individual experiences taken from the narrative accounts in this study. This led to the production of a revised explanatory model (Figure 3.4).

Extensive quotations are included in the presentation of results in order to demonstrate that themes are grounded in the data (Elliot, Fischer, & Rennie, 1999). This also assists the reader when assessing whether the themes, and the links between the themes, create a coherent picture (A. Smith & Roberts, 2003; J. A. Smith, (Ed), 2003). The matrices are provided in the appendices (Appendix VI and VII), and the transcripts are available on request.

3.4 Results

The characteristics of respondents are shown in Table 3.1. Differences in demographic and job characteristics between male and female consultants were similar to those in the whole sample (Chapter 2). In comparison to male consultants, female consultants tended to be younger and to have been a consultant for fewer years; were more likely to work part-time; and more likely to be specialised in radiology or clinical oncology. The main difference between the whole survey dataset and this interview sub-sample is that interviewed female consultants were more likely to have children (77% of the interview sample compared to 53% of the overall sample).

Table 3.1 Job and demographic characteristics of interviewees

Characteristic	Whole sample (male and female consultants)	Male Consultants N (%)			Female Consultants N (%)		
		All male consultants N=49	Original questions only* N=27	Additional question only* N=21	All female consultants N=26	Original questions only N=10	All questions (original plus additional) N=16
Age							
<35	2(3)	0	0	0	2 (8)	1(10)	1(6)
36-45	36(48)	21(43)	7(26)	14(67)	15 (58)	7(70)	8(50)
46-55	31(41)	22(45)	17(63)	4(19)	9 (35)	2(20)	7(44)
over 55	6(8)	6(12)	3(11)	3(14)	0	0	0
Marital status							
Married/cohabiting	67(89)	45(92)	24(89)	20(95)	22 (85)	9(90)	13(81)
Single	6(8)	2(4)	1(4)	1(5)	4 (15)	1(10)	3(19)
Separated/Divorced/Widowed	2(3)	2(4)	2(7)	0	0	0	0
Specialty							
Gastroenterology	10(13)	10(20)	5(19)	5(24)	0	0	0
Surgical oncology	16(21)	15(31)	9(33)	6(29)	1 (4)	1(10)	0
Radiology	12(16)	4(8)	2(7)	1(5)	8 (31)	3(30)	5(31)
Clinical Oncology	30(40)	15(31)	8(30)	7(33)	15 (58)	5(50)	10(63)
Medical Oncology	7(9)	5(10)	3(11)	2(10)	2 (8)	1(10)	1(6)
Working part-time	12(16)	1(2)	0	1(5)	11 (44)	4(40)	7(47)
Number of years as a consultant							
<2	3(4)	1(2)	0	1(5)	3 (4)	1(10)	1(6)
2-5	22(29)	8(16)	2(7)	6(29)	22 (29)	7(70)	7(44)
6-10	18(24)	15(31)	8(30)	7(33)	18 (24)	0	3(19)
11-15	19(25)	16(33)	12(44)	3(14)	19 (25)	1(10)	2(13)
16+	13(17)	9(18)	5(19)	4(19)	13 (17)	1(10)	3(19)
Have at least one child living at home <18 years old	50(67)	30(61)	15(56)	14(67)	20 (77)	9(90)	11(69)

*One male consultant completed both the original and additional questions, his characteristics were: Aged 46-55, consultant for 11-15yrs, radiologist, full-time, with a child under 18yrs living at home

3.4.1 Content analysis of closed questions regarding gender differences in perceived control at work and professional esteem

Most consultants were satisfied with their level of responsibility (86% men, 92% women) and autonomy (61% men, 69% women). Also most of them believed that their colleagues perceived them to be doing a good job (82% men, 88% women) and felt that they were able to bring about positive change at work (79% men, 92% women, table 3.2a).

Most also agreed that there was no difference between male and female consultants in terms of responsibility (81% men, 85% women), autonomy (85% men, 92% women), ability to influence change (71% men, 68% women), and regard from colleagues (64% men, 65% women, table 3.22b). However, in relation to stress at work, a large proportion of consultants (particularly male consultants) felt that work was more stressful for female than for male consultants (62% men, 46% women, table 3.2b).

Equal proportions of male and female consultants felt that their gender worked for them in the job (45% men, 50% women) while very few felt that it worked against them. The remainder provided answers that were either mixed or neutral (table 3.2c).

In summary, when asked directly using closed questions, the majority of both male and female consultants reported that there were no gender differences in any of the components of job satisfaction under investigation (although there was perhaps a trend for female consultants to be more satisfied). Contrary to Study 1 findings, most consultants stated that job stress was the aspect of work in which gender differences were apparent.

Table 3.2a Frequency of reports of own perceived control and professional esteem

Question/content area	Male responses (n=28)			Female responses (n=26)		
	Yes N (%)	No N (%)	Not known/mixed N (%)	Yes N (%)	No N (%)	Not known/mixed N (%)
Should be given more responsibility (Q1)	3 (11)	24 (86)	1 (4)	1 (4)	24 (92)	1 (4)
Perceived to do a good job by colleagues (Q3)	23 (82)	0	5 (18)	23 (88)	1 (4)	2 (8)
Ability to bring about positive change (Q6)	22 (79)	4 (14)	2 (7)	24 (92)	2 (8)	0
Should be given more autonomy (Q9)	8 (29)	17 (61)	3 (11)	6 (23)	18 (69)	2 (8)

Table 3.2b Frequency of perceived gender differences in perceived control and professional esteem

Question/content area	Male responses (n=28*)				Female responses (n=26*)			
	M > F N (%)	F > M N (%)	F = M N (%)	Not known/mixed N (%)	M > F N (%)	F > M N (%)	F = M N (%)	Not known/mixed N (%)
Gender differences in …								
.. amount of responsibility (Q2)	3 (11)	0	22 (81)	2 (7)	4 (15)	0	22 (85)	0
.. ability to do a good job (Q5)	1 (4)	4 (14)	18 (64)	5 (18)	2 (8)	4 (15)	17 (65)	3 (12)
.. ability to bring about positive change (Q8)	4 (14)	1 (4)	20 (71)	3 (11)	5 (20)	3 (12)	17 (68)	0
.. amount of autonomy (Q10)	1 (4)	1 (4)	22 (85)	2 (8)	1 (4)	0	24 (92)	1 (4)
.. amount of job stress	2 (8)	16 (62)	4 (15)	4 (15)	3 (12)	12 (46)	4 (15)	7 (27)

**the data in relation to some questions does not total 28 men/26 female due to a small amount of missing data where the question was not asked due to time limitations: maximum number of consultants missing per question was 2*

Table 3.2c Perceived impact of gender on work performance

Question/content area	Male responses (n=22)				Female responses (n=16)			
	For N (%)	Against N (%)	Equal N (%)	Not known/mixed N (%)	For N (%)	Against N (%)	Equal N (%)	Not known/mixed N (%)
Gender working for or against you (Q12)	10 (45)	1 (5)	6 (27)	5 (23)	8 (50)	2 (13)	1 (6)	5 (31)

3.4.2 Gender differences in experience of work for male and female consultants: a framework analysis

The thematic framework arising from analysis of the transcripts comprised three overarching themes:

1. Male consultants' negative perception of a) female qualities b) part-time working c) compatibility between working as a consultant and having a family and d) female consultant's ability to have good quality relationships with other female staff
2. Female consultants' behaviour at work and experience of work in terms of a) having to work harder to be as good b) using feminised behaviour to achieve goals and avoiding challenging male behaviour and c) being excluded from decision-making activities
3. The material or objective situation for female consultants in terms of a) working part-time, b) the lack of family friendly policies at work (long hours culture) and c) not having a 'wife' at home to support their career.

Table 3.3 provides a quantitative summary of the frequency of each theme (and sub-theme) by gender, age and specialty. The full matrices are provided in the appendices (Appendix VI and VII), which also detail the types of interview question utilised with each consultant (original, additional or both). The text following Table 3.3 describes each theme, using quotations taken directly from the transcripts. All of the quotations are cited in the following format:
Gender (M/F) ID number: line number, age group, Full or Part time working (FT/PT)

The first digit of the ID number denotes the consultants' specialty, as follows:

1xxx = Gastroenterologist
2xxx = Surgeon
3xxx = Radiologist
4/5xxx = Oncologist

Table 3.3 Frequency of themes according to gender, age and specialty of consultants

Theme	Sub-theme	Male consultants									Female consultants								
		Number of consultants	Age				Specialty*				Number of consultants	Age				Specialty*			
			<36	36-45	46-55	>55	G	S	R	O		<36	36-45	46-55	>55	G	S	R	O
Perceptions of female qualities	Negative perceptions	12	0	6	3	3	3	6	0	3	5	0	3	2	0	0	1	1	3
	Mixed perceptions	2	0	0	1	1	0	0	0	2	4	1	2	1	0	0	0	1	3
	Positive perceptions	1	0	0	1	0	0	0	0	1	7	0	3	4	0	0	0	4	3
	No gender difference	7	0	2	4	1	1	3	2	1	1	0	1	0	0	0	0	0	1
Perceptions of part-time working	Negative perceptions	4	0	1	3	0	2	1	0	1	6	1	4	1	0	0	0	3	3
	Part-time is less stressful	1	0	0	1	0	1	0	0	0	0								
	Part-time is more stressful	1	0	0	1	0	0	0	0	1	0								
Perceptions of working as a doctor and having a family	Impacts on ability to do job properly/not 100% committed to work	14	0	6	7	1	4	7	1	2	4	1	2	1	0	0	0	1	3
	Negative impact on colleagues	2	0	2	0	0	0	0	0	2	3	1	1	1	0	0	0	1	2
	Acknowledge its an added burden	4	0	1	1	2	2	2	0	0	0								
Perceptions of females' ability to work with other female staff	Negative perceptions	5	0	4	1	0	2	0	0	3	0								
	Positive perceptions	0									5	0	4	1	0	0	0	1	4
Females working harder to be considered as good	Agree	4	0	1	3	0	0	2	1	1	5	0	4	1	0	0	1	1	3
	Mixed	1	0	0	1	0	0	0	1	0	0								
Using feminised behaviour to achieve goals and/or avoiding challenging male behaviour		5	0	2	2	1	1	1	1	2	13	2	9	2	0	0	1	4	8
Being excluded from decision-making activities		7	0	2	4	1	0	2	1	4	13	0	8	5	0	0	0	3	10

Theme	Sub-theme	Male consultants									Female consultants								
		Number of consultants	Age				Specialty*				Number of consultants	Age				Specialty*			
			<36	36-45	46-55	>55	G	S	R	O		<36	36-45	46-55	>55	G	S	R	O
Long-hours culture/lack of family friendly policies	Long hours culture	8	0	2	6	0	2	4	0	2	3	0	2	1	0	0	0	1	2
	Difficulty of flexible training/working	2	0	1	1	0	2	0	0	0	1	0	1	0	0	0	0	0	1
	Discrimination against men	2	0	1	1	0	0	0	0	2	2	1	0	1	0	0	0	0	2
	Lack of family friendly policies (inc impact on others)	2	0	1	0	1	0	1	0	1	1	0	1	0	0	0	0	1	0
	Good family friendly policies	1	0	0	1	0	0	0	0	1	4	0	2	0	0	0	0	1	1
Not having a wife	Importance of 'wife' to support job	4	0	1	3	0	0	2	0	2	5	0	5	0	0	0	1	3	1
	Women take responsibility for home-life	4	0	0	4	0	1	1	1	1	5	1	3	1	0	0	0	2	3

***** Specialty: G=gastroenterologist; S=surgeon; R=radiologist; O=oncologist (medical and clinical)

3.4.2.1 Male consultants' negative perception of a) female qualities, b) part-time working, c) compatibility between working as a consultant and having a family, and d) the ability of female consultants to have good quality relationships with other female staff

a) Male consultants' negative perceptions of female qualities

Negative comments relating to female qualities were expressed by nearly half of the male consultants interviewed, and almost all of these comments exhibited a perception of female consultants as emotionally vulnerable or weak:

> "They have a slightly different outlook… I find they tend to get up tight easily if things don't go well but I think that's just a female reaction to a lot of situations" (M2090: 64-67, 55yrs+, FT)

> "We've had female registrars here who have been looking for consultant posts and there have been comments to the effect of 'oh we don't want her here because she's a bit, bursts into tears or something, or emotional'. I don't share those views but I've heard them" (M1700: 24-27, 36-45yrs, FT)

> "Female consultants are just not as strong mentally as male consultants. They tend to get more personally involved with patients, they get more upset about any criticism" (M4448:21-23, 36-45yrs, FT)

A few of the female consultants concurred with this viewpoint:

> "My female consultant colleague and myself function to some extent on our emotions and men are far more objective and leave those emotions behind … the guys just deal with the patients but the women tend to take home all the emotional side of it … sometimes the women can get far more heated in discussion which is to our disadvantage because we get emotionally worked up and upset about something whereas the men can stay far more even keeled and objective and therefore can sometimes win an argument or discussion because of that" (F5087: 81-83 & 91-92, 36-45yrs, PT)

> "I think individually as women we're occasionally more susceptible to bullying and possibly more sensitive to it as well, it bothers me being bullied more than some of my male colleagues" F2227: 178-182, 36-45yrs, FT)

However, the predominant theme from female consultants in relation to gender differences in qualities was a positive perception of the qualities that women brought to medicine:

> "If you look at the perceived skills of women in terms of multitasking and communication skills they are probably more open than a man's.. in terms of organisation, and getting paramedical people involved in trying to help grease the wheels it helps being a female" (F3090: 102-105, 36-45yrs, FT)

> "We're certainly perceived as being more conscientious… I think they [paramedics] like working with females because they think we are more focussed and dedicated than the men … and nurses ... like working with the females because we are perceived as doing the job thoroughly" (F4078: 48-51, 36-45yrs, PT)

> "Women tend to wish to reach a consensus… are more able to do several things at the same time… more able to multi task and see things at different levels over a broader picture than I think men are. Men's approach to things, certainly in my experience, is more single-minded… it's more direct … rather than 'what would you like to do?' 'can we come to agreement?' which is I think the female approach" (F4015: 61-71, <36yrs, FT)

> "…there is this concept of the dysfunctional male never admitting error, don't like criticism all that kind of stuff – if we're not careful there is that dysfunctional male element to medicine and we think women do sometimes bring a better balance" (F3011: 91-94, 46-55yrs, PT)

Whilst a few male consultants also recognised the positive qualities that women bought to medicine, particularly in relation to communication skills, some of these male consultants expressed mixed views about female qualities. For example one stated "*I think they [women] are better communicators on the whole*" when justifying his perception that female oncologists were probably perceived as doing their job better than male oncologists. However, in response to the question about job stress, the same consultant stated that he felt they would be more stressed than male oncologists because "*they take criticism to heart*" (M4255:30/80, over 55yrs, FT). Some female consultants expressed similarly mixed views about female qualities, for example:

> "There may be [gender differences] in terms of their communication skills with patients… but I think the perception is that women are more touchy feely and will cope better with that, but equally they may be less robust and therefore find it harder to deal with difficult things" (F4015:32-35, <36yrs, FT).

Some, mostly male, consultants stated that there was either no difference in qualities according to gender, and that instead most differences were individual (some suggested that they were based on personality), or that the differences did not relate to quality: "I think they [females] are just as bad as males. Strong points and weak points" (M2559:97-98, >55yrs, FT).

b) Male consultants' negative perceptions of part-time working

Most male consultants voluntarily expressed a view (whether it be positive, negative or neutral) on part-time working when asked about the impact of gender. This is perhaps due to the fact that a considerable proportion of female consultants work part-time, especially in comparison to male consultants for whom it is relatively rare. A few male consultants expressed negative perceptions of the part-time workforce, either in relation to the impact it had on them and their working lives in terms of having to bridge the gap and 'pick up the pieces', or in relation to the ability of a consultant to perform their job effectively on a part-time basis:

> "it does mean that consultants who work like that [part-time] are going to make a lesser contribution to work and going to be less in a position to carry on the burdens and frustrations of developing the service as those who devote their whole working life to it" (M5193: 111-120, 46-55yrs, FT)

> "I think some of them are not willing, have not thought it through in terms of the demand that this particular career in medicine is going to make of them and I think they take it a bit too light-hearted 'oh I'll be able to do this' and then they find themselves they can't and then create problems for their other colleagues around … I'm not sure you should even put females into medical school, when I went it was just blokes and at [name of medical school] they stuck strictly to the minimum they had to take and that was 65 because of this part-time business" (M2090: 17-19 & 119-122, 46-55yrs, FT)

There were similar comments about having to support maternity leave absences from work:

> "I've never really assessed whether male oncologists work differently to female oncologists, the issues have been time off for maternity leave etc and the impact it might have on colleagues they have left behind … I've been bought up in a large male dominated profession and it's less so now I think I have worries for the future within this specialty because half of oncologists are female and I'm not quite sure what's going to happen in ten years time in terms of maternity leave and the chaps left behind to run the place" (M4179: 65-69 & 96-102, 36-45yrs, FT)

Some male consultants expressed views suggesting that they were envious that women were able to have breaks from work (in terms of maternity leave) and work part-time, or about the unfairness or inequity of such policies:

> "I guess it would be less stressful [as a woman] because you get that break when you're having babies, come back refreshed" (M4392: 80-84, 36-45yrs, FT)

> "women get more flexibility than men .. it would be quite frowned upon for a man to say I think I'm going to go and have a part-time job, which lots of women do" (M1607: 23-24 & 27-28, 36-45yrs, FT)

> "I think there is a lot more accommodation for people who have children … it seems to be one-way – if someone's off on maternity leave I have to cover for them but it never works the other way around" (M4014: 10-11 &16-17, 36-45yrs, FT)

One female colleague confirmed that male colleagues had expressed envy towards her break from work:

> "The most consistent comment from male colleagues when I was first pregnant was envy that they weren't having six months off and working part-time" (F4063:26-28, <36, PT)

Some female consultants expressed their awareness of this negative perception about part-time working and the impact of maternity leave on colleagues, but also expressing how these perceptions impact on them:

"It's more being part-time than being a woman but most part-time people are women and I do think there is discrimination against us in the workplace and just a certain amount of hostility in the workplace which I think is unfair" (F3051: 130-133, 36-45yrs, PT)

"I think in some situations one gets a reputation and that is sometimes erroneous and it's quite often because you're part-time so we're perceived not to be there and not pulling our weight .. so in fact I go home after a lot of the men. I think people have perceived female radiologists as not working as hard particularly if they're part-time" (F3016: 96-108, 36-45yrs, PT)

"I've seen two female oncologists start in the department since [I was appointed] and certainly one of them wanted to work part-time and was very much a female come to help out, not recognized as a consultant in her own right and just thinking that she'll help one of the other men" (F4136: 26-31, 46-55yrs, PT)

"The thing that's against you is that if you haven't had your children by the time you are a consultant that creates a lot of problems as I've found to my cost. My first four years as a consultant here have been basically very difficult because I had two periods of maternity leave, and I know if I wanted to have another baby that it would cause all sorts of trouble here" (F4075: 101-106, 36-45yrs, FT)

"..it is just a fact that still you are a woman working in what is still a man's world to some extent and you do actually have to prove you are a proper player as opposed to a fluffy part-timer" (F4063:6-9, <36yrs, PT)

None of the consultants, either male or female, voluntarily expressed any positive perceptions of the impact of part-time working on the workforce.

c) Male consultants' negative perceptions of compatibility between working as a consultant and having a family

As well as negative perceptions of part-time working there emerged a theme about the (in) compatibility of working as a consultant and having a family, either in relation to your ability to do your job properly or your commitment to work:

"I think it's virtually impossible, the way surgery is run now, for a woman to combine what I call the maternal instincts with doing a surgical job… I think they underestimate the time demand that doing it properly will put upon them" (M2090: 25-30, 46-55yrs, FT)

> "Women put themselves in this position … they take on a greater workload if they want to fulfil both roles [mother and doctor]" (M3790: 129-136, 46-55yrs, FT)

> "If you had children you've really made the decision to put them first and put work second" (M4392: 80-84, 36-45yrs, FT)

> "They [women] want families and children and that stuffs things up" (M2056:19, 36-45yrs, FT)

> "there is something of a lie knocking around that women can have it all – have babies, a wonderful family, fantastic high flying career – I don't think that all of that is possible" (M2131: 73-75, 36-45yrs, FT)

> "if you are going to be successful at the moment in medicine or surgery, the set up does not take kindly if you need time out for children, family this sort of thing and that's where the prejudice comes in" (M1268:15-18, 36-45yrs, FT)

Some male consultants' commented specifically on the impact that flexible working policies (including maternity leave) had on them:

> "I have worries for the future within this specialty because half the oncologists are female and I'm not quite sure what's going to happen in 10 years' time, I mean half of my colleagues will almost certainly be female and the reasons I have worries over that is in terms of maternity leave and the chaps left behind to run the place" (M4179:97-102, 36-45yrs, FT)

Another specifically identified the lack of reciprocity for work undertaken to support those female colleagues who take time off to have a family:

> "People without children end up doing more of the work .. it seems to be one way – if somebody's off on maternity leave I have to cover for them but it never works the other way around" (M4014:12-17, 36-45yrs, FT)

One female consultant reported on the discrimination against male consultants in relation to prioritising family commitments above work commitments, reporting a situation that was faced by a male colleague when his wife needed to go abroad because her father was unwell:

> "It was kind of 'well, why do you need time off? Can't you get a nanny?' but if it had been me – [my husband] had been in a nasty accident a few weeks ago and nobody questioned me needing to take a few days off". (F4015: 95-99,<36yrs, FT)

Some female consultants recognised the impact that having responsibility for childcare had on their ability to work as hard as their male colleagues, and that this counted against them:

> "I have to work a set time and if I don't finish my work and get home at that time, I can't stay on until 7.30pm and finish my work. I can't go to a meeting at 6pm without prior negotiation with my husband .. they [male consultants] have got a lot more freedom to do their work, they haven't got the rigid constraints in which they have to work" (F4075:75-84 , 46-55yrs, FT).

> "I think that [female consultants] should be just as able to do it [bring about positive change] or should be just as able… what's in the back of my mind is … if you have a family and to do with hours and putting in time and meetings and going to extra things that they may not be able to" (F4162:126-132, 36-45yrs, FT)

One female consultant felt that she had been discriminated against in terms of rewards due to the fact that she had a limited capacity to take on out-of-hours or additional work due to her family commitments:

> "I don't have a discretionary award despite having worked here for 11 years.. they [men] have several times tried to .. take my registrar off me on the grounds that the clinical work they do is more important… I've always only had a part-time secretary.. even though patient numbers were the same… partly it's because I don't, I'm not able to go to meetings that easily, not being able to do anything additional to my clinical work.. so there are reasons why they might not think very highly of what I've done but at the same time, even just considering the amount of work, the amount of patients I've been seeing, I don't think I have huge respect for doing that" (F4136: 99-100, 46-55yrs, PT)

d) <u>Male consultants' negative perceptions of the ability of female consultants to have good quality relationships with other female staff</u>

Some male consultants expressed a negative perception of the quality of the relationships which female doctors have with other female staff:

> "one of the problems in the NHS generally is that it's service is dominated by women, nurses, radiographers, secretaries, and I think in my experience generally women tend not to get on as well with other women at work as they do men at work" (M4448: 25-28, 36-45yrs, FT)

A particular aspect of this theme concerned the use of sexualised behaviour between the male doctors and female nurses:

> "you probably get things done slightly more easily from the nurses if you are male, certainly from female nurses … if you've got some nice nurses who bat their eyelids you're not going to say very much to them and you can get on [with them on] a more pally basis but that's not going to work with a female consultant" (M5043:18-23, 36-45yrs, FT)

> "female doctors don't get on as well with nurses who are predominantly female … a lot of nurses find it difficult to take orders from other females and what I've often found is female doctors are much rougher with the nurses … and you don't have the … sexual frisson between male doctors and female nurses, there's a sexual innuendo of one type or another going on [between male doctors and female nurses] all of the time" (M1205:75-84, 46-55yrs, FT)

None of the female consultants expressed these views. On the contrary, some expressed spontaneous views of the good relationships which they have with the nurses and other allied health professionals whom they work with, some even implying that it was easier for female consultants than for male consultants to have such relationships:

> "As a female I look for communication with my nursing and radiology colleagues and we can sit and have a natter and a chat and sort things out over a package of biscuits, but for a man [it's different]" (F3090:98-101, 36-45yrs, FT).

> "… particularly the PAM's [professions allied to medicine] like the radiographers, I think they like working with the females because they think we are more focussed and dedicated than the men ... and the nurses I think prefer, or like, working with the female [doctors] because we are perceived as doing the job thoroughly" (F4078:49-56, 36-45yrs, FT).

3.4.2.2 Female consultants' behaviour at, and experience of, work in terms of a) having to work harder to be perceived as equally good b) using feminised behaviour and/or avoiding challenging male behaviours c) being excluded from decision-making activities

a) Female consultants' having to work harder to be perceived as equally good

A common theme arising in transcripts from female consultant participants was the perception that they have had to work harder in order to be considered on an equal footing with male consultants:

> "…sometimes there is a resistance… there is a small chauvinistic element where the woman has to work harder or prove herself more to achieve" (F4375: 54-57, 46-55yrs, FT)

> "It's easier to be a man and get on. I went to a meeting where I was told it was only the field movers, and it was predominantly men ... maybe not surprising but clinical oncology is a 50:50 specialty. Women do have to be very hot ... they have to be that bit better ... there are a lot of high powered female clinical oncologists but you have to be better" (F4162: 176-182, 36-45yrs, FT)

> "In terms of getting on… in terms of moving up the ladder and whether women actually, who are equally as good, can actually achieve their ultimate potential in terms of senior leadership – I don't know, and I think that's probably where we lose out" (F5087: 117-121, 36-45yrs, PT)

> "I think there is perhaps a slight tendency to see them [women] as having achieved against the flow and so on average to be slightly better" (F2227:56-58, 36-45yrs, FT)

Some male consultants concurred with this:

> "I suspect they have to do it [the job] better. I think it's a lot more difficult to make it .. as a woman than a man, so I suspect the women are therefore better" (M2113: 33-35, 46-55yrs, FT)

> "It's probably easier coming up the ladder [as a man] than being a woman" (M3696:82-83, 46-55yrs, FT)

One male consultant suggested that female doctors were treated better than male doctors provided that their performance was high, but that they might be treated more harshly if their performance dropped:

> "females are given a little more leeway, even when medical student status, but only so long as their performance remains high … so they'll be a little more gentler prodding and poking, more gentler questioning, but if their performance drops off then the guillotine falls if anything slightly harder" (M3790:124-128, 46-55yrs, FT).

b) Female consultants using feminised behaviour to achieve their goals and/or avoiding challenging male behaviour

Together with working harder to be considered equal, another common theme among female consultants was their use of feminised behaviour in order to achieve their goals:

> "you have to work out how to do it, hence the pink and fluffy jacket sometimes … you can be much more outrageous in what you say to people, much more direct and open and honest, as a woman, because you can say it with a twinkle in your eye" (F4386: 69-70 & 122-124, 46-55yrs, FT)

> "I think we bring about change more easily because we are less combative and much better at persuading people that they want to change and sitting down and persuading people that it was their idea in the first place for a start … you've always been bought up to sort of slightly give ... certainly in my nieces generation … she's never begun to even consider herself as a second class citizen" (F2227: 103-106, 36-45yrs, FT)

> "Sometimes you can use it [being a woman] in your favour by just being very girlie about something and distracting them and other times by being girlie it counts against you. Generally it doesn't count against you though." (F3016: 185-187, 36-45yrs, PT)

The use of feminised behaviour appeared to arise out of a reluctance to challenge male behaviour and/or an inability to use 'male' behaviours at work because they would be perceived negatively:

> "Whereas a man might try to be strong and direct, women don't usually use those tactics, partly because if you are too strong and direct you're perceived as being confrontational and not strong. You are perceived as being pushy" (F4386:66-69, 46-55yrs, FT)

One male consultant concurred with this:

> "If you're a very high forceful consultant as a man you are judged as an alright sort of bloke but if you are a woman you're a real bitch" (M1661:22-24, 36-45yrs, FT)

Another male consultant agreed with the perception that female consultants use 'sexualised' behaviour but expressed mixed views about it:

> "I've certainly seen them [female consultants] use their feminine wiles to get their way and I've sat there with a mixture of incredible admiration and complete anger" (M2090:91-93, 46-55yrs, FT).

Other male consultants concurred with the perception that male and female consultants use different methods to instigate change or manage situations but stated that neither was dominant:

> "maybe some loud mouthed male consultant on a committee may get more done than the woman, but on the other hand if the woman has a different approach and is more behind the scenes … it's very stereotypical but I think there is a difference in management approach between men and women and I don't necessarily think one is better or more productive" (M5086:94-101, 46-55yrs, FT).

c) <u>Female consultants being excluded from decision-making</u>

In terms of their experience at work, another predominant theme that emerged from the transcripts of female consultants was their exclusion from decision-making. In particular, this related to the long-hours culture of the NHS and that decision-making meetings often took place outside of standard working hours:

> "I can't go to a meeting at six o'clock without prior negotiation with my husband and if he's then got a meeting there's a conflict ... they [men] have a lot more freedom to do their work – they haven't got the rigid constraints in which they have to work" (F4075: 74-84, 36-45yrs, FT)

> "there are a lot of meetings after work and there are a lot – I come in at 8 for a lot of meetings – they are not 9-5 hours… so I find it harder to participate in the same way as I would have done before [having her son]" (F4162: 13-18, 36-45yrs, FT)

A number of male consultants also raised this. One male consultant acknowledged that through working part-time, consultants may "lose out" in terms of being unable to contribute their views and opinions at critical meetings:

> "… being part time is obviously an issue… they'll lose out because they're not always there for a meeting that's crucial or whatever" (M3700: 85-87, 36-45yrs, FT)

> "The challenge is that [to influence] change you need to be in a position to deliver more time and that's where the tension lies" (M2502:43-44, 36-45yrs, FT)

However, one male consultant suggested that their lesser ability to bring about change was related to them being a 'minority' group:

> "[Female consultants] may be less able to bring about change because there are less of them ... but they are forming little women's groups" (M4082:77-79, 46-55yrs, FT).

Other female consultants discussed the 'freedom' that male consultants have to focus 100% on work and be involved in management because they do not have primary responsibility for their children, and that this is what prevents them from being involved:

> "most of the managerial roles are taken on by men but at the same time they don't have anything else to think about … they are able to concentrate both within and out of work more on work … they don't have to think about making [childcare] arrangements if your CT list is overrunning" (F3051: 106-121, 36-45yrs, PT)

> "It's up to you to a large extent how much you take on and you don't. There's plenty of opportunity for me to do more things if I want to but I haven't got time to" (F3016:13-15, 36-45yrs, PT).

> "they [male doctors] can go home and if they want to do 3 hours work they can do it, but I can't come home and just do that – it's really hard to fit in" (F3051:19-21, 36-45yrs, PT).

But one female consultant reported that this is through choice, not discrimination, and that women do not perhaps want to be involved in committees:

> "men love committees and going into a huddle at the end of the day, women just want to go home to their gardens, their kids, their dogs, whatever it is, it's not because there

is anything wrong with the women or because the men discriminate against them, it's different culture" (F4416:85-89, 46-55yrs, FT).

3.4.2.3 The objective situation for female consultants in terms of a) working part-time, b) the lack of family friendly policies at work (long-hours culture), and c) not having a 'wife' at home to support their career

A final theme relates to the objective or material/practical situation for female consultants.

a) Female consultants being more likely to work-part-time and b) the lack of family friendly policies at work (long hours culture)

Part-time working and female gender were used interchangeably in many of the interviews. Similarly discussion of family commitments and work/family compatibility arose directly from questions regarding gender differences at work and always in relation to female, rather than male, consultants' responsibilities.

The perception expressed by a number of male consultants reflected an acceptance of the status quo and an expectation that women have to change to fit the demands of medicine rather than vice versa:

> "there's a perception that, because of family commitments, they may find it more difficult to do work out of hours, drop everything and be available 24 hours a day" (M2455: 39-41, 46-55yrs, FT)

> "the set up does not take kindly if you need to take time out for children, family, this sort of thing and that's where the prejudice comes in … the ability to keep working and take on extra load is highly thought of" (M1268:16-20, 36-45yrs, FT).

Some female consultants described the difficulty of progressing their career in the face of out-of-hours work demands, or working away from home, when they have responsibility for a family at home:

> … what I find is that, when we're trying to get our CME points in our professional development for me to go away on a week long course is really quite difficult because I'm leaving behind the children … so I have to make quite complex arrangements.. whereas my husband is going off to the South of France today now he can just do that

and he doesn't even have to give it a second thought really" (F3051: 106-121, 36-45yrs, PT)

And one male consultant describes the juggling act that a female colleague of his had to do order to manage her job and her family. She is a consultant cardiologist married to a cardiac surgeon. He states that:

> "she does her full commitment of on-call but that inevitably means that she brings her kids in when she comes to do ward rounds" (M2502:74-76, 36-45yrs, FT)

One male consultant described maternity leave as a 'luxury' that he would not be entitled to:

> "You get that break when you're having babies, come back refreshed … whereas a man ...does not have that luxury" (M4392:81-86, 36-45yrs, FT).

And a female consultant also described similar envy from her colleagues when she took maternity leave:

> "the most consistent comment from male colleagues when I was first pregnant was envy that they weren't having six months off and working part-time… the chance of me being part-time [if I was male] would be negligible" (F4063:26-28 & 169-170, <36yrs, PT).

Another acknowledged the higher expectations placed on male colleagues to deliver:

> "I've almost accepted that they'll just have to see that I can't do that [make changes, publish results, go to meetings], but I don't think a man has the protection of saying 'I don't have time'" (F4136:99-102, 46-55yrs, PT).

c) <u>Female consultants' not having a 'wife' at home</u>

One final theme concerned having a 'wife' at home. Some male and female consultants commented on this. In general, the male consultant perspective regarded the important role that their wife or partner played in supporting their career and looking after their family and home:

> "Most men actually rely a huge amount on their partners even when we don't have children" (M4372:9-11, 46-55yrs, FT)

> "I've only done what I've done because I've had a wife who looked after the kids and ran the family for many years" (M2131: 76-77, 36-45yrs, FT)

> "The stress comes if they are managing the house as well… doing more than one job. I think if I did my wife's share of the house management I would be a lot more stressed than I am" (F3696: 73-76,46-55yrs, FT)

Some female consultants commented on the fact that they did not have a partner fulfilling the 'wife' role at home, and were therefore disadvantaged because they were expected to fulfil both roles (consultant and mother/housewife):

> "the man, their function was to do the job and be the consultant and they had a wife, and one of the things that I always said was the thing that went against me all the way through my junior career coz I didn't have a wife at home… not pursuing her own career but sublimating her career to mine" (F4386: 100-105, 46-55yrs, FT)

> "Quite a lot of men have got a wife or partner at home or at least sharing that workload. For me, if the child is sick it could be either of us in fact, it could be fair, but I actually feel the burden still falls on me" (F3016: 159-163, 36-45yrs, PT)

One female consultant, who did have a husband who took on an equal share of home and family workload, acknowledged that she was 'lucky' and that it was unusual, but that it was the only way in which she would be able to cope with work as well as she does:

> "I think in general women have more balls to juggle… I'm lucky in that my husband will fit in with my work pattern and cope with the things I'm unable to cope with because I'm simply not there and I'm very lucky with that.. a lot of females don't have husbands who are either able or willing to do that ... which I think inevitably loads up the stress side of things and makes you less capable of coping with the work side issues" (F3110: 99-100, 36-45yrs, FT)

Some male and female consultants commented on the responsibility taken by women for the home/children, acknowledging the social convention for this:

> "It must be more difficult to be domestically organised and put up with the rigours of being a woman and having a family and do other things compared to a man, when socially it's much more accepted that you'll have an absolute commitment to your job and you can 'duck' some of the domestic type of things" (M2113:78-82, 46-55yrs, FT)

> "Most of the duties outside of the hospital, in other words family, women do it" (M1299:84-85, 46-55yrs, FT).

> "The men still don't have that overall responsibility for running the home and the children" (F3824:71-73 46-55yrs, FT).

> "It would be less stressful [being a male consultant] as there would probably be less guilt about the home thing if you were a man. I think there is an inbuilt maternal instinct which says you should spend time with your children and I think there is much less of an expectation of that for men" (F4001:66-70, 36-45yrs, PT).

3.4.3 Developing an explanatory framework for risk of psychological distress in male and female consultants.

The themes that had emerged from the interviews were considered in relation to each other, and in relation to the individual transcripts from which they had been drawn. They were then considered in relation to the findings from Study 1 (Chapter 2) and a diagrammatic representation of the inter-relationships which had emerged from the data in both studies was created (Figure 3.3).

This model was then considered in relation to relevant theoretical constructs. In particular it was felt important to integrate Karasek's Job Demand-Control-Support model, as well as 'work-life balance' to reflect key themes in the literature that had also emerged in the qualitative study. First, the constructs from Karasek's model were considered in relation to the findings from Studies 1 and 2. The terms 'job demand' and 'job stress' were merged into one construct, as were 'job control' and 'job satisfaction' in order to represent both the theoretical constructs (Karasek) and the empirical (consultant-specific) findings from Study 1. The third construct from Karasek's model – 'social support' - was also added to the model but its meaning expanded beyond Karasek's interpretation of 'support at work' to also encompass the 'social support' documented in the literature as being protective of mental health in the

face of adversity (B. G. Brown & T. Harris, 1978; G. W. Brown & T. Harris, 1978; Dalgard, Bjork, & Tambs, 1995). In the revised model, the term 'social support' therefore represents both practical and emotional support provided at work and at home, and thereby encompasses the theme of '*not having a wife at home'* that emerged from the qualitative study, as well as 'social support' at work, as intended by Karasek. A construct was created that included both the '*negative attitudes of co-workers*' and '*organisational barriers*' (such as the 24:7 culture of the organisation and the lack of family friendly policies). This is because attitudes and culture were strongly related and intertwined throughout consultants' dialogue, and were both associated with similarly described impacts on job stress and satisfaction. Finally, a construct representing '*having domestic and/or childcare responsibility and work-life balance*' was created in order to represent this aspect of consultants' experiences which had emerged repeatedly in the qualitative study. The revised model is presented in Figure 3.4.

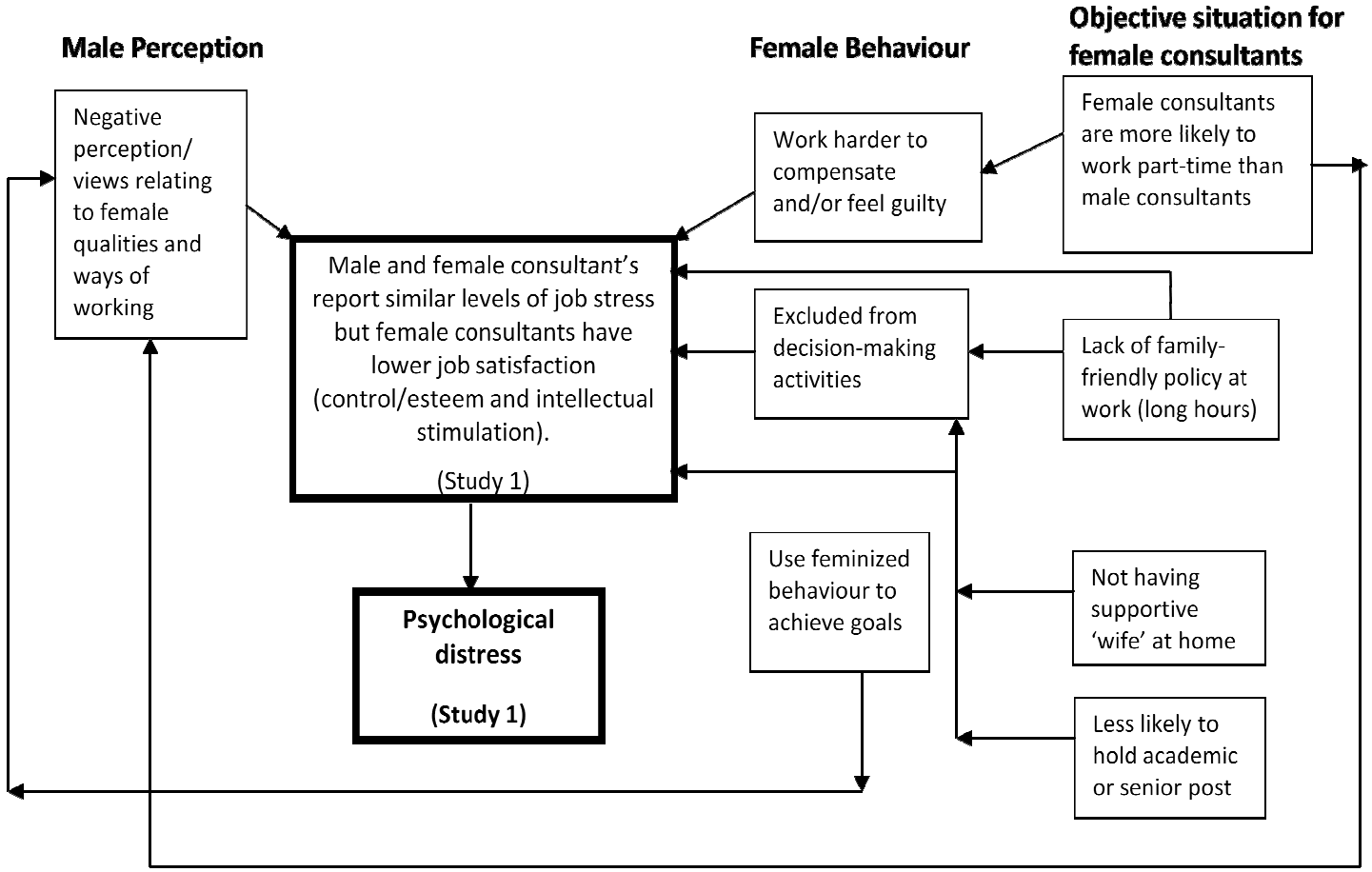


Figure 3.3 A diagrammatic representation of the relationships between the themes and outcomes observed in Study 1 and Study 2

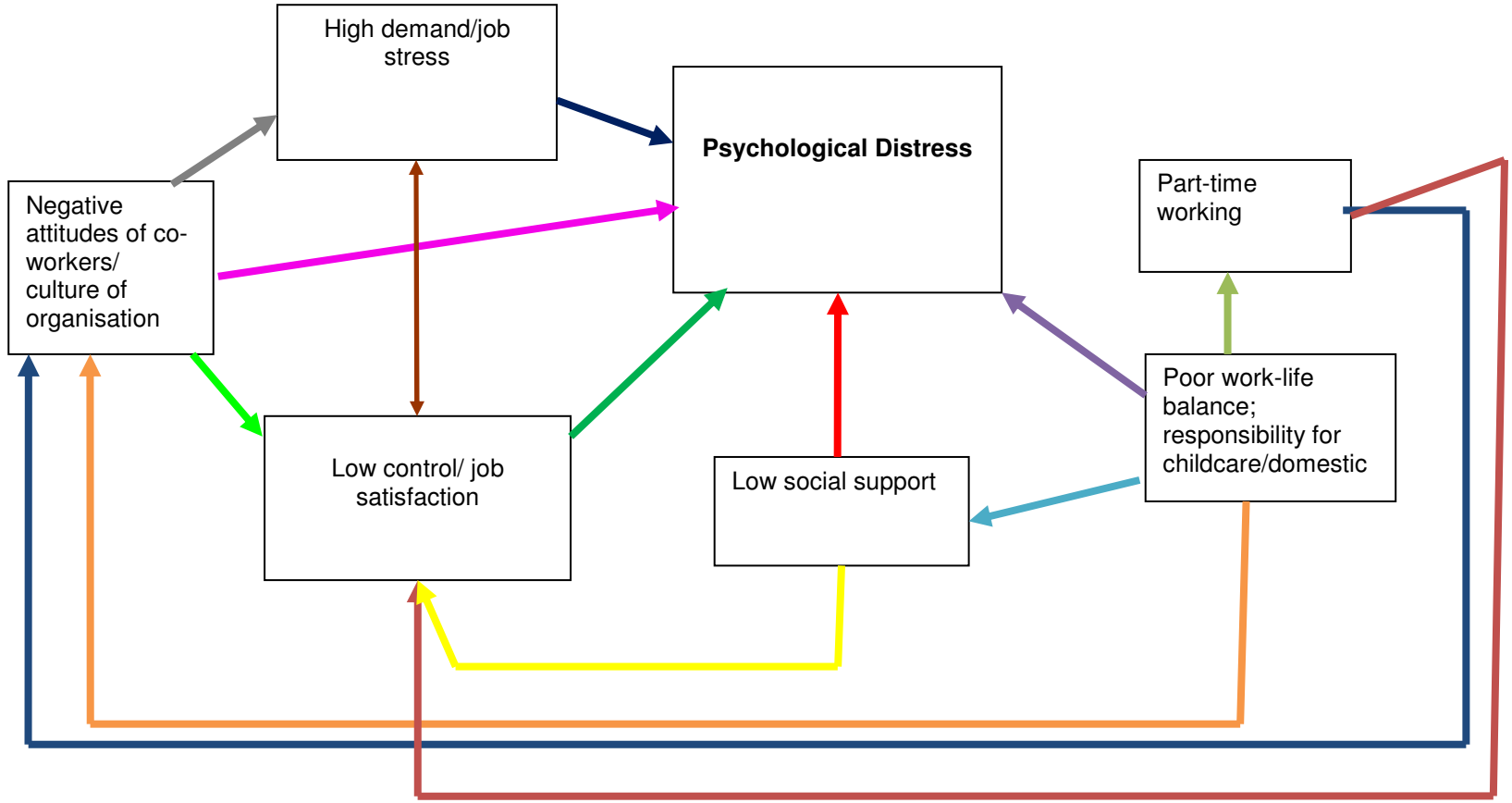


Figure 3.4 Empirical and theoretical explanatory model for psychological distress in hospital consultants

3.5 Discussion

What is known already?

- Female consultants reported lower job satisfaction in relation to professional esteem and perceived control in Study 1, and this was associated with a higher level of psychological distress. Karasek and Siegrist's occupational stress models provided a framework for interpreting these findings but it is unclear why female consultants might report lower satisfaction.
- Theories of job satisfaction suggest that aspects of the job and/or individual characteristics are important, although there has been little exploration of the relationship of gender to these aspects of the job/individual.
- Studies of the relationship between gender and job satisfaction are mostly a-theoretical and have produced inconsistent findings which are difficult to interpret due to methodological limitations. It therefore remains unclear why female consultants reported lower satisfaction.

What this study adds

- The findings provide inconclusive support for the findings from Study 1. Responses to closed questions gave little support for female consultants having lower job satisfaction and equal job stress. Responses to open questions suggest that female consultants may indeed have lower job satisfaction but also higher job stress than male consultants.
- These findings have been assimilated into an explanatory framework for understanding why female consultants may report lower job satisfaction than male consultants and in turn how that may relate to a higher risk of psychological distress
- Lower job satisfaction may arise from a combination of negative perceptions of male consultants coupled with aspects of female consultants' behaviour and the objective situation for female consultants.
- These perceptions, behaviours and objective situations may impact directly upon consultants' perceived job demand, control and support, and in turn their risk of psychological distress.

The findings from this study provide inconclusive support for the findings from Study 1. When asked directly using closed questions there was no apparent support for female consultants having lower job satisfaction in relation to status, esteem, autonomy or responsibility. Nor was there support for female and male consultants having equal job stress. However, once consultants were given the opportunity to explain their responses and expand on their answers it became apparent that these initial closed questions may have limited the scope for understanding their views and perceptions about gender, work and occupational stress.

The qualitative analysis indicated that the lower job satisfaction reported by female consultants compared to male consultants could be explained by a complex interplay of the negative perceptions exhibited by male consultants, the limitations and obstacles imposed by female consultants' objective work/life situation, and due to behavioural strategies which women choose to employ at work. Whilst the core constructs of the occupational stress models proposed by Karasek and Siegrist have empirical validity (see Chapter 1), the failure to explicitly consider the relationship of gender to the constructs may limit their ability to fully explain work-related causes of poor mental health amongst hospital consultants, which thereby limits their ability to inform relevant interventions to protect (or treat) the wellbeing of the consultant workforce.

The prominent theories of job satisfaction are not gender-specific, the implicit assumption being that any gender differences in job satisfaction will be explained by differences between men and women in disposition or core job factors. This study was not designed to test any of these theories, but the findings could be considered in relation to them. According to the Job Characteristics Model (Hackman & Lawler, 1971) women's lower satisfaction would be predicted to result from gender differences in the five core job characteristics which contribute to job satisfaction. This could therefore include: having a perception that there is less variety and complexity in the skills required to perform the job; feeling they are not performing a whole identifiable task; feeling that their job has less significance to the wellbeing of others than men; feeling they have less autonomy in their job; and/or receiving less feedback on their performance.

The combination of negative attitudes, objective situation and behavioural strategies reported in this study may well translate (or relate) to gender differences in these characteristics. Indeed gender differences in some of these 'characteristics' were specifically confirmed, for example part-time female consultants feeling their job has

less significance, or that they are “helping out” rather than being valued in their own right. Both male and female consultants referred to gender differences in personality or disposition, a common theme being that women were more “touchy feely”. Women generally saw this as a strength rather than a limitation, however a large proportion of male consultants (and a few female consultants) suggested that women were emotionally weaker, which could perhaps in turn be paraphrased as ‘more neurotic’. Neuroticism has been shown to be negatively related to job satisfaction (T. A. Judge, et al., 2002) (higher neuroticism = lower job satisfaction), and women are commonly reported to have higher neuroticism (Lynn & Martin, 1997). Therefore both situational and dispositional theories of job satisfaction may be relevant to consider when interpreting the findings and informing potential interventions.

An alternative theoretical perspective which is relevant to situational approaches to job satisfaction is that female consultants’ lower job satisfaction is the result of gender discrimination. There is evidence supporting the existence of gender discrimination in the medical profession: female consultants are disproportionately represented in lower status specialty groups, and receive lower pay even when adjusted to account for the hours worked (as reviewed in Chapter 1). Replicating an attempt to explain gender differences in the career trajectories of lawyers (K. E. Hull & Nelson, 2000) (a male dominated profession that has also had increasing numbers of women entering in recent decades), it may be possible to explain the observed gender differences between consultants by reference to the same theoretical frameworks: assimilation, choice and constraint.

A process of “gender assimilation” would assert that as more women enter the workplace, and more men retire and leave the workplace, female consultant’s careers will gradually converge with those of male consultants. The term assimilation is used widely throughout legal and civil rights literature and its origins can be traced also to Jean Piaget (1896-1980) (Piaget, 1952), an influential learning and education theorist who stated that there were two states of ‘adaptation’ when faced with new experiences, ‘assimilation’ (incorporating the new into the old without changing the old, i.e. ‘squeezing’ female doctors to fit into the male doctors world), and ‘accommodation’ (altering existing ideas and ways of working as a result of the new experience of women entering medicine). If these processes had already taken place one would perhaps expect there to be differences in perceptions/experience between different cohorts (e.g. the number of years spent working as a consultant), but this study provides little evidence of this. The key themes which emerged in this study did not appear to be age- or ‘experience’-dependent, although a few consultants (both

male and female) specifically referred to their past experiences and described a perception that things had changed, or were improving, over time.

In relation to "choice" theories, this would include a range of perspectives from human capital theories through to cultural feminist and gender socialization theories. Human capital theorists would state that gender differences related to the fact that male and female consultants begin their career with different 'capital' to offer (for example they enter medical school with different backgrounds; go to different, more-or-less prestigious, medical schools; perform differently while at medical school). In turn, these differences impact on their first job, which then impacts on all subsequent jobs. There is little evidence of this; indeed female applicants are more likely to be offered places at medical school compared to male applicants (I C McManus, Esmail, & Demetriou, 1998), and evidence regarding exam performance at undergraduate level suggests that male students underperform compared to female students (Dewhurst, McManus, Mollon, Dacre, & Vale, 2007; Woolf, Haq, McManus, Higham, & Dacre, 2008), and that being female is predictive of greater success at medical school, not worse (Ferguson, James, & Madeley, 2002).

Cultural feminist or gender socialization theorists on the other hand would argue that gender differences instead relate to innate or socialized gender differences in values and interests, and therefore that female consultants have different preferences for the type of work, and type of consultant, they aspire to be. Studies have shown that motivation for becoming a doctor differs by gender (I.C. McManus, Livingston, & Katona, 2006) (e.g. males motivated by wanting to be indispensable, females by wanting to be caring). Specialty preferences also differ by gender: women are more likely to state preferences for general practice, paediatrics, obstetrics and gynaecology and are less likely to state a preference for surgery (Department of Health, 2009; Ernst & Yett, 1984; Michael J. Goldacre, Davidson, & Lambert, 2007). Whether these differences in specialty choice represent 'choice' or reflect 'barriers' is subject to debate (J. Dacre, 2011).

"Constraint" theorists would argue that gender differences in attainment at work relate to explicit gender harassment or discrimination and/or institutional barriers leading to gender inequalities, either at pre or post-entry to the profession. The literature regarding gender discrimination and inequalities - both in general and specific to hospital consultants - was discussed in Chapter 1. Key themes that emerged in the current study appear to provide further support for the constraint theoretical perspective: that female consultants' may be discriminated against on the basis of

their gender and/or due to working flexibly, and the organization (despite having policies for equality and flexible working) continues to promote and value (or at least support) a culture of working that does not readily fit with such policies. Allen (Allen, 1999) in her study of stress amongst consultants found that "all or nothing" was the prevailing philosophy and only by taking on all of the roles and functions imposed on you can you be considered to be a 'proper' consultant. The role of a consultant in the NHS today consists of a multitude of tasks and responsibilities on top of their clinical duties. These include training and supervision of junior doctors, management responsibilities (administrative tasks, dealing with complaints), working within a multidisciplinary team, participation in research (or at the very least keeping up to date with recent research), continuing professional development and training, medico-legal work, audit and clinical governance. Many of these activities traditionally occur outside of working hours (CPD, training, research). This may exclude those working part-time and those who have childcare responsibilities, or at least make it very difficult for them. Consideration of these different theoretical perspectives suggests that a combination of feminist/gender socialisation and constraint theories might help further explain the gender differences in working experience reported by hospital consultants in the current study.

The findings from this study must be considered alongside some methodological considerations. The lack of sampling by specialty prevents any analysis or comment on differences according to specialty group which would be an interesting focus for future study. One hypothesis, based upon assimilation theory, which could be tested is that female consultants who work in a more equally gender-differentiated specialty (such as radiology or paediatrics) would report levels of satisfaction which were more similar to men in those specialties, in comparison to female consultants within male-dominated specialities, such as surgery. Given that levels of job stress and satisfaction have been found to differ by specialty group in previous studies of hospital consultants (Taylor, et al., 2005) it is likely that specialty is an important factor to consider.

The findings reported here arise from a cross-sectional study at one point in time where female consultants are generally younger and therefore have fewer years' experience than male consultants. This cohort effect represents a power differential in age and seniority between male and female consultants. Male consultants are generally older and have been consultants for longer, and are also less likely to have young children at home. Therefore age and number of years as a consultant may confound with the effect of gender. The study has taken place at one time point in a

period of change in relation to employment patterns (both generally and within the NHS) both in relation to increasing numbers of women in the workforce, and the emergence and acceptance of flexible working options (Department of Health, 2000a; NICE, 2009). An attempt was made to see if age effects could be observed but the key themes which emerged in this study did not appear to be age or experience dependent.

The study was also constrained by taking the opportunity of appending it to another study. This restricted choices regarding various aspects of the methodology including sampling and the design of the interview. The use of a structured questionnaire with closed (pre-determined) questions was necessary given the time constraints for interviews, but limited the ability of the consultants to redefine the topic under investigation. It would be important to confirm the face validity of the model (its components and inter-relationships) using methods that facilitate consultants to define the key topics in relation to their experience.

Although not seeking to generalise findings from this qualitative study, a large number of consultants were interviewed and their characteristics matched those from the larger dataset, which provided some confidence that they are at least partly representative of the sample from which they were drawn in terms of some key individual and job characteristics. The sample from which they were drawn represented a good response (73%) from either whole or randomly selected populations. The positioning of this study (subsequent to reviewing a large amount of relevant literature and theory as well as conducting the quantitative study) and my previous experience (as a female psychology graduate researcher from a mixed methods background) undoubtedly influenced my approach to the design and analysis of this study. However, attempts were made to address this by subjecting interview transcripts to a thorough and detailed analytic process, involving several independent researchers. The transcripts were also re-visited at multiple time-points throughout the analytic process to ensure that the themes remained grounded in the data, and that any disconfirming examples were specifically sought and reported. Extensive quotations were provided to enable an external validation of the findings (Yardley, 2008).

The validity of the findings from this study also draws strength from commonalities with other research. Many of the themes that emerged in this study have been previously described. In relation to the negative perceptions of co-workers reported in this study, women are often cited as being emotionally “weak” or more emotionally

expressive (despite the lack of evidence for consistent differences) (Lindelöw & Thorbjörnsson, 1998); Negative perceptions regarding part-time working have been reported in medicine (Evans, Goldacre, & Lambert, 2000; Medical Women's Federation, 2008) and in other working environments (Grant, Yeandle, & Buckner, 2006; Joseph Rowntree Foundation, 2003), with part-time often being equated with 'less committed'. Conversely, a recent research project using mixed methods with over 3,500 employees and managers from seven organisations found that flexible workers were *more* committed to the organisation than non-flexible workers (Management, 2008).

The impact of gender on relationships with nurses is not a new phenomenon. It was first referred to as the 'doctor-nurse' game by Stein in 1967 (Leonard I. Stein, 1967) to describe (female) nurses' passive and deferent relationships with (male) doctors, though when revisiting it in 1990, Stein argued that a number of factors (including the increasing prevalence of female doctors) had led to a shift in balance in this relationship, becoming more mutually interdependent (L. I. Stein, Watts, & Howell, 1990). Findings similar to those reported in this study have been reported elsewhere (E. Gjerberg & Kjolsrod, 2001; Porter, 1992), and have led to commentaries about the hierarchy in medicine and whether it is indeed based upon status or gender (Zelek & Phillips, 2003).

In relation to female consultants' behaviour, '*women working harder to be perceived as good*' has been reported in research examining survey responses in the UK and US (Gorman & Kmec, 2007). Women reported their jobs required more effort than men (controlling for job characteristics, family/household responsibility and individual qualifications). The authors' interpretation is that employers apply higher performance standards for women. The feminised (flirtatious and submissive) behaviour to avoid being seen as "harsh" or "bitchy" reported by female consultants has been related to less promotional opportunity (Chan-Serafin, Bradley, Brief, & Watkins, 2005; Kray & Locke, 2008), and failing to challenge male behaviour has been reported in research within engineering environments. Powell and colleagues have shown that female engineers often adopt 'anti-women' behaviours as a form of coping with the male world they enter (accepting gender discrimination and acting 'like one of the boys') but the authors conclude that this "undoes" their gender and serves to devalue feminine qualities, and supports a culture that is hostile to women (A. Powell, Bagilhole, & Dainty, 2009).

A final key theme relating to the objective situation for women was that very few women have the support of a partner who assumes or shares equally the domestic and family responsibilities at home in order that they can prioritise their career, unlike the male consultants. *'Not having a wife at home'* was reported as a limiting factor by a number of female consultants and recognised as being instrumental in the successful careers of many male consultants. Together with enabling men to prioritise their career ahead of family responsibilities, 'wives' were often seen as key providers of both emotional and practical support to counteract stressors at work. There is a growing body of evidence showing that poor social support (defined as '*the availability of helping relationships' (Leavy, 1983))* is independently associated with mental health problems including depression (G. W. Brown & T. Harris, 1978; Dalgard & Haaheim, 1995; House, 1981).

A report about flexible working presented to the NHS Executive over a decade ago (1999) contained many of the themes that emerged from this study. Regarding the negative view on part-time working, the report stated "*there is no doubt that those who wish to work part time for family reasons lose professional status*". Attention was drawn to the reality that many (mostly male) senior consultants work part-time in relation to their clinical commitments due to undertaking managerial or national work such as clinical/medical director roles or work for the Royal Colleges, or indeed private work. This part-time allocation is not only made possible, but there is no loss of kudos or status. One consultant quoted in the report used the term "presenteeism" to describe the "elastic hours culture" which exists within the NHS and the value that is placed upon judging consultants against the hours that they work.

The report contains recommendations for change, including suggestions for individuals to instigate change (such as challenging the time of out-of-hours meetings), and also includes a draft working lives standard comprising eleven statements supporting a better work-life balance and valuing the contribution of every doctor regardless of their working hours. It is disheartening that 5-6 years after the publication of this report, the consultants in this study (interviewed in 2003/4) are reporting the same prejudices and difficulties with work-life balance thus indicating that, at the time of this study, recommendations had not impacted on consultants working lives. More recently, the report 'Women doctors: making a difference' (published in 2009) raises many of the same issues and recommendations again, which suggests that the 1999 report had made little impact over the intervening decade. This may be at least in part due to a failure to consider comprehensively the context in which women in medicine work.

Various authors have argued that understanding the impact of work on health for women, and increasingly for men, requires a wider perspective than that which has a traditionally been applied (Karen Messing, et al., 2003). Such a perspective would need to encompass the measurement of aspects of the social environment outside of work (in particular family/domestic responsibilities) while also including gender-specific measures within work (such as harassment or discrimination). The findings from this study have led to the development of a more comprehensive model that extends the occupational stress models proposed by Karasek and Siegrist to include other (gender-related) factors that impact on job demand, control and support constructs or may relate independently to risk of psychological distress. Testing the face-validity of the findings and the resulting model in a current cohort of consultants would add strength to its validity. This might be particularly insightful if explored with consultants who work in either gender-balanced or male-dominated specialties, to further explore the impact of the changing culture and impact of a greater number of women entering the workforce.

In addition, recommendations for interventions or initiatives should be explored and discussed with consultants. Interventions to protect wellbeing (and treat poor mental health) are reviewed more fully in Chapter 5. Methods of tackling the negative perceptions of male consultants, and perceptions and uptake of the flexible/family-friendly working policies need to be examined and addressed. This is likely to require a 'systems approach' (examining how the different factors influence one another within the whole) and interventions that integrate individual and organisational level approaches.

There have been many changes to the way that doctors work within the NHS today. These have been driven by policy and guidance which is aimed at improving the care provided to patients and ensuring that it is patient-centred. Some of these changes may currently be incompatible with the needs of the workforce, particularly in view of the changing gender distribution in medicine. If the policies and culture continue unchallenged it could have a negative impact at patient, doctor and organisational levels. There is a need to find ways of working that are both patient-centred and supportive of work-life balance and flexible working in order to protect the mental health of the consultant workforce, encourage existing female doctors to remain in the profession, and encourage new recruits into 'male' dominated specialties.

Chapter Four: Testing the face validity of a gender-sensitive model to explain the association between work and psychological distress in hospital consultants

4.1 Introduction

Improving the wellbeing of the NHS consultant workforce requires interventions and initiatives that are underpinned by robust coherent theoretical models. The most prominent occupational stress model (Karasek's Job Demand-Control model) has been tested mostly in male populations, using measures that have not been sufficiently validated with women, or in studies that have 'controlled' for gender rather than attempted to examine the impact of gender (Karen Messing, et al., 2003). In particular studies have omitted consideration of policy and practices which may stereotype women and discriminate against them and which may impact on the association between work and health especially for women (C. Clark et al., 2011; Karen Messing, et al., 2003).

A gender-sensitive explanatory model for understanding the association between work and psychological distress in hospital consultants was developed on the basis of findings from a secondary analysis of national survey data (Chapter 2) and interviews with a sub-sample of survey respondents (Chapter 3). The findings from these studies supported the importance of the interplay between job demand, job control and social support when explaining risk of psychological distress, as hypothesised in Karasek's model. As such these constructs are central to the model. However, other constructs emerged that expanded upon Karasek's model and that may provide a more comprehensive understanding of the occupational risk factors for poor mental health in hospital consultants. These include consideration of potential discriminatory practice at individual and organisational levels (negative attitudes of co-workers and the culture of the organisation) and female consultants' objective situations, conforming to traditional gender role expectations (working part-time or flexibly; having more responsibility than men for domestic/childcare issues; and being a key *provider* of social support outside of work rather than a recipient – not having a 'wife' at home). The model is illustrated in Figure 3.4 (Chapter 3).

The interviews that informed the development of the model (Chapter 3) took place in 2003/4. Since then there have been a number of changes that may have impacted on

the working lives of consultants, including increasing numbers of women entering the consultant workforce (from 25% of FTE consultants in 2003 to 30% in 2010) (NHS Health and Social Care Information Centre, 2011), and the European Working Time Directive being fully applied to junior doctors in 2009, reducing the maximum hours they can work to 48. Furthermore, as far as I am aware, there has been no research to-date that has explored whether experiences of male and female consultants differ according to the 'male dominance' of the specialty group. The proportion of female consultant doctors varies considerably by specialty, ranging from less than 10% of surgeons to around a third of radiologists and psychiatrists (32% and 38% respectively) and nearly half of paediatricians (46%) (NHS Health and Social Care Information Centre, 2011). Working in a male dominated, compared to a more gender-balanced specialty, may impact on experience at work for both male and female consultants. For example, according to 'assimilation' theories (discussed more fully in the previous chapter) the ratio of female to male doctors may impact on the risk of gender discrimination at work (K. E. Hull & Nelson, 2000), and commentaries regarding the 'feminization' of medicine describe both positive impacts, such as more humanized care leading to better population health outcomes (Phillips & Austin, 2009) and negative impacts, being associated with a downgrading in status (Laurance, 2004).

The changes to consultants' working lives over the past decade, together with the possibility that risk factors for work-related psychological distress may differ by specialty group, suggest the need to test the face validity of the explanatory model with a current cohort of consultants selected due to their specialty (male dominated vs. a more gender balanced specialty). Qualitative methods such as interviews and focus groups are well suited for generating and refining theory and models (Bradley, Curry, & Devers, 2007; Sofaer, 1999), having been used for example to test the face validity of theoretical frameworks for patient safety culture in primary care (Kirk, Parker, Claridge, Esmail, & Marshall, 2007) and community pharmacy (Ashcroft, Morecroft, Parker, & Noyce, 2005).

4.2 Aim

To test the face validity of an explanatory framework for understanding poor mental health in hospital consultants by investigating:

- The confidence with which associations in the model are supported by consultants, to establish whether:
    - the model requires refinement to more accurately reflect experiences reported by consultants
    - there are any associations in the model that are disconfirmed by experiences reported by consultants.
- Whether the confidence of support of the model varies by gender or in relation to the male dominance of the specialty group

4.2.1 Primary research question

Does the gender-sensitive explanatory framework have face validity to male and female consultants working in male dominated and less male dominated specialty groups?

4.2.2 Secondary research questions

- Do any elements of the framework require refinement to more accurately reflect experiences reported by consultants?
- Are there any relationships in the model that are disconfirmed by experiences reported by consultants
- Is there any suggestion that perceptions of face validity of the model may differ by gender or by specialty group?

4.3 Method

4.3.1 Design

A cross-sectional semi-structured interview study

4.3.2 Participants

Consultant surgeons and radiologists working in one of three inner city NHS teaching hospitals, governed by one of two integrated NHS Trusts were invited to participate. The aim was to recruit at least 20 consultants: approximately 5 male and 5 female

consultant surgeons, and the same number of male and female consultant radiologists. This purposive sampling strategy was employed to ensure a balance of male and female respondents and of surgeons and radiologists, and to minimise the possible bias from selecting a sample on the basis of convenience (Mays and Pope, BMJ 1995). Surgeons were selected to represent a male dominated professional group (only 10% of consultant surgeons were female in 2010 (Federation of the Royal Colleges of Physicians of the UK, 2011)), and radiologists to represent a more gender-balanced professional group (33% of consultant radiologists were female in 2010).

Recruiting consultants from one of three integrated hospital sites limited the heterogeneity of the sample in relation to working environments and policies, thus facilitating exploration of the impact of the same (or similar) working environments on the experience of work for different consultants. This design complements the national interview study (Chapter 3) which included a large number of consultants across the UK from a wide range of different organisations and environments.

4.3.3 Procedure

An invitation to participate was emailed to potential participants outlining the aims and purpose of the research and attaching the study information sheet (Appendix VII and IX). One repeat invitation was sent to each non-responder. Participants were randomly selected (in a stratified way to ensure balance of male and female consultants) from a list of consultant radiologists and surgeons that I compiled using a list of consultants provided by a cancer service spanning the three hospital sites supplemented by searches for consultants names on the individual hospital websites.

Interviews were conducted face-to-face or by telephone (according to participant preference) and at a location and time that was convenient to them. They took place between December 2010 and March 2011. Interviews lasted between 25 and 60 minutes, were digitally recorded, and consisted of two components:

- An introductory section aimed at exploring the context of work for each consultant. This included asking them to describe the nature of their current post and commitments outside of work; their main sources of job stress and job satisfaction; the support that they receive (both practically and emotionally, at work and outside of work); and their perception of their work-life balance (including the extent of flexibility required of them at work, and awarded to them when required at home).

- The diagrammatic representation of the model (Figure 3.4, Chapter 3) was then presented and consultants were briefly orientated to the diagram. Consultants were asked to provide an initial appraisal of the model (in response to an anchor question: "*From your experience, does this appear to contain the main occupational causes of poor mental health in hospital consultants? Is there anything missing/wrong?"* and then encouraged to comment on individual components of the model.

The final part of the interview was used to explore consultants' views about potential interventions or changes to working life that could help protect the wellbeing of the workforce. This is reported in Chapter 5. The topic guide is provided in Appendix X.

4.3.4 R&D and Ethics Committee Approval

This study was reviewed and approved by North London REC 1 NHS National Research Ethics Committee (REC reference: 10/H0717/065) and the two NHS Trust R&D departments.

4.3.5 Analysis

Transcripts were analysed in a two-stage process:

1. Qualitative thematic content analysis of consultants' experiences and perceptions in relation to each association in the model
2. Quantitative rating of the confidence with which each association in the model is supported

1. *Qualitative thematic content analysis of consultants' experiences and perceptions in relation to each association in the model*

Transcripts were analysed using thematic content analysis. Content analysis is a data reduction technique that enables the frequency of 'themes' or other content to be counted. It is "*a systematic, replicable technique for compressing many words of text into fewer content categories based on explicit rules of coding*" (Stemler, 2001). Thematic analysis is similar to content analysis but "*pays greater attention to the qualitative aspects of the material analysed*" and "*combines analysis of frequency of codes with analysis of meaning in context*", drawing upon both manifest and latent content of the data (Joffe & Yardley, 2004).

To test the face validity of the model, the thematic analysis used a coding frame that was derived a-priori from the model. The constructs and associations between constructs were each treated as "themes" that were explicitly sought in each transcript, searching for both confirming and disconfirming evidence. Verbatim quotations were taken from each transcript with regard to each of the associations between constructs within the model (or marked as 'not discussed' if there was nothing in the transcript that related to that specific part of the model). A coding sheet was developed for this purpose (see Appendix XI). Once all individual transcripts had been analysed, the ratings and evidence for ratings were synthesised for each individual relationship in the model (Appendix XII).

The thematic analysis also sought to identify additional themes or constructs that were not represented by the model. This included searching for associations between existing constructs that had not been hypothesised, as well as identifying additional constructs not represented in the model. Any potential refinements to the model were noted on each transcript before being collated across all transcripts and synthesised thematically. This process included quantifying the frequency that each new theme occurred, describing the type of consultant to which the theme was relevant (in terms of gender and specialty), and providing supporting quotations/information taken from the transcripts.

2. *Quantitative rating of the confidence with which each association in the model is supported*

In order to facilitate comparison of the findings by gender and specialty group a rating scale was developed to represent the confidence that each association in the model was supported.

A 6-point rating scale was developed for this purpose:

-2	"very confident" that the association is <u>not</u> supported
-1	"quite confident" that the association is <u>not</u> supported
0	"mixed" with neither positive nor negative support being dominant
+1	"quite confident" that the association is supported
+2	"very confident" that the association is supported
-88	not discussed

Verbatim or summated quotations relating to each of the 14 individual associations in the model were transposed from each transcript to a coding sheet (as described in the

qualitative thematic analysis section above). The data relating to each 'theme' (association in the model) was then rated using the scale above.

In addition to rating each individual association in the model, two summary ratings were calculated:

1. Confidence that the model as a whole is supported based upon responses to the 'anchor question' immediately after the model was presented. This response was coded using the same scale as above.
2. Confidence that the model as a whole is supported by aggregating the ratings applied to each individual association. This was calculated using the rating scale and rules in the table below (Table 4.1). A threshold of 'seven' associations was applied in order to ensure that overall ratings of confidence were based on the ratings for at least half of the associations in the model. 'Very' confident ratings (either supportive or unsupportive of the model) could only be applied where there were no ratings in the 'opposite' direction (e.g. to get an overall rating of +2 "very confident that the model is supported" there must be at least seven associations rated at a +2 level and no -1 or -2 ratings for any other associations).

Table 4.1 Rules for rating the confidence of support for the overall model by aggregating ratings applied to each individual association in the model

Category	Score	Rules
Very confident that the model is supported	+2	at least 7 of the associations are supported at +2 level and there are no negative ratings
Quite confident that the model is supported	+1	at least 7 of the associations are supported (+1 or +2 rating) and there are no -2 ratings
Quite confident that the model is *not* supported	-1	at least 7 of the associations are unsupported (-1 or -2 rating) and there are no +2 ratings
Very confident that the model is *not* supported	-2	at least 7 of the associations are unsupported at -2 level and there are no positive ratings
Unsure whether the model is supported or unsupported	0	all other combinations of scores

Finally, the quotations and/or information associated with each rating were collated into tables for each individual association in the model.

Data management and collation

Once coding sheets had been completed for each consultant interview, the ratings were entered into SPSS and measures of central tendency (mean and median) of the confidence that each association in the model was supported, were computed for the overall sample and also according to gender and specialty group. Colour-coded versions of the model were also produced to illustrate visually the strength of confidence for each association in the model, based upon the median scores. This facilitated "eyeball" comparisons of the views and experiences of respondents overall, by gender and by specialty group (Barbour, 2001).

4.3.6 Quality assurance

Given that in qualitative interviews, the interviewer becomes the 'research instrument' (Kvale, 1996) it is important to reflect on the impact that I, as the researcher, may have had on the design, conduct and analysis of transcripts for this study. I am a female researcher with psychology undergraduate and health and social policy Master's degrees, and an established track record of research into the occupational causes of poor mental health in NHS health professionals (Taylor, et al., 2007; Taylor, et al., 2005; Taylor & Ramirez, 2010; Taylor et al., 2010). The study was therefore designed on the basis of the theoretical and empirical knowledge I have of this subject area. I am not an NHS employee and so am not employed by the NHS Trusts in which this study took place.

I have been trained formally (through undergraduate and postgraduate qualifications) and informally (through a mixed methods research career spanning 14 years) in qualitative interview methods, and have conducted many research interviews. In the current study, the aim was to test the face validity of a model of occupational stress for hospital consultants that I had developed, on the basis of previous work (Chapters 2 and 3). This may have introduced an unintentional bias, known as confirmation bias, where information that confirmed my preconceptions was favoured. In addition, showing the model to the consultant participants may have introduced a social desirability bias, whereby they confirmed its validity as they felt it was the 'right' answer or because it was what they thought I wanted to hear (Nederhof, 1985). Various studies have shown that there is more likely to be such bias when the

interviewer and interviewees are similar in terms of 'social distance', that is, similar in relation to social class, ethnicity/race or other such social groupings (Nederhof, 1985). In this study all interviewees were consultant doctors from a range of ethnic backgrounds including white British (my ethnic grouping). Their social class grouping (a Class 1A professional) is higher than mine (a University-employed research fellow).

Various methods were employed in order to strengthen confidence in the validity of findings:

Exploring the possibility that findings are the result of social desirability bias: Presentation of the model to consultants was preceded by a series of open questions about consultants' working lives. It was therefore possible to assess the face validity of the model based on a model-naïve section of the interview, as well as analysing complete transcripts. The interview topic guide was not designed for this purpose but did ask consultants to describe their main sources of job stress and job satisfaction, and explored their experience in relation to social support and flexible working. Some aspects of the model would not necessarily have been discussed due to the nature of the questions posed, but responses to these initial questions were analysed in isolation from the remainder of the transcripts, to aid judgement regarding the support for the model and to aid judgment regarding the likelihood of a social desirability bias.

Exploring the possibility that findings are the result of confirmation bias:
Several different methods were employed to strengthen confidence that this bias had not occurred:

1. A second researcher (CCB) who was skilled in qualitative analysis but naïve to the subject area and to the model prior to undertaking this exercise analysed the transcripts independently using the same methods (Appendix XI). CCB rated a stratified random selection of 8 transcripts: 2 transcripts were selected from each of the four groups (male radiologists; female radiologists; male surgeons; female surgeons), using a random number generator (www.random.org). The agreement between the ratings made by CCB and CT was examined and the percentage agreement calculated. Weighted Kappa was considered but not applied to the data for two main reasons (i) due to the small sample size (which impacts on the value of Kappa (Altman, 1990)), and (ii) due to uncertainty over the weight to apply to the '-88' (not discussed) rating which was sometimes applied by one and not the other rater. The method of analysing and presenting agreement (using a colour coded

chart that visually demonstrated extent of agreement/disagreement) facilitated a focus on disagreement as well as agreement, particularly highlighting any instances of extreme disagreement (e.g. positive by one researcher being rated as a negative by the other). This also provides the raw data for the reader to interpret the level of agreement more accurately than a kappa statistic (which can be the same for very different tables of data (Altman, 1990)).

2. *Disconfirming case analysis* – One of the main aims of this study was to purposefully search for disconfirming evidence. These are rated as negatively confirming the individual associations in the model and are clearly documented and discussed in terms of their relevance to refining the model. In addition, transcripts were explicitly searched for evidence that could be used to refine the model, such as the introduction of new constructs or new associations between constructs (as described earlier).

3. *Production of a paper trail* (evidence linking raw data to final report). A detailed description of the methods is provided, as well as tabulated coding frameworks for each individual association in the model, documenting the positive and negative support for the individual associations, supplemented by verbatim or summarised quotations (Appendix XII). This enabled a quality check to ensure that the same rating had been applied to transcripts offering similar information or experiences. It also provides a clear audit trail from transcript to rating for further external validation of the findings. In addition, transcripts of interviews can be provided on request.

4.4 Results

4.4.1 Characteristics of the sample

Twenty-two consultants were interviewed (Table 4.2). Most worked full-time although this varied by specialty and gender; most female radiologists described themselves as working part-time, though for some this was “maximum part-time” (10 sessions over 4 days). The least number of sessions worked was 8 (over 3.5 days). All male radiologists and surgeons worked full-time. Only one female surgeon worked part-time and this was because she was currently on a research sabbatical and was nearing retirement.

There was a wide spread in terms of the number of years they had been a consultant: a quarter of the sample were relatively new consultants (<2 years in post) and half had been a consultant for over 10 years. Most consultants were married or cohabiting, and had young children (aged <18yrs). Of those that were married, the majority of spouses/partners worked full time (n=14) and most were also consultants: only three spouses worked outside medicine (in accountancy, law and media). Only two consultants, both male, had a spouse they classified as a homemaker.

Table 4.2 Characteristics of the interview sample

Characteristics	Total sample N=22	Female Radiologists N=6	Male Radiologists N=5	Female Surgeons N=5	Male Surgeons N=6
Working Status					
FT	16	1	5	4	6
PT 4 days +	4	4	0	0	0
PT < 4 days	2	1	0	1	0
Number of years as a consultant					
<2 years	6	1	2	1	2
2-5 years	2	1	0	0	1
5-10 years	3	1	0	1	1
Over 10 years	11	3	3	3	2
Marital Status					
Married/cohabiting	18	5	5	3	5
Single	4	1	0	2	1
Children					
None	8	1	2	3	2
Children <18yrs	12	5	1	2	4
Children >18yrs	2	0	2	0	0
Occupational status of spouse/partner					
n/a	4	1	0	2	1
Works FT	14	5	4	3	2
Works PT	2	0	0	0	2
Homemaker	2	0	1	0	1

4.4.2 Qualitative thematic analysis of transcripts

4.4.2.1 Part-time working

In the model, working part-time was associated with (a) negative attitudes of co-workers/culture of the organisation; and (b) having low control/job satisfaction.

(a) Association between part-time working and negative attitudes of co-workers/culture of the organisation

The association between working part-time and negative attitudes of co-workers and/or the culture of the organisation was 'quite' confidently supported across the whole sample (Table 4.6, Figure 4.1). Most male and female consultant radiologists and surgeons agreed that this association existed. Only two consultants were rated as not supporting this association, both of whom commented on the absence of negative attitudes of co-workers from their experience. One was a male radiologist who stated that he was not sure that the association existed (but acknowledged he had very few part-time colleagues) (022 M/R); the other was a female radiologist who worked part-time (4 days a week) and said she had never felt negative attitudes:

"*I feel I do my bit and don't feel bad I only work 4 days*" (020 F/R).

Some consultants (both male and female) expressed negative attitudes themselves:

"*I think part-time working is not in the interests of patients*" (015 F/S);

"*I know people who work 3 days [a week] and I perceive them not to be there enough to really have a handle on it [work]*" (013 F/R).

One male surgeon explicitly acknowledged that it is in doing the "*extras*" on top of your paid hours that you earn "*kudos*" (011 M/S) and a male radiologist described part-time workers as "*second class*" if working at a teaching hospital and not able to take on teaching/research elements of the job (014 M/R). The long-hours culture of the organisation was illustrated by a male surgeon who suggested that working part-time in terms of leaving work at 3.30pm was:

"*for me vaguely lunchtime and there's still another 5 hours of work to do and so it's almost like having a half day every day which isn't compatible [with the job as a surgeon]*" (006 M/S).

One female part-time radiologist reported her perception of negative attitudes from a surgical co-worker:

> "*I get the feeling he [surgical colleague] is looking down on me the whole time as I can't go in on a Friday*" (001 F/R).

Several consultants specifically mentioned the culture of the organisation being at odds with part-time working:

> "*It's this '24:7' thing. I've never thought of nights or weekends as anything special and would work every Saturday and Sunday*" (016 M/R);
>
> "*I firmly believe that it isn't from people being unpleasant, but the work environment*" (009 M/S).

One surgeon described the incompatibility of a career as a surgeon and being a family man from his perspective:

> "*being a good father and husband is diametrically opposed to a professional career in surgery, doing the hours and having commitment and being flexible to sort out problems*" (006 M/S).

Some consultants gave accounts of their experience or perceptions that were mixed in terms of support for the model. For example, one male surgeon equates being a good surgeon with "*being there when something goes wrong at 2am*" and that if you have child responsibilities you cannot be as flexible. However he went on to say that it is teamwork that is the crucial element, not physically being there all the time:

> "*You could see patient X, I could operate on that patient, and Doctor Y could look after them post-operatively. That's the way we function ... we try to maintain continuity but know it's not always practical and so do the next best alternative and make sure everybody's up to speed in terms of what's happening to that patient*" (010 M/S).

Some of the criticism of part-time working, particularly for surgery, related to not being available for your patients. However, some consultants raised the fact that often "full-time" consultants were not available:

> "*The surgeons that we have are quite often not in the hospital because they now go to supply so many outreach clinics, so there would be no difference whether they were in an outreach clinic or that was their part-time session off. They're still not going to be there looking after their post-op patients at that stage*" (004 F/R).

When asked about this, one very senior male surgeon began by stating that the difference between his situation (being away from the hospital due to managerial commitments) and a female consultant working part-time due to spending time with her family was that "*if there is a problem in theatre I can nip down*" but then went on to acknowledge that there were times when his other commitments would not allow him this flexibility:

> "*I regularly get called at the last minute to do a reconstruction [and] I just say 'I can't*" (010 M/S).

Another male surgeon disagreed that it was a problem to work part-time in surgery and again raised the importance of teamwork:

> "… *because we're managing things in groups and teams now*" (002 M/S).

This surgeon stated that he was "*not aware of any negativity towards it* [part-time working]" and went on to say that if he requested to work part-time he felt it would be supported, but also went on to comment:

> "[Part-time workers] *find it very hard to get trained*" (002 M/S).

The perspective from some part-time female consultants was that their absence from the hospital was not viewed as positively as their colleagues' absence:

> "*a lot of people actually feel better [about leaving the hospital at a set time] because they have to leave and do their private work … I feel this pressure to report more, to be doing more*" (003 F/R).

A female radiologist who did not feel this pressure recognised that this might be partly due to their service being delivered on multiple hospital sites:

> "*They [colleagues] don't actually know if you're on one of your part-time sessions when you're not working or whether you're at the other hospital*" (004 F/R)

(b) Association between part-time working and having low control/job satisfaction

The association between working part-time and having low control/job satisfaction was also 'quite confidently' supported overall (Table 4.6, Figure 4.1). Only three consultants were rated as 'quite confidently *not* supporting' the model. Of these, one was a consultant currently on a research sabbatical and nearing retirement. She reported the high control and satisfaction she was experiencing being able to focus on her research (015 F/S). The other two (both female radiologists) reported having

control and high satisfaction at work despite working part-time. One rationalised this by stating she had re-assessed her expectations of what she wanted to achieve, describing wanting a career but not wanting "*to have it all as that would mean sacrificing family life*" (020 F/R). The other describes the high level of support for flexibility in her department which she said led to her feeling she had control (004 F/R).

Most male and female consultants provided evidence to support the association between working part-time and having low control. Male consultants often described their experience of working full-time and it awarding them higher satisfaction and/or control:

> "*If you do a lot more than your job plan you have [more] ability to negotiate [flexibility] ... your ability to deal with the nitty gritty of everyday tasks disappears [if you work part-time] as you lose the everyday continuity*" (011 M/S).

Others acknowledged that it was the work that they did outside of their "day job" that awarded them status (022 M/R & 023 M/R), and that committees were "*not a 9-5 activity*" (014 M/R). One female surgeon concurred with this:

> "*If you don't sit on committees you can't be involved in decisions*" (017 F/S)

Another described surgical friends of hers that had that worked part-time as being "*amazingly dissatisfied"* and that they "*tried to get back to working full-time as soon as possible.. to get respected at work*". This surgeon provided an analogy of boarding school to describe her perception:

> "*if you are a boarder you get all the fun of being a boarder, but if you're a day pupil you miss out on all the extra bits, the fun bits, and you're never really included – you're excluded from most things*" (008 F/S).

One part-time female radiologist reported having had to work harder to ensure she kept her profile:

> "*I've had to be twice as good as [full time worker] to keep my profile up*" (001 F/R)

Another reflected back on a period when she worked 3 days a week stating that it hasn't worked for her:

> "*I didn't achieve enough and felt slightly marginalised*" (003 F/R).

A third female radiologist reported on the restrictions to the roles of part-time workers and how her low control at work arises in part from the lack of support she has on her days off:

> "*Part-time workers are perceived or assumed that they won't do the work, therefore they are not given certain roles … I don't have a lot of support on the days I'm off, so when I come back then there's work to do basically*" (013 F/R).

4.4.2.2 Poor work-life balance; domestic/childcare responsibility

Poor work-life balance and/or domestic/childcare responsibility is associated with four other constructs in the model: (a) part-time working; (b) psychological distress; (c) negative attitudes of co-workers/culture of the organisation; and (d) low social support.

(a) Association between part-time working and poor work-life balance and/or domestic/childcare responsibility

The association between having domestic and/or childcare responsibility and working part-time was not explicitly discussed in seven interviews and for most of the 10 consultants that were rated as 'quite confidently supporting' the association it was due to comments that confirmed an implicit assumption that this would be the main reason for consultants working part-time. A couple of female radiologists explicitly stated that once you work part-time, the responsibility for all child-related things falls on your shoulders, regardless of whether you are also working (003 F/R; 004 F/R).

There was less support for the association between poor work-life balance and part-time working as most consultants felt that they failed to achieve a good work-life balance, whether they worked full or part-time. One female part-time radiologist reported often having to work on her day-off and acknowledges her work-life balance is not as good as she would like it to be "*too much work; not enough home*" but that if she worked less:

> "*you get the dissatisfying negative attitudes and you can't get to all the meetings*" (001 F/R)

Another admitted bringing her children into work quite often, doing her emails late at night, and taking work home with her "*mentally and emotionally*" (020, F/R). Of the six consultants interviewed who worked part-time, four worked 8-10 sessions within four days so that they could spend a day with their children. One acknowledged that she had a poor work-life balance as she has no time for herself for sport or anything else:

"*All I do is work or childcare*" (013 F/R)

A full-time surgeon described having a poor work-life balance due to full-time surgery requiring her to work "*ridiculous hours*" and it being "*all encompassing*" (018 F/S). Several male full-time consultants described working evenings and weekends as part of the job, one stating that his wife and family had learned to accommodate it:

"*they are so used to it now that even if I suddenly said 'right well I'm going to be home at this time' they won't believe it and so I'll be at home and often they'd have gone out*" (006 M/S)

Another surgeon who acknowledged his hours were unpredictable and long, especially during the week, but reported making up for it at weekends and holidays:

"*They [his family] know what's involved but when we take time off for holidays we have a really good time, and we try to protect weekend time*". (011 M/S)

Two consultants (a female surgeon and male radiologist) described having a good work-life balance. Neither had children, and one started work very early so she could leave at 5pm:

"*It works for me because I get a proper break [from work]*" (008 F/S)

The other worked his programmed activities within 4 days, having two afternoons off in his job plan:

"*I have probably a very good work life balance ... my little bits of time off during the week are very useful ... I go and have coffee with my friends, I go shopping, I forget about work and I think I'm quite lucky*" (021 M/R).

One part-time female radiologist described her perception of her work-life balance depending on the support she had around her:

"*At times I think yes I do [have a good work-life balance]. When my nanny's not sick and my husband's in the country, so when all your ducks are in a row, yes I do. But when it's not and I'm stretched because I'm stretched at home, then I think actually I'd rather be at home more, because then I'm snapping at the kids and things are all shambolic and I don't know where their stuff is, and it's just because my mind's all over the place*" (020 F/R).

(b) Association between psychological distress and poor work-life balance and/or domestic/childcare responsibility

There was strong support for the association between psychological distress and having a poor work-life balance and/or having childcare/domestic responsibility (Table 4.6, Figures 4.1 to 4.5). Indeed only two consultants were rated as providing evidence that was contrary to the model. Both were female surgeons who had trained many years ago (and were very senior at the time of their interview). One described the multiple levels of support she has in terms of childcare that ensure that despite having responsibility for childcare:

"*I have no problems at home that have an influence on my work*" (015 F/S)

The other describes work-life balance as being a new concept:

"*When we were training nobody was thinking about work-life balance, it was just work*" (018 F/S)

This surgeon equated having a good work-life balance with working fewer hours and therefore having much less experience. This she describes as being "*scary*" and "*not fair*" on the trainees:

"*I just think it's not fair on them coming out there inexperienced, because then you put them in a position of responsibility and they're not actually competent to do it and that leads to all sorts of terrible things like being up before the GMC*" (018 F/S).

A common theme was the stress experienced by women with primary responsibility for childcare, juggling work and home:

"*All childcare issues fall to the woman… I don't do anything for myself – you are sacrificing your wellbeing in order to be [mother and worker]*" (001 F/R).

A male consultant with no children had deliberately organised his job plan to have two half days where he is not contracted to work. He admits that this is good for his health and rarely takes work home:

"*It's important otherwise you start worrying at home – you have to learn to cut off work*" (021, M/R)

Similarly a female surgeon who was single with no children reported making sure that she arrived at work early (6.30am) so she could leave:

> "*around 5pm to go to the gym, see friends and get a proper break … I start to go my most mad when I can't*" (008 F/S).

A full-time female radiologist with no children acknowledged the difficult role that part-time consultants had (with childcare responsibilities) commenting that they:

> "*never get any down time as either full-on work or looking after your kids*" (019 F/S).

This was supported by a part-time female radiologist:

> "*All I do is work or childcare. I don't do anything else. It would be better for me to do some sport*" (013 F/R).

A male surgeon with a wife and children acknowledged he had a poor work-life balance but that when he is able to limit his hours at work he notices the benefit:

> "*When I get home at a reasonable time … it does me good*" (006 M/S)

He also acknowledged that the long hours he worked were a source of conflict between him and his wife:

> "*She's given up relying [on me] that's the disappointing thing, it's now a joke … she's sick of the fact that it's always a struggle for her to go out because I'm never there*" (006 M/S).

(c) Association between negative attitudes of co-workers/culture of the organisation and poor work-life balance and/or domestic/childcare responsibility

This association was strongly supported. Only two consultants were rated as not supporting this: one explicitly stated that negative attitudes were not an issue in his experience (010 M/S), and the other was a young consultant (less than a year in post as a consultant) who worked 10 sessions across 3 full and 2 half days and said he felt "*no great pressure to stay at work*" on his half days and that he rarely had to (021 M/R).

Three consultants were rated as providing mixed support, for example, one male surgeon states that he can leave "*early*" if he wants – implying that the culture of the organisation did support having a good work-life balance, but also then went on to say that he works very long hours and often at weekends. One consultant reported that

the flexibility demanded of him by the organisation was reciprocated when he needed it, and felt this was partly due to working in a department where many of his colleagues had families "*and so they understand it*" (002 M/S).

The association between the culture of the organisation and poor work-life balance was acknowledged by a number of consultants:

> "*There are times when colleagues are away that my day starts at 7am and may finish at 8/9pm*" (019 F/R)
>
> "*As time goes on you realise how much work you do that's outside your working hours. Managers just expect you to come in on your day off; they think they just have to pay you*" (017 F/S)

This surgeon implied that managers don't consider the importance of time off and work-life balance. Another consultant commented that even when managers did offer time-off in lieu of the extra work it was not possible to take it:

> "*You can't [take the time off] because of your patients*" (002 M/S).

A female radiologist admitted that she was asked to come into work on occasion even when she was not on-call and that she often has to bring her children into work at these times:

> "*I get asked to do on-call 'unofficially' when not on-call*" (020 F/R).

Only a few consultants explicitly agreed with the association between having childcare responsibility and negative attitudes of co-workers. One female surgeon stated that it was "*unacceptable to be pregnant*" in her department and that when she was appointed to her post a senior colleague had said:

> "*Now you've got a job I think we probably ought to book you onto the next gynae list, have your tubes tied and then we know you can't have any children*"

She described this as:

> "*Semi-serious ... they have this obsession with female surgeons that have babies never come back the same person they went away*" (008 F/S).

The view that a career in surgery was incompatible with having a good family life was supported by another male surgeon (009 M/S). Furthermore, a senior male radiologist who managed a department was critical of a female part-time colleague whom he felt was not engaged fully in work due to her wanting to remain available should her family need her:

"[She] d*oes not disengage from family whilst at work ... always has her phone available*" (014 M/R).

(d) Association between low social support and poor work-life balance and/or domestic/childcare responsibility

The support for this component of the model came mostly from consultants acknowledging the importance of the practical and emotional support they received from people at work and at home in facilitating them to have a better work-life balance. This included having layers of support at home in terms of nannies and other childcare support (as a 'back-up'), and working with supportive colleagues. One senior radiologist acknowledged the support of his team covering reporting of films for him if it is away giving a lecture. He says he had a full-time nanny when his children were young as well as a "*secondary layer of support*" with an extended family around him. He acknowledged that he did not have to take much responsibility for childcare or domestic issues due to the high amount of support he had (014 M/R). One female radiologist who also has a nanny to provide childcare support stated that her work support was however poor and was a major source of stress for her (013 F/R). Several consultants mentioned the cost of childcare. One male surgeon pointed out that if you work part-time you earn less money and:

"[You] *therefore have less ability to employ the social support you need to be able to do the work*" (011 M/S)

A female radiologist commented on the indispensability but expense of her nanny:

"[I have an] *expensive but totally fantastic nanny who stays there until I get home and is amazing. She costs me almost all my salary but I enjoy coming to work so it's worth it*" (004 F/R)

A key theme from consultants who reported having good flexibility was having informal systems of support in place with their colleagues:

"*I have a colleague who can cover, and vice versa, so I can get to my child's assembly or whatever*" (020 F/R).

4.4.2.3 Low social support

In the model, low social support was associated with (a) psychological distress and (b) having low job control/satisfaction.

(a) Association between low social support and psychological distress

Every consultant was rated as providing either 'quite' or 'very' confident support for the association between low social support and psychological distress (Table 4.6, Figure 4.1). Some specifically acknowledged the importance to their wellbeing of the practical and emotional support they received both at work and at home:

> "*I have a fantastic nanny who is flexible, very good friends and colleagues. When the support goes wrong it all goes wrong*" (020 F/R)

One male surgeon had a weekly social "*debrief*" with some colleagues who had become friends, stating:

> "*If I didn't have their support I'd be off sick*" (006 M/S)

One female radiologist specifically stated that her nanny protected her mental health:

> "*Keeps me out of psychological distress*" (004 F/R).

Others described their lack of support as a major cause of stress for them:

> "*It's not the work itself it's the lack of [practical] support [that is stressful]*" (002 M/S);
>
> "*I don't have a named secretary – it's an enormous amount of work to do in my own time … I've never had to take a day off as I've got good childcare… god forbid if I had to*" (001 F/R)
>
> "*I think the support is huge ... in September my secretary resigned and she was not replaced until [late December] ... so there I am running 450 students, 2 national meetings, on top of a quite heavy workload and lots of other things coming through ... with no secretary, nothing*" (012 F/S).

One female surgeon described the lack of emotional support available at work and the impact this had on her:

> "*You have to be seen to be coping ... I see faces of mine [patients] that have died*" (008 F/S)

This particular surgeon held a very senior post and referred to the isolation of having such responsibility:

> "*I've felt very isolated recently I think because I'm [Leading Role] and I've been leading everything, people come to me with their problems and I'm having to do things that people don't necessarily 110% agree with, but I have to do … you sometimes feel it's quite lonely*" (008 F/S).

One male surgeon, married to a female surgeon, stated that confiding in your spouse when there are problems at work can have a downside though he acknowledged that he did discuss problems with her:

"*They can escalate problems as they get defensive for you*" (002 M/S)

(b) Association between low social support and having low job control/satisfaction

The association between low social support and low job control/satisfaction was also confidently supported by all except two surgeons. It was not explicitly discussed with one of the surgeons (008 F/S) and the other surgeon reported having low control despite reporting having a high level of emotional support from his colleagues (006 M/S). Most other consultants reported an association between these constructs. In relation to support at work, those that had good support acknowledged its importance:

"*I have good support at work from colleagues, it means I can go home and switch off and know my patients are in good hands*" (007 M/S);

"*I've got very good support from my colleagues ... it's very rare for me to feel put upon ... I have a reasonable amount of control over my job as it does offer me some flexibility ... if there's a problem and I'm on call I will come and deal with it, but if I'm not on call one of my consultant colleagues will come and deal with it*" (021 M/R).

Those that felt they were lacking support at work described its impact:

"*Management in the NHS has eroded autonomy. Managers choose the appointment of new staff rather than clinicians, so you don't end up with the right people*" (015 F/S);

"*You spend lots of valuable time sorting out management/administration things that are completely out of your control*" (003 F/R).

In relation to support at home, some female consultants reported the impact that not having a wife at home had on them:

"*Not having a 'wife' means I have less time for CPD and research*" (013 F/R);

"*Not being able to attend early meetings makes you feel upset and dissatisfied*" (001 F/R).

Equally, one male consultant who did have a wife at home acknowledged the impact this had on his work-life:

"*It meant I could dedicate fully to the job*" (014 M/R)

Another concurred that support from home was critical:

"*I think if your work-life is not supportive of your home you'd be unhappy but if you home-life is not supportive of your work you'd be 10 times more unhappy – it's seriously disproportionate*" (002 M/S).

4.4.2.4 Low job control/satisfaction

(a) Association between low job control/satisfaction and psychological distress

Except for three consultants with whom this was not explicitly discussed, all others provided 'quite' or 'very' confident support for this association. Some described the impact that low control had on their wellbeing:

"*When I'm not in control I feel stressed*" (020 F/R);

"*What is most stressful about working life is the things you have no control over*" (006 M/S);

"*The low control … feeling disempowered quite a lot. Decisions are being made by non-clinical people -that's a distress*" (002 M/S);

"*Stress? It's things that aren't within my control*" (017 F/S).

Others described the positive impact that high control had on their wellbeing:

"*My high control enables me to delegate and ensure I get work-life balance*" (010 M/S);

"*I think I feel in my job as I've got plenty of control, as much control as I want of what I do in my job plan, so perhaps that's one of the reasons why I don't feel like I have any psychological distress because I feel like I'm totally in control of what I do*" (004 F/R).

One female radiologist described the satisfaction she derived from working as an examiner and the impact it had on her professional status:

"*it raised my profile with the junior doctors more which then makes me feel better about myself*" (001 F/R).

(b) Interaction between low job control/satisfaction and high job demand/stress in terms of their association with psychological distress

Every transcript was rated as either 'quite' or 'very' confidently supporting this aspect of the model. Some consultants stated explicitly that they interacted with each other:

"*[Being an examiner] is a huge amount of extra work but huge satisfaction, so it's a trade-off*" (001 F/R);

"*High demand leads to low control as work is then driving you. Best is when [you have] high demand but the capacity to meet the demand*" (006 M/S);

"*If there wasn't flexibility to increase control, then people wouldn't cope with it [being a doctor]*" (011 M/S).

One female surgeon described feeling increasingly pressured at work and that the main source was:

"*being given all of the responsibility, you get all the flack, it's your name at the top of the bed, it's your name in the notes, it's your responsibility irrespective of whether you have caused whatever people are not happy with ... but you have none of the power, you have zero power ... You have all the responsibility but none of the control, and certainly none of the power. This leads to a huge amount of pressure*" (012 F/S).

One senior male radiologist described the impact that positive feedback could have to counter the effect of the high demand:

"*Most consultants can cope with stress but if it happens in a chronic way, and there's no mechanism to tell you that 'yes it's really stressful but actually you're doing a really good job and look at all the good you're doing, that's fantastic, let's talk about how we might be able to develop the service to maybe make it less stressful' if there's not that engagement I could see if would be utterly soul destroying*" (014 M/R).

4.4.2.5 High job demand/stress

In the model high job demand/job stress was associated with psychological distress independently of job control/satisfaction. For three consultants this was not supported. One male consultant, a transplant surgeon, stated that despite having a very demanding job it did not stress him because his work was "*life or death*" which he said "*puts daily stressors into context*". He added:

"*I don't think for me high demands add to my stress but definitely control does and so anything that can give me more self-control, gives me more control over distress*" (007 M/S).

Another surgeon did not see stress as necessarily having a direct link to psychological distress as it was inherent to the job:

"*I think its part of the job really to have stress*" (009 M/S)

A female radiologist stated that high demand might be a personal choice:

"*It's a personal thing, you just want to do your work and you want to do it well and you don't want to leave before you've done this or that or the other. Within this department there aren't any particular pressures on you that you must stay ... it would be very easy to say to someone else actually I need to go now, could you do this?*" (004 F/R).

All other consultants provided 'quite' or 'very' confident support for the association between high demand and psychological distress. One female radiologist described having two days in her week where she is meant to be in "*three places at once*" and described the impact this had on her:

"This gives me *huge stress because I always feel at the end of the day like I simply haven't done it [the work] … by Wednesday evening I'm good for nothing*" (019 F/R).

A newly appointed male radiologist described the demand that he felt from taking on a management role but feeling insufficiently trained for it, and describes the physiological impact that this has on him in meetings:

"When I go to big meetings I know I need to say something, I can feel myself getting stressed and I'm starting to sweat and my voice goes" (021 M/R).

A male surgeon who completed some of his training in USA described the impact that the long-hours culture had on him:

"*It was fearsome. I must admit it wasn't good for my personality, it made me short-tempered, I'd lose my sense of humour, I'd have no patience ... I wanted everything done now ... occasionally when things freak me out - it happens to me every few months only - but when I do hit the roof people dodge and run for cover. I don't abuse anybody, I don't bully anybody, but I think it's not good for me and it's not healthy if I do that frequently either* " (002 M/S).

Others described the association between high demand and psychological distress for them:

> "*Having too much to do in too little time ... you spend your whole day and your life punishing yourself for not having done all the things that you meant to have done*" (006 M/S);
>
> "*The number of meetings has gone prolific ... I pack 5 days' work into 4 so I'll never have a coffee, never have a lunch, I'll never stop. I've been working here since 1997 and I've never been for a coffee. What's upsetting is that when I do a breast clinic the radiographers go off for lunch and coffee and the doctors never go off for lunch, we're just doing patient after patient and everyone else goes off ... you think 'why am I not human like you' as a doctor it is not acceptable, or frowned upon that you're allowed a break or a coffee. No one thinks you have normal needs*" (001 F/R).

4.4.2.6 Negative attitudes of co-workers/culture of the organisation

In the model, negative attitudes of co-workers and/or the culture of the organisation was associated with (a) psychological distress; (b) high demand/job stress; (c) low control/job satisfaction. Of all the associations in the model, these were the most likely to be unsupported as three consultants stated that negative attitudes of co-workers did not exist in their experience. This included two female part-time radiologists (020 and 004) and a male full-time radiologist (022). There was also a relatively high number of consultants with whom these associations were not specifically discussed (6 consultants where the association with psychological distress was not discussed; 4 where the association with high demand was not discussed; and 5 where the association with low control was not discussed).

(a) Association between negative attitudes of co-workers/culture of the organisation and psychological distress

Only two consultants were rated as providing 'very' confident support for this association: a female surgeon and a female radiologist, both of whom reported personal experience of having negative attitudes and/or an inflexible organisation. The female surgeon had requested to work part-time temporarily after the birth of her daughter due to health complications but had this request refused, being told it would either be a permanent change or she had to come back full-time (012 F/S). The female radiologist described the negative attitudes of her co-workers regarding her not being at work one day a week "*it's very frowned upon*", and also the "*aggressive men*"

that she had to work with she described as a major source of stress for her (001 F/R). Two female surgeons acknowledged that the discrimination and negative attitudes existed but that they had managed to avoid it impacting on them. One thought this was because of her race:

> "*I'm of Indian background so I don't think any of the discriminations ever worked in my case. I've been really fortunate*" (015 F/S).

The other stated that she had been "*incredibly lucky*" not falling subject to the discrimination she saw going on (018 F/S).

Another female surgeon described her mechanism for dealing with the sexism she witnessed at work:

> "*You have to knuckle down and be one of the boys. Don't let yourself be offended by the sexist jokes... they do it to test you to an extent*" (008 F/S).

Several female radiologists agreed that negative attitudes prevailed:

> "*There are probably one or two people* [in her department] *who definitely think like that*" (003 F/R);
>
> "*Certainly when having kids certain comments were made to me and people don't give you responsibility*" (013 F/R).

Another female radiologist described the difference between her and her male colleague's response to failing at a procedure and how this was perceived by the wider department/organisation:

> "[My male colleague] *if he does fail he won't accept it, and he's considered more driven, more focussed, more committed*" whereas "*I move on … I think 'that didn't work, what would I do next time' … without feeling beaten by it. It's a means to an end, it's not the end itself … but [my reaction] could be seen as a negative thing or a limiting thing*" (019 F/R).

Some male consultants also acknowledged that negative attitudes existed; one radiologist stating that preventing the attitudes required appropriate support structures:

> "[so that colleagues] *at the coal face [could be told] yes they're going on maternity leave but don't worry about it because the structure is there to protect you ... that's the thing that hurts people*" (023, M/R).

(b) Association between negative attitudes of co-workers/culture of the organisation and high demand/job stress

There was strong support for the association between the culture of the organisation and high demand/job stress, in particular the 24:7 culture of working:

> "*I don't suffer from this [negative attitudes] as I'm always seen to be working hard… I don't slope off or have time off or days off and have worked 24:7*" (021 M/R)

Another consultant inferred that this might be worse in a teaching hospital due to the added burden of research and teaching commitments:

> "*Expectations are only met outside 9-5 hours*" (014 M/R).

One male surgeon, who had recently had been on sick leave for a three-month period, described that he received instant support and was put under "*no pressure*" to return to work, although at a later point in the interview he admitted that he had been encouraged to attend for a particular meeting as his absence from it would not have been beneficial to him:

> "I was *advised to come in for this* [meeting] *because it'll swing such and such*" (002 M/S).

In relation to negative attitudes of co-workers and the impact this had on job demand/job stress, several female consultants described their difficult encounters with male colleagues:

> "*Meetings with aggressive men [are stressful] ... the male world does not take flexibility into account*" (001 F/R)

However one who stated that her "*surgical colleagues can be judgemental and unappreciative*" (003 F/R) stated that one of her female colleagues did not feel the same as her about this. Several male consultants conceded that female consultants probably did have to work harder to be considered as good:

> "*Females probably do have to perform that little bit better to be acceptable*" (010 M/S)

One male surgeon described a female surgical colleague who was respected but stated that this was because she was single and hasn't got children so "*can behave like a man*" (006 M/S).

(c) *Association between negative attitudes of co-workers/culture of the organisation and low control/job satisfaction*

Several consultants described their perception that autonomy had been eroded due to the culture change in the NHS that has included the introduction of managers, big mergers, and more regulation such as job planning:

> "*The job planning culture of the organisation has led to a loss of autonomy and restrictions about time for unplanned activities*" (014 M/R).

One consultant described the poor infrastructure of support as being part of the culture of the organisation, and that it was this that led to low control and satisfaction (023 M/R).

Others described the impact of negative attitudes of co-workers on control and satisfaction in relation to how she was perceived by others:

> "*One main stressor is being seen to do my job properly, not the clinical bit, it's all the extras*" (001 F/R).

A female surgeon described the damage that positive gender discrimination could do in terms of how such women would be subsequently viewed. The female surgeon had been approached by a senior female surgeon "*an incredible surgeon*" who had a reputation for supporting women into surgery, but she says declined her invitation as it would not have helped her gain the respect she wanted and deserved:

> "*I backed off because I saw in my colleagues eyes that they saw what she was doing and didn't really respect it, because she was supporting people because they were female and not because they were great at their job*" (008 F/S).

This was supported by a male surgeon who stated:

> "*if you give in to the advances of male senior colleagues you will always be known as getting the job due to giving in*" (002 M/S).

Some male consultants described female consultants as having more difficult relationships with (female) nurses, as found in the previous study:

> "*Nurses don't respect female doctors as much*" (003 F/R); "*to get women to do work for them they [female consultants] often have to be charming and friendly and bring in cakes and all that*" (002 M/S).

One female radiologist also concurred with this:

> "*Particularly with nursing staff, I remember that when I was on the wards in clinical medicine it's actually really quite difficult as a woman*" (003 F/R)

However another female consultant, a surgeon, spontaneously mentioned that her good relationship "*with my ward nursing staff*" was fundamental to her job satisfaction:

> "*They're good fun to work with ... and my nurse specialists are just complete bricks*" (008 F/S).

4.4.3 Quantitative analysis of transcripts

4.4.3.1 Reliability of ratings

Ratings by the two independent raters were compared for agreement (Table 4.3). This revealed that out of the 112 ratings completed by the two raters:

- 46 were identical (40%)
- 39 were one point on the scale apart (36%)
- 5 were more than one point apart on the scale (4%)
- 22 'disagreed' due to one rater giving a rating of 'not discussed' and the other rating the association as being discussed (18%)

Across all eight transcripts the agreement between raters ranged from 7 to 13 out of the 14 associations in the model. The highest agreement was for the transcript of an interview with a female surgeon (ID 8), where 8 ratings were identical and 5 were within one point on the scale. The only pair of ratings that did not meet these criteria was for the confidence that the association between low social support and low job satisfaction/control was supported. This was rated as '*not discussed*' by CT but given a '*quite*' confident rating by CCB.

The lowest agreement was for a transcript of an interview with a male surgeon (ID 11) where only 4 ratings were identical and 3 were within one point on the scale. Five of the associations in the model were deemed 'not discussed' by one of the raters but awarded a rating by the other. There were two aspects of the model that were rated at odds by the two raters: the association between poor work life balance/domestic/child responsibility and low social support was rated as 'quite' confidently supported by one rater, and quite confidently NOT supported by the other; and the association between low social support and psychological distress was rated as 'very confidently supported' by one rater, and 'unsure/mixed' by the other.

Table 4.3 Concordance in confidence ratings between two independent raters

ID	Rater	Association in the model														N (%) agreement** within transcript
		Part time/neg attitudes	Part time/ low control	Poor WLB*/ part time	Poor WLB*/ Psych distress	Poor WLB*/ neg attitudes	Poor WLB*/ low soc support	Low soc support/ low control	Low soc support/ psych distress	Low control/ psych distress	High demand/ psych distress	Interaction Demand/ control	Neg attitudes/ Psych distress	Neg attitudes/ High demand	Neg attitudes/ Low control	
3 F/R	CT	2	2	2	2	-88	-88	1	2	1	1	1	1	2	2	12 (86)
	CCB	1	2	2	2	0	0	1	1	1	2	1	1	1	1	
7 M/S	CT	-88	2	1	1	0	-88	2	1	2	-2	2	0	-88	0	10 (71)
	CCB	-88	2	2	2	2	1	2	2	2	-2	2	-88	-88	-88	
8 F/S	CT	2	2	1	2	2	-88	-88	2	1	2	2	1	1	1	13 (93)
	CCB	2	2	1	1	1	-88	1	2	0	2	2	2	1	1	
11 M/S	CT	2	2	1	2	2	1	1	2	-88	1	2	-88	-88	-88	7 (50)
	CCB	-88	2	2	2	2	-1	0	0	2	0	2	0	0	2	
13 F/R	CT	2	2	1	1	2	1	2	1	2	1	1	1	1	1	12 (86)
	CCB	1	2	1	1	2	-1	2	2	1	1	-88	2	2	1	
14 M/R	CT	1	1	2	-88	2	2	2	1	1	1	2	-88	1	2	12 (86)
	CCB	2	2	2	0	1	1	1	0	0	0	2	0	1	2	
17 F/S	CT	2	2	1	1	2	1	1	1	1	-88	1	-88	2	2	10 (71)
	CCB	2	2	2	2	2	-88	2	2	-88	-88	2	2	-88	2	
21 M/R	CT	0	0	-88	2	-1	2	2	2	1	2	2	1	2	-88	9 (64)
	CCB	-1	2	2	1	-1	-88	1	1	1	-88	1	2	2	1	
N (%) agreement** within association in model		7 (88)	7 (88)	7 (88)	7 (88)	6 (75)	2 (25)	7 (88)	7 (88)	6 (75)	7 (88)	7 (88)	4 (50)	6 (75)	5 (63)	Mean N (%) 10.6 (76%)

Key:
Dark Green = exact agreement
Pale Green = agreement within one point on the scale
Pink = rated "not discussed" by one rater; other provided a rating
Red = ratings at least 2 points apart.

*WLB = work-life balance and also includes domestic/childcare responsibility ** agreement = identical ratings (dark green) or within one point on the scale (pale green)

-2 "very confident" that the association is not supported
-1 "quite confident" that the association is not supported
-88 not discussed
0 "mixed" with neither positive nor negative support being dominant
+1 "quite confident" that the association is supported
+2 "very confident" that the association is supported

4.4.3.2 Overall support for the model: response to 'anchor' question

Except for one response, all responses to the anchor question - where consultants provided their initial appraisal of the model - were rated as '*quite*' or '*very*' confidently supporting the model (Tables 4.4 & 4.5). A few consultants specifically referred back to the early part of the interview (prior to showing the model) in terms of the fit of their experiences with the model:

> "*Most of the things we've [already] talked about are included somewhere in one of these boxes*" (008 F/S).

There was little difference according to gender or specialty in relation to ratings except that female radiologists were more likely to be coded as '*very'* confidently supporting the model compared to other consultants.

The main distinction between those rated as '*quite*' rather than '*very*' confidently supporting the model was that those rated as '*quite*' confidently supporting the model were likely to suggest a refinement (perhaps an additional arrow linking two constructs together, or a rewording of a construct), but had provided a positive appraisal of the model and confirmed that they did not feel there were any major improvements that could be made. Only one consultant was critical of the model. A male surgeon stated that the model was:

> "*Multi-factorial on the side of the doctor and not on the side of the stress*" (009 M/S)

This was because as I had not explained properly to him that the diagram simplified the constructs and that job satisfaction and job stress broke down into many components; he also felt that the constructs should be weighted according to their relative contribution to psychological distress, and that individual pre-disposing vulnerabilities (such as upbringing and coping mechanisms) should be included.

4.4.3.3 Overall support for the model: aggregated confidence ratings

The aggregated confidence rating (computed from the ratings for all 14 individual associations) revealed a very similar pattern to the rating based upon the anchor question only (Table 4.4). This aggregated rating had a median score equating to being '*quite*' confident that the model was supported, regardless of whether based on the whole sample or on the gender or specialty sub-samples. This meant that for

most transcripts at least half of the 14 associations in the model were positively supported, and there were no -2 ratings (*very* confident that the association is *not* supported).

Ratings based upon only the initial part of each transcript (prior to the model being presented) revealed a different pattern. Confidence ratings were lower in general, and across the whole sample the median and mean rating was '*unsure*'. However, examination by gender and specialty revealed that two thirds of female consultants (5 radiologists and 2 surgeons) were rated as providing '*quite*' confident support for the model despite not having seen it. Only one male consultant (a surgeon) was rated as '*quite*' confidently supporting the model using only the early part of the interview. In the majority of cases the overall '*unsure*' rating was due to the high proportion of associations in the model not being discussed in this preliminary section of the interview. No transcripts were rated as having provided sufficient negative support for the model to receive a rating of '*quite*' or '*very*' confident that the model is <u>not</u> supported.

Table 4.4: Confidence that model is supported based on 'overall scores' for whole sample, by gender & by professional group

Confidence that the model is supported, based upon:	N consultants scoring at each point on the scale																								
	Whole sample n=22					Gender										Specialty									
						Male consultants n=11					Female consultants n=11					Surgeons n=11					Radiologists n=11				
	-2	-1	0	+1	+2	-2	-1	0	+1	+2	-2	-1	0	+1	+2	-2	-1	0	+1	+2	-2	-1	0	+1	+2
Response to anchor question immediately after presentation of the model.	1	0	1	11	9	1	0	1	6	3	0	0	0	5	6	1	0	1	5	4	0	0	0	6	5
Mean (SD)/ Median	1.2 (0.9) / 1					0.9 (1.1) / 1					1.6 (0.5) / 2					1.0 (1.2) / 1					1.5 (0.5) / 1				
Aggregated confidence rating using whole interview transcript (computed from ratings for each individual association)	0	0	4	15	3	0	0	2	9	0	0	0	2	6	3	0	0	1	9	1	0	0	3	6	2
Mean (SD)/ Median	1.0 (0.6) /1					0.8 (0.4) / 1					1.1 (0.7) / 1					1.0 (0.4) / 1					0.9 (0.7) / 1				
Aggregated confidence rating using early part of transcript only, before presentation of the model (computed from ratings for each individual association) *(n=21 as one female surgeon shown model at the start of the interview due to time limitations)*	0	0	13	7	1	0	0	10	1	0	0	0	3	6	1	0	0	7	3	0	0	0	6	4	1
Mean (SD)/ Median	0.4 (0.6) / 0					0.1 (0.3) / 0					0.8 (0.6) / 1					0.3 (0.5) / 0					0.6 (0.7) / 0				

Key:

Very confident that the model is not supported (-1.5 to -2)

Quite confident that the model is not supported (-0.5 to -1.4)

Very confident that the model is supported (1.5 to 2)

Quite confident that the model is supported (0.5 to 1.4)

Unsure/mixed (+0.4 to -0.4)

Table 4.5 Responses to anchor question immediately after presentation of the model

Rating	ID number Gender/Specialty	Examples/rationale for rating
+2	015 F/S	"I think that's actually what is happening… I can see very easily what this is about ... [the model] it's excellent. I think this is actually what is happening"
	008 F/S	"Most of the things we've [already] talked about are included somewhere in one of these boxes. I think it's pretty comprehensive"
	014 M/R	"I think it's really good. It resonates because I can absolutely see that if social support [at home] is not sorted out then you're going to be in trouble. It's a very good model, although simple there's a huge amount in some of those boxes"
	013 F/R	"I don't think there is anything else I can think of that you should add. Just looking at the diagram, the model looks fine"
	001 F/R	"I think it's perfect"
	004 F/R	"I can see it looks like a very good model and I think it's right"
	003 F/R	"looks pretty good"
	007 M/S	"I think it's very good. Everything I can think of can fit into one of the boxes"
	006 M/S	"It's got all the components in there"
+1	016 M/R	"I think it's a good model ... need to allow for deliberately low expectations some women have, which leads to low job satisfaction … work-life balance (associations in model) was certainly true"
	023 M/R	"We've talked about some of this. Of course the job is demanding and that in itself leads to stress and we've talked about that. It usually impacts when I'm trying to get something done and I always have a stream of people, but the flip side of that is well, if they didn't come I'd think maybe they don't want my opinion" [continues to talk through the other components of the model and agree]
	021 M/R	"I think they all logically link in the way you've put the arrows. Maybe part-time working is stressful independently"
	022 M/R	"I think that's very true actually. That's a good model"
	019 F/R	"I think [the model] is right"
	020 F/R	Does not answer the question directly but begins to describe her experiences and how they fit with the model
	018 F/S	"I can't respond regarding part-time working as I've always worked full-time and don't have any children, but there is nothing missing or wrong"
	002 M/S	"I think it's pretty good" [suggests some rephrasing but no other changes]
	010 M/S	"Yes I do [think it's good] It's not missing anything, except perhaps an emphasis on home-life"
	012 F/S	"I think it's OK but not comprehensive" [but when pressed to describe anything that is wrong or missing or could be improved she cannot describe anything, and talks around each aspect of the model and agrees with it]
	017 F/S	"I wouldn't disagree with any of those things at all. I can't think of anything else"
0 – mixed/unsure	011 M/S	"I think it's interesting … the dollar sign is missing from the model"
-1		
-2	009 M/S	"How much is child delivery a confounding variable in this? Because you have postnatal stress which seems to be to be a major form of stress in part-time workers" "It's multifactorial on the side of the doctor and not on the side of stress … I think there should be more focus on where the stress is coming from, what kind of stress" "the model does not weight individual boxes" "Perhaps I have highlighted the need for looking at individuals and their own upbringing as a possible cause of how they cope"

4.4.3.4 Support for individual associations within the model

The median rating for each of the 14 individual associations in the model equated to either '*quite*' or '*very*' confident support, regardless of whether examined across the whole sample or by gender or specialty sub-samples (Table 4.6, Figures 4.1 to 4.5). Few consultants (maximum of three) provided data that was rated as '*quite*' or '*very*' confidently not supporting the model. This meant there were no negative (unsupportive of the model) mean or median ratings for any associations.

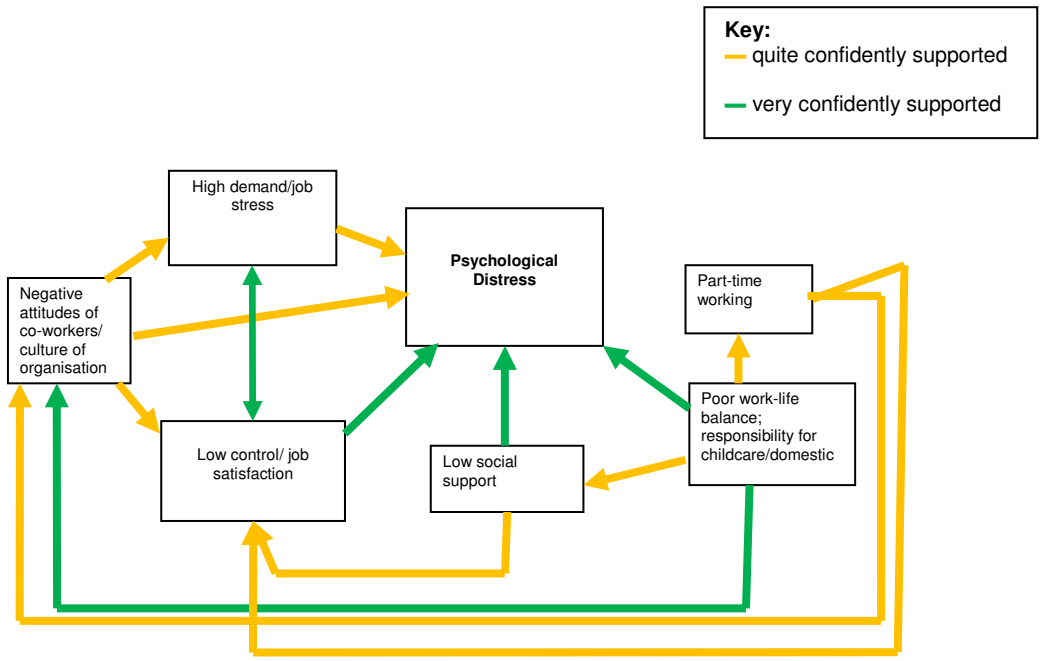


Figure 4.1 Confidence model is supported: whole sample (median scores)

Examination of the data according to gender (by eyeballing the data and diagrammatical representations of the model) suggested there was more confident support for the model in the transcripts of female compared to male consultants (Figures 4.2 and 4.3). This included more confidence for the associations between (i) negative attitudes of co-workers/culture of the organisation and both part-time working and poor work-life balance/domestic & childcare responsibility, and (ii) the association between part-time working and low control/job satisfaction. The strong confidence in the validity of the association between low control/social support and psychological distress shown in the whole sample was not so apparent in the transcripts of male consultants. In general, male consultants tended to provide examples and perceptions that were rated as less confidently supporting the model except for the work-specific constructs and associations (e.g. the association between high demand/job stress and psychological distress; and for an interaction between job

stress/demand and job satisfaction/control in terms of association with psychological distress).

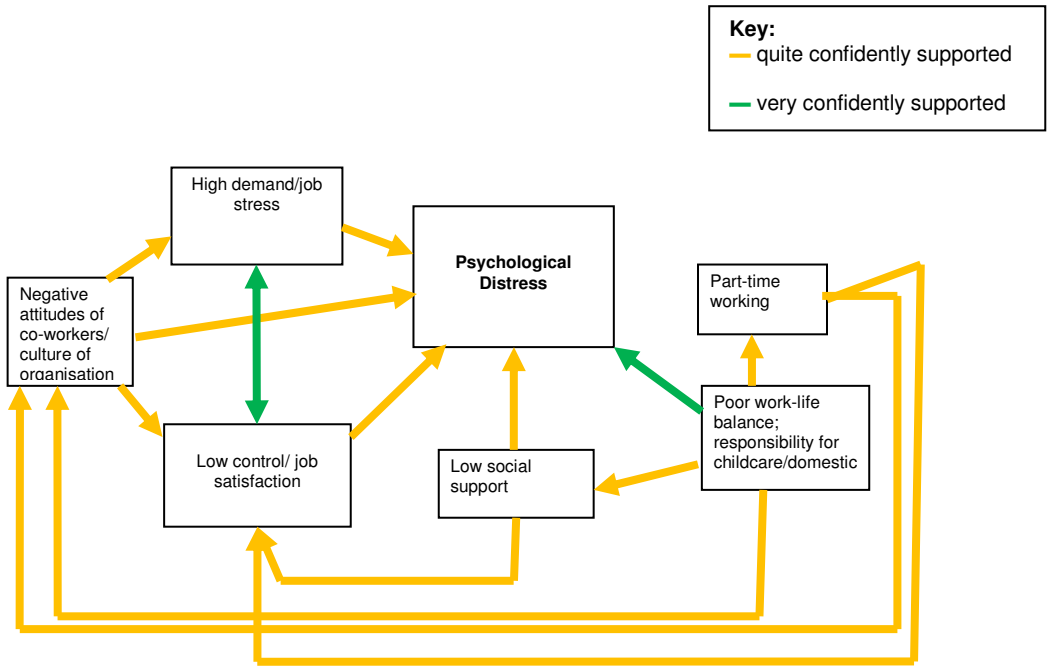


Figure 4.2 Confidence model is supported: Male consultants (median scores)

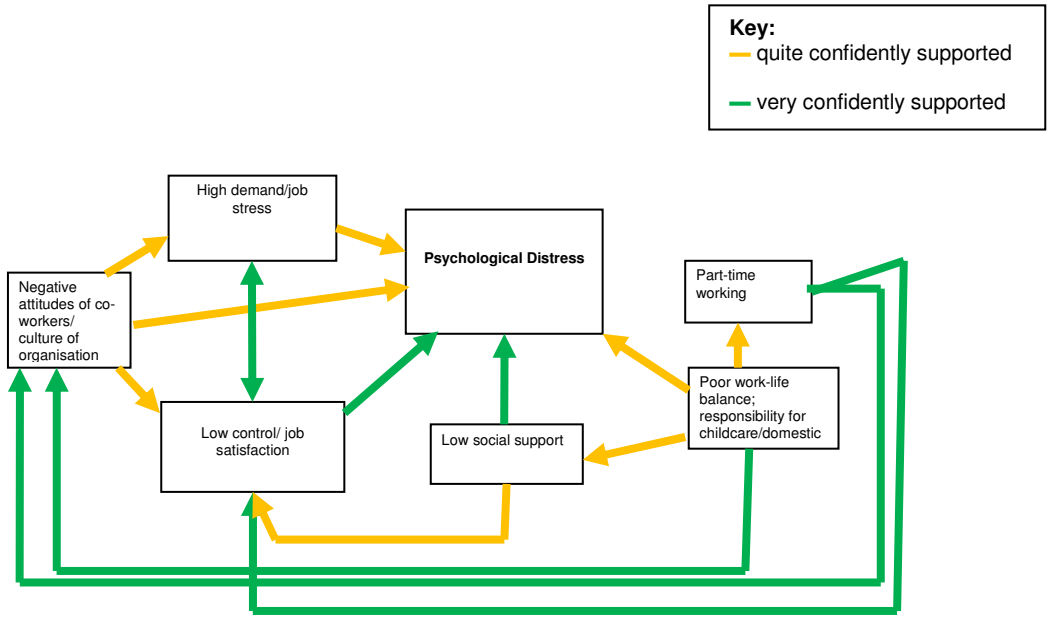


Figure 4.3 Confidence model is supported: Female consultants (median scores)

Examination of the data according to specialty group showed that the transcripts of interviews with surgeons appeared to more strongly support the validity of the model than those of radiologists (Figures 4.4 and 4.5). From these figures it can be seen that, compared to radiologists, surgeon's transcripts were rated as more confidently supporting the associations between part-time work and negative attitudes of co-workers/culture of the organisation and between part-time work and low control/job satisfaction. Radiologists, however, were rated as more confidently supporting the association between poor work life balance/childcare/domestic responsibility and negative attitudes of co-workers/culture of the organisation, compared to surgeons.

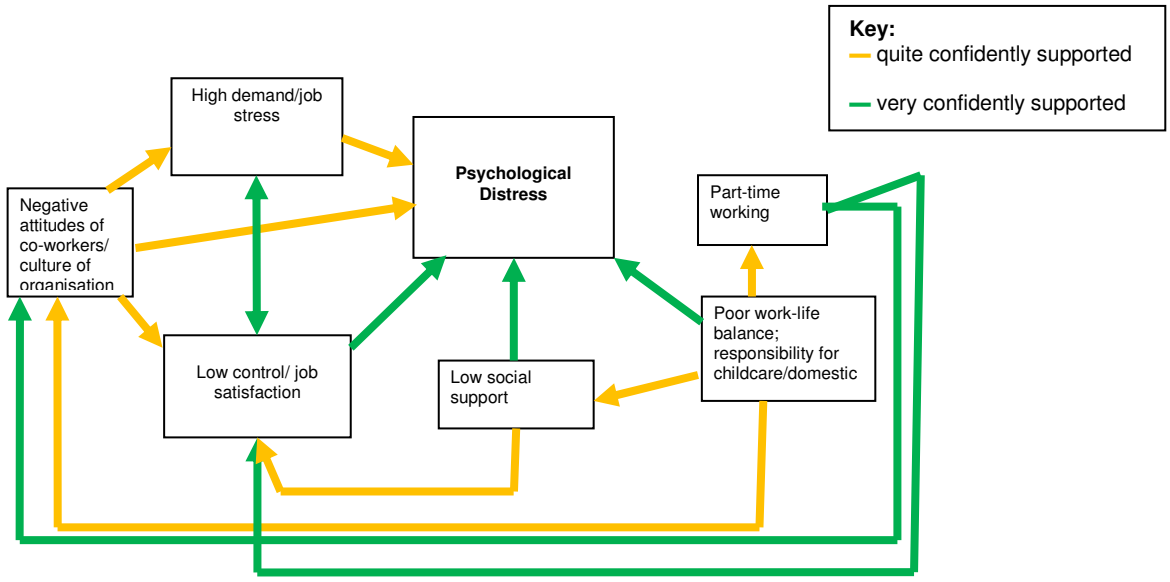


Figure 4.4 Confidence model is supported: Surgeons (median scores)

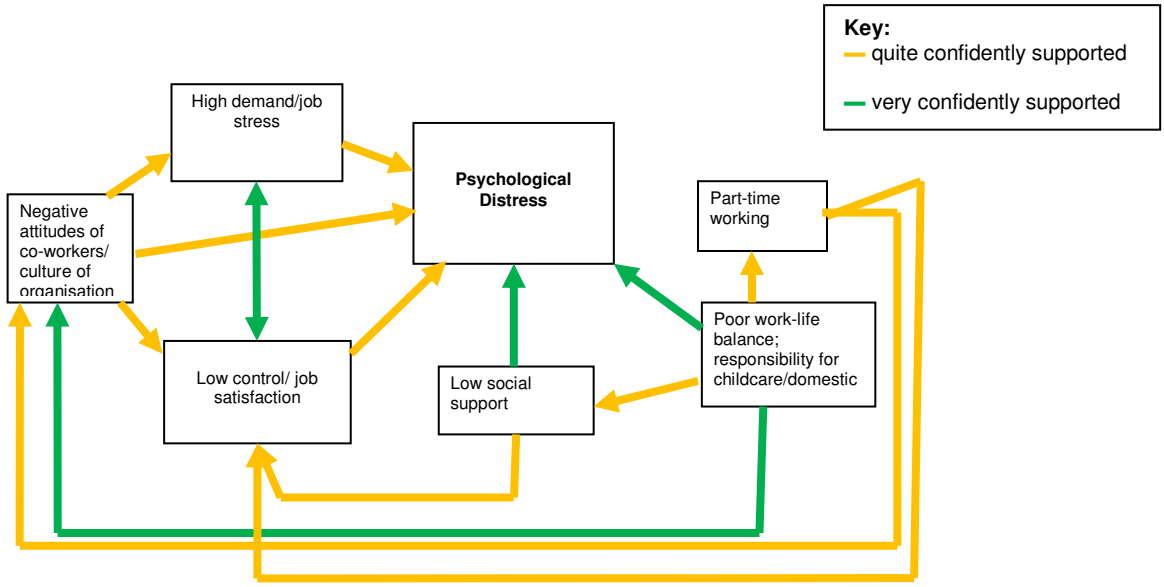


Figure 4.5 Confidence model is supported: Radiologists (median scores)

Table 4.6 Confidence of the support for individual associations within the model

Association in the model	Whole Sample N=22						Male consultants N=11						Female consultants N=11						Surgeons N=11						Radiologists N=11					
	ND	-2	-1	0	+1	+2	ND	-2	-1	0	+1	+2	ND	-2	-1	0	+1	+2	ND	-2	-1	0	+1	+2	ND	-2	-1	0	+1	+2
Part-time working is associated with negative attitudes of co-workers/culture of the organisation	2	0	2	5	6	7	1	0	1	3	5	1	1	0	1	2	1	6	1	0	0	2	3	5	1	0	2	3	3	2
Mean (SD) / Median	0.9 (1.0)/ 1						0.6 (0.8) / 1						1.2 (1.1) / 2						1.3 (0.8) / 1.5						0.5 (1.1) /0.5					
Part-time working is associated with low control/job satisfaction	2	0	3	2	6	9	1	0	0	2	5	3	1	0	3	0	1	6	2	0	1	1	1	6	0	0	2	1	5	3
Mean (SD) / Median	1.1 (1.1) / 1						1.1 (0.7) / 1						1.0 (1.4) / 2						1.3 (1.1) / 2						0.8 (1.1) / 1					
Poor work-life balance; childcare/domestic responsibilities is associated with part-time working	7	0	1	1	10	3	5	0	0	0	5	1	2	0	1	1	5	2	4	0	1	0	6	0	3	0	0	1	4	3
Mean (SD) / Median	1.0 (0.8) /1						1.2 (0.4) /1						0.9 (0.9) / 1						0.7 (0.8) / 1						1.3 (0.7) / 1					
Poor work-life balance; childcare/domestic responsibilities is associated with psychological distress	2	0	2	0	7	11	2	0	0	0	2	7	0	0	2	0	5	4	0	0	2	0	3	6	2	0	0	0	4	5
Mean (SD) / Median	1.4 (0.9) /2						1.8 (0.4) / 2						1.0 (1.1) / 1						1.2 (1.2) / 2						1.6 (0.5) / 2					

Association in the model	Whole Sample N=22						Male consultants N=11						Female consultants N=11						Surgeons N=11						Radiologists N=11					
	ND	-2	-1	0	+1	+2	ND	-2	-1	0	+1	+2	ND	-2	-1	0	+1	+2	ND	-2	-1	0	+1	+2	ND	-2	-1	0	+1	+2
Poor work-life balance; childcare/domestic responsibilities is associated with negative attitudes of co-workers/culture of organisation	2	0	2	3	5	10	0	0	2	2	3	4	2	0	0	1	2	6	1	0	1	3	2	4	1	0	1	0	3	6
Mean (SD) / Median	1.2 (1.0) / 1.5						0.8 (1.2) / 1						1.6 (0.7) / 2						0.9 (1.1) / 1						1.4 (1.0) / 2					
Poor work-life balance; childcare/domestic responsibilities is associated with low social support	6	0	2	0	11	3	3	0	2	0	4	2	3	0	0	0	7	1	4	0	1	0	5	1	2	0	1	0	6	2
Mean (SD) / Median	0.9 (0.9) / 1						0.8 (1.2) / 1						1.1 (0.4) / 1						0.9 (0.9) /1						1.0 (0.9) / 1					
Low social support is associated with low control/job satisfaction	1	0	0	1	14	6	0	0	0	1	6	4	1	0	0	0	8	2	1	0	0	1	7	2	0	0	0	0	7	4
Mean (SD) / Median	1.2 (0.5) / 1						1.3 (0.6) / 1						1.2 (0.4) / 1						1.1 (0.6) / 1						1.4 (0.5) / 1					
Low social support is associated with psychological distress	0	0	0	0	9	13	0	0	0	0	7	4	0	0	0	0	2	9	0	0	0	0	4	7	0	0	0	0	5	6
Mean (SD) / Median	1.6 (0.5) / 2						1.4 (0.5) / 1						1.8 (0.4) / 2						1.6 (0.5) / 2						1.6 (0.5) / 2					
Low control/job satisfaction is associated with psychological distress	3	0	0	0	9	10	2	0	0	0	5	4	1	0	0	0	4	6	2	0	0	0	3	6	1	0	0	0	6	4
Mean (SD) / Median	1.5 (0.5) / 2						1.4 (0.5) / 1						1.6 (0.5) / 2						1.7 (0.5) / 2						1.4 (0.5) / 1					

Association in the model	Whole Sample N=22						Male consultants N=11						Female consultants N=11						Surgeons N=11						Radiologists N=11					
	ND	-2	-1	0	+1	+2	ND	-2	-1	0	+1	+2	ND	-2	-1	0	+1	+2	ND	-2	-1	0	+1	+2	ND	-2	-1	0	+1	+2
High demand/job stress is associated with psychological distress	2	1	2	0	10	7	1	1	1	0	5	3	1	0	1	0	5	4	2	1	1	0	4	3	0	0	1	0	6	4
Mean (SD) / Median	1.0 (1.1) / 1						0.8 (1.3) / 1						1.2 (0.9) / 1						0.7 (1.3) / 1						1.2 (0.9) / 1					
There is an interaction between job stress/demand and job control/satisfaction in association with psychological distress	1	0	0	0	10	11	0	0	0	0	5	6	1	0	0	0	5	5	1	0	0	0	5	5	0	0	0	0	5	6
Mean (SD) / Median	1.5 (0.5) / 2						1.6 (0.5) / 2						1.5 (0.5) / 1.5						1.5 (0.5) / 1.5						1.6 (0.5) / 2					
Negative attitudes of co-workers/culture of organisation is associated with psychological distress	6	3	0	2	9	2	5	1	0	2	3	0	1	2	0	0	6	2	3	0	0	2	5	1	3	3	0	0	4	1
Mean (SD) / Median	0.4 (1.3) / 1						0.2 (1.2) / 0.5						0.6 (1.4) / 1						0.9 (0.6) / 1						0 (1.7) / 1					
Negative attitudes of co-workers/culture of organisation is associated with high demand/job stress	4	1	0	2	9	6	3	0	0	1	5	2	1	1	0	1	4	4	2	0	0	2	4	3	2	1	0	0	5	3
Mean (SD) / Median	1.1 (1.0) / 1						1.1 (0.6) / 1						1.0 (1.2) / 1						1.1 (0.8) / 1						1.0 (1.2) / 1					
Negative attitudes of co-workers/culture of organisation is associated with low control/job satisfaction	5	3	0	2	7	5	5	1	0	2	2	1	0	2	0	0	5	4	3	0	0	2	4	2	2	3	0	0	3	3
Mean (SD) / Median	0.7 (1.4) / 1						0.3 (1.4) / 0.5						0.8 (1.5) / 1						1.0 (0.8) / 1						0.3 (1.8) / 1					

4.4.4 Proposed refinements to the model

Various suggestions for refining and improving the model emerged from the analysis of transcripts. All manifest and latent content that was judged as suggesting a refinement to the model was documented on the individual transcript, and then collated across all transcripts and synthesised thematically.

In total there were 27 proposed refinements to the model, either resulting in amending or extending an existing component or relationship, or adding a new component (Table 4.7). Together with these refinements to specific parts of the model, several consultants described the need to take a more comprehensive or holistic view when examining the work-health association, illustrated by the following quotation:

> "[There is a] *need to look beyond that person as a human being, what are they going back to, what are they surrounded by when they go home and their sleepless nights that they bring into work, and then the clinic is a bit burgeoning and they lose their cool with the administrative staff, but actually if they stand back its because they've had a major row at home and they haven't slept all night or a child's kept them up. We need to be much more open about acknowledging that our workforce consists of human beings with all their frailties and the day to day fluctuation and we expect people to be consistent all the time and consistently perform at a high level all of the time. We don't give allowance for it and we give less allowance in certain specialties like surgery and the male dominated specialties*" (010 M/S)

The refinements were considered in relation to the current model and a new model was developed, encompassing relevant theory and empirical findings from the literature and the three studies contained within this thesis. Each new refinement is numbered and cross-referenced to the new model to provide transparency from Table 4.7 to the new model (Figure 4.6).

The only refinements suggested by consultants and not translated to the new model were:

- "*Re-label psychological distress as 'lack of psychological happiness'*" (002 M/S): not re-labelled due to importance placed on using conventional terminology to describe the 'outcome' of interest.

- "*The boxes need to be weighted in terms of their relative importance*" (009 M/S) not acted upon due to the model being a hypothesis-generating model resulting from qualitative research that has yet to be tested quantitatively. Quantitative assessment of the individual constructs and components in the model followed by use of a statistical modelling technique such as structural equation modelling or path analysis would enable assignment of weights to the constructs and associations in the model.

Table 4.7 Proposed refinements to the explanatory model

Number	Refinement	Suggested by	Example quotations/supporting information	Action
1	Change wording of part-time to 'flexible working' to encompass a broader range	002 M/S	This was a misuse of language in the model as the construct was always meant to represent all modes of flexible working.	Change construct from 'part-time' to 'flexible' working.
2	Separate out work-life balance (WLB) and responsibility for childcare	Evident in most transcripts	WLB, and the association it has with other constructs, is relevant for consultants both with and without children; the two constructs need to be considered separately.	Separate the two constructs in the revised model
3	Rename social support to ensure it is a term that encompasses practical and emotional support at work and at home.	012 F/S 018 F/S	Social support is a term used in the literature to mean a wide range of different things. In order to ensure that the meaning is explicit, it should include emotional and practical support received at work and at home. "*social support didn't ring true to me – I didn't know what it meant*" (018 F/S)	Include emotional and practical support received at home, and at work (as two separate constructs).
4	"Being female" is a risk factor in itself (regardless of whether you have children or work part-time)	001 F/R 002 M/S 003 F/R 006 M/S 007 M/S 008 F/S 010 M/S 012 F/S 013 F/R 019 F/R	"*there have been some definite gender issues, you know, spoken down to you or things acted upon that they would not dream of doing in a million years to male colleagues*" (012 F/S) "*if you're going to be a successful woman in surgery you've got to be twice the man that most men are*" (006 M/S) "*the NHS for a woman is much more difficult*" (001 F/R) "*People do things when a man says, and when you're a woman you have to grovel and beg. If you're assertive you sound bossy*" (003 F/R) "*My colleagues are very derogatory about women sometimes … you have to be seen to be coping ... because of my gender*"(008 F/S) "*Females have to perform just that little bit better to be acceptable*" (010 M/S).	Add gender to the model

Number	Refinement	Suggested by	Example quotations/supporting information	Action
5	Part-time working is associated directly with psychological distress	001 F/R 007 M/S 011 M/S 019 F/R 021 M/R 022 M/R	"*I've really suffered over the years ... I've been a consultant over 10 years and I'm much more confident than I was ... I would come in on a Sunday to report.. the new consultant is a very vulnerable thing, a part-time female*" (001 F/R) "*wife (who works PT) probably has a more stressful situation than I do – if I had a fixed finishing point I would struggle*" (011 M/S) "*I get less stressed the more time I can spend at work … part-time would be stressful*" (007 M/S) "*I would be stressed as you'd never complete a task*" (019 F/R)	Link flexible (part-time) working directly to psychological distress.
6	Part-time working is associated directly with high job stress/demand	001 F/R 004 F/R 006 M/S 007 M/S 008 F/S 011 M/S 012 F/S 021 M/R 022 M/R	"*although I probably have the technically higher demand, higher stress job, my wife who's a GP who works part-time probably has the much more stressful situation than I do" & "it's not just the nice stuff around the edge which disappears but your ability to even deal with the nitty gritty of everyday tasks disappears because you don't have the everyday continuity*"(011 M/S) "*You work more intensively; don't allow any breaks*" (001 F/R) "*it's whether part-time working per se is actually stressful independently*" (021 M/R) "*part-time women always work a lot harder*" (012 F/S) "*I quite often get less stressed the more time I can spend at work because I get more done and feel that I'm not missing things. Part time, or working less, would for me be stressful*" (007 M/S)	Link flexible (part-time working) to high job stress/demand

Number	Refinement	Suggested by	Example quotations/supporting information	Action
7	Part-time working is associated directly with high demand for others too	003 F/R 011 M/S 023 M/R	"*it can be difficult. You can have to cover other things, and have less flexibility sometimes yourself and it can impact even on your own free time*" (011 M/S) "*If not managed properly becomes burden for others – can lead to low self-esteem/morale all around*" (023 M/R). "*I know you can have unpaid leave in theory but the thing to do with being a part-time person, I would never take that because I'd be making other people in the department do my work. That just isn't acceptable*" (003 F/R)	Confirms the association between part-time working and high demand, and psychological distress but from the perspective of others in the department as well as the individual who is working part-time. Links to no.24 (ratio of FT:PT workers)

Number	Refinement	Suggested by	Example quotations/supporting information	Action
8	Expectations/aspirations (in relation to job and work-life balance)	001 F/R 006 M/S 008 F/S 009 M/S 010 M/S 013 F/R 014 M/R 016 M/R 019 F/R 020 F/R 023 M/R	"*do I want a career or do I want it all? I consider myself to have a career, a very good career, could I if I had not had children had more? Of course, but that's not what I want*" (020 F/R) "*I think every working parent feels that you're under-performing in many levels because you're used to performing higher basically .. as a mother, you're the mother and everything else is slightly peripheral to that*" (013 F/R) "*[you need to] define what you are capable of doing and what your time allows you to do.. be honest with your job plan .. and your colleagues.. it's about expectations and respecting other people's strengths*" (010 M/S) "*you can have a woman who is working two days a week and thinks she's got a poor work life balance*" (009 M/S) "*it's a personal thing [staying late] you just want to do your work and you want to do it well and you don't' want to leave before you've done this that or the other*" (003 F/R) "*You have to slightly let go of your aspirations [if you are a doctor and mother]; need to match what you can give; need to be clear about aspirations upfront and organisation needs to be clear about expectations. Expectations of job link to job satisfaction*" (016 M/R) "*I recently decided not to go for a certain academic position because it would have meant extra hours and crazy after hours, that kind of stuff, so I have my limits*" (002 M/S) (*also discusses wife who he says chooses to prioritise family over becoming senior at work*) "*if you only do 4 sessions as a consultant and the other sessions during your week are childcare then psychologically what's your priority in life .. I think you have to really decide*" (014 M/R) "*Colleagues with children doing a great job but none want to be medical directors/professors, and that's a problem. It's created a ceiling*" (019 F/R) "*Aspirations matter: I want to go higher so I just accept that I have to do lots of work in my own time*" (023 M/R)	Add *compatibility of expectations/aspirations (for work and home life) with reality* to the model

Number	Refinement	Suggested by	Example quotations/supporting information	Action
9	Extent to which you have proved yourself first/earned respect moderates the impact of working part-time; having children	001 F/R 002 M/S 003 F/R 008 F/S 020 F/R 021 M/R 022 M/R	"*I'm very lucky because I trained here so I've got very supportive group of colleagues*" (003 F/R) "*I was a registrar here part-time before so I'd proved myself… which is why I think they made me the job*" (001 F/R) "*it's much easier to maintain a skills set than to develop one*" (002 M/S) Need to build reputation first [before kids] otherwise "*you're sunk*" (008 F/S)	Links to 'number of years as a consultant' (no.14) and to 'previous experiences'.
10	Financial situation	001 F/R 011 M/S 012 F/S 015 F/S 020 F/R	"*Nanny's come at a cost, they are expensive*" (020 F/R) "*[had support structure in place and lived next to hospital] because you're financially viable to do that*" (015 F/S) "*it is important to [include] a dollar sign, medicine is not rewarded in line with other parallel professions. … in part-time medicine you're going to earn disproportionately lower and the problem with that is … that they may not then be able to employ the necessary social support to allow them to carry on with the rigors of the week*" (011 M/S) "*when your children are young your nanny could be taking half of it [salary]*" (001 F/R). "*Without high pay it's very hard to afford the support needed to ensure you can control your demands"* (012 F/S).	Add 'Income' to model

Number	Refinement	Suggested by	Example quotations/supporting information	Action
11	Specialty (and sub-specialty) choice	001 F/R 006 M/S 007 M/S 008 F/S 009 M/S 010 M/S 011 M/S 017 F/S 018 F/S	"*[unpredictability of hours] some of it comes down to the fact that [I work] a fairly unique cross-over between specialties ... and occasionally you are asked to help, or have input, because of that particular specialist knowledge*" (011 M/S) Moderates impact of PT working: "*the surgical world is one that looks on you badly if you can't be at their [the surgeons] 7.30am meeting and come in on your day off to do things ... it's becoming much more acceptable to work part-time in radiology*" (001 F/R) "*orthopaedics can be a perfect example – I suspect it's incredibly hard for a female orthopaedic surgeon to survive*" (018 F/S) "*We give less allowance for variation in performance in surgery and male dominated specialties. In surgery you are responsible if there are post-op complications in a way that you might not be in other specialties*" (017 F/S) "*I have accepted that my life is unpredictable ... it's probably one of the reasons why I'm not married and I don't have children. My friend who's a breast surgeon really wanted to be a vascular surgeon but realised that the unpredictability of it would be killing for her family*" (008 F/S) "*It's more difficult to work part-time in specialties that rely on practical skills ... you're very exposed if you don't have sufficient level of experience*" (009 M/S) "*we don't give allowance for [not performing consistently high all the time] and we give less allowance in certain specialties like surgery and the male dominated specialties*" (010 M/S)	Add specialty (and sub-specialty) choice to the model – to link to moderators and job-stress/demand

Number	Refinement	Suggested by	Example quotations/supporting information	Action
12	Predictability of workload	003 F/R 006 M/S 007 M/S 008 F/S 019 F/R	"*Vascular surgery is really unpredictable but it could be made less unpredictable in that we do a very hefty on-call ... if we had a decent number of surgeons on the on-call rota it would be alright*" (008 F/S) "*we have session-based work so you report your stuff and then you go home … it's not the same as being the only person that can do an operation*" (003 F/R) "*On-call, emergency aspect, is for many colleagues, including myself, an added stress ... because you have no control over what happens as an emergency .. so you have no control over your period of life for that time, which is potentially very very unsettling and difficult*" (006 M/S) "*I quite like the unpredictability but I do have a lot of support from my colleagues so I know that, pretty much if I'm not on call at 5pm I can go and deal with my work-life balance" "we know when we're on call so we can [plan around it]*"(007 M/S)	Add predictability of workload as a moderator.
13	Type of organisation (DGH vs. teaching hospital)	001 F/R 003 F/R 023 M/R 021 M/R	Summary: in teaching hospitals there is more pressure for teaching/research (aspects that demand 'extra' time); but also have registrars that can help out. Academic vs. clinical career – academics have to accept lots of work in their own time. Some women work in teaching hospitals due to husbands working in London/city, not because of desire for academic career. "*[Negative attitudes] probably vary from hospital to hospital. If you were to go down to some of the West country DGH's where they have a very slow turnover of patients, and you have the luxury of time, it wouldn't really matter if you were seen to take a bit longer in things you were doing. I would perceive that if you weren't working very hard [here] there may be negative attitudes from other people*" (also mentions greater specialist support at teaching hospital compared to DGH) (021 M/R)	Include type of organisation in the culture of organisation and department.

Number	Refinement	Suggested by	Example quotations/supporting information	Action
14	Number of years as a consultant – a curvilinear effect?	001 F/R 002 M/S 003 F/R 006 M/S 008 F/S 014 M/R 018 F/S 020 F/R	"*The more senior you get ... there's a sort of isolation thing starts happening*" (014 M/R) "*New consultants try/expected to deliver too much*" (002 M/S) "*different phases of your life different bits (of the model) will be important*" (006 M/S) Seniority links to less support at work as you become the provider of support to others; experience as a consultant links to confidence to take control – can be linked to isolation (008 F/S & 014 M/R) Older consultants had no expectations of work-life balance. Newer consultants have better work-life balance but at cost of expertise (018 F/S) Control is related to status: need to build up reputation before can take control and decide what you will/will not do. There is a big shift from about 6 years as a consultant where you become the support for others. "*It's taken a long time [to earn respect and build associations] … as I've got older I've got better at ... saying actually that's not important … but only in the last maybe 2 years ... it's kind of realising that I'm not failing if I haven't done everything ... but that's purely from experience and from getting older and saying actually this can wait*" "*5 or 6 years [as a consultant] you mentally do a big shift because you are not a junior consultant anymore*" (020 F/R) "*[being a consultant] has been much more stressful than I thought it would be … when I was newly appointed I never used to leave and now I'm a bit stricter with myself*" (003 F/R) Being a new consultant often clashes with being a new mum – two new roles at the same time (001 F/R)	Add number of years as a consultant to the model

Number	Refinement	Suggested by	Example quotations/supporting information	Action
15	Work-life balance is associated with job control	007 M/S 010 M/S 022 M/R	If you have high control you can probably ensure a good work life balance Chooses to do work stuff at home therefore does not perceive it to be poor WLB (022 M/R)	Link 'compatibility of expectations/aspirations for work and home life with reality' with 'job control'
16	Work-life balance is influenced by financial situation	012 F/S	Good WLB requires money to pay support which may mean working long hours/private practice which in turn may lead to less WLB.	Both Income and WLB are moderators
17	Having children in terms of postnatal stress and being a mother = confounding variable	009 M/S	"*you have postnatal stress and all that which seems to me like a major form of stress in part-time workers*" (009 M/S)	Having childcare/domestic responsibilities links directly to psychological distress
18	The culture of the organisation and negative attitudes of co-workers should be separated.	003 F/R 009 M/S 019 F/R 023 M/R	Bad work environment leads to negative attitudes (not the other way around) (009 M/S) Denies that co-workers are negative about PT but the culture of organisation is (003 F/R)	Separate out the culture of the organisation from the negative attitudes of co-workers
19	Stress outside of work should be included	010 M/S 011 M/S	Mentions impact of sleepless nights on work and states that you can't ignore what is happening outside of work and impact this has at work (010 M/S) Having time–out is very important. Annual leave is high quality time out (011 M/S)	Add 'experience of severe life events or difficulties' to the model

Number	Refinement	Suggested by	Example quotations/supporting information	Action
20	Size of department/ratio of FT: PT workers might moderate the association between PT on negative attitudes	011 M/S 012 F/S	"*It works well [in his department] because the balance is only one woman and 9 men. If it was 5 and 5 even if it was only one day [that they were not working] it may not work as well*" (011 M/S) "*there are only 3 people in the department and 1 person only works 2 days a week, which puts a lot of pressure on just 2, but when there are 14 then that means there are always 5 people around at any time so it's a size thing*" (012 F/S)	Add culture of organisation and department to the model.
21	Threshold of Part-time matters	003 F/R 013 F/R 014 M/R 016 M/R 017 F/S 020 F/R 022 M/R	"*[Depends on the job. In interventional radiology] there is no substitute for doing lots of it ... you should focus on the things you know that you can do well … that you can do safely*" (016 M/R) "*Below 4 sessions v. difficult to be viable as a teaching hospital consultant. Need to maintain skills … you need to be seeing a certain volume of material to remain specialist*" (014 M/R) "*Working 4 days feels like I have continuity and I do my bit*" (020 F/R) "*I was working 3 days and I actually found that I wasn't really achieving enough at work because I wasn't there enough to be developing things … You feel like you're not an active member of the department*" (003 F/R) "*I work 4 days, I would not work 3 days – I don't think I could do the job in 3 days – I wouldn't be there enough really*" (013 F/R) "*You probably have to be there about 4 days a week [if a surgeon] ... any less than that and it would make my life difficult and stressful I think*" (017 F/S)	Add threshold of part-time working as a moderator of the association between part-time working and job stress/satisfaction.

Number	Refinement	Suggested by	Example quotations/supporting information	Action
22	Amount/type of training and impact of EWTD	015 F/S 016 M/R 017 F/S 018 F/S 019 F/R 021 M/R 022 M/R 023 M/R	"*It was tough because jobs were hard to get and if you got one you had to work really had to maintain it and keep your skills up. [Now] their exposure to experience is so different to ours and that's quite scary I think*" (018 F/S) "*I just don't know if the new trainees will get enough time to build up the experience … there's not great technique to it, you just need to do lots and lots to get better at it ... it's a challenge for people coming through and a challenge for us to train them*" (022 M/R) "*they're just not experienced doctors, they're not doctors, they are technicians and I really feel for them" "not given the time to develop any kind of breadth before they specialise" "there is a shift mentality now – not my problem". Training programme is tick box as don't stay anywhere long enough to identify/sort out problems or sift people out"* (019 F/R) "*At the moment its generally not the clinical part of the job that's stressful it's the other bits, but this will change as new consultants won't feel able to do the baseline of their job*" (021 M/R) "*lawsuits will increase - very under-qualified doctors are being churned out*" (023 M/R) "*The training is very poor because of the contamination of the European Working rules ... and they don't belong to a firm, where you have mentorship, which I had … making you the best person in the job" "we had to compete for jobs every 6 months or a year so you want to be on top of it all of the time ... now you get into a number, you are there for 7 years whether you do any good or not*" (015 F/S). "*When [colleague] qualified as a surgeon the average surgeon had 32,000 hours of cutting when becoming a consultant. It's now about 6-7,000 hours" "Medicine's an apprenticeship ... you need the experience*" (016 M/R) "*Now registrars are working shifts of 12 hours ... it's the continuity that makes all the difference to patient care so the only people that are there the whole time are actually the consultants*" & "*juniors are becoming less and less experienced because they work less hours, and over the years more and more responsibility's gone to the consultant because they're the only person that's there*" (017 F/S)	Add sufficiency of training as a moderator of the association between occupational and personal inputs and the occupational mediators.

Number	Refinement	Suggested by	Example quotations/supporting information	Action
23	Being appropriately trained in communication and management skills	021 M/R	Describes being a new consultant and taking on leadership roles without sufficient training	Add sufficiency of training as an occupational moderator
24	Transparency of workload is associated with negative attitudes	020 F/R 022 M/R 023 M/R	Workload is transparent in radiology – helps with negative attitudes as everyone can see who is doing the work. "*If you get your work done no-one can point a finger at you ... if you look at the end of the year against my name, there are a certain number of films are reported so no-one can say 'Oi! What are you doing?*" (023 M/R) "*We have a very transparent way of how we work. So everyone can see it and as long as I make sure no-one's having to cover me who's not capable of covering me then it's ok*" (020 F/R) "*There's a lot of transparency in what we do in terms of number of reports that you produce so there's no hiding really ... I don't have to worry about if my colleague wants to leave early on a particular day because I know that he or she is producing the work*" (022 M/R)	Add transparency of workload as a moderator
25	Personality	002 M/S 003 F/R 006 M/S 007 M/S 010 M/S 017 F/S	"*I guess personality type is in there somewhere*" (017 F/S) "*underlying personality of the individual" "it's almost as if the specialty attracts the particular personality*" (010 M/S) "*intrinsic issues within an individual*" matter (002 M/S) "*perhaps there's a fundamental personality difference between women that decide they're going to do radiology and women who decide they're going to do surgery*" (003 F/R) "*surgeons are by definition type A personality kind of people" need to include "pre-existent personality type*"(006 M/S) "*there are basically 5 of us that do exactly the same job and I know that definitely one person out of the 5 of us does suffer from a lot of stress – exhibits signs of stress-related issues – so I wonder if the individual is also a different box*" (007 M/S)	Add personality type as a personal 'input'

Number	Refinement	Suggested by	Example quotations/supporting information	Action
26	Previous experience/coping	002 M/S 006 M/S 009 M/S	"*Having lived in a more extreme stress scenario I value this one ... the US was very hard, not only was it long hours but they were very intense*" (002 M/S) "*one of my mental problems is that I would tend to be depressive anyway*" (006 M/S) "*I have a slightly larger view of life in general because I'm not a run of the mill doctor … I was bought up in Italy, I've lived in Greece, I've spent some time in Israel, I've done military service … I've come across hurdles which are far bigger than the balance of life and work" "perhaps I have highlighted the need for looking at individuals and their own upbringing as a possible cause of how they cope*" (009 M/S)	Add previous experience/coping as a personal 'input'
27	Culture change over time: as older surgeons leave it will get better	007 M/S	"*10 years ago surgery was a much more masculine environment ... so I know some of my [female] colleagues did find that quite difficult and had to deal with a lot of prejudice and assumptions and attitudes that I think made it very difficult for them ... and my perception is that things are changing a lot*" & "*people in other Trusts across the UK probably still have to deal with a lot of these prejudiced attitudes*" (007 M/S)	Include ratio of male: female and old: younger consultants in the culture of the organisation/department.

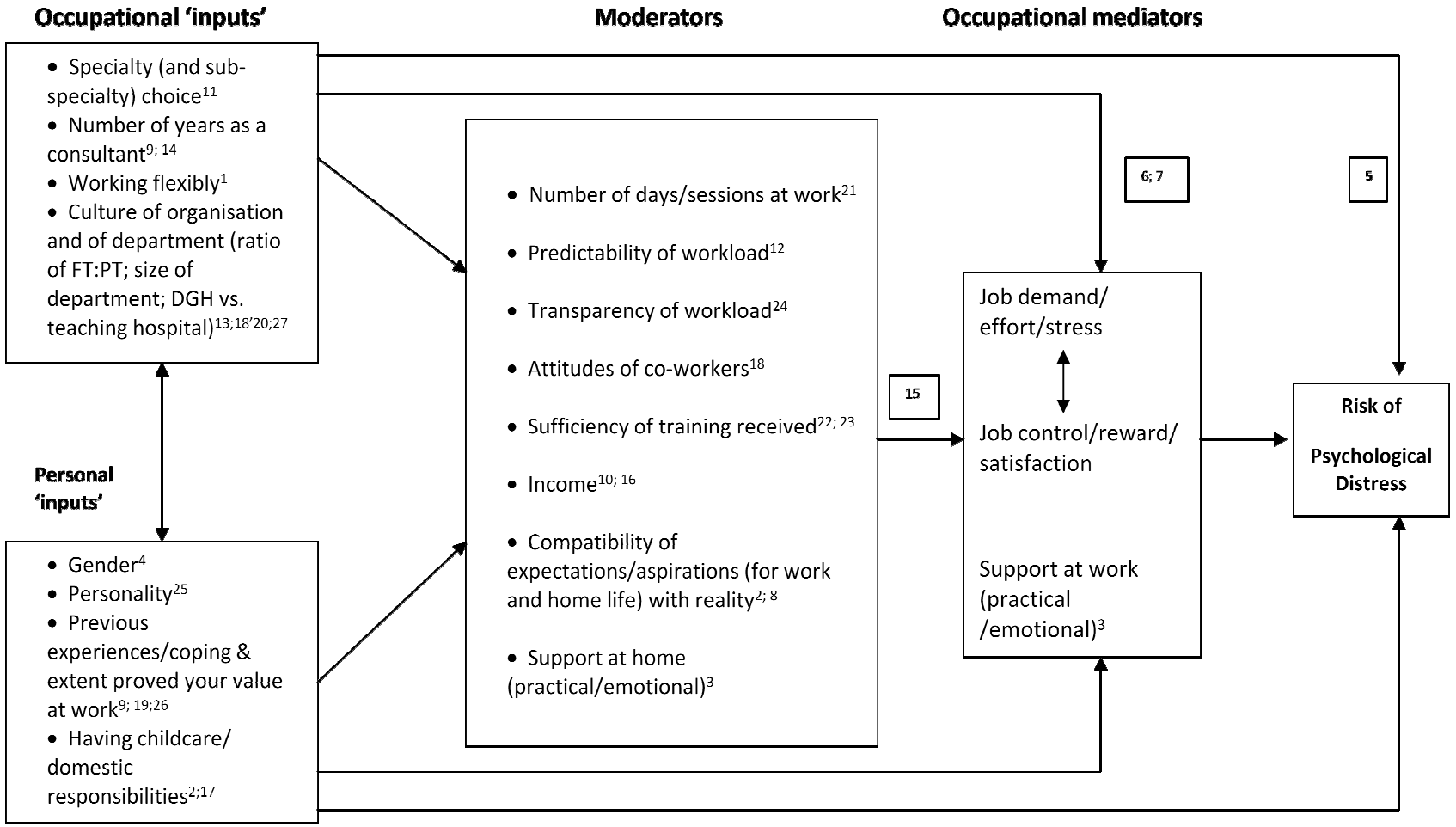


Figure 4.6 **Revised explanatory model for the association between work and psychological distress in hospital consultants**

4.5 Discussion

What is known already?

- Explanatory models for work-related psychological distress have been developed and tested mostly with male working populations and thereby lack gender sensitivity.
- A gender-sensitive explanatory model was developed, underpinned by Karasek and Siegrist's occupational stress models, but extended to incorporate key themes raised in interviews with male and female hospital consultants. This included consideration of attitudes, behaviours and objective realities that may impact on perceived job-demand, control and support (and therefore risk of psychological distress).
- Application of 'assimilation theory' suggests that experiences and perceptions of male and female consultants may vary depending on the male-dominance of the specialty.

What this study adds

- Broad confirmation of the face validity of key constructs and associations in the model
- Identified additional potential moderators of the association between gender, work and psychological distress.
- The revision of the model to synthesise theory and empirical evidence, including the interaction between work and home-life and both individual and organisational-level factors.

The face validity of the explanatory model was partially confirmed by consultants participating in this study. Of the 22 consultants interviewed, only one did not consider the model to be an accurate representation of his experience. Despite being broadly confirmed by most consultants a large number of 'refinements' to the model emerged from the interviews with consultants. Incorporation of these refinements led to a revised explanatory model. This revised model retains the concepts from Karasek's Job Demand-Control-Support model and Siegrist's Effort-Reward Imbalance model at its core, but is expanded to include factors that relate to the individual, job and organisation that may impact directly on risk of psychological distress and/or influence consultants' perceived demand, control and support at work.

The need to extend these occupational stress models to accurately represent risk of psychological distress in male and female consultants fits with previous commentaries on occupational stress models (Karen Messing & Östlin, 2006; Karen Messing, et al., 2003; WHO, 2004).

The study was designed to explore the face validity of the study-generated model. Participants were purposively selected according to gender and specialty to enable initial exploration of the validity of the model in relation to these characteristics. Further investigation with larger representative samples would be required to make any confident statements about the impact (if any) of these characteristics on the validity of the model. With this caveat in mind the findings from these initial explorations suggest few gender differences: the confidence that the model was supported was similar for male and female consultants. The main exception to this was that female consultants appeared more likely than male consultants to spontaneously raise more of the components of the model in the early part of the interview (before seeing the model). Male consultants seemed less likely to describe perceptions or experiences that went beyond the work-specific components of the model and when specifically asked about the other components of the model (such as part-time working and negative attitudes of co-workers) they generally gave responses that were rated as less convincingly supportive compared to female consultants (though very few perceptions or experiences were rated as disconfirming any elements of the model).

The prominent occupational stress models, developed on the basis of research with mostly male samples, have been criticised for omitting consideration of the work-home interface or of non-traditional modes of working (Karen Messing, et al., 2003). The finding here that male consultants seemed less likely to go beyond the work-specific elements when discussing the relationship between work and mental wellbeing concurs with these previous critiques. This could be explained with reference to gender roles and socialization theories. According to the traditional gender roles accepted by western society, the primary domain for men is work and for women is the home (Beauregard, 2009). Research has shown a gender difference in response to marriage and having children in that men increase hours and promotion-seeking whereas women decrease hours and promotion-seeking (Beauregard, 2007; Carol Black, 2007). The work-home interface may simply therefore be more 'relevant' to women. Alternatively, it may be considered more 'socially acceptable' for women to comment on the interaction of home-life with work-life when describing work stressors than it is for men, who are (according to traditional gender roles) meant to prioritise

work. In this study, whilst no male consultants worked part-time and most (if they had children) said they did not take an equal share in responsibility for their children, the majority recognised the importance of work-life balance. They also supported the relevance of the constructs in the model relating to working part-time, having good support at work and home, and the impact of negative attitudes of co-workers and/or the culture of the organisation, in terms of their relationship to psychological distress. A third explanation could be the presence of a systematic bias in rating transcripts of male vs. female consultants. This is however unlikely given the high agreement between ratings by two independent raters.

In relation to specialty, surgeons were generally rated as providing more confident support for the model compared to radiologists. This was especially true for the associations between working part-time and negative attitudes of co-workers and between working part-time with having low control/satisfaction. Using Jean Piaget's terminology (Piaget, 1952) (introduced in the previous chapter) it may be that the increasing proportion of women in radiology has led, over time, to a greater "accommodation" of them, leading in turn to a reduction in negative attitudes towards 'female' ways of working, and also to greater acceptance that part-time contributions are valuable (hence less negative impact on job satisfaction). In contrast, surgery has perhaps yet to accommodate women or female ways of working – evidenced by the fact that less than 10% of surgeons are female. Instead there emerged evidence in the transcripts from male and female surgeons of gender "assimilation" rather than accommodation, for example a female surgeon describing how you had to "*be one of the boys*" to survive being female in a male dominated world, and a male surgical colleague concurred this describing that this particular surgeon was able to do her job well because she "*is single and hasn't got kids so she can behave as a man*" admitting that surgery was a "*male chauvinist*" profession.

A further change in medicine from a few decades ago is that consultants' increasingly provide care in multi-disciplinary teams that comprise consultants from a wide range of disciplines. This means that experiences and perceptions of work for individual consultants may be shaped by their interactions both within their discipline and with other disciplines/specialties. This cross-fertilization between specialties was illustrated by the experience of one part-time female radiologist who described working in a very supportive department, but that her greatest stress came from the male surgeons she had to work with who she perceived did not tolerate well the fact that she worked part-time. Therefore whilst culture change (or 'accommodation') may occur at a faster rate in specialties where greater numbers of women are entering, this

progress may be hindered by less progressive change in other professional groups, and in the wider organisation (Mannion et al., 2010; Scott, Mannion, Davies, & Marshall, 2003).

Very little disconfirming evidence was provided by consultants. Associations in the model that were disconfirmed by consultants were generally linked with the need to consider other factors as moderators when explaining associations (such as 'expectations' and 'extent of support') and thereby linked to a refinement to the model. The construct in the model that received the least confident support was '*negative attitudes of co-workers; culture of the organisation*' though the majority of consultants were rated as providing confident support even for these associations. It became apparent that although 'negative attitudes' and 'culture of organisation' were perhaps inter-related, they should be considered separately. This is because whilst three consultants stated explicitly that they did not think negative attitudes existed, there was latent or manifest acknowledgement from these (and most other) consultants that the culture of the organisation was 'at odds' with nurturing a culture that values flexible working and work-life balance. Specifically this included reference to a "24:7" culture or to the value placed on working long hours that consultants perceived their organisation (and/or colleagues) to hold. This was reflected in the acceptance from most consultants' that work inevitably spilled over to their home-life.

A long working hours culture is prevalent across many different employment sectors in the UK (Kodz, Kersley, Strebler, & O'Regan, 1998). Analysis of the Labour Force Survey 2009 (accessed via www.esds.ac.uk) showed 19% of UK full time employees usually worked in excess of the 48 hours Working Time Directive limit. As well as being damaging to health of itself (Ng & Feldman, 2008; Sparks, Cooper, Fried, & Shirom, 1997), a long-hours culture requires a 'resource of time' which may be unequally distributed by gender due to gendered division of domestic labour, which may thereby result in a culture that inherently favours men (Rutherford, 2001). Whilst there seemed to be little evidence of a culture shift from the organisation in terms of the long-hours culture, there was a suggestion from some consultants that there had been a culture shift in relation to attitudes of co-workers. Several consultants spoke about a bygone age where negative attitudes towards female doctors existed, suggesting that they did not think they existed any longer (or at least that they were diminishing). One female surgeon described her time as a trainee where 'work-life balance' wasn't even in the vocabulary, describing in contrast its prevalence in dialogue with trainee surgeons now. Nevertheless, alongside these perceptions that a culture shift had taken place was evidence from experiences and perceptions of other

consultants (both surgeons and radiologists, male and female) that prejudices against women and particularly against part-time women, were still evident.

The findings of this study are consistent with those found in the previous national study conducted 7-8 years previously as well as the wider literature (cited in the previous chapter). This demonstrates the validity of these constructs and associations as well as their stability over time. There were some inherent biases in the sample on which these findings are based. All male consultant participants worked full-time. This is not surprising given that only 8% of the male consultant workforce in the UK work part-time (compared to 33% of the female consultant workforce) (Federation of the Royal Colleges of Physicians of the UK, 2011). On the contrary, almost all female radiologists interviewed worked part-time, although most worked four days a week, some working their maximum number of sessions in those four days rather than spreading them over five so were only 'part time' in terms of having a week day where they did not work. All consultants were also from university teaching hospitals. Whilst possible that the experiences of male and female consultants from non-teaching hospitals may be different, the key constructs in the model were common to consultants in the previous national study which did include consultants from both district general hospital and teaching hospitals in rural and urban areas of the UK.

The stability of the issues over time, evidenced by the similarities of experience described in both studies conducted 8 years apart, suggests efforts to improve the working lives of doctors as a whole (Department of Health, 2000a, 2001, 2008b), or of female doctors specifically (Department of Health, 2009; Royal College of Physicians, 2001), have yet to impact on the workforce. The policy and research evidence regarding interventions to improve doctors' wellbeing is reviewed in the subsequent chapter. In summary, interventions and policies have mostly failed to take account of relevant theory and empirical evidence and little attention has been paid by the research community to organisation-level interventions, mostly focussing on interventions to alleviate occupational stress in individuals (Harvey, et al., 2009; Hill, Lucy, Tyers, & James, 2007; NICE, 2009; Seymour & Grove, 2005). NICE guidance on behaviour change (NICE, 2007) recommends interventions that tackle change at multi-level (individual, organisation and society). In the MRC complex interventions guidance (Craig et al., 2008), the importance that interventions have a coherent theoretical basis is emphasised.

If further validated, the explanatory model resulting from this study could form a useful basis for devising interventions and/or revising workforce policy to ensure the psychological wellbeing of male and female doctors is protected. An important determinant of the effectiveness of interventions is their acceptability to the target population. It is therefore important to involve the target population in designing and testing interventions (Rickinson, Sebba, & Edwards, 2011). As a first step in this process consultants' perceptions and experiences regarding interventions/initiatives that did or could improve their working lives were sought and are presented in the following chapter.

Chapter Five: What can be done to reduce the risk of psychological distress in male and female hospital consultants?

5.1 Introduction

There is a need to determine how best to reduce the prevalence of work-related psychological distress in hospital consultants by implementing robust interventions and strategies aimed at both prevention and treatment. Whilst there has been increasing attention in the UK on prevalence, causes and consequences of occupational stress, both in the general workforce (C. Black, 2008; Harvey, et al., 2009) and specifically in the NHS workforce (Boorman, 2009b), this has not led to any firm conclusions about effective interventions (Harvey, et al., 2009; Marine, Ruotsalainen, Serra, & Verbeek, 2006; Seymour & Grove, 2005) and evidence in this area is sparse.

The lack of firm evidence in this area is due to a combination of methodological weaknesses (including lack of theoretical underpinning) together with an absence of research on organisational-level interventions. Many studies have used non-randomised designs and they lack consistency in process and outcome measures (Graveling, Crawford, Cowie, Amati, & Vohra, 2008). Furthermore, few interventions have been underpinned by relevant theoretical frameworks of occupational stress (Marine, et al., 2006; NICE, 2009; Seymour & Grove, 2005). Interventions to improve doctors' working lives and reduce the risk of work-related ill-health are most likely to be successful if they have a coherent theoretical basis (Albarracín et al., 2005; Craig, et al., 2008).

The prominent occupational stress models are insufficiently comprehensive (T. Cox, 1993; T. Cox, Kuk, & Leiter, 1993), and there is a need to identify the structural conditions that put people at risk of the stressors – at organisational and individual levels (Thoits, 2010). Specifically the models lack consideration of factors that particularly affect women. These factors include traditional societal expectations of their roles in relation to domestic and childcare responsibilities and the male-dominated nature of many professions where gender discriminatory practice has been evident. Understanding occupational stress requires a complex model that integrates individual level factors (e.g. demographics, personality, previous experience etc) with situational factors (e.g. job content, organisational policies and support at work) and

extra-organisational factors (e.g. life stressors and family support) (Cooper & Marshall, 1976; S Michie, 2002). The findings from the exploratory work conducted as part of this thesis - detailed in Chapters 3 and 4 - lend support to this complex model, and resulted in the development of an explanatory model for psychological distress in hospital consultants which takes account of individual, situational and extra-organisational factors.

Tackling occupational stress is likely to require complex interventions at least in part aimed at changing behaviour. Such interventions may be most successful if they simultaneously target change at organisational and individual employee levels (Kompier, Cooper, & Geurts, 2000; S. Michie & Williams, 2003; NICE, 2007). Frameworks have been proposed for classifying interventions according to whether they target change at an individual or organisational level (Jordan et al., 2003) (Figure 5.1), and according to whether they target prevention or treatment (such as the primary, secondary, tertiary classification offered by Cox (T. Cox, 1993; T. Cox, et al., 1993) (Figure 5.2). However, there has been little attention paid to the design or evaluation of organisational-level interventions for prevention or treatment of occupational stress. Mostly interventions have been focussed on preventing or treating occupational stress at an individual-level (e.g. stress-management or counselling interventions (NICE, 2009)).

Interventions or policies targeted at individuals may have limited impact if organisational factors such as the culture of the organisation are not addressed. Indeed, a recent observational study (involving 7 organisations and over 3500 employees) found that whilst all organisations had flexible working policies, the managerial resistance to flexible working was greatest in organisations where the take-up of flexible working was dominated by a specific type of employee (such as parents of young children), and least in organisations where there was more widespread uptake demonstrating an organisational culture recognising and supporting flexible working for all employees (Management, 2008).

The lack of evidence for organisational interventions has not been matched by a lack of policy attention for such interventions. In recent years both the UK Health and Safety Executive (HSE) and the National Institute for Health and Clinical Excellence (NICE) have published organisational-level guidelines for tackling work stress. HSE published management standards for tackling work stress in 2007 (Health and Safety Executive, 2007). This organisational-level approach aimed mostly at prevention of work stress (Palmer, Cooper, & Thomas, 2004) is informed by extensive reviews of

empirical and theoretical literature. However, due to the fact that the literature lacks gender-sensitivity (as discussed in Chapter 1) the resulting model is similarly limited. Indeed the increased prevalence of occupational stress in female workers is accounted for by classifying women as having a pre-existing vulnerability to the 'hazards' linked to work stress rather than there being any exploration of gender-based factors that could enhance the applicability of the model to women. To my knowledge, neither the implementation nor effectiveness of the management standards has been evaluated.

In 2009 NICE published guidance for employers: '*Promoting mental wellbeing through productive and healthy working conditions'.* Due to the lack of evidence for interventions (Graveling, et al., 2008), this guidance was predominantly underpinned by a conceptual model informed by expert input and thematic literature review of descriptive studies examining factors relating to occupational stress (Baxter, Herrmann, Pickvance, Goyder, & Chilcott, 2009). This synthesis similarly lacks recognition of its inherent gender bias. The guidance focuses predominantly on recommending organisational-level interventions such as ensuring line managers are appropriately skilled and knowledgeable to identify and support staff wellbeing, and the need for board-level commitment to improving the health and wellbeing of the workforce. However, an audit of the implementation of this guidance in 282 Trusts (representing 63% of all eligible Trusts) conducted by the Royal College of Physicians in 2011 showed that less than half had a plan or policy to promote the mental wellbeing of their staff (Royal College of Physicians, 2011). Furthermore, whilst some Trusts met the recommendation for providing training to line managers regarding promoting and protecting the mental wellbeing of staff, attendance at such training was rarely found to be compulsory.

Given the lack of empirical evidence regarding effective strategies or interventions for occupational stress generally, let alone in the medical workforce, this study aimed to explore consultants' perceptions about how to reduce levels of work-related psychological distress. This is intended as a preliminary stage to developing effective interventions in this area. In recent years the importance of stakeholder or user involvement in the design of interventions (and in research generally) has gained increasing prominence (Oliver et al., 2004). Involving users, in this case hospital consultants, in the conception and design of interventions can serve to enhance their acceptability and ensure interventions are feasible to implement (Goldenhar, LaMontagne, Katz, Heaney, & Landsbergis, 2001; Yardley et al., 2006), and has been

described as critical to ensuring the effectiveness of occupational stress interventions (MacKay, Cousins, Kelly, Lee, & McCaig, 2004).

Organizational Level Programs	Individual/Organizational Level Programs	Individual Level Programs
Selection and Placement Communication Training and education programs Job redesign / restructuring Physical and environmental characteristics Other organizational level interventions	Co-worker support groups Participation and autonomy Person environment fit Role issues Other individual / organizational level interventions	Relaxation Exercise Meditation Time Management Biofeedback Employee Assistance Programs (EAP's) Cognitive-Behavioural Therapy Other individual level interventions

Figure 5.1 Occupational stress intervention strategies according to level of intervention (Jordan, et al., 2003)

	Individual	Organisational
Primary	Reduce the risk factors or change the nature of the stressor	Remove the hazard or reduce its exposure to the employee
Secondary	Alter the way the individual responded to a stressor	Improve the organisations ability to recognise and respond to stress problems
Tertiary	Heal the traumatised	Help employees cope with stress at work

Figure 5.2 Classification of stress management interventions (T. Cox, 1993; T. Cox, et al., 1993)

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5.2 Aim

To explore consultants' perceptions of how work-related psychological distress could be reduced.

5.2.1 Primary research question

What interventions or strategies are proposed by consultants' to reduce risk of work-related psychological distress?

5.3 Method

This study was nested in the previous study. Therefore the sample, methods and procedure are identical to those described in Chapter 4. Twenty-two consultants (male and female radiologists and surgeons) participated in in-depth interviews. Subsequent to exploring the causes of work-related psychological distress and assessing the face validity of the explanatory model (reported in Chapter 4), consultants were asked their views on interventions or strategies to reduce levels of work-related psychological distress. Specifically, they were asked their views on how levels of psychological distress could best be tackled and to describe any strategies or interventions that could (or did) make a positive difference to their wellbeing at any stage in their career (see Appendix X for the interview topic guide).

5.4 Analysis

Transcripts were analysed using thematic content analysis. The analysis was informed by a framework derived from the categorisation systems suggested by Cox (1983) and Jordan et al (2003), and by the explanatory model developed as part of this PhD (Chapter 4). The resulting framework consisted of 3 categories: Level of Intervention (individual or organisational-level change); Aim of the Intervention (primary, secondary or tertiary); and Target Factors (the inputs, moderators or mediators that the intervention would particularly target, taken from the explanatory model). Table 5.1 shows the resulting coding framework.

Table 5.1 Coding framework

Code	Source	Categories
Level of intervention	Cox (1983) and Jordan et al (2003)	Organisational Individual
Aim of intervention	Cox (1983)	Primary Secondary Tertiary
Target factors	Taylor explanatory model drawn from empirical work with hospital consultants (Chapters 2, 3 and 4).	Occupational inputs • Specialty (and sub-specialty) choice • Number of years as a consultant • Working flexibly • Culture of organisation and of department (ratio of full to part-time workers; size of department; district general vs. teaching hospital) Personal inputs • Gender • Personality • Previous experiences/coping & extent proved your value at work • Having childcare/domestic responsibilities Moderators • Number of days/sessions at work • Predictability of workload • Transparency of workload • Attitudes of co-workers • Sufficiency of training received • Income • Compatibility of expectations/aspirations (for work and home life) with reality • Support at home Mediators • Job demand/stress • Job control/satisfaction • Support at work

Individual transcripts were read and proposed strategies or interventions were highlighted and summarized on the reverse of the transcript. The proposed strategies/interventions were then collated across all transcripts and grouped thematically. Each transcript was re-read to check that the thematic framework enabled inclusion of all suggestions by consultants. Strategies employed by individual consultants to manage occupational stress (but not suggested as 'interventions') were grouped and reported separately. All other themes were categorised according to the coding framework described above. Table 5.2 shows the themes and corresponding classification. Direct quotations were taken from individual transcripts to support the inclusion of each theme which also provided an audit trail back to the original transcripts.

5.5 Results

The interventions/strategies proposed by consultants were categorised into 10 overriding themes, comprising 24 sub-themes. The majority of suggested interventions were for organisational level interventions aimed at primary prevention (*removing the hazard or reducing its exposure to the employee*, Table 5.2).

Table 5.2 Interventions/strategies to target occupational stress suggested by consultants

Theme	Sub-theme	Level	Aim	Target factors
1. Improve training for junior doctors	a) Extending training to account for working-time directives	Organisational	Primary	Sufficiency of training
	b) Improving assessment of competency	Organisational	Primary	Sufficiency of training
2. Improve training for consultants	a) Teamwork skills	Organisational	Primary	Sufficiency of training
	b) Management/leadership skills	Organisational	Primary	Sufficiency of training
	c) Improved access to CPD (continued professional development)	Organisational	Primary	Sufficiency of training
3. Recruitment of staff	Explicit about expectations	Organisational	Primary	Compatibility of expectations/ aspirations with reality
4. Improve flexible working options	a) Job share	Organisational	Primary	Flexible working
	b) Unpaid leave	Organisational	Primary	Flexible working
	c) Use of locums	Organisational	Primary	Flexible working
5. Increase predictability of work	a) Consultant: Better organisation of on-call rota's	Organisational	Primary	Predictability
	b) Trainee: geographic location of training	Organisational	Primary	Predictability
6. Improve managerial /senior support	a) Strong positive leadership	Organisational	Primary	Support at work
	b) Role models	Organisational	Primary	Org culture/Support at work
7. Improve practical support	a) Administrative support	Organisational	Primary	Support at work
	b) Technology	Organisational	Primary	Support at work
	c) Parking facilities	Organisational	Primary	Support at work
	d) Support services/infrastructure	Organisational	Primary	Support at work
8. Improve childcare support	a) Better provision	Organisational	Primary	Support at work
	b) Financial support	Organisational	Primary	Income
9. Culture change	a) Tackling gender discrimination	Organisational	Primary	Org culture/attitudes of co-workers
	b) Valuing different contributions	Organisational	Primary	Org culture
	c) Organisational focus on reducing stress	Organisational	Secondary	Org culture
10. Providing emotional support	a) Mentoring	Individual	Secondary/Tertiary	Support at work
	b) Other forms of emotional support	Individual	Tertiary	Support at work

5.5.1 Organisational level interventions with primary prevention aim (Table 5.3a)

5.5.1.1 Improve training for junior doctors

a) Extending training to account for restrictions imposed by the European Working Time Directive (EWTD)

Many consultants mentioned their concerns regarding the quality of training of current doctors within the context of the constraints on working hours imposed by the EWTD coupled with the shorter time taken to reach consultant grade since "Modernising Medical Careers" was introduced in 2005 (Table 5). Although one consultant surgeon suggested that imposing a limit on working hours could in itself lead to more equality between the sexes, this was not raised as a positive consequence:

> "*Because I think we are reducing the quality of the males now as much*" (002 M/S).

There was much discussion of the negative impacts of this legislation in relation to limiting experience and therefore safety to practice competently. Some consultants referred to the long hours they had worked as trainees, acknowledging that it was a difficult time, but that it was essential for them to be robust enough to work effectively under pressure and to be "*less afraid of the sick patient*" (021 M/R). One radiologist raised his concern that being a consultant was stressful enough when you were clinically competent but that this would not be guaranteed in the future:

> "*In the future if you can't do the baseline of your job because you haven't had [sufficient] medical training, then that will become more of a stress, the clinical aspect, the actual job you're supposed to do, let alone the other stuff"* (021 M/R).

Comments regarding the negative impact of the EWTD were particularly prevalent in relation to surgery where concerns were voiced regarding patient safety given the reduced practical experience that current trainee doctors receive:

> "*When you're training in a practical specialty like surgery you're really keen to spend as much time as you can learning how to operate*" (007 M/S);
>
> "*You ask most doctors who they would go to for surgery and they'll go to the old duffer who's seen every possible manifestation of the disease. I'm going to him because he's got 5000 operations under his belt, you've got 30… we're not training electricians here, we're training doctors*" (023 M/R).

Consultants struggled to suggest solutions for this, given that the legislation is unlikely to change but several did suggest that training should be extended in length to account for the impact of the EWTD, either by allowing pre-specialisation general medical education to expand again (019 F/R) or allowing trainees (especially surgical trainees) to work longer hours. One surgeon suggested that perhaps working 60 hours one week then 48 hours the next may provide a solution (002 M/S).

b) Improving assessment of competency

A related issue raised by some consultants was concern about assessment of competency with the new system of training. One female surgeon mentioned the constant competing for jobs when she was a trainee and how that kept her "*on top of it all of the time*" and stated that this incentive had now gone because once an individual has entered the training programme "*they're guaranteed to go and finish*" (015 F/S). A male surgeon described the "*box ticking*" in relation to training and that the sheer number of forms had led to one of his colleagues being reluctant to teach. This particular surgeon also raised concern that the system does not facilitate preventing progression in those who are not competent:

> "*There is a clear training thing but it's not imposed, and they can fail them but they only go on probation for a year ... it doesn't really root them out*" (002 M/S).

5.5.1.2 Improve training for consultants

a) Teamwork skills

A prominent theme evident in the transcripts of both male and female and surgeons and radiologists was the importance of working in a supportive team and "good teamwork" in relation to protection from psychological distress. Some consultants mentioned that this was a particular feature of their current working life and acknowledged that it enabled them to do their job and feel supported:

> "[my team is] *like a professional family*" (019 F/R);
>
> "[Having] *a cohesive team of consultants has been absolutely key*" (014 M/R).

Others mentioned "teamwork" as a possible solution in specialties where there may not be many individual consultants, which impacts on the burden on colleagues if an individual does need to leave early or take time out for family or other reasons:

> "*You can force people to work in teams. Rather than having two small teams have a larger team*" (007 M/S).

A further issue raised by several consultants was the impact of the change to training in relation to teamwork and team support:

> "*When I was a house officer you would do every on-call with your team, you'd spend weekends together, have your Sunday night curry together, and you were a team … there was a huge trust. Now you are not necessarily on-call with your own team, you've got junior doctors that change every 4 months and it does make a difference*" (017 F/S).

b) Management/leadership skills

One newly appointed consultant mentioned the need for provision of training in management/leadership skills prior to becoming a consultant, having been asked to undertake a leadership role within a few weeks of becoming a consultant. He described feeling insufficiently skilled or prepared:

> "*As a registrar you don't get any training in conflict management or negotiation skills ... you do management courses as consultants but they're purely just ticking the box to get your job really … in registrar training you need to be made aware of what's expected of you as a consultant … one thing I didn't really appreciate when I first started was the amount of managerial and administration stuff … when you're a consultant, apart from having to be very good at your actual specialty, you also have to know how to deal with politics and interaction and being able to negotiate, about being confrontational … I suppose [these] are leadership skills, it's all working as part of a team*" (021 M/R).

c) Improved access to CPD (Continuing Professional Development)

Two female radiologists mentioned in particular the need for CPD activities to be made more accessible for working women who work part-time:

> "*Courses need to be run with part-time workers in mind*" (001 F/R).

5.5.1.3 Recruitment/selection of staff

One senior radiologist who ran a department mentioned the importance of being explicit at the recruitment stage about the expectations of the job in relation to the type of department:

> "*Departments need to look at themselves and look at 'what sort of department are we?' Therefore what sort of applicants are we likely to attract*" (014 M/R).

5.5.1.4 Improve flexible working options

A number of different suggestions were made regarding flexible working options. This included a) job share; b) unpaid leave; c) use of locums.

a) Job Share

Job share was suggested by a number of consultants as a possible solution to the issue of part-time working (both in relation to ensuring capacity for the job and reducing burden on full-time colleagues). One consultant even suggested that the word "part-time" should even be changed to "'job share":

> "*Maybe part-time is the wrong word – maybe a job share is a better thing. Create a consultant job share and say it's a 12 PA post, we want to employ two of you … and you function as a unit*" (020 F/R).

Some consultants mentioned that whilst they did not consider themselves to be working in a job-share they did have a colleague that they paired up with that provided the same sort of expertise as them, and that this provided support on a daily basis as well as enabling them to take time off work when they needed to.

Despite support from some consultants for more job-share posts, a few highlighted the need to ensure that there was complete "*trust*" with your job share partner, and that the "*compatibility*" of the two job sharers was important. One surgeon pointed out that job sharing could actually lead to less flexibility as you would always have to check with the other colleague before taking annual leave or leaving work early which he felt would erode autonomy:

> "[Job share would] *take away the independence you have got*" (011, M/S).

b) Unpaid leave

Several consultants commented that it was the school holidays that were hardest to manage as a working mother, with one stating that she kept paying for a full-time nanny during the term-time despite not needing her, just to ensure that the holidays were covered (004 F/R). This consultant suggested that a system where you can change your work-life balance at different periods in your life would make a big difference to her:

> "*Ideally to work more in term time and less in holidays*" (004 F/R).

One consultant suggested that a solution might be to allow consultants to take unpaid leave:

> "*Offer consultants unpaid leave during school holidays on occasion*" (020, F/R).

A male surgeon suggested that we should "*think outside of the box*" with regard to solutions and that a proper solution to the issue of medicine conflicting with childcare responsibilities may be to offer women five years unpaid leave when they have children so that they can return full-time to the workforce having had their children and looked after them through their early years (009 M/S).

c) Locums

A few consultants commented on the fact that general practice was an attractive career choice for female doctors and stated that one reason for this was that it was possible to "*buy in*" locum support so that you can work more flexibly in the school holidays, and can take your full maternity leave without burdening your colleagues:

> "*The problem then falls to the GP surgery to fill that [workforce gap] with locums but it's not that particular woman's issue or problem because she's only contracted to work through certain months and they [the female GP] save virtually a whole consultant salary by not having to pay for extra childcare*" (004 F/R).

Whilst acknowledging the challenges of implementing this in hospital medicine due to the increased specialisation it was suggested that this may have not been adequately explored:

> "*People in general practice can [take time off in the school holidays] because they pay for locums, they can pay for their own locum for their holidays, but there aren't many locums in radiology and I couldn't be guaranteed that I could find someone*" (004 F/R).

Several consultants however described holding locum posts prior to their first permanent consultant post (003 F/R and 004 F/R).

5.5.1.5 Increase predictability of working hours and location

a. Consultant: better organisation of on-call rota's

Much of the discussion regarding solutions for work-life balance and particularly in relation to consultants with family responsibilities centred around the predictability of work and in particular the frequency of on-call. There were two main suggestions for easing the impact of this:

(i) Having on-call rotas that are shared between sufficient consultants so as not to be too regular:

"*Both locally and nationally I've tried to increase the number of interventional radiologists to make it more bearable and I think that's the solution*" (016 M/R);

"*If you had a decent on-call system and a decent number of surgeons on the on-call rota, say 10 – if you're only on-call every 30 days one all night [working session] would be alright*" (008 F/S);

(ii) Having on-call rotas that are planned a long way into the future:

"*We actually know our on-call until mid 2012* [6 months in advance] *... it's very important*" (019 F/R).

b. Trainee: stability in the geographic location of training

The issue regarding training location was raised by a few consultants. One female surgeon described the current surgical training which requires trainees to be able to move around the country as presenting a huge challenge to a female doctor with a family:

"*Training should be changed so you can be in the same place for the duration*" (008 F/S).

In contrast, radiology training does provide stability as raised by a female radiologist, stating that this was of particular benefit if trainees choose to have children during their training:

"*Surgical trainees move from hospital to hospital, Trust to Trust, so you don't form a relationship, whereas within radiology it's very different …. Whereas in surgery you'd have to come off the training programme [if you had a child] in radiology you don't, you step out of it, you come back into it*" (020 F/R).

5.5.1.7 Improve senior/managerial support

a) Strong positive leadership

The importance of strong positive leadership to the working lives and wellbeing of consultants was stated by several consultants, both in terms of being there to provide support and in terms of providing performance feedback:

"*It needs to be easy, approachable and appropriate management support*" (006 M/S)

"*You need to get that from the organisation … but if the balance isn't right and management are too overbearing and trying to micromanage your time then I think for most consultants it doesn't work well*" (014 M/R)

Some consultants were managers of their department and recognised their role in ensuring that they provided support to their workforce:

> "*It's respect and understanding of their needs ... I will never have a meeting after 5 or before 8 where the workforce is predominantly women*" (010 M/S).

b) Role models

A few consultants mentioned that 'role models' would be important, particularly in relation to female and part-time workers:

> "*If you have individuals who have made it to the top without being superwomen [they would be] able to create a healthy press for part-time workforce*" (019 F/R).

5.5.1.8 Improve practical support

c. Administrative support

The need for more administrative (secretarial) support for consultants was mentioned by several consultants, in terms of helping to manage administrative burden:

> "*You're not in for a day and the next day you've got 242 emails to answer*" (012 F/S);
>
> "*I have a PA but she works 3 days [a week] and works for about 10 consultants so I simply don't have any kind of professional infrastructure anymore ... You do it all yourself*" (019 F/R)

It was also mentioned in relation to requiring a key point of contact:

> "*If you're going to be late for something you need to be able to phone somebody, your secretary or whatever and say I'm not going to make it wherever, I'm going to be late, can somebody tell them I'm going to be late*" (008 F/S).

d. Technology

Technological solutions were mentioned by some consultants both in relation to their benefits and limitations. Several consultants mentioned the changes to NHS email ("NHS.net" enabling secure access outside Trust premises) and availability of smartphones to access email:

> "*I've now taken with NHS net and I think it's a good thing and a bad thing, so I often do my emails at home at night as I just don't have the time to sit at the computer [at work]*" (020 F/R)

"*[having a Blackberry] has made life a lot better in one sense in that I can do my emails at all sorts of varied times … often I do it at midnight when I'm in bed*" (001 F/R).

Others mentioned the use of tele/video-conferencing to enable meetings regardless of an individual's location:

"*You don't have to be in the room – stay at home, phone from home*" (010 M/S).

One radiologist, when discussing the problems she had with regard to covering school holidays and childcare said that the technological advances in relation to tele-radiology may help resolve the problems in the future:

"*I might be able to report from home for a couple of hours in the morning and then work from 6-10pm in the evening, just to keep some stuff going in the [school] holidays*" (004 F/R).

e. Parking facilities

Although only mentioned by one consultant, a female radiologist with young children, being able to park easily at the hospital was felt to make "*a big difference*" if you had to "*drop children on the way into work*" (001 F/R).

f. Support services/infrastructure

One surgeon mentioned the need to ensure effective and reliable support services in the hospital:

"*We totally depend upon the infrastructure of what we do. The patient can't get here [operating theatre] without a good portering system, or nurses looking after them … if things don't go according to plan, not because of unpredictability or emergencies, but because of lack of efficiencies for the infrastructure to run smoothly, then that's frustrating*" (002 M/S).

5.5.1.9 Improve childcare support

g. Better provision

Several consultants raised the need to ensure that there is more provision of childcare in hospitals, not just for consultants but for the staff they depend upon as well:

"*Some of my staff have been prevented from coming to work because they can't get childcare*" (008 F/S).

However, most recognised that this service, if provided, would be time-limited in usefulness and only work when you had young children who were not at school:

"[*Hospital-based childcare provision] only works up to school age, then when you have more than one child that falls apart really*" (001 F/R).

h. Financial support

A few consultants mentioned the financial burden of ensuring that you had appropriate childcare. One male surgeon highlighted the fact that earning higher salaries in medicine requires extra time "*either through free time or hours out in private medicine*" and that childcare costs, particularly in London: "*are sometimes as much as the doctors themselves are earning*" (011 M/S). A female radiologist concurred:

"[My nanny] *costs almost all my salary but I enjoy coming to work so it's worth it*" (004 F/R).

Another female radiologist spoke of the need to revisit childcare benefits, stating:

"[We are] *taxed double ... we effectively pay our nanny's tax, we get taxed, so we lose x percentage of our salaries to tax and on top of that we pay our nanny's tax as well … so maybe from the government* [there should be an] *initiative to have tax rebates because it's a lot of money*" (020 F/R).

5.5.1.10 Culture change

a. Tackling gender discrimination

When asked directly about how best to address "negative attitudes of co-workers", some consultants acknowledged that such a culture change may take time:

"*The senior male surgeons probably need to change their attitude quite a lot and that's going to take a long time*" (018 F/S).

However others suggested that it was in fact the organisation that was impeding the change:

"*I think in the surgeon's eyes that cultural change has probably changed ... I think it's in the bigger picture it's still a problem ... that it's still felt to be important that, to progress and to do well, and to excel, you have to be doing all of these things which are extra things. I don't think individual colleagues feel that at all, I think it's the system which feels that*" (011 M/S).

One male surgeon who described the "*difficulty*" in relationships between female doctors and nurses suggested that this had been 'sexually based' and was changing as nurses became more valued and there is a power-shift:

"*I think when the sex element drops out of it, that nurses are no longer trying to hook up with doctors, which I think is less of a case [now] … so the respect you get from them is not a sexual one … I think nurses are having more respect in their role as well, that they feel a valued member of the teams, so there isn't a hierarchy as such, then there won't be so much power, it's just power really*" (002 M/S).

b. Valuing different contributions

Several consultants mentioned the need to ensure that the contribution of different types of worker, particularly part-time workers, was recognised and valued:

"*I think that they [part-time posts] need to be made more attractive*" (020 F/R).

Some mentioned the barriers for those who do work part-time:

"*The working week isn't really set up for part-time working … really there's no reason they [decision making meetings] can't happen any day of the week*" (001 F/R).

Another female radiologist inferred it was the nature of the job preventing part-time working:

"*The NHS is not bad for letting you work part-time … it's just whether you can work part-time … It's the nature of the job*" (013 F/R).

5.5.2 Organisational level interventions with secondary prevention aim (Table 5.3b)

5.5.2.1 Culture change

c. Organisational focus on reducing stress

A few consultants mentioned the need for an organisational focus on reducing and preventing stress in the workplace:

"*[There is a need to] visibly prevent the stress in the organisation … alongside trying to target those groups more prone to stress and prevent the stress within the system … to try to maintain staff morale and reduce stress*" (009 M/S).

A female radiologist stated that there needed to be more recognition of basic needs for breaks and refreshments:

"[There should be] *more awareness that doctors do need drinks and coffees and lunches and breaks*" (001 F/R).

5.5.3 Individual level interventions (Table 5.3c)

5.5.3.1 Providing emotional support

a. Mentoring

The provision of mentoring was mentioned by a number of consultants. One consultant mentioned having a mentor currently, and another having an executive coach:

> "*occasionally when things freak me out … it's something I'm learning to cope with a bit better, more out of having been mentored really*" (002 M/S).
>
> *"I have a coach who works with me once a month. Her role, I see very much as helping me be a better leader … so we talk a lot about my leadership skills, what I'm doing, what I should be doing, what I could be doing better … Initially when I was approached that it might be a good idea to do this I wasn't sure, but I'm completely convinced that it is a good thing"* (010 M/S).

Another mentioned the mentorship that had been inherent to her training due to being within a firm:

> "*They [junior doctors] don't belong to a firm, where you have mentorship, which I had … making you the best person in your job*" (015 F/S).

Several other consultants mentioned spontaneously that having a mentor would be useful:

> *"I think a mentor is probably a good idea … I think it may be useful to have a more senior experienced person just to look at my career from a different angle for me*" (022 M/R).

One surgeon, although supportive of mentoring in principle, stated:

> "[The benefit] *depends on the person that's mentoring you*" (017 F/S)

Another female surgeon mentioned that although there was supposed to be a mentoring scheme in place in the Trust where she worked, she had not been provided with information about how to access it:

> "*There's supposed to be a mentorship scheme in place but there isn't really … there is very little support. There probably is access to it but I've no idea how you would access it*" (008 F/S).

b. Other forms of emotional support

A female surgeon mentioned that there was a lack of emotional support, despite the nature of the job (vascular surgery) where patient death was a real possibility:

> "*There should be some form of confidential counselling where you're not judged but you can talk something out with somebody*" (008 F/S).

Another consultant mentioned the need for strategies to ensure good interpersonal relationships with colleagues:

> "*if you have an interpersonal relationship with someone that's normally good but then turns a bit sour for a while, then having strategies to first of all identify that, and then to try to build on that and* [such strategies] *therefore improves your social support*" (007 M/S).

5.5.4 Strategies employed by individual consultants to manage occupational stress (Table 5.4)

Many consultants shared their personal strategies for managing occupational stress. These included:

a) Living near work
b) Importance of annual leave
c) Relaxation
d) Offering flexibility in relation to working hours where possible

a) Living near work

A number of consultants, particularly those with children, mentioned that they had chosen to live near to their workplace in order to best ensure that they could manage a work-life balance:

> "*I'd rather be squashed in a place nearer, in central London, than have to commute*" (012 F/S);
>
> "*Even though I was on-call it didn't worry me because I just bought a flat next to the hospital*" (015 F/S).

b) Importance of annual leave

One consultant stated that one of her main strategies for dealing with the pressures of work was to ensure that she took all of her annual leave:

> "*I take all my holiday and I try to have two or three [holidays] backed up into the future ... that's always very psychologically encouraging*" (019 F/R).

On the contrary, a male surgeon who acknowledged having a poor work-life balance and lacking control at work stated that he had:

> "*yet to arrange my holiday in good enough time so that last year I lost a week and half's holiday because I didn't have enough time in the year to take it*" (008 M/S).

c) Relaxation

Only one consultant mentioned the importance of finding "*ways of relaxing*" (010 M/S). This particular consultant listened to Buddhist chants on his way into work in the morning:

> "*I am very calm when I get to work*" (010 M/S).

Several female consultants with families mentioned the lack of time that they had for themselves due to either working or looking after their children and that this was detrimental to their wellbeing:

> "*All I do is work or childcare. I don't do anything else. It would be better for me to do some sport*" (013 F/R).

d) Offering flexibility in relation to working hours where possible

Several consultants mentioned the importance of extending their working day in order to feel that they could take some time back (e.g. leave early) if they needed to. One female radiologist stated that stepping out of the boundaries of her job-plan gave her a "*bargaining tool*":

> "*It keeps me in control ... you've got to give to the system and then you can take some back*" (020 F/R).

A male surgeon stated the importance of ensuring that you:

> "*have some periods of time that are designated as not to be at work ... it means that when I'm there ... that if I really wanted to say 'well hang on a minute I shouldn't be here' then I would turn around and say exactly that ... it means that I know in that period of time it's good grace*" (011 M/S).

Table 5.3(a) Organisational level interventions with primary prevention aim suggested by consultants

Theme	Sub-theme	Example quotations
1. Improve training for junior doctors	Extending training to account for EWTD	"I look at registrars we have now who've literally just come from house jobs and they have not got a clue why they want to do radiology, they are immediately immersed in a series of exam processes, which take them up to the point where they'll get a qualification in radiology in a couple more years then suddenly they'll be radiology consultants" "they are not being given the opportunity to develop any kind of breadth in medical practice before they specialise … I think the solution is to allow pre-specialisation general medical education to expand again" (019 F/R) Agrees "absolutely" there is a need to lengthen training due to the EWTD "I just think it's not fair on them coming out there inexperienced" (018 F/S) "As it's already diluted, your training, we used to train for nearly 13-14 years before we became a consultant, now in 7 years without the mentorship. And if you're doing the 7 years full-time you're not getting enough skills to be expert in that field and if you dilute it by saying I'll come part-time for 14 years or 10 years they're worse off" (015 F/S) "We do have to be more creative with teaching and training within those confines … but I really feel that they need to be a bit more battle weary, they need to be that much tougher, even just for one or two years. You just need two or three really tough years to understand how to make decisions when you're tired …Maybe the 48 hour working time directive may help [to achieve gender equality] because I think we're reducing the quality of the males now as much … its overall dumbing down I'm afraid … I think it should be maybe like 58-60 [hours a week] or maybe 60 one week, 48 another. There has to be something like that because they're just not getting their flying hours in, and for surgery you need a critical amount. For psychiatry, paeds no, that's why women are in [these posts] " (002 M/S)

Theme	Sub-theme	Example quotations
	Improving assessment of competency	"We had to compete for jobs every six months or a year, so you want to be on top of it all of the time ... and now you get into a number, you're there for 7 years whether you do any good or not, whether you train or not you're going up the ladder ... people entering the training programmes, they're guaranteed to go and finish them" (015 F/S) "we have to ensure we are looking after their education all the way along, which we have always done, but now we have to record it and there's a bit of a 'hoop and box ticking' going on … a consultant said to me yesterday that he's reluctant to teach anybody … because he ends up having to fill in all these forms. And that bothers him." " trainees [have] a clear training thing but it's not imposed and they can fail them but they only go on probation for a year and keep their head down, it doesn't really route them out" (002 M/S)
	Working in teams	"You can force people to work in teams ... there are some teams that have very few colleagues, there might just be one or two surgeons in transplant surgery, so it would be much better if they had colleagues or had joined teams … rather than have two small teams, have a larger team" (007 M/S) "you need good team support" (008 F/S) "[the team I work with is] like a professional family" (019 F/R) "if there wasn't [team support] it wouldn't be possible to do [the job]" (011 M/S) "[A shift to team responsibility rather than individual responsibility] would be good .. that would be great" (013 F/R) "I've got a very, very good team … a cohesive team of consultants has been absolutely key … I think we've got a fantastic team … we talk to each other and there aren't any big issues … it really is a team thing" (014 M/R)

Theme	Sub-theme	Example quotations
	Working in teams (continued)	"I think that [teamwork] does make a difference ... I knew I was going to be off for most of this week so I did actually speak to one of my colleagues and said 'I've got these patients and can you just keep an eye on them'. I'm pretty happy they will be looked after and someone knows about them ... That's the main difference that the working time directive's made … when I was a house officer you would do every on-call with your team, you'd spend weekends together, you'd have your Sunday night curry together and you were a team and you know exactly who they were, what they were like, huge trust, and that's just gone because you're not necessarily on call with your own team, you've got junior doctors that change every 4 months and it does make a difference" (017 F/S) "I absolutely agree [that the team you work with is important] … as long as you've got confidence in your colleagues … I have no problem with my colleagues seeing my patients post-operatively on the understanding that, if there's any real problem, they'll get hold of me wherever I am" (015 F/S) "make sure you're supportive of your colleagues and they're supportive of you" (010 M/S)
	Skills in management and leadership	"In registrar training you need to be made aware of what's expected of you as a consultant ... I didn't appreciate the amount of managerial and administration stuff ... in my first two months I was suddenly made lead of clinical governance for the department ... it's good to be thrown into the deep .. but actually it would have been nice to have a little bit of preparation … when you're a consultant, apart from being good at your specialty, you also need to know how to deal with politics and interaction and being able to negotiate, about being confrontational and all that stuff .. leadership skills and working as part of a team" (021 M/R)
	Improved access to CPD	"Courses aren't run part-time – they're often on days of the week – so that's hard for people to attend conferences ... the working week isn't really set up for part-time working" "courses need to be run with PT workers in mind" (001 F/R) "The amount of work that has to be done in the given time doesn't really allow you time to do CPD. CPD is really important for professional satisfaction … and if you're trying to do your job in 4 days then obviously it's harder than if you're doing it over 5 days" (013 F/R)
2. Recruitment/ selection of staff	Being explicit regarding expectations	"Departments need to look at themselves and look at 'what sort of department are we?' Therefore what sort of applicants are we likely to attract" (014 M/R)

Theme	Sub-theme	Example quotations
3. Improve flexible working options	Job Share	"Maybe part-time is the wrong word – maybe a job share is a better thing. Create a consultant job share and say it's a 12 PA post, we want to employ two of you ... and you function as a unit" (020 F/R) "Two [consultants] working in same system [part of body] and another two, so in total four working on same type of intervention ... we aim to plan a service with more than one operator" (022 M/R) "A job share … with a very clearly marked out job plan ... a job plan where you were doing an identical job ... I guess maybe it could work. You'd probably have a little bit of overlap so that you had some continuity of care, maybe that would be the best way to do it" (013 F/R) "if we could encourage [job share] it would be great" (007 M/S) "surgery could definitely be done as a job share providing you can get two compatible people working together who were committed to covering each other when the other one wasn't there" (008 F/S) "I'm sure there must be more mileage to gain out of job sharing for women …. that would give everyone more flexibility in their job planning because you'd have some overlap between the 2 people" (004 F/R) Job share is difficult because "you lose the individual flexibility.. to be able to cope with the high demand … if you have to always check with another colleague it takes away the independence you've got" (011 M/S) "If you job share and you trust very much the person you work with in your job share that probably is very helpful .. but its having to find someone that wants to do that and that you get on with and you trust and they trust you equally as much" (017 F/S)
	Unpaid leave	"One thing that would be nice ... is the issue of offering consultants the option of unpaid leave … during school holidays on occasion" (020 F/R) "Allow women to take 5 years off when they want to, to look after their kids. Without pay. You're not allowed to do that … It's possible to run a service with women who have taken 5 years off and come back full-time. I think that's an area we haven't even looked at" (009 M/S)
	Use of locums	"people in general practice can [take time off in the school holidays] because they pay for locums, they can pay for their own locum for their holidays, but there aren't many locums in radiology and I couldn't be guaranteed that I could find someone … the problem then falls to the GP surgery to fill that with locums but it's not that particular woman's issue or problem because she's only contracted to work through certain months and they save virtually a whole consultant salary by not having to pay for extra childcare" (004 F/R). Held locum posts prior to their first permanent consultant post (003 F/R and 004 F/R).

Theme	Sub-theme	Example quotations
4. Increase predictability of working hours and location	Consultant: better organisation of on-call rota's	"the frequency of on-call is crucial to this … both locally and nationally I've tried to increase the number of interventional radiologists to make it more bearable and I think that's the solution [to women entering the profession]" (016 M/R) "We actually know our on call until mid 2012 ... because two women organise it and we do it that far ahead. It's very important ... I booked something the other night for March 2012" (019 F/R) "On call is something that could do with being looked at for working women as well" (001 F/R)
		"Vascular surgery is really unpredictable but it could be made less unpredictable in that we do a very hefty on-call ... it's pretty much a 1 in 3 and you're probably in pretty much every third on-call and when you're in you're in all night and then you have to work the next day. That's exhausting - even I find that exhausting and I don't have any children. If you had a decent on-call system and a decent number of surgeons on the on-call rota, say 10 – if you're only in every 30 days once all night it would be alright" (008 F/S) "it's a fixed 1 in 8 and everyone has their set day on-call … essentially I'm paired with another consultant so on holidays, study leave and things like that we swap our on-calls with each other … so you can actually plan ahead and work out which weekend you're going to be on call" (017 F/S)
	Trainee: stability in geographical location of training	"One of the biggest insecurities … is the fact you have to move hospitals so frequently and you're always applying for another job and it could be in Manchester, it could be in London. If you're trying to keep your family together, that lack of not knowing where you're going to be for the next 5 years is incredibly difficult. If there was some more structure, so you could say we're appointing you to this training scheme and you will be in this area for a period of time, that allows you to be more stable, nannies, schools all of that becomes less of an issue ... the insanity of the way the training schemes are currently run .. it causes tremendous stress and it puts people off" (008 F/S) "I get [my trainees] for 5 years, they don't move ... whereas surgical trainees … move from hospital to hospital, Trust to Trust, so you don't form a relationship, whereas within radiology its very different … whereas [in surgery] you'd have to come off the training programme [if you had a child]. Whereas in radiology you don't, you step out of it, you come back into it." (020 F/R)

Theme	Sub-theme	Example quotations
5. Improve senior/ managerial support	Strong positive leadership	"our manager that's just left was very very good and had I rung up and said I've got to go, she would say 'fine you go and we'll sort it out' … and that's brilliant cause that's what you need. That [managerial support] isn't universal" "it does depend on having that relationship with management such that you feel you're on the same team and they're your friends" "it needs to be easy, approachable and appropriate management support, that's the key thing"(006 M/S) "I think performance feedback is very important, you need to get that from the organisation ... you need strong management ... but if the balance is not right and management are too overbearing, and trying to micromanage your time, then I think for most consultants it doesn't work well" "I have been fortunate enough to have some fantastic directors …by fantastic I mean enthusiasts and for me that is actually the number one quality"(014 M/R) "It's respect and understanding of their [workforce] needs … I will never have a meeting after 5 or before 8 where the workforce are predominantly women" (010 M/S) "Gynaecology was very male dominated before and now it's almost 50/50 female. I think that came as a positive discrimination from the college of surgeons. So probably the change has to come from the top" (015 F/S) "there is an expectation [from managers] that we still do our jobs and do the best we can for patients, even if it means working for longer than you should" (017 F/S)
	Role models	"I would suggest that role models would be very important in raising the esteem of [part time female workers] ... if you have individuals who have made it to the top without being superwomen and able to create a healthy press for part-time workforce" (019 F/R) "The female programme director was the first consultant that I worked with when I became a registrar. I suppose in some ways she was a role model in that you see where she's got to and how she's got there, and she was always very supportive of all the female trainees, but as time has gone one, because most of my surgical friends are male, gender's become less important" (017 F/S)

Theme	Sub-theme	Example quotations
6. Improve practical support	Administrative support	"I could have more support – a PA would give me better support, someone to keep an eye on your calendar, to help organise your teaching ... more secretarial support would make a difference" (001 F/R) "the support is huge … you're not in for a day and the next day you've got 242 emails to answer" (012 F/S) "you need a reasonably good support team around you so if you're going to be late for something you need to be able to phone somebody, your secretary or whatever and say I'm not going to make it to wherever I'm going to be late, can somebody tell them I'm going to be late" (008 F/S) "There is a lack of administrative infrastructure compared to 5 years ago … although there's been a huge increase in medical administration. I have a PA, but she works 3 days and works for about 10 consultants so I simply don't have any kind of professional infrastructure anymore .. you just get ingrained in it, you do it all yourself" (019 F/R)
	Technology	"There are certain IT things which help … providing people who work part-time with absolutely the best quality IT technology available to them so they can, when necessary, access things remotely ... but [you need to ensure its] not abused because … you've got another whole job there" (011 M/S) "I've now taken with NHS net and I think it's a good thing and a bad thing, so I often do my emails at home at night as I just don't have the time to sit at the computer [at work]" (020 F/R) "[Having a Blackberry] has made life a lot better in one sense in that I can do my emails at all sorts of varied times… often I do it at midnight when I'm in bed"(001 F/R) "In the future you might be able to do tele-radiology, so I might be able to report from home for a couple of hours in the morning and then I might be able to work from 6-10pm in the evening to just keep some stuff going in the [school] holidays" (004 F/R) "teleconferencing ... you don't have to be in the room – stay at home, phone me from home" (010 M/S)
	Parking facilities	Parking "so if you drop children on way into work you can get to work easily ... those things make a big difference" (001 F/R)
	Infrastructure	"We totally depend upon the infrastructure of what we do. The patient can't get here without a good portering system, or nurses looking after them and I think that has to be addressed … if things don't go according to plan, not because of unpredictability of emergencies, but because of lack of efficiencies for the infrastructure to run smoothly, then that's frustrating" (022 M/S)

Theme	Sub-theme	Example quotations
7. Improve childcare support	Better provision	"more childcare within the working hospital, but that only works up to school age, then when you have more than one child that falls apart really, but that did help lots of my colleagues" (001 F/R) "there are only a certain number of crèche places here …some of my staff have been prevented from coming to work because they can't get childcare" (008 F/S) "The hardest thing is the holidays … when they get older and they go to school .. ideally you don't really want to pay anyone to sit there all of that time [that they are at school]" (004 F/R)
	Financial support	"Silly things like childcare benefits. Put that in place … because you're taxed double that really irks my husband … we effectively pay our nannie's tax, we get taxed, so we lose x percentage of our salaries to tax and on top of that we pay our nanny's tax as well ... so maybe from the government initiative is to have tax rebates because it's a lot of money" (020 F/R) "[finances matter] the ability to earn higher amounts of money in medicine requires extra time, either through free time or hours out in private medicine … particularly relating to part-time workers and responsibilities for childcare and domestic … it's even more important in London where childcare costs .. are sometimes as much as the doctors themselves are earning" (011 M/S)
8. Culture change	Tackling gender discrimination	"There's a huge cultural shift ... we are getting there I think, it's slow, but there has to be a huge cultural shift" [to make a difference to working lives of female consultants in particular and encourage them to stay in profession and go into surgery] (010 M/S) "[negative attitudes] are coming from the senior surgeons, because a lot of them have been difficult in the past, so guess it's the senior male surgeons probably need to change their attitude quite a lot and that's going to take a long time .. and, you know, orthopaedics can be a perfect example … I would suspect that it's incredibly hard for a female orthopaedic surgeon to survive" (018 F/S)

Theme	Sub-theme	Example quotations
		"When the sex element drops out of it, that nurses are no longer trying to hook up with doctors, which I think is less of a case [now], when I was a trainee it was a lot more prevalent. So the respect you get from them is not a sexual one ... I think nurses are having more respect in their role as well, that they feel a valued member of the teams, so there isn't a hierarchy as such ... then there won't be so much power … when roles become gender neutral then that's the only chance" (002 M/S) "I think to change [negative] attitudes ... if structures are in place to say yes we are going to foster part-time working but it'll be at no cost in terms of time to the people who are actually then doing the work at the coal face" (023 M/R) "I think in the surgeon's eyes that cultural change has probably changed [happened] … I think it's in the bigger picture it's still a problem" (011 M/S)
	Valuing different contributions	"it's still felt to be important that, to progress, and to do well, and to excel, you have to be doing all of these things which are extra things. I don't think individual colleagues feel that at all, I think it's the system which feels that" (011 M/S) "The working week isn't really set up for part-time working ... even though radiology's very forward [thinking] it's still got a long way to go … really there's no reason they [decision making meetings] can't happen any day of the week" (001 F/R) "The NHS is not bad for letting you work part-time, it lets you work part-time - it's just whether you can work part-time I guess. It's the nature of the job" (013 F/R) I think that [part-time posts] need to be made more attractive … needs to link with that [job satisfaction/control] and link up with that [work life balance] but I think that's a big link" (020 F/R)

Table 5.3(b) Organisational level interventions with secondary prevention aim suggested by consultants

Theme	Sub-theme	Example quotations
Culture change	Organisational focus on reducing stress	"[There is a need to] visibly prevent the stress in the organisation, in the NHS ... alongside trying to target those groups more prone to stress and prevent the stress within the system. So not only to focus on delivering healthcare to patients in the cheapest possible way but to think about staff and to try to maintain staff moral and reduce stress" (009 M/S) "more awareness that doctors do need drinks and coffees and lunches and breaks would [make a difference]" (001 F/R)

Table 5.3(c) Individual level interventions suggested by consultants

9. Providing emotional support	Mentoring	"they [Junior Doctors] don't belong to a firm, where you have mentorship, which I had … making you the best person in your job" (015 F/S) "I think a mentor is probably a good idea ... I think it may be useful to have a more senior experienced person just to look at my career from a different angle for me" (022 M/R) "having a set mentor [would have made life easier] ...but it depends on the person that's mentoring you" "I've had several along the way and partly it's people that you work with, that you get on with, people that you make friends with and ring once you've left the job.. people you ring when you're having a bad day" (017 F/S) "There's supposed to be a mentorship scheme in place but there isn't really ... there is very little support. There probably is access to it but I've no idea how you would access it" (008 F/S) "I suppose what would have been nice perhaps would have been a specific senior mentor. I got my own from my peers really. But having a senior mentor would have been quite good" (018 F/S) "Occasionally when things freak me out ... it's pretty rare, but when I do I hit the roof and people dodge, run for cover … it's something that I'm learning to cope with a bit better, more out of having been mentored really" (002 M/S)
	Other forms of emotional support	"There should be some form of confidential counselling where you're not judged but you can talk something out with somebody ... nobody looks after you, you're left to your own devices" (008 F/S) "if you have an interpersonal relationship with somebody that's normally good but then turns a bit sour for a while then having strategies to first of all identify that, and then to try to build on that and [such strategies] therefore improves your social support" (007 M/S)

Table 5.4 Strategies employed by individual consultants to manage occupational stress

Theme	Example quotations
Living nearby	"I don't live too far away – I live 10 minutes away" (020 F/R) "that's the reason I live not too far away [to see daughter before bed] I'd rather be squashed in a place nearer, in central London than have to commute" (012 F/S) "we were locally based [when children were small]" (014 M/R) "I bought a flat next to the hospital" (015 F/S)
Importance of annual leave	"I take all my holiday, and I try to have 2 or 3 backed up into the future. I think I'm going then and I'm going then, that's always very psychological encouraging" (019 F/R) "I've yet to arrange my holiday in good enough time so that last year I lost a week and a half's holiday because I didn't have enough time in the year to take it" (006 M/S)
Relaxation	"[it is important to] find ways of relaxing" (010 M/S)
Being flexible where possible	"I step out of the boundaries [of job plan] when it works for me ... it's a bargaining tool ... I will stay late on the day to sort this case out for you but next week I'm not going to do it … I feel it keeps me in control … if you are going to work part-time as a woman, and as a woman with children, it's give and take. You've got to give to the system and then you can take some back" (020 F/R) "it's very important that you have good job planning and your appraisal of your job planning, and I have some periods of time that are designated as not to be at work .. it never happens that I'm not at work on them but it just means that I know that when I'm there, in those periods of time ... that if I really did want to say well hang on a minute I shouldn't be here, then I would turn around and say exactly that. That's quite important ... it means that I know in that period of time it's good grace" (011 M/S) "[it is important to define] what you are capable of doing and what your time allows you to do. Being honest with your job plan, being honest with your colleagues so they know what, it's all about expectation and respecting other people's strengths ... and variety in your working environment, taking on new roles that will interest and challenge you" (010 M/S)

Table 5.5 Consultants' views on the impact of the European Working Time Directive on training junior doctors (EWTD)

Views on the impact of the EWTD
"*What has made my life much more difficult, as I've come through my training, are the enforcements of the hours that junior doctors have to keep, so not being able to work the hours you want to work ... when you're training in a practical specialty like surgery you're really keen to spend as much time as you can learning how to operate ... and there were time constraints enforced upon us and that was very very stressful and I found that actually a great source of frustration … I think there is probably a difference between the practical specialties and the non-hands-on specialties*" (007 M/S)
"*The training is very poor ... because of the contamination of the European working rules*" (015 F/S)
"*I did the 24/7 working the whole of the weekend ... it made you less afraid of the sick patient" "[before EWTD] your breadth of medical knowledge was quite big before you started*" (021 M/R)
"*I just don't know if the new trainees will get enough time to build up the experience … it's a challenge for people coming through and it's a challenge for us to train them as well*" (022 M/R)
"*it's a nightmare now [with] shift systems, because shifts would be very difficult probably for childcare*" (001 F/R)
"*I came up through the tough stuff, but the tough stuff also gave you an incredibly good surgical experience which we're not giving now, so yes, they've got a much better work life balance, but their exposure to experiences is so different to ours and that's quite scary I think. They're coming out as consultants very inexperienced*" (018 F/S)
"*[surgery] is not any more stressful than other specialties [now] because of the EWTD*" (009 M/S)
"*I'm not saying [the old system] was correct ... but the [new] consultants that have been sped through the mill, you're going to have lots and lots of lawsuits … you ask most doctors who they would go to for surgery and they'll go to the old duffer who's seen every possible manifestation of the disease. I'm going to him because he's got 5000 operations under his belt, you've got 30 … we're not training electricians here, we're training doctors*" (023 M/R)
"*the juniors are now becoming less and less experienced because they work less hours … so I think over the years more and more responsibility's gone to the consultant because they're the only person that's contactable all the time or seeing the patients every day of the week" "when I was a house officer you would do every on-call with your team, you'd spend weekends together, have your Sunday night curry together, and you were a team ... there was a huge trust. Now you are not necessarily on call with your own team, you've got junior doctors that change every 4 months and it does make a difference*" (017 F/S)
"*Medicine's an apprenticeship, it's not pure science … you need the experience. You need the emergency experience and you need the constant training experience. So I truly believe that a consultant on appointment is not as safe, or as competent, as they were when I was appointed as a consultant …. There was a huge price to pay, in terms of stress, in terms of family life and all the rest of it. If you are saying to me where those people better doctors, yes they were, nobody's saying it was better for them, or that it was less stressful, but it was better for the patients*" (016 M/R)

5.6 Discussion

What is known already?

- Little is known about the effectiveness of interventions to prevent and/or treat occupational stress due to methodological weaknesses (including lack of theoretical underpinning) of the research and lack of research on organisational-level interventions.
- Tackling work-related psychological distress, which is multi-component in nature, is likely to require multi-component and/or multi-level strategies.
- Robust design and testing of a complex intervention requires the application of relevant theory regarding the causes and prevention of work-related stress and collaboration with the relevant stakeholders.

What this study adds

- The majority of interventions proposed by consultants were organisation-level aimed at primary prevention of occupational stress. These included improved training; job re-design; and provision of adequate support (managerial, practical and emotional). Consideration of how to address gender discrimination or negative attitudes to flexible working was integral to many proposed interventions.
- Tackling occupational stress in hospital consultants requires a gender sensitive approach that recognises and addresses the context and content of work for individual (male and female) employees, and in particular has a coherent theoretical basis.
- Current recommendations regarding women in medicine are focused on workforce planning and have little reference to the context or content of work that may serve as risk factors for psychological distress. Due to their lack of reference to relevant theory or evidence they are unlikely to reduce or prevent occupational stress in the workforce.

All consultants suggested interventions and/or strategies aimed at preventing (or at least reducing) occupational stress in both male and female consultants. The majority of interventions proposed by consultants were organisation-level aimed at primary prevention of occupational stress. These included improved training; job re-design; and provision of adequate support (managerial, practical and emotional). Strategies to tackle gender discrimination and negative attitudes towards flexible working were intrinsic to many of the proposed interventions.

Interventions relevant to all consultants (male and female, full and part-time workers) included improving the quality of training (for training and career grade doctors) and improving practical and emotional support at work. Ensuring that doctors are equipped with the necessary technical and non-technical (e.g. teamwork, management, leadership) skills to deliver high quality patient care was a core theme for many consultants.

Many expressed concerns about the competence of future consultants who will have received fewer years and shorter hours training due to the combination of the European Working Time Directive and shortening of medical training (Horwitz, 2011). Concerns were raised in terms of the wellbeing of this new tranche of consultants with much less experience and training (including their competence to practice safely) and in terms of the impact of the reduction in hours and training of junior doctors on existing consultants' workload and ability to train them effectively. Suggestions for intervening with this were limited due to the statutory nature of the regulations but some suggested re-expanding pre-registration training, and others that the regulations should be reviewed for doctors such as surgeons where hours of practical experience are required to reach competence.

The impact of the ETWD has been a constant source of debate and controversy for the medical profession (BMA, 2008; Federation of the Royal Colleges of Physicians of the UK, 2011). The concerns about impact on patient safety voiced by some of the consultants in this study have been the subject of a recent systematic review (Moonesinghe, Lowery, Shahi, Millen, & Beard, 2011). The review examined impact of reduction of working hours in US and UK and found that in the US (where working hours have been reduced to less than 80 a week) studies had shown that the policy had not adversely affected outcomes in patients or postgraduate training. In the UK however (where working hours are significantly shorter, limited to 48 hours), the impact had not yet been evaluated in sufficiently robust studies.

Further commentary on this subject has suggested that studies that examine the impact of such policies have failed to examine various key issues including the extent of compliance with the rules, the impact on the job demands of junior doctors (e.g. are they being required to do the same amount of work but in less time?), and the impact of the policies on handovers and transfer of care (Horwitz, 2011). The NHS Medical Education England (MEE) have conducted a review of the impact of the EWTD on training (Temple, 2010) that included focus groups and interviews with key figures to gauge opinion as well as sourcing empirical evidence. This review suggests that little attention has been paid to how to ensure quality of training within the limitations of the ETWD. The report concludes with various recommendations for addressing this shortfall including implementing a consultant delivered service, ensuring that service delivery explicitly supports training, and supporting and rewarding trainers. No evidence regarding the implementation of these recommendations could be found.

The importance of management, leadership and teamwork skills was evident in suggestions made by many of the consultants in this study. Research has shown that consultants who feel inadequately skilled in these aspects of their job are more likely to report burnout and psychological distress (Heaven, et al., 1998; Ramirez, et al., 1996; Taylor, et al., 2005). Training in such 'non-technical' skills has traditionally been poorly considered in under-and post-graduate training, unlike in aviation where the safety of passengers is considered to be as dependent on the non-technical skills of the crew (communication, leadership, teamwork) as their technical skills (Festa, 2005; Flin & Patey, 2009).

There has been a shift in recent years to more acceptance of their value and importance in reforming and improving the NHS (Academy of Medical Royal Colleges & NHS Institute for Innovation and Improvement; Department of Health, 2008a) and there now exists a Medical Leadership Competency Framework providing guidance for leadership skills at undergraduate, post-graduate and post-specialist levels (NHS Institute for Innovation and Improvement & Academy of Medical Royal Colleges, 2010). Evidence-based training in such "non-technical skills" is generally lacking (McCulloch, Rathbone, & Catchpole, 2011) though there is an emerging literature especially in relation to their application to improve patient safety in surgery (L. Hull et al., 2012; Vincent, Moorthy, Sarker, Chang, & Darzi, 2004).

Meta-reviews of teamwork (Salas, DiazGranados, Weaver, & King, 2008) and leadership (Avolio, 2005) interventions have each reached similar conclusions that despite hundreds of studies little is known due to methodological weaknesses in study design, incomparability of findings due to the vast range of interventions, and non-standardised process and outcome measures. An exception is communication skills training. The UK national advanced communication skills programme, run by the Department of Health National Cancer Action Team is underpinned by trials showing that communication skills can be taught and skills maintained (Fallowfield et al., 2002; Fallowfield, Jenkins, Farewell, & Solis-Trapala, 2003). This training is particularly aimed at improving doctor-patient communication and tackles aspects of communication such as breaking bad news and discussing prognosis. It is available for all cancer health professionals and is a mandatory requirement for those who have direct contact with patients. Applying these evidence-based techniques to the teaching of other key communication skills (such as teamwork skills) and to consultants outside of oncology may be beneficial.

A second key set of proposed interventions relevant to all consultants concerned ensuring that doctors have the necessary support at work. This comprised suggestions for both emotional and practical support. The need for improved emotional support at work was cited by a third of consultants interviewed. Mentoring was a common suggestion though only one consultant described having a mentor (and it was his older brother, a consultant in the same specialty). There is growing evidence that mentoring can bring many positive benefits (Steven, Oxley, & Fleming, 2008), and it has strong support of the BMA who published '*Mentoring for Consultants: a national framework for the NHS*' in 2010 stating that mentoring should be available for doctors at all stages in their career (BMA Joint Medical Consultative Council, 2010). A BMA survey of medical directors and postgraduate deans in 2009 however reported most (69%) were not aware of mentoring scheme for consultants in their region (Wilson, 2010). Given the support for mentoring from national bodies (BMA, Royal Colleges) and the consultants themselves, but the lack of their availability, it may be necessary to explore the barriers and facilitators to implementing such schemes.

Other consultants specified a need for 'confidential counselling' and support when things have gone wrong. We know very little about the effectiveness of such interventions. A systematic review of studies conducted with health professionals concluded that there was some limited evidence for the benefit of interventions such as teaching relaxation techniques and coping skills, and for work-directed interventions such as communication skills training (Ruotsalainen, Serra, Marine, & Verbeek, 2008). However, most of the included studies were focussed on nurses who may be more open to receiving interventions than doctors. Doctors notoriously avoid seeking help for mental health problems (Harvey, et al., 2009).

As well as emotional support, consultants also suggested various strategies for reducing risk of psychological distress that were categorised as "improving practical support". This included the provision of administrative support as well as the provision of technological solutions to better facilitate different working patterns and work-life balance. Although technology was mentioned by some as a potential solution to issues relating to workload and working patterns, others suggested that technology could serve to increase stress. Indeed there is a growing literature about the impact of technology on health, with one author coining the term "email stress" (Hair, Renaud, & Ramsay, 2007) and another suggesting that technology was starting to be integrated into work-stress frameworks as a contributory factor (Amick III & Celentano, 1991).

As well as primary prevention, some consultants also recognized the need for secondary prevention, specifically an organisational focus on reducing stress. The long hours' culture is evident in the results of the annual census conducted by the Royal College of Physicians. This shows an increasing trend for consultants (both full and part-time) to work much more than their contracted hours. In the latest published census (from 2010), this equated to the average whole time consultant working 1.3PA's more than their contracted hours, and the average part-time consultant working 1PA more than their contracted hours (Federation of the Royal Colleges of Physicians of the UK, 2011). Set within a context of reduced practical support (due to financial restraints) and lack of provision of emotional support this increasing trend raises concerns for the wellbeing of the workforce.

Many consultants reflected on the reality of the increasing number of women in hospital medicine and the issues related to this, which predominantly focussed on the need to ensure satisfaction and wellbeing for the individual woman within the context of perhaps having career breaks or working flexibly, but with similar attention paid to the satisfaction and wellbeing of the remaining workforce. Consultants proposed various 'job-redesign' interventions or strategies to attempt to address this. This included suggesting that there should be more job-share posts. One consultant particularly made the distinction between 'job share' and 'part-time' posts as she felt it denoted a whole job being covered by two people rather than part of a job being completed (the implication being that the rest was left to others to do). Some consultants had managed to pair themselves up with others doing a similar job and had in effect created such posts for themselves but felt that this should be much more strategically planned. Another practical proposal was that on-call rotas should be planned well in advance and shared amongst as many consultants as possible so as to enhance the predictability of work commitments and ease the burden on an individual consultant.

There has been much attention paid to the issue of the increasingly female medical workforce by several of the Royal Colleges (particularly the Royal College of Physicians) in England. This was instigated by the publication of "*Women in Hospital Medicine*" in 2001, and more recently by "*Women and medicine: the future*" (June 2009) and "*Women Doctors: making a difference*" (Oct 2009). The key aim of these reports has been to review the statistics relating to women in medicine, plot their career trajectories and project to the future with an increasingly female medical workforce. Each report has culminated in a series of recommendations aimed at

ensuring that the medical workforce is able to deliver high quality patient care in relation to capacity. Most of the recommendations are based upon improved data collection and workforce planning (Jane Dacre & Shepherd, 2009), rather than attempts to tackle any wider cultural issues. Many recommendations from the first report in 2001 are repeated in the more recent reports, suggesting that implementation of the recommendations has either failed to occur, or failed to resolve the issues. There is little mention of plans for audit or evaluation of the implementation of recommendations within these reports, which may in part explain their lack of implementation.

Given that these reports may influence workforce planning, the recommendations have been reviewed in relation to concordance with the interventions suggested by consultants in this study together with the explanatory framework reported in Chapter 4. One area of convergence is the recommendation for improved access to mentoring. This was proposed as a practical and emotional support strategy for both male and female consultants by consultants in this study, as mentioned earlier. In the latest RCP report mentoring is recommended for female doctors but is combined within a recommendation about improving 'careers advice' so appears more targeted at training rather than career grade doctors.

In addition to mentoring, recommendations aimed at encouraging women into leadership roles have been a prominent theme. The latest report suggests "*committees should be encouraged to develop their ways of working to enable greater participation by doctors who are parents or carers*" (Recommendation 1.2.2 (Department of Health, 2009)). The issue of working practices acting as barriers to participation was raised by some consultants in this study, and is a regular feature in literature about the 'glass ceiling' defined as "*invisible or artificial barriers preventing women advancing beyond a certain level*" (Bell, McLaughlin, & Sequeira, 2002).

The latest Royal College report (*Women Doctors: making a difference*) states that an audit of the arrangements medical institutions have in place for committees and boards is "underway". This was 2.5 years ago but no further mention of this could be found on the Royal College website or via internet searches. Furthermore data from the annual census conducted by the Royal College of Physicians shows a trend for doctors to be contracted for an increasing proportion of clinical sessions, and thereby fewer sessions for teaching, research and leadership/management activities (Federation of the Royal Colleges of Physicians of the UK, 2011). If this trend

continues it will serve to make it even more challenging for female consultants to obtain leadership positions.

Recommendations for improving access to part-time and flexible working/training are also contained within the various reports. Missing from these critiques of workforce capacity and ensuring flexibility in employment contracts is any mention about the content of "less than full-time" posts and the need to ensure that there is balance between demand and control (or effort and reward). The need for part-time posts to provide variety and professional esteem was raised by several of the consultants interviewed as part of this study. Furthermore the RCP reports do not address the need to manage the impact of increased flexibility on the workforce as a whole, and in particular to encourage a cultural shift whereby part-time working is not viewed negatively.

These issues have been raised previously in a report '*Making Part-time work'* conducted by the Medical Women's Foundation on behalf the Department of Health (Diaz, et al., 2002). The report aimed to identify and share best-practice of part-time working in medicine and resulted in a number of recommendations for career and training grade doctors, including acknowledging the need to tackle negative attitudes towards flexible working. Doctors they interviewed suggested that role models (especially men) should be sought and championed to show that part-time doctors can achieve, and also that the Royal Colleges and other such organisations should offer part-time senior positions where agendas are being set.

Positive views about accommodating women in medicine are not shared by all. Dame Carol Black, when president of the Royal College of Physicians in 2004, suggested that the increasing dominance of women in medicine would serve to "*lessen its power and influence*" (Laurance, 2004), comparing it to the impact of the dominance of women in teaching and nursing. Even within the latest report (Department of Health, 2009) the statement is made that "*The thrust of this report is about enabling full-time work in the interests of patients"*. The view that part-time working is not in the interests of patients prevails and was also expressed by some of the consultants interviewed as part of this study. This is despite acknowledgement that even full-time doctors do not provide care 24:7 (I. Goldberg & Hornung, 1998; Medical Women's Federation, 2008).

The gender bias in receipt of clinical excellence awards is also acknowledged in the latest report. It is recommended that women are encouraged to apply for clinical

excellence awards and that the selection panels should be gender-balanced and should audit awards by gender. Such awards are given for contributing '*above and beyond the norm*' or '*over and above that normally expected in a job*', which is likely to often equate to working extended hours over and above those additional hours already worked by the typical doctor (Federation of the Royal Colleges of Physicians of the UK, 2011), and would therefore exclude (or be very challenging) for a worker who had restrictions on the hours he or she could work. Indeed although the statistics for these awards are analysed according to gender they are not examined in relation to whether consultants work full or less than full-time so it is unknown how many awards have been given to women or men working less than full-time.

A final point of concordance between the recommendations in the latest report and the findings from this study was in relation to childcare. Improved access to, or financial help with, childcare was a key suggestion from some consultants in this study. This was also recommended by the RCP who stated that NHS Trusts should employ childcare coordinators to help employees with childcare related issues, and call for a Governmental review of the financial cost of childcare (suggesting that doctors should be allowed to pay for childcare from their gross earnings).

A fundamental limitation of these various reports and resulting recommendations is the lack of gender-sensitive theoretical framework for understanding the impact of the context and content of work for consultants. These reports were not aimed at examining the wellbeing of the workforce, instead focussed on workforce capacity in terms of numbers and specialty choices. However, failure to examine the choices women make within a framework that considers the context and content of work may limit their usefulness. Consultants in this current study were considering interventions within the context of work and home responsibilities for consultants which resulted in other potential interventions. For example, consultants suggested exploring different types of flexible working (e.g. to allow longer periods of unpaid leave) and the feasibility of increasing the locum workforce in hospital care. Crucially, the reports fail to specifically address the need for cultural change in order for the various recommendations regarding flexible working and women in leadership to be most effective. Consultants in this current study focussed on various aspects of this, including the need for strong positive leadership and role models and the need to value different contributions beyond the long hours' culture.

Methods of tackling gender discrimination are often categorised into 'assimilation', 'accommodation' and 'celebration' (K. E. Hull & Nelson, 2000). Within the context of

women in medicine assimilation would equate to requiring women to work 'like men' with no adaptation, accommodation would equate to creating different ways of working or careers just for women (i.e. flexible working only offered to women with children), and celebration would equate to recognising the differences between men and women and/or the way that they work (where they exist) and putting them to good use. The current situation and many of the proposed recommendations equate to 'accommodation' at best. This approach can serve to further enhance a discriminative culture for example due to male and female childless workers feeling that flexible working is not equally available to them. Organisational Justice (Greenberg, 1987) (an individual's perception of and reactions to fairness in an organization) has been proposed in recent years to be a key component in models of occupational stress (Elovainio, Kivimäki, & Helkama, 2001), and shown to be associated with a range of outcomes (Colquitt, et al., 2001; Kivimäki, Elovainio, Vahtera, & Ferrie, 2003). The valuing of part-time posts and the contribution of men and women whose time is restricted by their responsibilities outside of work would amount to 'celebration' and may serve to support cultural change.

This study aimed to assess the views of consultants regarding strategies or interventions to reduce levels of psychological distress. This acts as important preliminary work to inform the development of interventions to be evaluated in subsequent robust studies. Interventions suggested by consultants illustrated their awareness of the need for a range of organisational strategies from very practical 'quick win' solutions such as ensuring on-call rota's are planned in advance through to strategies to drive culture change in medicine and reduce gender inequalities. These interventions were proposed within the context of an explanatory model of occupational stress that is empirically and theoretically underpinned, and aims to describe the risk factors for occupational stress comprehensively for male and female consultants. A systems-wide organisational approach that tackles the causes and provides support and treatment for occupational stress is required.

Chapter Six: Discussion

What was known about this topic?

- The proportion of women entering the medical profession is increasing steadily and women will soon make up a third of the consultant workforce.
- Hospital consultants report a higher prevalence of psychological distress compared to the general working population and work is likely to be an important aetiological factor. This has important implications for their wellbeing and for their ability to provide high quality patient care.
- The prominent occupational stress models point to the importance of certain key constructs such as levels of demand/control and effort/reward but have been developed and tested without gender-sensitivity and as such may have omitted key aspects of the content and context of work relevant to women.
- There is a need for effective interventions in the workplace to reduce occupational stress and protect the wellbeing of the workforce. This first requires a coherent theoretical and empirical framework, but theory and evidence examining the relationship between gender, work and mental health is sparse.
- As well as lacking a gender-sensitive theoretical basis, interventions to tackle occupational stress have mostly targeted the treatment of stress at an individual level and ignored organisational level and/or preventative interventions. In addition many have been a-theoretical and methodologically weak.
- There is a need to identify the constructs that should be included in a gender-sensitive model of the relationship between work and psychological distress for hospital consultants and from this determine how the mental health of the consultant workforce can be improved.
- It is important to involve relevant stakeholders in the design and development of interventions for a number of reasons including to offer a viewpoint from experience, and to improve the likelihood that interventions will be acceptable and feasible to implement.

What does this thesis add?

- A gender-sensitive explanatory model of the relationship between work and psychological distress has been developed and refined through a series of mixed-methods studies with hospital consultants.
- This comprehensive model, underpinned by a transactional approach to stress and by prominent occupational stress models (notably Karasek and Siegrist's models), comprises consideration of individual, work content and context, and work-home interface factors.
- If further validated, the model could provide a framework to evaluate the likely effectiveness of current policy and practice in terms of impact on the wellbeing of the consultant workforce, and also to underpin the design of occupational risk assessment measures and interventions to prevent and treat occupational stress in doctors.
- Consultants' views regarding interventions and/or policy initiatives that could address occupational stress were mostly aimed at primary prevention at an organisational level. Some could be considered 'quick wins' with relatively little resource implication. Others would require injection of resource and/or a more strategic approach to workforce and workplace design in order to drive widespread culture change.

6.1 Key finding

A gender-sensitive explanatory model of the relationship between work and psychological distress has been developed and refined through a series of studies with hospital consultants. Underpinned by prominent occupational stress theories and empirical findings as well as consideration of models of gender discrimination, this new model comprises factors at an individual, job/organisational and work-home interface level that appear to relate to occupational stress.

Previous attempts have been made to build taxonomies of work-related stressors, in part as recognition of the overlap between conceptual theoretical models of occupational stress and supporting the need for more comprehensive models. For example, Cooper et al (Cartwright & Cooper, 1997; Cooper & Marshall, 1976) (extended by Johnson et al (S. Johnson et al., 2005)) propose 9 categories of stressors: intrinsic characteristics of the job itself; the person's role(s) in the organisation; their relationships with other people at work; career prospects and progression; organisational factors (e.g. structure, culture and climate of the organisation); home-to-work interface; job security, pay and benefits, and resources and communication. All of these stressors are present in the consultant-specific explanatory model reported in this thesis. This confirmation is important in relation to theoretical and empirical validity (Onwuegbuzie & Burke Johnson, 2006). However, these taxonomies intend to provide 'generic' categories and in doing so treat workers homogenously, and are also underpinned by a synthesis of literature that has generally lacked gender-sensitivity. The approach taken in this thesis, to try to understand the relationship between gender, work and psychological distress (comparing and contrasting male and female consultants' experiences, and those from male-dominated and gender-balanced specialty groups) adds important elements to the resulting model that may help to increase understanding of occupational stress in consultants. The resultant "consultant" and "gender" specificity provides a comprehensive framework from which to conceptualise occupational stress and may be useful to inform policy and interventions aimed at addressing occupational stress in the medical workforce.

At the heart of the proposed model are the main constructs proposed by Karasek and Siegrist (R. A. Karasek, 1979; Siegrist, 1996) (and supported by many empirical studies, see Ch1) regarding perceived levels of demand and control, or effort/reward (or indeed job stress/satisfaction), as well as work-related social support. Although supported by the studies reported in this thesis, if taken alone they provide a very

simplistic understanding of the relationship between work and psychological distress, and fail to include many other important constructs. The gender-sensitive approach to examining the relationship between work and psychological distress taken in this thesis has led to a model that extends beyond these constructs to include aspects of the individual, job, organisation, and work-home interface. Based on the research reported in this thesis these factors should be considered when conceptualising risk of psychological distress in consultants.

Specifically, the model explicitly acknowledges that gender may be a risk factor in itself as well as through being associated with other potential risk factors such as flexible working and negative attitudes of co-workers. Important job-related moderators of this relationship that emerged through qualitative research included the number of days/sessions spent at work, and the predictability and transparency of workload. At an organisational level the culture of the wider organisation as well as of the department in which a consultant was based was also felt to have an important impact. This included the ratio of full to part-time workers and the size of the department, and whether an academic teaching hospital or not. Another unique feature of this occupational stress model is the explicit inclusion of a broad definition of social support including support both at work and from outside of work (and both practical and emotional support). Social support is not included in the above taxonomy, perhaps because it is focussed on synthesising stressors rather than protective factors. However, the research findings reported in this thesis would strongly suggest that lack of adequate support acts as a stressor (or at least moderates the relationship between work and risk of psychological distress).

Many of the solutions or interventions suggested by consultants to address the problems that they had experienced were practical, cheap and could perhaps be fairly easily implemented such as identifying and championing role models within the workforce, and enhancing the predictability of work by ensuring that on-call rotas are planned far in advance. Others may require more long-term strategic planning such as investigating the feasibility and acceptability of increasing the number of job-share posts (perhaps replacing part-time posts) and finding a way to ensure that job-planning takes account of the balance between demand and control (or effort/reward; stress/satisfaction) for all workers. It is important to note that few of the proposed interventions would be likely to arise from current recommendations for women in medicine (as discussed in the previous chapter).

6.2 Significance of the research

Tackling occupational stress in hospital consultants is important due to its relationship with the high levels of psychological distress reported by consultants. Psychological distress in consultants impacts on both their lives and their ability to provide high quality patient care (Taylor, et al., 2007), as well as carrying a huge financial cost (Boorman, 2009b). A gendered approach to understanding and resolving occupational stress is essential due to the increasing proportion of women in the medical workforce: shortly to reach a third of the consultant workforce. Interventions designed on the basis of coherent theory and empirical findings are more likely to be effective (Craig, et al., 2008). Furthermore, interventions that are aimed at behaviour change are more likely to be effective if tackled from multiple levels (individual, organisational and wider society (NICE, 2007)). The explanatory model that has emerged through a series of mixed-methods studies with UK hospital consultants provides a framework for tackling occupational stress at individual and organisational levels.

6.3 Methodological considerations

The explanatory model evolved through an iterative research process. As a mixed-methods researcher with a pragmatic epistemological stance the choice of methodology for each study was made on the basis of judging the study design that would be best suited to each primary research question. The resultant meta-inference (from combining 'knowledge' gained in each study) was an "*attempt to fit together the insights provided by qualitative and quantitative research into a workable solution*" (R. B. Johnson & Onwuegbuzie, 2004). The explanatory model is presented as a potential workable solution to understanding gender, work and psychological distress in male and female consultants.

Given the context of this research – the UK National Health Service – it is relevant to consider the way that 'evidence' or 'knowledge' may be judged. Contemporary medicine is heavily influenced by the notion of "evidence-based practice" which has been argued by some to be inherently positivist, particularly in relation to the ranking of evidence according to study design. However many examples can be provided of evidence-based medicine that is built upon evidence from mixed paradigms and approaches (Olsen & McGinnis, 2010), and a thorough review of the epistemological basis of evidence-based medicine concluded that "*for applied fields that are interested in both process and outcomes .. it is necessary to adopt a pragmatic framework that*

can enable integration of both qualitative evidence concerning subjective experience, values and meanings and quantitative evidence into practice that is fully evidence-based" (p.23, (Marks, 2002)). Marks continues that the key criteria in 'evidence-based medicine' is that evidence must be valid and reliable, and that for evidence to affect practice it is likely to be important to demonstrate the generalizability of findings.

The concepts of validity and reliability are in themselves considered by some to be positivist in nature and rejected by some qualitative researchers (Schwandt, 2001) though contemporary methodologists have argued that the fundamental basis of validity and reliability is equally applicable to qualitative and quantitative research though their meaning and application is quite different (Golafshani, 2003). There is much debate in the mixed-methods literature regarding how best to judge the quality of meta-inferences in mixed methods research, but a useful framework is provided by Teddlie and Tashakkori (2008) who suggest quality should be assessed according to design quality and interpretive rigour (Figure 6.1). Where possible, this framework guided the design, conduct and presentation of the studies within this thesis. Each study includes a clear rationale regarding choice of design and methods, and the procedures, analysis and interpretation are explained in detail. This is aimed at providing the reader with sufficient information to independently assess quality in relation to design and interpretive rigour.

6.4 Limitations of the research

The limitations of each study have been described within each relevant chapter, and alternative explanations for findings have been considered. Key limitations from one study became the basis for the design of the next study. These include limitations regarding sampling and sample size, and measures and methods of data collection and analysis that may impact on the reliability and validity of the findings. The use of secondary data and appending an interview study to a larger national study presented both opportunities and potential problems. On the positive side this enabled collection of data from a large number of consultants with wide geographical representation which would not have otherwise been possible without a source of external funding. Claims of representation and generalizability could be more confidently stated because of this. However, a limitation is that these studies were not designed to examine gender differences and as such the sample size of the quantitative study was not sufficient to be confident that only the statistically significant findings were meaningful. Conclusions drawn from the analysis of survey data, which underpinned the subsequent study, may therefore be flawed. The national interview study was

conducted to explore findings from the quantitative survey analysis, but this meant that interviews were time-constrained and a structured approach was necessary. Conclusions from analysis of this data may be limited by this. This design and method was chosen originally to enable further exploration of the phenomenon from the same participants (to speak to them about their questionnaire responses) but the length of time between completion of the survey and participation in the interviews prevented this. In hindsight it may have been a better design to have conducted a separate qualitative study so as not to be restricted by the parameters of another study. It was these limitations that informed the design for the final study which enabled an in-depth exploration of gender, work and health from the perspective of consultants from two purposively selected specialty groups. The concordance in findings between the two interview studies and with relevant literature strengthens confidence in the overall findings but further validation would be required in order to influence policy or practice (*see further research section*). The consultant specialty groups included in the studies were defined by those selected for the original national survey on which studies 1 and 2 were based. The five specialty groups were chosen to reflect a range of demands on the medical workforce such as high acute on-call responsibilities (gastroenterologists, surgical oncologists), considerable exposure to death and dying patients (clinical and medical oncologists) and provision of a clinical support service (radiologists). In 'Women Doctor's: Making a Difference' (Department of Health, 2009) specialty groups were categorised according to two dimensions: the extent to which they were "plan-able" vs. unpredictable, and their orientation towards technical vs. people skills. Using this framework, the specialty groups included in this thesis would all fall into the technical quadrants, though would cover a range in relation to plan-a-bility. Further work should be undertaken that includes male and female consultants working in the less technically oriented specialty groups such as paediatrics, psychiatry and public health.

Of particular relevance to the appraisal of this thesis is the lack of previous gender-sensitive empirical evidence against which to compare findings. This is the first study to examine the relationship between gender, work and psychological distress in hospital consultants. Each theme (and then each construct) has been considered in relation to its empirical and theoretical support in the wider literature but the lack of comprehensive examination by other authors limits this in terms of ability to provide 'theoretical consistency' and 'interpretative agreement' (Figure 6.1). The research focus on occupational *stress* lends itself to examine the 'bad' side of work rather than the 'good' side of work. Recent commentary has called for more research into the positive side of work (A. P. Smith & Wadsworth, 2011). Smith argues that although

the negative and positive sides of work are related that there is probably more to the "absence of negative predictors" that makes a good job. By focussing on the causes of psychological distress it may have led to overlooking some important positive (and protective) features of work for male and female consultants although in all studies there was an equal focus on job satisfaction as there was on job stress.

The gender focus, made explicit to participants in each of the qualitative studies, may have influenced the findings by introducing a social desirability bias which may mean that the extent or nature of gender difference has been under (or over) stated by participants. This may have also been influenced by my gender. Previous research has found that in gender-focussed interviews, female interviewers elicited more negative attitudes towards 'gender neutral' language than did male interviewers, particularly from female interviewees (Rubin et al 1991). Some researchers have suggested that the idea of homophily is important when examining the impact of interviewer characteristics, that interviewees may be more open in interviews with people they identify more with (McPherson et al 2001). The likelihood of social desirability bias may also be influenced by other characteristics such as professional group. A questionnaire issued to a range of groups (including faculty members, English graduate students and medical students) regarding the need to modify language (in relation to gender) found that medical students were the least likely to be interested in or made any attempt to change language practices (Harrigan and Lucic 1988). The authors suggest several explanations for this including that the lack of concern may be due to the male-dominated environment in which they work.

In relation to the studies reported in this thesis, all themes from both qualitative studies have been supplemented by extensive quotations and the commonality of themes has been quantified to enable the reader to independently examine the quality of findings and the frequency and gender of respondents. Negative and positive views regarding gender were reported in both qualitative studies, and by both male and female consultants. Social desirability bias may explain the contradiction in Study 2 (Chapter 3) between answers to closed questions regarding gender differences at work and the answers to open questions. Attempts were made to 'validate' the analysis of qualitative data by asking other trained qualitative researchers to independently analyse a random sample of transcripts in both qualitative studies. However, in all cases these independent researchers were also women. In retrospect this may have been a stronger design if a male qualitative expert had been invited to contribute.

Figure 6.1 Components or criteria for design quality and interpretive rigor (taken from "Quality of inferences in mixed methods research: calling for an integrative framework" p113 table 7.3 (A. Tashakkori & Teddlie, 2008). *Permission to reproduce table received from Sage Publications Ltd.*

Aspects of inference quality	Research criterion	Indicator or Audit
Design quality	Design suitability	Are the methods of study appropriate for answering the research question(s)? Does the design match the research questions?
	Design adequacy/fidelity	a) Are the procedures implemented with quality and rigor? b) Are the methods capable of capturing the meanings, effects or relationships? c) Are the components of the design (e.g. sampling, data collection procedures, data analysis procedures) implemented adequately?
	Within-design consistency	Do the components of the design fit together in a seamless manner? Is there within-design consistency across all aspects of the study
	Analytic adequacy	Are the data analysis procedures/strategies appropriate and adequate to provide possible answers to research questions?
Interpretive rigor	Interpretive consistency	a) Do the inferences closely follow the relevant findings in terms of type, scope and intensity? b) Are multiple inferences made on the basis of the same findings consistent with each other?
	Theoretical consistency	Are the inferences consistent with theory and state of knowledge in the field?
	Interpretive agreement	a) Do other scholars reach the same results (i.e. is there peer agreement?) b) Do the investigators inferences match participants' constructions (is there researcher-participant agreement)?
	Interpretive distinctiveness	Is each inference distinctively more plausible than other possible conclusions that can be made on the basis of the same results?
	Integrative efficacy (mixed and multiple methods)	Does the meta-inference adequately incorporate the inferences made from QUAL and QUAN strands of the study?

6.5 Future research

The explanatory model has been developed predominantly on the basis of qualitative studies exploring the experiences and views of individual consultants. It is hypothesis generating and further research is needed to confirm its applicability (and validity). Future research could take a number of directions from the preliminary findings reported in this thesis. For findings to influence workforce policy and practice within medicine it is likely that they would need to be accepted as valid, reliable and generalisable (Marks, 2002). Although founded on a quantitative study that included a large statistically representative sample of male and female consultants, much of the model emerged through qualitative studies aimed at understanding experience of work on an individual level (not aimed at generalisability). The validity of the explanatory model and it's practical usefulness could be assessed in a number of ways, including:

- Testing its predictive value in a prospective longitudinal study based upon a sufficiently large random sample of consultants (stratified according to key potential risk factors including gender). This would require valid measurement of each of the constructs in the model (for example through the use of validated standardised measures). Through use of structural equation modelling (and/or multi-level modelling) the relative contribution to variance of each construct could be established. Another less sophisticated approach to analysis could be to create a 'Negative Occupational Factors' score(Allan et al., 2009) – a sum of the presence of occupational stressors and assess the relationship with outcomes. The focus in this thesis has been on psychological distress, but it may be important to measure a range of other potential outcomes from stress, especially given that there is a gender-bias in relation to psychological distress (Aneshensel, Rutter, & Lachenbruch, 1991; Thoits, 2010). In addition, it would add value if measures could be assessed in 'real-time' rather than retrospectively. The use of Ecological Momentary Assessment (EMA) via technology such as smartphones or handheld computers) has been used in various populations and recently demonstrated to be feasible in a small-scale study of nurses (Johnston, Beedie, & Jones, 2006) and is currently being tested further (Allan, et al., 2009).
- Developing and evaluating interventions underpinned by the model and assessing their impact on outcomes (psychological distress and other outcomes along the pathway including perceived demand/control/support etc.). A key consideration here would be the need for complex interventions that impact at organisational and individual levels in order to effectively test the

model. Interventions aimed at only one part of the model may have their effectiveness impeded by their lack of impact on other confounding and/or predictive factors. It would be important to also include a process evaluation (similar to treatment fidelity) and to measure both subjective (including perhaps a stress audit self-report questionnaire such as ASSET (S. Johnson, 2009) and objective outcomes (such as absenteeism, sickness absence, measures of performance) at individual and organisational levels.

- A "natural experiment" could be conducted in organisations that are planning to implement new workforce policies (perhaps in relation to the recent NICE guidelines (NICE, 2009)).

  A mixed-methods pre-test post-test design (preferably with a quasi-experimental comparison arm) could evaluate the impact of the introduction of policies/interventions on outcomes at a local or national level with hypotheses based on the likely impact of policies on constructs in the model.
- An experienced qualitative researcher (naïve to the model) could conduct interviews with a purposively selected sample of male and female consultants, selected due to their characteristics in relation to predicting high or low risk of psychological distress. Interviews would be aimed at exploring consultants' views and experiences regarding the relationship between gender, work and stress including vulnerability and protective factors. The concordance of the findings with the model could then be assessed. To assess the impact of social desirability bias this could be conducted by both male and female interviewers.
- Further research could be conducted with target groups indicated as being particularly at risk such as part-time workers (comparing outcomes/experiences for different types of part-time/flexible workers, and ensuring male and female participants) in a mixed methods design.

Furthermore, the key elements of the explanatory model are supported by published studies and reports in consultant and other populations (as described in previous chapters of this thesis). This suggests that the model may have broader application beyond hospital consultants. There is concern about the mental health of other NHS staff groups (Boorman, 2009a, 2009b; Harvey, et al., 2009). In particular there is evidence to suggest that nurses also have high levels of psychological distress (Bourbonnais, Comeau, & Vézina, 1999; Bressi, et al., 2008), and interventions aimed at reducing work-related distress in nurses have been similarly criticised for lacking inclusion of work-home interface, as well as lacking organisational focus (Jones &

Johnston, 2000). The explanatory model may be generalisable to nurses and other NHS occupational groups. In addition, the model may be valid to male and female workers in other male-dominated higher (class 1A) professional groups, such as law or banking. There has been relatively little research regarding occupational stress in these groups.

Finally, another key emerging factor that has not been addressed in this thesis is that of ethnicity. The medical workforce is becoming increasingly diverse in terms of ethnicity (Bowler, 2004) but akin to gender there is differential distribution across specialty groups according to ethnicity (Michael J Goldacre, Davidson, & Lambert, 2004) and some evidence of discrimination at entry to medical school (I C McManus, Richards, Winder, Sproston, & Styles, 1995), and poorer final year exam performance that remains unexplained even when a multitude of factors are accounted for (Woolf, McManus, Potts, & Dacre, 2011). The impact (if any) of ethnicity at consultant grade has as yet been unexplored to my knowledge but this emerging literature suggests that a fully comprehensive model of risk factors for psychological distress in consultants should also consider ethnicity.

6.6 Conclusions

The research described in this thesis suggests that there are important factors relating to gender that impact on the relationship between work and health in hospital consultants. In particular these factors include personal 'inputs' such as having childcare/domestic responsibilities, occupational 'inputs' such as working flexibly and specialty choice, and moderators of the relationship between these and risk of psychological distress such as the attitudes of co-workers, compatibility of expectations (for work and home life) with reality, and support at work and home (practical and emotional). The explanatory model synthesising these findings provides a framework for understanding the relationship between gender, work and health in hospital consultants. This model may prove a useful framework for generating research questions, interpreting empirical data and informing intervention design. However, subsequent research should be undertaken to further validate the constructs and relationships in the model both in hospital consultants and in other professional groups.

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Appendices

Appendix I - Chapter Two: Consultants' Job Stress and Satisfaction Questionnaire

Stressful aspects of your work

To what extent have the following factors contributed to any stress you have experienced in your job **in the past few months**? Please rate each factor by circling the relevant number on the 0 to 3 scale. If not applicable, please rate '0'.

		Extent contributes to stress			
		Not at all	A Little	Quite A bit	A Lot
1	Being involved with the physical suffering of patients	0	1	2	3
2	Encountering difficulties in relationships with junior medical staff	0	1	2	3
3	Feeling you have insufficient input into the management of your unit or institution	0	1	2	3
4	Disruption of your home life through spending long hours at work	0	1	2	3
5	Having inadequate facilities (e.g. equipment, space) to do your job properly	0	1	2	3
6	Having to deal with distressed, angry or blaming relatives	0	1	2	3
7	Keeping up to date with current clinical and research practices	0	1	2	3
8	Having to take on more managerial responsibilities	0	1	2	3
9	Encountering difficulties in relationships with consultant colleagues	0	1	2	3
10	Feeling under pressure to meet deadlines	0	1	2	3
11	Being responsible for the quality of the work of other staff	0	1	2	3
12	Being involved with the emotional distress of patients	0	1	2	3

13	Encountering difficulties in relationships with administrative staff, e.g. secretaries	0	1	2	3
14	Having too great an overall volume of work	0	1	2	3
15	Feeling you are poorly paid for the job you do	0	1	2	3
16	Encountering difficulties in relationships with managers	0	1	2	3
17	Having conflicting demands on your time (e.g. patient care/management/research/College)	0	1	2	3
18	Having inadequate staff to do your job properly	0	1	2	3
19	Dealing with the threat of being sued for malpractice	0	1	2	3
20	Disruption of your home life as a result of taking paperwork home	0	1	2	3
21	Feeling that your accumulated skills and expertise are not being put to their best use	0	1	2	3
22	Disruption of your home life as a result of being on call	0	1	2	3
23	Having a conflict of responsibilities (e.g. clinical vs. managerial; clinical vs. research)	0	1	2	3
24	Uncertainty over the future funding of your unit/institution	0	1	2	3
25	Being responsible for the welfare of other staff	0	1	2	3
26	Having performance targets which are unrealistic or unattainable (e.g. due to lack of resources)	0	1	2	3
27	Dealing with patients or relatives having expectations of care that cannot be met	0	1	2	3
28	Having to comply with increasing bureaucratic and regulatory procedures	0	1	2	3

29	Feeling concerned about keeping your skills up to date due to your Trust not investing in new technologies	0	1	2	3
30	Providing patient care within multi-disciplinary teams	0	1	2	3
31	Feeling that you are losing generalist skills as your job becomes more specialised	0	1	2	3
32	Having difficulties recruiting high calibre staff	0	1	2	3
33	Having insufficient formalised time for teaching, training and research	0	1	2	3
34	Having inadequate administration systems (e.g. IT, filing procedures for notes)	0	1	2	3
35	Having to submit a job plan and undergo performance appraisal	0	1	2	3
36	Being required to provide routine NHS clinical services (e.g. outpatient clinics) outside normal working hours	0	1	2	3

Satisfying aspects of your work

To what extent have the following factors contributed to the satisfaction you have derived from your job **in the past few months**? Please rate each factor by circling the relevant number on the 0 to 3 scale. If not applicable, please rate '0'.

		Extent contributes to satisfaction			
		Not at all	A little	Quite a bit	A Lot
1	Having a high level of responsibility	0	1	2	3
2	Being perceived to do the job well by your colleagues	0	1	2	3
3	Being able to bring about positive change in your unit/institution	0	1	2	3
4	Having good relationships with patients	0	1	2	3
5	Feeling you have the staff necessary to do a good job	0	1	2	3
6	Deriving intellectual stimulation from research	0	1	2	3
7	Having a high level of autonomy	0	1	2	3
8	Having opportunities for personal learning (developing clinical/research/management skills)	0	1	2	3
9	Having good relationships with other staff members	0	1	2	3
10	Having variety in your job	0	1	2	3
11	Feeling you have adequate financial resources to do a good job	0	1	2	3
12	Being involved in activities that contribute to the development of your profession	0	1	2	3
13	Feeling you have a high level of job security	0	1	2	3
14	Deriving intellectual stimulation from teaching	0	1	2	3
15	Feeling you have adequate facilities to do a good job	0	1	2	3

16	Feeling your clinical experience is used to the full in the job you do	0	1	2	3
17	Feeling you deal well with relatives	0	1	2	3
18	Being an expert in a specialist area	0	1	2	3
19	Being perceived to do the job well by patients	0	1	2	3
20	Having the opportunity to practice medicine privately	0	1	2	3
21	Providing patient care within multi-disciplinary teams	0	1	2	3
22	Being able to complete a difficult clinical procedure successfully	0	1	2	3

Appendix II - Chapter Three: Interview information letter

What Causes Burnout Among Senior Clinicians?
National Survey

Cancer Research UK
London Psychosocial Group
Adamson Centre
St Thomas' Hospital
LONDON
SE1 7EH

Research Team: Dr Jill Graham (Study Director)
Professor Amanda Ramirez, Professor Mike Richards,
Dr Susan Michie, Dr David Snashall,
Catherine Manley (Study Coordinator)

Telephone: 020 7620 0442
Email: catherine.manley@kcl.ac.uk

Dear

Recently you very kindly completed a questionnaire for a study of burnout among senior clinicians. The following information is provided to enable you to decide whether or not you would be willing to participate in the second phase of this research, involving a follow-up interview.

The purpose of the interview
The focus of the questionnaires was on work-related factors associated with burnout. Factors at work do not fully explain, however, why some consultants are able to tolerate the demands of the role while others suffer symptoms of burnout. Interviews will enable us to take a broader look at potential causal factors for burnout. In order to identify both causal and protective factors for consultant burnout, we are interested in interviewing consultants regardless of whether they are experiencing symptoms of burnout currently.

What taking part involves
The interview will contain questions covering the following:

- psychological symptoms
- stress outside work
- support strategies.

It will take approximately 45 minutes and will be carried out at a time and location that is most convenient for you. *We will select for interview a random sample of those who agree to participate, and will telephone them in the next few months to arrange the interview.* We plan to interview a large sample of consultants thus the interviews will take place over the next nine months.

Confidentiality
With your permission we would like to tape record the interview. This is to enable accurate coding of the data. Cassette tapes will be stored in a locked filing cabinet and will be marked only with the respondents code number. All information collected in the course of this research will be kept strictly confidential and will not be used in any way that would enable identification of the individual respondent.

Your contribution to this research is extremely important – we appreciate your input.

Yours sincerely,

Jill Graham
Study Director

Amanda J Ramirez
Professor of Liaison Psychiatry

This research is funded by Cancer Research UK and the Guy's and St Thomas' Charitable Foundation

What Causes Burnout Among Senior Gastroenterologists?
National Survey

Cancer Research UK
London Psychosocial Group
Adamson Centre
St Thomas' Hospital
LONDON
SE1 7EH

Research Team: Dr Jill Graham (Study Director)
Professor Amanda Ramirez, Professor Mike Richards,
Dr Susan Michie, Dr David Snashall,
Catherine Manley (Study Coordinator)

Telephone: 020 7620 0442
Email: catherine.manley@kcl.ac.uk

Are you be prepared participate in a confidential interview?

Name:

☐ Yes.

Please provide your daytime telephone number and indicate the best time to call:

_____

_____

_____

☐ No.

Please return this form in the enclosed SAE.

This research is funded by Cancer Research UK and the Guy's and St Thomas' Charitable Foundation

Appendix III - Chapter Three: Interview consent form

Consent form - Interview

What Causes Burnout Among Senior Clinicians?
National Survey

Cancer Research UK
London Psychosocial Group
Adamson Centre
St Thomas' Hospital
LONDON
SE1 7EH

Research Team: Dr Jill Graham
Professor Amanda Ramirez, Professor Mike Richards,
Dr Susan Michie, Dr David Snashall,
Catherine Manley, Jenny Candy

Telephone: 020 7620 0442
Email:catherine.manley@kcl.ac.uk

CONSENT FORM - INTERVIEW

Title of project: **What Causes Burnout Among Senior Clinicians?**

Name of Researchers: Jill Graham, Catherine Manley & Jenny Candy

1. I agree that this interview can be audiotaped. I understand that only the researchers will have access to the audiotape, and the tape and any documentation will be marked only with my study identification number.

2. I understand that interview data will be treated with absolute confidentiality and will not be used in a way that could enable identification of any individuals. I agree that un-attributable quotations may be used in future publications.

---------- ---------- ----------

Name Date Signature

VERSION 3 – 20.8.2002

This research is funded by Cancer Research UK and the Guy's and St Thomas' Charitable Foundation

Appendix IV - Chapter Three: Interview schedule

Interview schedule

We are interested in exploring some of the specific components of work that contribute to stress or satisfaction you may experience and whether there are any gender differences in the experience of these.

[NB: probe to explain answers after initial response is given]

Responsibility

1. So firstly, do you feel you should be given more responsibility than you are?

2. Do you think in general that female consultants are given more, less or about the same responsibility as male consultants?

Colleagues' perception of how well you do your job

3. Do you think your colleagues perceive you to do your job well?

4. In what ways do they communicate this to you?

5. Do you think in general that female consultants are perceived to do their job as well as, less well or better than male consultants?

Ability to bring about positive change

6. Do you feel as though you are able to bring about positive change in your unit/institution?

7. In what ways are you able to do this?

8. Do you think that in general, female consultants are more able, less able or equally able to bring about positive change compared to male consultants?

Autonomy

9. Do you think you should be given a higher level of autonomy than you are?

10. Do you think, again, that female consultants have more, about the same, or less autonomy than male consultants?

Stress

11. We are interested in the experiences of male and female consultants and where they might be similar and different. In light of this, do you think if you were a wo/man [insert opposite gender] the experience of being a hospital consultant would be more, less or equally stressful?

Impact of gender on work

12. Finally, does being a wo/man [insert their gender] work for or against you in this job and in what ways?

Appendix V - Chapter Three: Themes and first framework

Thematic framework arising from the initial stages of analysis

Themes arising from transcripts in Stage 1 and 2 of the analysis process

Stage 1: Themes were:

- having children/part-time working and women being perceived as not doing job as well
- gender stereotyping – emotional, cognitive and behavioural
- gender differences in leadership style and in levels of professional esteem

Stage 2: Themes were:

	Core themes		Sub-themes	
A	**Incompatibility of success at work and home (being a good/successful doctor vs. being a good mother)**	**1**	**Incompatibility due to organisational/job factors**	
		1.1	Time demands of the job (length of working day, time of meetings, training etc)	
		1.2	Part-time/flexible working as 'lesser'	
			1.2.1	Not perceived as being as good a doctor
			1.2.2	Not perceived as being as committed to your job
			1.2.3	Non-adaptation of working practices to accommodate part-time workers and/or less opportunity for involvement in non-clinical aspects of job
			1.2.4	Lack of infrastructure to support – feeling of being indebted/burden to full time workers
			1.2.5	Perceived as being a woman's way of working (not available or desirable to men)
		2	**Incompatibility due to cultural factors (role expectations)**	
		2.1	Role expectation of mothers	
			2.1.1	Feeling guilty
		2.2	Importance of having a 'wife'	
		2.3	Role expectation of doctors	
B	**Gender stereotyping at work**	**1**	**Emotional**	
		2	**Cognitive**	
		3	**Behavioural**	
		3.1	Communicating	
			3.1.1	with patients
			3.1.2	with colleagues
C	**Professional status and esteem**	**1**	**Respect from patients**	
		2	Respect from colleagues	
		3	**Career progression/seniority**	

Appendix VI - Chapter Three: Framework matrix for Male consultants

Negative perceptions: Male consultants
* = additional question only; ** = original plus additional questions; all others had original interview schedule

ID number Yrs as consultant Age Full/Part time Marital status	Female qualities	Part-time working	Working as a doctor and having a family	Female doctors ability to work with other female staff
1060 16yrs+ >55yrs Full time Married	"There are very few in my view brilliant endoscopists who are female ... they are very good at other things .. but they won't do endoscopy at the top end or teaching, there is a great reluctance"		"obviously there's the family and everything else that goes on and I've worked with a number of lady consultants with families and they are torn in two different ways"	
1205 6-10 yrs 46-55yrs Full-time Married Original		"women generally often work part-time which is less stressful, or they have other interests outside [work], they are more interested in the home and so on"	"they [women] are more interested in the home and so on"	"I actually think that female doctors don't get on as well with nurses who are predominantly female … a lot of nurses find it quite difficult to take orders from other females and what I've found is female doctors are much rougher with the nurses than male doctors ... also you don't have the …. Sexual frisson ... there's a sexual innuendo of one type or another going on all of the time … women are happier taking orders from men than they are from women"

ID number Yrs as consultant Age Full/Part time Marital status	Female qualities	Part-time working	Working as a doctor and having a family	Female doctors ability to work with other female staff
1268* 6-10yrs 36-45yrs Full-time Married		"the set-up doesn't take kindly if you need time out for children, family"	"The amount of time you can dedicate to the job determines how successful you are… the set up does not take kindly if you need time out for children, family and this is where the prejudice comes in. The ability to keep working and to take on extra load is highly thought of"	
1299 11-15yrs 46-55yrs Full-time Married	"I don't think they [women] have any extra powers"	"They train all these women at medical school and a lot of them don't work full-time ... it would be quite frowned on for a man to say I think I'm going to go and have a part-time job"	"women tend to be able to move [family commitments] around their work more easily than men … there is a bit more of a buck stops here for men than there probably is for women"	
1607 6-10yrs 36-45yrs Full-time Married				
1651* 6-10yrs 36-45yrs Full-time Married				

ID number Yrs as consultant Age Full/Part time Marital status	Female qualities	Part-time working	Working as a doctor and having a family	Female doctors ability to work with other female staff
1656* <2yrs 36-45yrs Full-time Married			"My wife feels she has more of an issue with working full time … sometimes she feels she's missing things a little bit when she sees other colleagues and friends of hers working part-time or not working at all .. there is that little tension in terms of spending time with the children which I think maybe as a man you do slightly less"	"occasionally you see that female doctors, but I think more junior doctors, sometimes have slightly more difficult relationships with the nurses but I think that's changing and certainly my female consultant colleagues don't have that problem"
1661* 2-5yrs 36-45yrs Full-time Married	"[there is a] general negativity about women in medicine. I think women have to put up with a lot of preconceived prejudices"			
1700 2-5yrs 36-45yrs Full-time Separated/Divorced/ Widowed	"We have had female registrars here who have been looking for consultant posts and there have been comments to the effect of 'oh we don't want her here because she's a bit, bursts into tears or something, or emotional. I don't share those views but I've heard them"			
1706* 2-5yrs 36-45yrs Full-time Married			"it's quite easy for me to commit myself to the work and put the hours in and assume that one of my colleagues who has got a son and so on is expected home so I think it would be different if I had children"	

ID number Yrs as consultant Age Full/Part time Marital status	Female qualities	Part-time working	Working as a doctor and having a family	Female doctors ability to work with other female staff
2009* 16yrs+ >55yrs Full-time Married			"I think there is a discrimination against women partly because of the disjointed career, if they are going to have a family then it isn't easy at all"	
2025* 16yrs+ >55yrs Part-time Married	"It did [work for me being a man] and that's from sitting on interviews and things like that ... it was not only getting people appointed, I think the public when they came to see a consultant thought they should be seeing a man"			
2056* 2-5yrs 36-45yrs Full-time Married	"they [female doctors] tend to cry more"		"I think the old duffer syndrome is largely gone but they [female doctors] want families and children and that stuffs things up. Their priorities change"	
2068* 6-10 yrs 46-55yrs Full-time Married				

ID number Yrs as consultant Age Full/Part time Marital status	Female qualities	Part-time working	Working as a doctor and having a family	Female doctors ability to work with other female staff
2090 16yrs+ 46-55yrs Full-time Married	"[women] fall into two groups, there's the ones that the only difference is that they are XX and not XY chromosomes and they are going to make surgeons" [implication that you have to be male to be a surgeon] "They [women] have a slightly different outlook ... they tend to get uptight easily if things don't go well but I think that's just a female reaction to a lot of situations" "I think they [women] make it more stressful for themselves ... they perceive problems that are not there"	"You could even argue, I'm going to be really sexist and say I'm not sure you should even put females into medical school … because of this part-time business"	"I think some of them [women] are not willing, have not thought it through in terms of the demand this particular career in medicine is going to make of them and they take it a bit too light-hearted - 'oh I'll be able to do this' - and find themselves they can't and then create problems for their other colleagues around" "I think it's virtually impossible for a woman to combine what I call the maternal instincts with doing a surgical job.. I think they underestimate the time demand that doing it properly will put upon them" "Some of the older ones [female surgeons] do regret, when they look back, on sacrifices they have had to make"	
2113 6-10yrs 46-55yrs Full-time Married			"…socially it's more accepted that [men] will have an absolute commitment to your job" [whereas women have responsibility for home/family and therefore not absolutely committed to job]	

ID number Yrs as consultant Age Full/Part time Marital status	Female qualities	Part-time working	Working as a doctor and having a family	Female doctors ability to work with other female staff
2130 11-15yrs 46-55yrs Full-time Married	[discusses problem with a particular female surgeon] "I don't know whether that had a gender bias or whether it was entirely that person but it comes to mind when you ask about female surgeons"			
2131 6-10yrs 36-45yrs Full-time Married	"I certainly wouldn't perceive it [ability to bring about positive change] as being about gender, it's about the skills of the individual ... I've had male colleagues who are pathetic at it and silly and female colleagues who are very effective and vice versa"		"there's something of a lie knocking around that women can have it all – have babies, wonderful family, fantastic high flying career – I don't think all of that is possible"	
2409 11-15yrs 46-55yrs Full-time Married	"it's not a gender thing it's a personality thing"			
2455 11-15yrs 46-55yrs Full-time Married			"I think there is a perception that, because of family commitments, they [female doctors] may find it more difficult to do work out of hours, drop everything and be available 24 hours a day"	

ID number Yrs as consultant Age Full/Part time Marital status	Female qualities	Part-time working	Working as a doctor and having a family	Female doctors ability to work with other female staff
2502 6-10yrs 36-45yrs Full-time Married			"I think if you try and do both [work and family] it's probably undoable and I suspect most male surgeons give on the home time"	
2559 16yrs+ >55yrs Full-time Separated/divorced/ Widowed	"I think they [females] are just as bad as males. Strong points and weak points"		"We [management/male] tend to bend over backwards, most of them are obviously married with children and families and so they obviously reduce and increase hours to fit in with domestic things which we've always tried to support … I'm aware that some of my colleagues are not quite so keen with some being treated equally as others"	
2571* 16yrs+ >55yrs Full-time Single	"People expect you to [be a man] if you are known to be a consultant ... I think you command more respect if you are a man. We had a female consultant and they [patients] often said I don't want to see the nurse I want to see the doctor which of course is very amusing to us but not to them"			
2631* 6-10yrs 36-45yrs Full-time Married	"males get a better deal than females most of the time"			

ID number Yrs as consultant Age Full/Part time Marital status	Female qualities	Part-time working	Working as a doctor and having a family	Female doctors ability to work with other female staff
2654 11-15yrs 46-55yrs Full-time Married			"most of the female surgeons I know are either not married without kids or married to other hospital consultants and I think that must be very difficult"	
3696 ** 11-15yrs 46-55yrs Full-time Married	"the ones I've known can be just as forceful as men"			
3700 11-15yrs 36-45yrs Full-time Married	"In radiology there is no issue with gender ... a lot of the colleagues I've tended to respect in breast screening have been female and they are tremendously good radiologists"			
3745* 11-15yrs 46-55yrs Full-time Married				
3790 11-15yrs 46-55yrs Full-time Married			"Women put themselves in this position ... they take on a greater workload if they want to fulfil both roles [as doctor and mother]"	

ID number Yrs as consultant Age Full/Part time Marital status	Female qualities	Part-time working	Working as a doctor and having a family	Female doctors ability to work with other female staff
4014* 2-5yrs 36-45yrs Full-time Married			"I think there's a lot more accommodation for people that have children … people without children end up doing more of the work… it seems to be one way – if somebody's off on maternity leave I have to cover for them but it never works the other way around"	
4026 6-10yrs 46-55yrs Full-time Married				
4042* 6-10yrs 36-45yrs Full-time Married				"the majority of nursing staff, radiographers who are the most people we deal with are women, and you know I am aware of certain frictions between women, that don't necessarily exist between women and men"
4082 11-15yrs 46-55yrs Full-time Married	"In terms of communicating … they communicate better and are perhaps a bit more empathetic"			
4100* 6-10yrs 36-45yrs Full-time Married				

ID number Yrs as consultant Age Full/Part time Marital status	Female qualities	Part-time working	Working as a doctor and having a family	Female doctors ability to work with other female staff
4171* 6-10yrs 46-55yrs Full-time Married				
4179 2-5yrs 36-45yrs Full-time Married	"I don't feel comfortable with a female GP but that's on a personal-professional basis rather than a professional-professional basis" "I've certainly in some departments seen registrars let the 'weaker sex culture' which I don't agree with"		"I have worries for the future within this specialty because half the oncologists are female and I'm not quite sure what's going to happen in 10 years' time, I mean half of my colleagues will almost certainly be female and the reasons I have worries over that is in terms of maternity leave and the chaps left behind to run the place" "I'm sure a women would be hoping I would say it was more stressful [as a women in medicine] due to all the burden of home-life and bearing children but my response to that would be that's their choice"	
4255 11-15yrs >55yrs Full-time Married	"I think they [female doctors] are better communicators on the whole" "they take criticism to heart"			

ID number Yrs as consultant Age Full/Part time Marital status	Female qualities	Part-time working	Working as a doctor and having a family	Female doctors ability to work with other female staff
4260 16yrs+ 46-55yrs Full-time Married	"This is where my prejudices creep in … I think in general [female doctors are perceived to do their job as well as male] but one or two let the side down"	"I actually think organising your practice to enable you to work effectively part-time is stressful"		
4372* 16yrs+ 46-55yrs Full-time Married				
4392 6-10yrs 36-45yrs Full-time Married			"I guess it would be less stressful [as a female doctor with kids] because you get that break when you're having babies, come back refreshed. If you had children you've really made the decision to put them first and put work second"	
4420* 11-15yrs 36-45yrs Full-time Married				

ID number Yrs as consultant Age Full/Part time Marital status	Female qualities	Part-time working	Working as a doctor and having a family	Female doctors ability to work with other female staff
4448* 11-15yrs 36-45yrs Full-time Married	"I do notice that female consultant colleagues seem to cope even less well than I do [emotionally with cancer patients]" "my perception is that female consultants are just not as strong as male consultants, they tend to get more personally involved with patients, they get more upset about criticism that sort of thing"			"I think one of the problems in the NHS generally is that its service is dominated by female nurses, radiographers, secretaries and I think in my experience generally women tend not to get on as well with other women at work as they do men at work ... and if you talk for instance to female radiographers they don't tend to like female consultants and there are tensions between them, particularly between paramedics and female medical consultants, men probably have an easier time because of this"
4466 11-15yrs 46-55yrs Full-time Married				
4471 11-15yrs 46-55yrs Full-time Married	"my way of seeing it is they [female doctors] have just as much clout, responsibility and respect and everything else"			

ID number Yrs as consultant Age Full/Part time Marital status	Female qualities	Part-time working	Working as a doctor and having a family	Female doctors ability to work with other female staff
5002* 2-5yrs 36-45yrs Full-time Married				
5043* 2-5yrs 36-45yrs Full-time Married				"hospital work is completely dominated by females in terms of numbers – almost all the nursing staff, almost all the ancillary staff, at least half the doctors if not more … I don't think being male is any disadvantage as you probably get things done slightly more easily from the nurses if you are male, certainly from female nurses. I know my wife certainly has problems with the female nurses" "If you've got some nice nurse who bat their eyelids you're not going to say very much to them and you can get on a more pally basis but that's not going to work with a female consultant and they see it a bit more of a threat I think".

ID number Yrs as consultant Age Full/Part time Marital status	Female qualities	Part-time working	Working as a doctor and having a family	Female doctors ability to work with other female staff
5086 6-10yrs 46-55yrs Full-time Married				
5193 11-15yrs 46-55yrs Full-time Single	Describes female colleagues as “devotes more attention to patients than I do” “She has been accused in the past of not delegating work when it could be delegated … that may be a gender thing”	“Consultants who work [part-time] are going to make a lesser contribution to work and are going to be less in a position to carry on the burdens and frustrations of developing the service than those who devote their whole working life to it”	Discusses colleague that is planning a family and has reduced hours “the inference that might I think one can legitimately draw is that ... he [husband, full time consultant] is going to lead, he’s going to pursue his career in academic medicine oncology and she is going to work as a consultant part-time and when the babies come they will have priority”	
5222 16yrs+ 46-55yrs Full-time Married				

Female behaviour: Male consultants

ID number Yrs as consultant Age Full/Part time Marital status	Work harder to be as good	Feminised behaviour to achieve goals/avoid challenging male behaviour	Being excluded from decision-making activities
1060 16yrs+ >55yrs Full time Married			
1205 6-10 yrs 46-55yrs Full-time Married			
1268* 6-10yrs 36-45yrs Full-time Married			
1299 11-15yrs 46-55yrs Full-time Married			
1607 6-10yrs 36-45yrs Full-time Married			

ID number Yrs as consultant Age Full/Part time Marital status	Work harder to be as good	Feminised behaviour to achieve goals/avoid challenging male behaviour	Being excluded from decision-making activities
1651* 6-10yrs 36-45yrs Full-time Married		"It's a female dominated environment and I actually find I get on very well with females … I'm not a man's man, in the sense of rugby and drinking and whatever. I'm not very macho"	
1656* <2yrs 36-45yrs Full-time Married			
1661* 2-5yrs 36-45yrs Full-time Married		"if you're a very high forceful consultant as a man you are judged as an alright sort of bloke but if you are a woman you 're a real bitch so there's prejudices right across the place so it's a negative point of view"	
1700 2-5yrs 36-45yrs Full-time Separated/Divorced/ Widowed			
1706* 2-5yrs 36-45yrs Full-time Married			
2009* 16yrs+ >55yrs Full-time Married			

ID number Yrs as consultant Age Full/Part time Marital status	Work harder to be as good	Feminised behaviour to achieve goals/avoid challenging male behaviour	Being excluded from decision-making activities
2025* 16yrs+ >55yrs Part-time Married			
2056* 2-5yrs 36-45yrs Full-time Married			
2068* 6-10 yrs 46-55yrs Full-time Married			
2090 16yrs+ 46-55yrs Full-time Married	"I think they've got a harder battle ... it will take a long time to get rid of the general ethos that surgery is a male domain"	"I've certainly seen them [women] use their feminine wiles to get their way and I've sat there with a mixture of incredible admiration and complete anger" "I can be manipulated by them"	
2113 6-10yrs 46-55yrs Full-time Married	"By and large I suspect they [female consultants] have to do it better. I think it's a lot more difficult to make it as a woman than a man so I suspect the women are therefore better"		"managerial responsibility, they're [female consultants] are probably given less [responsibility]"
2130 11-15yrs 46-55yrs Full-time Married			

ID number Yrs as consultant Age Full/Part time Marital status	Work harder to be as good	Feminised behaviour to achieve goals/avoid challenging male behaviour	Being excluded from decision-making activities
2131 6-10yrs 36-45yrs Full-time Married			
2409 11-15yrs 46-55yrs Full-time Married			
2455 11-15yrs 46-55yrs Full-time Married			
2502 6-10yrs 36-45yrs Full-time Married			"the challenge is that [to influence] change you need to be in a position to deliver more time and that's where the tension lies"
2559 16yrs+ >55yrs Full-time Separated/divorced/ Widowed			
2571* 16yrs+ >55yrs Full-time Single			

ID number Yrs as consultant Age Full/Part time Marital status	Work harder to be as good	Feminised behaviour to achieve goals/avoid challenging male behaviour	Being excluded from decision-making activities
2631* 6-10yrs 36-45yrs Full-time Married			
2654 11-15yrs 46-55yrs Full-time Married			
3696 ** 11-15yrs 46-55yrs Full-time Married	"it's probably easier coming up the ladder [as a man] than being a woman"		
3700 11-15yrs 36-45yrs Full-time Married		"they [female doctor's] are less aggressive"	"being part-time is obviously an issue … they'll lose out because they're not always there for a meeting that's crucial or whatever"
3745* 11-15yrs 46-55yrs Full-time Married			

ID number Yrs as consultant Age Full/Part time Marital status	Work harder to be as good	Feminised behaviour to achieve goals/avoid challenging male behaviour	Being excluded from decision-making activities
3790 11-15yrs 46-55yrs Full-time Married	"Females are given a little more leeway, even when medical student status, but only so long as their performance remains high ... so they'll be a little more gentler prodding and poking, more gentler questioning but if their performance drops off then the guillotine falls if anything slightly harder"		
4014* 2-5yrs 36-45yrs Full-time Married			
4026 6-10yrs 46-55yrs Full-time Married			
4042* 6-10yrs 36-45yrs Full-time Married			
4082 11-15yrs 46-55yrs Full-time Married			"[female docs] may be less able to bring about change because there are less of them… but they are forming little women's groups"

ID number Yrs as consultant Age Full/Part time Marital status	Work harder to be as good	Feminised behaviour to achieve goals/avoid challenging male behaviour	Being excluded from decision-making activities
4100* 6-10yrs 36-45yrs Full-time Married			
4171* 6-10yrs 46-55yrs Full-time Married			"the vast majority of the clinical directors in this Trust are men – 2 women and 26 men – but then getting/becoming clinical director is like a poisoned chalice, it's not as if there are people queuing up"
4179 2-5yrs 36-45yrs Full-time Married			
4255 11-15yrs >55yrs Full-time Married		"[female doctors] are less willing to throw their weight around"	"[female doctors] are less able to bring about positive change… they are less willing to throw their weight around"
4260 16yrs+ 46-55yrs Full-time Married			"By and large they [female doctors] are less likely to get involved in management and in change management, they work within their practice ... I don't think they are involved in running or changing of the service"
4372* 16yrs+ 46-55yrs Full-time Married			

ID number Yrs as consultant Age Full/Part time Marital status	Work harder to be as good	Feminised behaviour to achieve goals/avoid challenging male behaviour	Being excluded from decision-making activities
4392 6-10yrs 36-45yrs Full-time Married			
4420* 11-15yrs 36-45yrs Full-time Married	"[colleague] has always said that it's harder for women because if you are a doctor, particularly when she was a junior doctor, that you almost have to try a little bit harder. It's not something I've been particularly aware of but maybe that's because I'm male"		
4448* 11-15yrs 36-45yrs Full-time Married			
4466 11-15yrs 46-55yrs Full-time Married			
4471 11-15yrs 46-55yrs Full-time Married			

ID number Yrs as consultant Age Full/Part time Marital status	Work harder to be as good	Feminised behaviour to achieve goals/avoid challenging male behaviour	Being excluded from decision-making activities
5002* 2-5yrs 36-45yrs Full-time Married			
5043* 2-5yrs 36-45yrs Full-time Married			
5086 6-10yrs 46-55yrs Full-time Married		"It's the old male: female thing, maybe some loud mouthed male consultant on a committee may get more done than a woman, but on the other hand if the woman has a different approach and is more behind the scenes … do you know what I mean? It's very stereotypical but I think there is a difference in management approach between men and women and I don't necessarily think one is better or more productive"	
5193 11-15yrs 46-55yrs Full-time Single			
5222 16yrs+ 46-55yrs Full-time Married			

Objective situation: male consultants

ID number Yrs as consultant Age Full/Part time Marital status	Working part-time	Long hours culture/lack of family friendly policies	Not having a 'wife'
1060 16yrs+ >55yrs Full time Married			
1205 6-10 yrs 46-55yrs Full-time Married		"they [women]have to deal with flexible training or fit childbirth with their career, then have to move because their husbands got a career and so on"	
1268* 6-10yrs 36-45yrs Full-time Married		"The set up does not take kindly if you need to take time out for children, family, this sort of thing and that's where the prejudice comes in ... the ability to keep working and take on extra load is highly thought of"	
1299 11-15yrs 46-55yrs Full-time Married		"I suspect that any female gastroenterologist with a family must be under extreme difficulty"	" most of the duties outside of the hospital, in other words family, women do it"
1607 6-10yrs 36-45yrs Full-time Married			

ID number Yrs as consultant Age Full/Part time Marital status	Working part-time	Long hours culture/lack of family friendly policies	Not having a 'wife'
1651* 6-10yrs 36-45yrs Full-time Married			
1656* <2yrs 36-45yrs Full-time Married			
1661* 2-5yrs 36-45yrs Full-time Married			
1700 2-5yrs 36-45yrs Full-time Separated/Divorced/ Widowed			
1706* 2-5yrs 36-45yrs Full-time Married		"It's quite easy for me to commit myself to the work and put the hours in and I assume that one of my colleagues who has got a son and so on is expected home so I think it would be different if I had children"	
2009* 16yrs+ >55yrs Full-time Married			

ID number Yrs as consultant Age Full/Part time Marital status	Working part-time	Long hours culture/lack of family friendly policies	Not having a 'wife'
2025* 16yrs+ >55yrs Part-time Married			
2056* 2-5yrs 36-45yrs Full-time Married			
2068* 6-10 yrs 46-55yrs Full-time Married			"I think the reason why I can continue in work is very much down to the responsibility that my wife takes for looking after the children, the house and social arrangements. If she wasn't doing that I couldn't perform the job I do now"
2090 16yrs+ 46-55yrs Full-time Married		"I think it's virtually impossible for a woman to combine what I call the maternal instincts with doing a surgical job... I think they underestimate the time demand that doing it properly will put upon them"	
2113 6-10yrs 46-55yrs Full-time Married			"it must be more difficult to be domestically organised and put up with the rigours of being a women and having a family and do other things compared to a man, when socially it's much more accepted that you'll have an absolute commitment to your job and you can 'duck' some of the domestic type of things"

ID number Yrs as consultant Age Full/Part time Marital status	Working part-time	Long hours culture/lack of family friendly policies	Not having a 'wife'
2130 11-15yrs 46-55yrs Full-time Married		"The surgeons coming through now are likely to have less autonomy as they will be less confident in what they are doing ... I don't think it's a gender thing I think it's a training thing"	
2131 6-10yrs 36-45yrs Full-time Married			"I've only done what I've done because I've had a wife who looked after the kids and ran the family for many years"
2409 11-15yrs 46-55yrs Full-time Married			
2455 11-15yrs 46-55yrs Full-time Married		"I think there is a perception that, because of family commitments, they may find it more difficult to do work out of hours, drop everything and be available 24 hours a day" "I think there are some things that females are able to change more easily than male surgeons ... like working practice .. females may be more proactive and say no and make sure work is done in allotted times"	

ID number Yrs as consultant Age Full/Part time Marital status	Working part-time	Long hours culture/lack of family friendly policies	Not having a 'wife'
2502 6-10yrs 36-45yrs Full-time Married		"we've had one female surgeon here who wasn't married and didn't have children and she was absolutely the same as everyone else – she was a stupid workaholic like the rest of us and she used to put in the hours" Also describes a consultant cardiologist married to a cardiac surgeon "she does her full commitment of on-call but that inevitably means that she brings her kids in when she comes to do ward rounds so there is a tension that is created there"	
2559 16yrs+ >55yrs Full-time Separated/divorced/ Widowed		"While the organisation I am in isn't against females I'm well aware that certain organisations are very unsupportive of women in their childbearing/rearing years"	
2571* 16yrs+ >55yrs Full-time Single			
2631* 6-10yrs 36-45yrs Full-time Married			

ID number Yrs as consultant Age Full/Part time Marital status	Working part-time	Long hours culture/lack of family friendly policies	Not having a 'wife'
2654 11-15yrs 46-55yrs Full-time Married		"I would find it more difficult to work the way I do now and work the hours I do now and have a family as well."	
3696 ** 11-15yrs 46-55yrs Full-time Married			"I think the stress becomes if they are managing the house as well ... doing more than one job. I think if I did my wife's share of the house management I would be a lot more stressed than I am"
3700 11-15yrs 36-45yrs Full-time Married			
3745* 11-15yrs 46-55yrs Full-time Married			
3790 11-15yrs 46-55yrs Full-time Married			
4014* 2-5yrs 36-45yrs Full-time Married			

ID number Yrs as consultant Age Full/Part time Marital status	Working part-time	Long hours culture/lack of family friendly policies	Not having a 'wife'
4026 6-10yrs 46-55yrs Full-time Married			
4042* 6-10yrs 36-45yrs Full-time Married			
4082 11-15yrs 46-55yrs Full-time Married		"there's a lot of flexibility that's worked in for pick up from schools, for pregnancy, for all sorts of things"	"I think of myself, my wife, trying to balance work and home life would be even more [stressful] because she takes on the children's responsibility and the guilt of not being able to do one job better than another"
4100* 6-10yrs 36-45yrs Full-time Married			
4171* 6-10yrs 46-55yrs Full-time Married			

ID number Yrs as consultant Age Full/Part time Marital status	Working part-time	Long hours culture/lack of family friendly policies	Not having a 'wife'
4179 2-5yrs 36-45yrs Full-time Married		"at the end of the day it doesn't bother me if there are [gender] differences as long as everybody mucks in and does a reasonable days work" "the issues have been time off for maternity leave and the impact it might have on colleagues they have left behind"	
4255 11-15yrs >55yrs Full-time Married			
4260 16yrs+ 46-55yrs Full-time Married			
4372* 16yrs+ 46-55yrs Full-time Married		"I've got two part-time trainees at the moment job sharing because each of them are looking after young children, and it's extremely rare, in fact I can't remember a time when two men are job sharing for that reason"	"most men rely a huge amount on their partners even when we don't have children"
4392 6-10yrs 36-45yrs Full-time Married		"a man ..does not have that luxury [to have a break from work and come back refreshed after maternity leave]"	

ID number Yrs as consultant Age Full/Part time Marital status	Working part-time	Long hours culture/lack of family friendly policies	Not having a 'wife'
4420* 11-15yrs 36-45yrs Full-time Married			
4448* 11-15yrs 36-45yrs Full-time Married			
4466 11-15yrs 46-55yrs Full-time Married		"I'm aware that some of the consultants are part-time but I'm sure the work spills over into their own time and I think it's probably more difficult for them in some respects"	
4471 11-15yrs 46-55yrs Full-time Married			"I'm very lucky because we have a big family so my wife doesn't work so she takes a lot of the family burdens and all of that which enables me to do what I do. If I was one of my female colleagues, married to a working man, it would be more burden for them and I see that in their lives"
5002* 2-5yrs 36-45yrs Full-time Married			

ID number Yrs as consultant Age Full/Part time Marital status	Working part-time	Long hours culture/lack of family friendly policies	Not having a 'wife'
5043* 2-5yrs 36-45yrs Full-time Married			
5086 6-10yrs 46-55yrs Full-time Married			
5193 11-15yrs 46-55yrs Full-time Single		Describes colleague "she let slip the other day that these 4 hour sessions into which consultants' targets are to be divided, she does 17 per week which is ridiculous but as a single woman she has done that. A married woman other than in a role reversed relationship couldn't do that"	
5222 16yrs+ 46-55yrs Full-time Married			

Appendix VII – Chapter Three: Framework matrix for female consultants

Negative perceptions: Female consultants

* = additional question only; ** = original plus additional questions; all others had original interview schedule

ID number Yrs as consultant Age Full-Part-time Marital status	Female qualities	Part-time working	Working as a doctor and having a family	Female doctors ability to work with other female staff
2227 2-5yrs 36-45yrs Full-time Single	"In this hospital I think we [female doctors] do very well. We are moderately unusual in that there are 3 out of 8, which is a high proportion. I don't think there is a [gender] problem in this hospital" "You do get the lady doctor syndrome – you're the lady doctor and we're the proper doctor. Most of our patients .. really appreciate that [we are women] so it's not at all stressful being a woman in that respect" "I think individually as women we're occasionally more susceptible to bullying and possibly more sensitive to it as well, it bothers me being bullied more than some of my male colleagues"			

ID number Yrs as consultant Age Full-Part-time Marital status	Female qualities	Part-time working	Working as a doctor and having a family	Female doctors ability to work with other female staff
3011 11-15yrs 46-55yrs Part-time Married	"there is this concept of the dysfunctional male never admitting error, don't like criticism, all that stuff – if we're not careful there is that dysfunctional male element to medicine and we think women do sometimes bring a better balance" "we're bringing more female qualities which is healthy"			
3016 ** 2-5yrs 36-45yrs Part-time Married		"I think in some situations one gets a reputation and that is sometimes erroneous and it's quite often because you're part-time and we're perceived not to be there and not pulling our weight … 'oh she's gone again' 'she's gone early'… it might be that you are only contracted to work for half day so you're entitled to go but it's very difficult to actually walk out when everyone else is carrying on working so that's why I don't ever do half days, I do full days, so in fact I go home after a lot of the men"	"The next meeting for [college working party] is on the day my son's got a cardiology appointment so I will now not be going – so that's where again family comes first. I only neglect them [children] s far as I'm allowed to and when it's important everything has to stop…. I will take annual leave so that I can without any guilt have the whole day off with him, look after him, and then we can go out for lunch or watch a film or do something to make his day a bit happier"	

ID number Yrs as consultant Age Full-Part-time Marital status	Female qualities	Part-time working	Working as a doctor and having a family	Female doctors ability to work with other female staff
3051 ** 2yrs 36-45yrs Part-time Married	"I think groups like orthopaedic surgeons and surgeons are less able to relate to female radiologists sometimes than they are to male radiologists, and I think they would definitely prefer to have a male radiologist"	"in the new consultant contract part-timers in some ways came out a little bit better off than full-timers because they've given us proportionally more supporting activity time … so I think they are piling up a list of things that they are going to load onto us when the new job plans come out because they feel aggrieved that we've been given more time" "I do think there's a discrimination against us [part-time women] in the workplace and just a certain amount of hostility in the workplace which I think is unfair because we're all very good and I think they're lucky to have us really!"		
3090 ** 2-5yrs 36-45yrs Full-time Married	"if you look at the perceived skills of women in terms of multi-tasking and communication skills they are probably more open than a man's which I think in terms of organisation and getting paramedical people involved in trying to help grease the wheels it helps being a female"			"As a female I look for communication with my nursing and radiology colleagues and we can sit and have a natter and chat and sort things out over a package of biscuits, but for a man [it's different]"

ID number Yrs as consultant Age Full-Part-time Marital status	Female qualities	Part-time working	Working as a doctor and having a family	Female doctors ability to work with other female staff
3110 2-5yrs 36-45yrs Full-time Married				
3614 ** 6-10yrs 36-45yrs Part-time Married	"I've never worried about male chauvinist pigs or things like that, I use being a woman to my advantage!"	"if you try to be a part-time paediatrician or surgeon or something I think you would be a lesser mortal than the full timers"		
3645 ** 11-15yrs 46-55yrs Full-time Married	"I haven't had anybody call me a nurse for a long time! … I am in breast cancer screening … the patients prefer seeing a woman so actually it's an advantage to be a woman" "I think we're careful when we report, maybe more careful than men"		"I think the ones [female doctors] that the men will always complain about are the ones with young children and the ones who take time off because of their young children, because it's usually the women who have to stay at home if the nanny doesn't turn up or the child is sick or they need to go to the doctor or something, and I know that [other doctors] might bring up the fact that they call in unable to turn up … "	
3824 16yrs+ 46-55yrs Full-time Married	"I think sometimes they [female doctors] are more conscientious"			

ID number Yrs as consultant Age Full-Part-time Marital status	Female qualities	Part-time working	Working as a doctor and having a family	Female doctors ability to work with other female staff
4001 2-5yrs 36-45yrs Part-time Married				
4015 ** 2-5yrs <36yrs Full-time Married	"there may be [gender differences] in terms of their communication skills with patients, whether that's true I'm not sure .. but I think the perception is that women are more touchy feely and will cope better with that, but equally they may be less robust and therefore find it harder to deal with difficult things" "my colleagues will tend to refer the younger more unpleasant breast cancers to me, part of that is to do with how I approach things .. there's an element of me being able to empathise and have some more personal insight into what being a woman might be that would be hard for an older man particularly to do. Patients have also said they find it easier talking to a female consultant"		"when [male colleague's] wife needed to go to Australia quickly because her father was unwell, it was kind of 'well why do you need time off?' 'can't you get a nanny?', but if it had been me, [husband] has been in a nasty accident a few weeks ago and nobody questioned me needing to take a few days off"	

ID number Yrs as consultant Age Full-Part-time Marital status	Female qualities	Part-time working	Working as a doctor and having a family	Female doctors ability to work with other female staff
4018 ** 6-10yrs 36-45yrs Part-time Married	"a lot of people make comments about the female ability to multi-task and that being quite suited to a job where you might get different strands coming in at the same time .. and also the empathy side of things, which I think is generally perceived to be better conducted if you like .. or the ability for someone to realise they are not actually doing things quite right and they ought to modify the way that they do it .. it's quite difficult to persuade some of the male colleagues that actually they ought to" "if you put a man into my job to do all the things that I do which come from many different angles, not all one focussed job, they might find it more stressful .. trying to amalgamate all those different areas into one job is maybe quite tough for them"	"when I was a trainee .. I asked the clinical director (I got the gold medal in the exam so I was a fairly good candidate and so on) I asked him if there were going to be any consultant posts coming up and he said 'possibly' and I said 'well I'd want to work part-time' and he said 'oh I don't think you could do that'.		"I have a very good working relationship with the nurses that I work with" "I suspect my nurse specialists talk me up beforehand and say 'whatever problems you've got to and speak to Dr xxx and explain to her all the issues because she will spend time talking to you'. I know they say that, so I've already got good press before they [patients] even walked in the building"

ID number Yrs as consultant Age Full-Part-time Marital status	Female qualities	Part-time working	Working as a doctor and having a family	Female doctors ability to work with other female staff
4063 <2yrs <36yrs Part-time Married	"I'm probably considered to be more touchy-feely by the surgeons I work with than the surgeons are, but I don't know whether that's because I'm an oncologist or because I'm a woman. It could be both"	"you are a woman working in what is still a man's world to some extent and you do actually have to prove you are a proper player as opposed to a fluffy part-timer"	"the colleague I share a room with .. tells the most appalling jokes about people [doctors/colleagues] being pregnant" "I remember a surgeon telling me the first time I was pregnant that the model that had worked best for him was that a women stopped working and be at home … but really you just have to be a competent person then it doesn't matter if you are male or female .. if you are good at your job it eventually becomes apparent regardless of other deficiencies like having babies"	

ID number Yrs as consultant Age Full-Part-time Marital status	Female qualities	Part-time working	Working as a doctor and having a family	Female doctors ability to work with other female staff
4068 ** 2-5yrs 46-55yrs Full-time Married	"in this department the oncologists who people regard the most highly are female ,perhaps [because] they are more committed to the department, to their job .. perhaps they have lower expectations of us and if you fulfil them (the expectations) they regard you more highly!" "Oncology is a bit different because there are a lot of women in it .. but other specialities are very much male dominated and I think they probably do treat us a bit differently than their male colleagues, I think there might be a bit more respect for their male colleagues." "I think we're [female doctors] better at communicating with staff and patients"			"I have good relationships with my patients and other staff [but] there is perhaps more regard for male colleagues when we're going to multidisciplinary team meetings, meeting other surgeons, consultants from other specialities"

ID number Yrs as consultant Age Full-Part-time Marital status	Female qualities	Part-time working	Working as a doctor and having a family	Female doctors ability to work with other female staff
4075 ** 2-5yrs 36-45yrs Part-time Married	"I think that male doctors are still perceived by staff and by patients as somehow being better in some way, they are sometimes looked, respected, more than female oncologists" "I think women bring a lot of, we're quite dynamic and positive and I think very approachable, much more approachable"		"they [male doctors] do not have the responsibility of the childcare – the outside roles that I know I have to, today I have to work a set time and if I don't finish my work and get home at that time, I can't stay on until 7.30pm and finish my work. I can't go to a meeting at 6pm without prior negotiation with my husband and if he's then got a meeting there's a conflict .. they have a lot more freedom to do their work – they haven't got the rigid constraints in which they have to work" "obviously the thing that's against you if you haven't had your children by the time you are a consultant, that creates a lot of problems as I've found to my cost. My first four years as a consultant have basically been very difficult because I had two periods of maternity leave, and I know if I wanted to have another baby that would cause all sorts of trouble here"	

ID number Yrs as consultant Age Full-Part-time Marital status	Female qualities	Part-time working	Working as a doctor and having a family	Female doctors ability to work with other female staff
4078 ** 2-5yrs 36-45yrs Full-time Single	"I think we're [female doctors] certainly perceived as being more conscientious" "I think patient-wise, patients and their families often appreciate having a female doctor – a softer approach maybe"			"particularly the PAM's [professions allied to medicine] like the radiographers, I think they like working with the females because they think we are more focussed and dedicated than the men .. and the nurses I think prefer, or like working with the female [doctors] because we are perceived as doing the job thoroughly"
4134 2-5yrs 36-45yrs Full-time Married				

ID number Yrs as consultant Age Full-Part-time Marital status	Female qualities	Part-time working	Working as a doctor and having a family	Female doctors ability to work with other female staff
4136 ** 6-10yrs 46-55yrs Part-time Married	"when I was appointed there was no doubt they all thought 'give her lung cancer, nothing too taxing and not particularly complicated stuff to do" "I don't have a discretionary award despite having worked here for 11 years… several times they [male colleagues] have tried to take my registrar off me on the grounds that the clinical work they do is more important .. I've always only had a part-time secretary .. even though my patient numbers were the same"	"I've seen two female oncologists started in the department [recently] and certainly one of them wanted to work part-time and it was very much a 'female come to help out' not recognized .. trying not to see her as an independent doctor, a consultant in her own right, and just thinking that she'll help out one of the other men"		
4162 2-5yrs 36-45yrs Full-time Married			"I think that [female doctors] should be just as able to do it [bring about positive change], or should be just as able … what's in the back of my mind is things to do with, if you have a family and to do with hours and putting in time and meetings and going to extra things that they may not be able to "	"sometimes some of the nurses often say, in a clinic we have a nurse sitting in with me, a clinical nurse specialist, and the nurse may say to you 'oh yes, you did that well' or 'that was nice what you said'"
4189 2-5yrs 36-45yrs Full-time Married				

ID number Yrs as consultant Age Full-Part-time Marital status	Female qualities	Part-time working	Working as a doctor and having a family	Female doctors ability to work with other female staff
4286 ** 16yrs+ 46-55yrs Full-time Married	"different attitudes that people like surgeons or anaesthetists [have].. its quite clear that women have a different place but here [in oncology] I've never been conscious of that and people are surprised to hear that [laughs] but that's how it is"			
4375 ** 16yrs+ 46-55yrs Full-time Married	"I feel I'm particularly sensitive to criticism"			
4386 ** 11-15yrs 46-55yrs Full-time Single				

ID number Yrs as consultant Age Full-Part-time Marital status	Female qualities	Part-time working	Working as a doctor and having a family	Female doctors ability to work with other female staff
4416 ** 16yrs+ 46-55yrs Full-time Single	"men are less [touchy feely] they don't get much reward from that.. I think women do feel rewarded by it" "it's a horrible phrase 'quality of life' but you have to know the patient in detail, you have to know what their secret fears are, and I feel you can absolutely optimise the work in these specialties [oncology], and I do feel it's easier [for women], even for those who haven't got kids"			
5012 2-5yrs 36-45yrs Part-time Married	"you can get some very assertive women and some very assertive men, and you get some not very well organised assertive men .. I don't think it demarcates along gender lines quite so strictly"			

ID number Yrs as consultant Age Full-Part-time Marital status	Female qualities	Part-time working	Working as a doctor and having a family	Female doctors ability to work with other female staff
5087 ** 2-5yrs 36-45yrs Part-time Married	"It's quite clear my female colleague and myself included, function to some extent on our emotions and men are far more objective and leave those emotions behind ... women tend to take home all the emotional side of it I think ... sometimes women can get much more heated in discussion which is to our disadvantage because we get emotionally worked up and upset about sometime whereas the men can stay far more even keeled and objective and therefore can sometimes win an argument or a discussion because of that which makes me wonder whether women should actually learn different strategies"			

Female behaviour: Female consultants

ID number Yrs as consultant Age Full/Part-time Marital status	Work harder to be as good	Feminised behaviour to achieve goals/avoid challenging male behaviour	Being excluded from decision-making activities
2227 2-5yrs 36-45yrs Full-time Single	"I think there is perhaps even a slight tendency to see them as having achieved against the flow and so on average to be slightly better. When my colleague was appointed there were only 10 female surgeons in the UK – they really did have to be better to achieve. I had to ensure some of those interviews where they say 'do you think there should be women in surgery' ... I remember some things in my training but not since I've been appointed, I just think there's been a little bit of, it's just more having to prove yourself that little bit more"	"I was appointed following a very traditional surgeon who'd been very top down and quite status oriented, and I think this unit has changed magnificently over that time. We're much more a team, people know that they can stand up and give their tuppence ha'penny" "we [female doctors] are less combative and much better at persuading people that they want to change and sitting down and persuading people that it was their idea in the first place for start. I think we are less status oriented, it doesn't bother us that someone else thinks they started the ball rolling, it doesn't bother me if someone does start the ball rolling. I think women are more flexible … part of that might be social – you've always been brought up to sort of slightly give ... [whereas] my nieces generation I get the impression she has never begun to even consider herself a second class citizen" " we are bought up to be the peace makers … I do think women bring about change more easily, but quietly"	

ID number Yrs as consultant Age Full/Part-time Marital status	Work harder to be as good	Feminised behaviour to achieve goals/avoid challenging male behaviour	Being excluded from decision-making activities
3011 11-15yrs 46-55yrs Part-time Married			
3016 ** 2-5yrs 36-45yrs Part-time Married	"I go home after a lot of the men … I think people have perceived female radiologists as not working as hard, particularly if they're part time"	"I can say things because I am a woman and get away with it, and equally you can be a target of things because you are a woman, they just turn it around. I've been in meetings where either football or cricket was on, and I was speaking, and I suddenly realised that all the men were looking over me, so I stood up right in front of the screen and they all looked at me and I said 'guy's you can't do this – you can't watch sport, I'm speaking!' … so there's a bit of balance that allows you to do that in a non-confrontational way, but it would be quite difficult if a man wanted to speak…so sometimes you can use it in your favour by just being very girlie about something and distracting them and other times by being girlie it counts against you"	"it's up to you to a large extent how much you take on and you don't. There's plenty of opportunity for me to do more things if I want to but I haven't got time to"

ID number Yrs as consultant Age Full/Part-time Marital status	Work harder to be as good	Feminised behaviour to achieve goals/avoid challenging male behaviour	Being excluded from decision-making activities
3051 ** <2yrs 36-45yrs Part-time Married			"We don't get time to do other things in work other than work so if [having more responsibility] meant a lot of home work I would not be able necessarily to fulfil that so I would say no to something … they [male doctors] can go home and if they want to do 3 hours work they can do it but I can't come home and just do that – its really hard to fit in"
3090 ** 2-5yrs 36-45yrs Full-time Married		"I think it's very personality dependent. I could get away with murder if I wanted to… I can negotiate to get things I want" "if you look at the perceived skills of women in terms of multi-tasking and communication skills they are probably more open than a man's which I think in terms of organisation and getting paramedical people involved in trying to help grease the wheels it helps being a female"	
3110 2-5yrs 36-45yrs Full-time Married		"there are some ladies who tend to be a bit quiet and find it difficult to get up and voice their concerns or get any change going and are happier to just get on with the work, but having said that there are male colleagues I've got who are just the same … my local experience is that men and women doing it [effect change] pretty well, slightly different methods perhaps but the end result its quite often very well done"	

ID number Yrs as consultant Age Full/Part-time Marital status	Work harder to be as good	Feminised behaviour to achieve goals/avoid challenging male behaviour	Being excluded from decision-making activities
3614 ** 6-10yrs 36-45yrs Part-time Married		"I think we can make things better, I'll have to do my gentle persuasion bit but I think we will get there" "I've never worried about male chauvinist pigs or things like that, I use being a woman to my advantage!"	
3645 ** 11-15yrs 46-55yrs Full-time Married			"in the other departments I've worked in its more the men who naturally take on management roles… because a lot of women have outside responsibilities and don't want to devote so much time to management and meetings .. want to finish your job and go home and deal with the family"
3824 16yrs+ 46-55yrs Full-time Married			
4001 2-5yrs 36-45yrs Part-time Married			

ID number Yrs as consultant Age Full/Part-time Marital status	Work harder to be as good	Feminised behaviour to achieve goals/avoid challenging male behaviour	Being excluded from decision-making activities
4015 ** 2-5yrs <36yrs Full-time Married		"I think [female doctors] are equally able [to bring about positive change] I think they just do it in a different way ... women tend to wish to reach a consensus ... and more able to do several things at the same time, more able to multi-task and see things at different levels over a broader picture than I think men are. Men's approach to things, certainly in my experience, is more single-minded and more 'we're going to deal with this and then we can look at this' whereas women more tend to look at a broad range. Men's approach is more, not confrontational, it's more direct, it's more about 'I would like to do this' rather than 'what would you like to do? Can we come to agreement? Which is I think the female approach" "I can sometimes get people to do things because of the way I approach it, and there's also a possibility particularly with male consultants that I might get them to do it for another reason [laughs] … women don't tend to say 'do this now' they are much more likely to say 'I was wondering about …' 'what do you think…?' "	

ID number Yrs as consultant Age Full/Part-time Marital status	Work harder to be as good	Feminised behaviour to achieve goals/avoid challenging male behaviour	Being excluded from decision-making activities
4018 ** 6-10yrs 36-45yrs Part-time Married		"my general view is that females tend to achieve more … they [male doctors] don't necessarily think of alternative methods so they just try their own standard way of achieving something and if it doesn't achieve it they will wash their hands [of it]. Whereas I think the females, in my experience anyway, is that females will try different ways"	
4063 <2yrs <36yrs Part-time Married		"Men are more direct when they want to do things and women feel their way through and take people on board in a slightly different way."	
4068 ** 2-5yrs 46-55yrs Full-time Married			
4075 ** 2-5yrs 36-45yrs Part-time Married			"I can't go to a meeting at 6pm without prior negotiation with my husband and if he's then got a meeting there's a conflict ... they have a lot more freedom to do their work – they haven't got the rigid constraints in which they have to work"

ID number Yrs as consultant Age Full/Part-time Marital status	Work harder to be as good	Feminised behaviour to achieve goals/avoid challenging male behaviour	Being excluded from decision-making activities
4078 ** 2-5yrs 36-45yrs Full-time Single		"a lot of my colleagues are male and I think there's a very good balance with female and a lot of them respond positively to that"	"they [male doctors] will often be seen to be the leaders of various sorts of things, running this or that or the other… I think they probably have a higher profile, or promote a higher profile in everyday life, and perhaps are more noticed maybe, but it's obviously personality dependent because some of the women will do the same"
4134 2-5yrs 36-45yrs Full-time Married			
4136 ** 6-10yrs 46-55yrs Part-time Married			"I don't, not being able to go to meetings that easily, not being able to do anything additional to my clinical work"

ID number Yrs as consultant Age Full/Part-time Marital status	Work harder to be as good	Feminised behaviour to achieve goals/avoid challenging male behaviour	Being excluded from decision-making activities
4162 2-5yrs 36-45yrs Full-time Married	"Women do have to be very hot, they have to be that bit better. There are a lot of high powered female oncologists but you have to be better"	"a female junior can often do better, due to the sex issue and flirtation ... they can be less good and get on as well as they are pretty and wear nice skirts or whatever .. it doesn't get you far later on in your career though, you have to prove yourself in terms of your abilities, that you are competent and able to take exams"	"There are a lot of meetings after work, and there are a lot, I come in at 8am for a lot of meetings, they are not 9-5 hours, and yes I suppose that is discriminatory to people with children ... so I find it harder to participate in the same way as I would have before [having her son]" "It's because of the way hospital doctors have their time structured, we have enormous pressure not to cancel clinics, not to cancel theatres, so I understand completely why it's totally different in general practice where no one cares if you cancel your, if you close your practice for the day, and that's a real problem for hospital medicine" [there is no time built it for meetings] if you cancel your clinic you've just got twice the clinic the following week … as an oncologist I don't just have to go to one [MDT meeting] like the surgeons do, I have to go to 3 or 4 and that becomes very time consuming, and the head and neck is at lunchtime so I don't get a break, split site and that's hard" "it's easier to be a man and get on… I went to a meeting where I was told it was only the field movers and it was predominantly men"

ID number Yrs as consultant Age Full/Part-time Marital status	Work harder to be as good	Feminised behaviour to achieve goals/avoid challenging male behaviour	Being excluded from decision-making activities
4189 2-5yrs 36-45yrs Full-time Married			"I'd say [female doctors] are less able in general [to bring about positive change] there's still the old boy school system"
4286 ** 16yrs+ 46-55yrs Full-time Married			
4375 ** 16yrs+ 46-55yrs Full-time Married	"sometimes there is a small chauvinistic element where the woman has to work harder or prove herself more to achieve"	"sometimes you can be more persuasive and make things happen by gentle persuasion rather than by stamping your feet or so on"	"I think that sometimes there is a resistance [to women bringing about change]… sometimes there is a small chauvinistic element where the woman has to work harder or prove herself more to achieve"

ID number Yrs as consultant Age Full/Part-time Marital status	Work harder to be as good	Feminised behaviour to achieve goals/avoid challenging male behaviour	Being excluded from decision-making activities
4386 ** 11-15yrs 46-55yrs Full-time Single		"Being a woman you learn to manipulate much better than a man does because you spend your entire life manipulating people – I manipulate my husband and my sons and so therefore manipulating my colleagues is not too difficult!" "I think [men and women] are equally able [to bring about positive change] but they use different methods. Women are more facilitative and by and large manipulative … I mean I use those words in a loose sense but whereas a man might try to be strong and direct, women don't usually use those tactics, partly because if you are too strong and direct you're perceived as being confrontational and not strong – you are perceived as being pushy and so you have to work out how to do it, hence the pink and fluffy jackets sometimes" " [as a woman] you can be much more outrageous in what you say to people, much more direct and open and honest, as a woman, because you can say it with a twinkle in your eye"	"It's very different to ten years ago I think it's much more equal now. If you asked me the same subject about surgeons I probably wouldn't answer the same but for oncology I think it's a fairly even-handed profession"
4416 ** 16yrs+ 46-55yrs Full-time Single			"men love committees and going into a huddle at the end of the day, women just want to go home to their gardens, their kids, their dogs, whatever it is"

ID number Yrs as consultant Age Full/Part-time Marital status	Work harder to be as good	Feminised behaviour to achieve goals/avoid challenging male behaviour	Being excluded from decision-making activities
5012 2-5yrs 36-45yrs Part-time Married			"The only times I feel slightly uncomfortable, there are some areas that are more male dominated than others and sometimes with a lot of surgeons you can feel somewhat inhibited by the suits culture"
5087 ** 2-5yrs 36-45yrs Part-time Married	"In terms of getting on overall ... I think that's probably the one area, in terms of moving up the ladder and whether women actually who are equally as good can actually achieve their ultimate potential in terms of senior leadership – I don't know, and I think that's probably where we lose out"	"sometimes women can get much more heated in discussion which is to our disadvantage because we get emotionally worked up and upset about sometime whereas the men can stay far more even keeled and objective and therefore can sometimes win an argument or a discussion because of that which makes me wonder whether women should actually learn different strategies"	"I wonder if, as in the whole of medicine, there is some preference or some bias towards men, there aren't many female professors, there aren't many female clinical directors, whether that's a consequence, I'm sure part of it is a consequence of women having families and I'm sure part of it is a bias towards males"

Objective situation: female consultants

ID number Yrs as consultant Age Full/Part-time Marital status	Working part-time	Long hours culture/lack of family friendly policies	Not having a 'wife'
2227 2-5yrs 36-45yrs Full-time Single			"women are more likely to be single because relationships break up because of work, whereas men are more likely to have someone supporting them through it"
3011 11-15yrs 46-55yrs Part-time Married			
3016 ** 2-5yrs 36-45yrs Part-time Married		"I think in some situations one gets a reputation and that is sometimes erroneous and it's quite often because you're part-time and we're perceived not to be there and not pulling our weight … 'oh she's gone again' 'she's gone early'… it might be that you are only contracted to work for half day so you're entitled to go but it's very difficult to actually walk out when everyone else is carrying on working so that's why I don't ever do half days, I do full days, so in fact I go home after a lot of the men"	"quite a lot of the men have got a wife or partner at home or at least sharing that workload, so for example if a child is sick it is often not the men taking the time off, it will be the mother"

ID number Yrs as consultant Age Full/Part-time Marital status	Working part-time	Long hours culture/lack of family friendly policies	Not having a 'wife'
3051 ** <2yrs 36-45yrs Part-time Married		"when we're trying to get our CME points in our professional development for me to go away on a week long course is really quite difficult because I'm leaving behind the children .. I have to make quite complex arrangements whereas my husband's going off to the South of France today and he can just do that and he doesn't even have to give it a second thought really"	"they [male doctors] are able to concentrate both within and outside of work more on work… they don't have to think about making arrangements, you know if your CT list is overrunning and I have to think of who's going to look after the children and make arrangements for that"
3090 ** 2-5yrs 36-45yrs Full-time Married			

ID number Yrs as consultant Age Full/Part-time Marital status	Working part-time	Long hours culture/lack of family friendly policies	Not having a 'wife'
3110 2-5yrs 36-45yrs Full-time Married			"I'm lucky in that my husband will fit in with my work pattern and he will cope with the things I'm unable to cope with because I'm simply not there, and I'm very lucky with that… I'm very aware of the fact that a lot of females don't have husbands who are either able or willing to do that and they have to do the nanny juggling act, the nursery juggling act, which I think inevitably loads up the stress side of things and makes you less capable of coping with the work side issues. I can focus, when I'm at work I can focus wholeheartedly on what I'm doing because I don't have to worry about the home things … I'm lucky with my husband being the way he is which is part of the reason I didn't marry a doctor " "unfortunately that means my role as a mother and as a wife doesn't fit the traditional model and my mother finds that difficult to cope with sometimes and I get nagged 'you really ought to go and watch xxx' 'I can't mum, I'm on call' – that kind of thing I get every now and again"

ID number Yrs as consultant Age Full/Part-time Marital status	Working part-time	Long hours culture/lack of family friendly policies	Not having a 'wife'
3614 ** 6-10yrs 36-45yrs Part-time Married		"we [radiologists] are able to do sessions and shifts and we don't have to be full-time so I think everyone is on an equal footing"	"it's less stressful for men in general because most of them have a wife at home who runs everything else because I would say a huge part of my day is thinking about loads of other things that I have do on the way home, or tomorrow, or must get done, which is distracting me from concentrating and I generally think the boys don't have that quite so much"
3645 ** 11-15yrs 46-55yrs Full-time Married			
3824 16yrs+ 46-55yrs Full-time Married			"the men still don't have that overall responsibility for running the home and the children"
4001 2-5yrs 36-45yrs Part-time Married			"it would be less stressful [being a male doctor] as there would be probably less guilt about the home thing if you were a man. I think there is an inbuilt maternal instinct which says you should spend time with your children and I think there is much less of an expectation of that for men"

ID number Yrs as consultant Age Full/Part-time Marital status	Working part-time	Long hours culture/lack of family friendly policies	Not having a 'wife'
4015 ** 2-5yrs <36yrs Full-time Married			"It's harder for females to say 'no I'm going to be at work, this is what's important to me' .. I think women come under more pressure to do certain things … not just by their colleagues but actually also by patients, that you do certain things, and you do need to be at home to cook dinner etc"
4018 ** 6-10yrs 36-45yrs Part-time Married			
4063 <2yrs <36yrs Part-time Married		"the most consistent comment from male colleagues when I was first pregnant was envy that they weren't having six months off and working part-time" "the chance of me being part-time [if I was male] would be negligible, and that's part of why I enjoy my job so much, because I'm not here two days a week. I think if I was here five days a week I'd find it much harder from the point of view of being more relentless. .. I guess men feel differently but I would just miss my children terribly ... but my husband has no particularly desire to be part-time in order to look after the children … and I think the pressures on men to be the breadwinner are much higher"	

ID number Yrs as consultant Age Full/Part-time Marital status	Working part-time	Long hours culture/lack of family friendly policies	Not having a 'wife'
4068 ** 2-5yrs 46-55yrs Full-time Married			
4075 ** 2-5yrs 36-45yrs Part-time Married		"Today I have to work a set time and if I don't finish my work and get home at that time, I can't stay on until 7.30pm and finish my work. I can't go to a meeting at 6pm without prior negotiation with my husband and if he's then got a meeting there's a conflict"	they [male doctors] do not have the responsibility of the childcare – the outside roles that I know I have to, today I have to work a set time and if I don't finish my work and get home at that time, I can't stay on until 7.30pm and finish my work. I can't go to a meeting at 6pm without prior negotiation with my husband and if he's then got a meeting there's a conflict .. they have a lot more freedom to do their work – they haven't got the rigid constraints in which they have to work"
4078 ** 2-5yrs 36-45yrs Full-time Single			"many men have a partner who stays at home and is able to look after the home and either works part-time or not at all outside of the home so they don't have things at home to worry about in the practical sense quite so much, but that is changing, it's becoming more varied"
4134 2-5yrs 36-45yrs Full-time Married			

ID number Yrs as consultant Age Full/Part-time Marital status	Working part-time	Long hours culture/lack of family friendly policies	Not having a 'wife'
4136 ** 6-10yrs 46-55yrs Part-time Married		"I've almost accepted that they'll just have to see that I can't do that [make changes, publish results, go to meetings], but I don't think a man has the protection of saying 'I don't have time' but they might have a lot of stress"	"what limits me is having to cope with the family and be the one that's responsible for cutting short my hours of clinical work because I've got to deal with the family, and some men do that but an awful lot don't, because the man tend to earn more money than the women and the women are more likely to give up their jobs in favour of looking after the family"
4162 2-5yrs 36-45yrs Full-time Married		"Women drop out during training to have kids whereas men have more time to spend on it therefore come out being dominant. They can mentally and physically put in more hours to their exams and research etc" what's in the back of my mind is things to do with, if you have a family and to do with hours and putting in time and meetings and going to extra things that they may not be able to "	"Even working women take more of the responsibility for everyday activities at home than men do, so I am responsible for shopping, and I generally do the cooking … I have a cleaner that comes in but I am responsible for organising her and when she's not there I do it, and I still do extra stuff as well so I do it all"
4189 2-5yrs 36-45yrs Full-time Married			"whether it be children or elderly relatives it seems to be the women that are left to look after them"
4286 ** 16yrs+ 46-55yrs Full-time Married			

ID number Yrs as consultant Age Full/Part-time Marital status	Working part-time	Long hours culture/lack of family friendly policies	Not having a 'wife'
4375 ** 16yrs+ 46-55yrs Full-time Married			"they [male doctors] don't have to juggle the kids in the same way"
4386 ** 11-15yrs 46-55yrs Full-time Single			"in the early days of becoming a consultant it was a man's world and it was assumed that the man, their function was to do the job and be the consultant and they had a wife, and one of the things that I always said was the thing that went against me all the way through my junior career because I didn't have a wife at home – I had an extremely supportive husband without whom I wouldn't be where I am but I didn't have a wife who was at home doing the various bits and pieces, not pursuing their own career but sublimating her career to mine … my choice was to converge [with my husband's career] so my career was compromised on my husband's"
4416 ** 16yrs+ 46-55yrs Full-time Single			

ID number Yrs as consultant Age Full/Part-time Marital status	Working part-time	Long hours culture/lack of family friendly policies	Not having a 'wife'
5012 2-5yrs 36-45yrs Part-time Married		"I think I have been, probably because of permission to rate family and things higher for women than for men, a kind of acceptance. I negotiated a very flexible contract a term-time contract where I do a bit more work in the term-time so like today is a flexible day so in the holiday's I take Thursday's off but I work those in term-time. I think I've been very well treated"	
5087 ** 2-5yrs 36-45yrs Part-time Married			

Appendix VIII – Chapter Four: Invitation letter

Cath Taylor
Research Fellow
James Clerk Maxwell Building (room 3.21)
Kings College London
Cath.Taylor@kcl.ac.uk
07956 184280

Exploring perceptions and experiences of flexible working and social support in hospital consultants

Dear

I am undertaking a PhD aimed at exploring gender differences in the relationship between work and mental health in hospital consultants. This is underpinned by the work I have conducted examining the prevalence and causes of poor mental health in consultants (Taylor et al, 2005, Lancet – paper attached).

My work to date has indicated that there are various factors that could be important in explaining (and thereby preventing or reducing) poor mental health in consultants. I am writing to you to invite you to participate in a study aimed at examining two of these factors in more detail: flexible working and social support.

If you agree to participate it will involve a short (approx 30min) interview either by telephone or face-to-face (at your choice) at a time and location of your choice. I have attached a study information sheet to provide you with more information about this study.

Thank you for considering participating in the interview for this study. I look forward to hearing from you.

With kind regards,

Cath Taylor
Chief Investigator
cath.taylor@kcl.ac.uk
07956 184280

Appendix IX – Chapter Four: Consultant information sheet

Cath Taylor
Research Fellow
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Exploring perceptions and experiences of flexible working and social support in hospital consultants

INFORMATION SHEET

Introduction
You are being invited to participate in a research study. Before you decide whether you would like to participate it is important for you to understand why the research is being done and what it will involve. I would be very grateful if you could read this information sheet. Please contact me if there is anything that is not clear or if you would like more information about this study. My contact details are at the end of this information sheet.

What is the purpose of the study?
You have been invited to take part in a study aimed at exploring consultants' views and experiences about flexible working and social support. This study forms part of a PhD aimed at examining whether there are gender differences in the relationship between work and wellbeing in hospital consultants. It is underpinned by a programme of work examining the prevalence and occupational causes of poor mental health among hospital consultants (Taylor, Lancet, 2005). The focus in this study is on two aspects of an explanatory model that has emerged from work undertaken by the chief investigator: flexible working and social support.

As the emphasis of my PhD is on gender comparisons I have selected one male dominated specialty (surgery) and one less male dominated (radiology) and aim to interview male and female consultants from each specialty group. The study seeks to answer whether there are gender (and specialty) differences with regard to experience and perceptions of flexible working and social support in order to more fully understand the importance of these factors, and also to discuss possible interventions that may help protect the wellbeing of the consultant workforce.

Why have I been chosen?
You have been chosen because you are a consultant radiologist or surgeon working in [name of] NHS Foundation Trust or [name of] NHS Foundation Trust.

Do I have to take part?
It is up to you whether or not you take part. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw from the study at any time without giving a reason. A decision to withdraw at any time, or a decision not to take part, will not be disclosed to anyone or affect you in any way.

What will happen to me if I take part?
If you agree to participate, I will arrange to speak or meet with you to conduct a short (30-45min) interview. This can take place either by telephone or face-to-face and at a time and location that is convenient for you. With your consent, I will record the interview to ensure that there is an accurate record of our discussion. I may also make use of quotes when writing publications about this study, but all identifiable information will be removed so that statements remain anonymous. Only I will have access to the recordings of the interview which will be stored and disposed of securely. Transcripts from the interviews will be marked only with a unique ID number and will also be stored and disposed of securely. With your agreement I may also contact you once all interviews have been conducted to share the analytical

framework with you to ensure you agree that it reflects your experiences and perceptions in a valid and helpful way.

What are the possible disadvantages of taking part in the study?
The main inconvenience from participating will be finding 30-45 minutes in your busy schedule. However, this can be at any time of the day, on any day of the week, to enable it to best fit with the pressures of your workload and other responsibilities you may have.

What are the possible benefits of taking part?
This study forms part of a PhD aimed at better understanding the occupational causes of poor mental health in hospital consultants, particularly examining whether there are gender differences. It is hoped that the recommendations arising from this PhD may influence the design and development of interventions/initiatives aimed at improving working lives for hospital consultants. Your input will contribute towards these aims.

Will my taking part in this project be kept confidential?
Information that you give me during the course of this study will be kept confidential except in the event that you give information that suggests either your wellbeing, or the wellbeing of others, is significantly at risk. Such information will be shared first with my supervisors who are part of the study team and are both clinical psychologists. They will make an informed decision regarding the necessary steps which may involve offering you support, and in extreme cases may involve informing your line manager.

All documentation that is shared with other researchers for analysis purposes will be anonymised and any identifiable information removed. When I discuss the results of this study at meetings or conferences, or in publications, I will ensure that you are not identifiable.

What will happen to the results of the study?
Conclusions from this study will be used to inform recommendations for initiatives/interventions aimed at improving the working lives of doctors. I will aim to disseminate the findings from this work in journals and conference forums that reach both medical professionals and health service management. I will send you a summary of the results from this study once it is completed.

Who has reviewed this study?
This study has been reviewed and approved by North London Rec 1 NHS National Research Ethics Committee and your Trust R&D department.

Contact for further information?
Should you wish any further information about this study or to contact me to arrange a date/time for participating, please contact:

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London SE1 8WA
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Many thanks for taking the time to read this information sheet and consider your participation in this study.

Appendix X – Chapter Four: Interview topic guide

Exploring perceptions and experiences of flexible working and social support in hospital consultants

INTERVIEW TOPIC GUIDE

• General introduction to the interview – purpose and aims of research. Ask if they have any questions. Obtain signed consent, including for recording interview.

• Context of work: background (years as a consultant; component of role) and commitments outside work (family/young children etc)

• Job stress and satisfaction:
  - main sources of job stress/job satisfaction.

• Social support: probe about practical and emotional support sought and received (sources in and outside of work)

• Work-life balance:
  - Do you feel you have a good work-life balance?
  - What are the barriers/facilitators?
  - Flexible working: relationship between flexible working and status; how much flexibility they have; to what extent does the Trust require flexibility from you? Is this reciprocated?

• Face validity of the explanatory model:
  - **Anchor question:** from your experience, does this appear to contain the main occupational causes of poor mental health in hospital consultants? Is there anything missing/wrong?
  - Discuss the different elements of the model and their inter-relations

• What possible interventions/initiatives could improve your working life currently, or could have improved your working life during any stage of your career?

- Anything else that they would like to add/comment regarding gender, work and mental health?

- Thank you very much for your time and for contributing to this research.
  Ask whether they would like to receive the final study report.

Appendix XI – Chapter Four: QA exercise

Quality assurance of the analysis of transcripts

Aim
To quality assure analysis of face validity of the model.

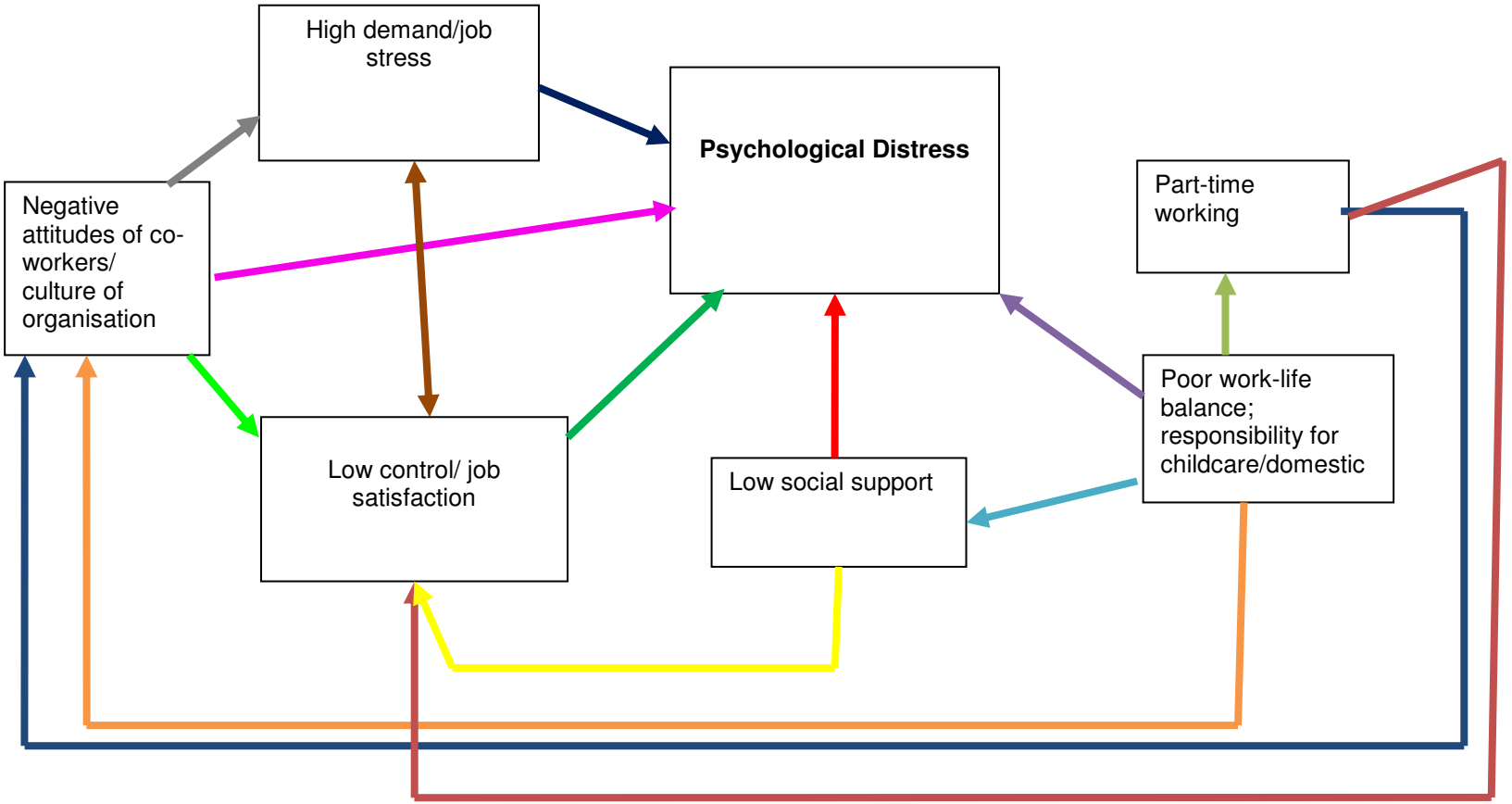
Method

An experience qualitative researcher (CCB) will independently rate a sample of the transcripts according to her confidence that the model is supported in the transcripts. The procedure will be completed independently by CT.

Procedure
Each relationship within the model is denoted by a coloured line (Figure 1). CCB will rate the confidence with which she feels each relationship is supported by the transcript on a scale from -2 (confident that relationship is completed disconfirmed) through 0 (not sure) to +2 (confident that relationship is completed confirmed), using the rating sheet provided (Figure 2).

Both CT and CCB will provide comments/reasons for the rating given, in particular giving examples or explanation for negative ratings or '0' ratings and will also document any parts of transcripts that suggest refining the model.

Figure 1: Empirical and theoretical explanatory model for psychological distress in hospital consultants



Key to model:

Part-time working is associated with negative attitudes of co-workers/culture of organisation

Part-time working is associated with low control/job satisfaction

Poor work-life balance; responsibility for childcare/domestic responsibilities is associated with part-time working

Poor work-life balance; responsibility for childcare/domestic responsibilities is associated with psychological distress

Poor work-life balance; responsibility for childcare/domestic responsibilities is associated with negative attitudes of co-workers/culture of organisation

Poor work-life balance; responsibility for childcare/domestic responsibilities is associated with low social support

Low social support is associated with low control/job satisfaction

Low social support is associated with psychological distress

Low control/job satisfaction is associated with psychological distress

High demand/job stress is associated with psychological distress

There is an interaction between job stress/demand and job control/satisfaction in relationship with psychological distress (the impact of one depends on the level of the other)

Negative attitudes of co-workers/culture of organisation is associated with psychological distress

Negative attitudes of co-workers/culture of organisation is associated with high demand/job stress

Negative attitudes of co-workers/culture of organisation is associated with low control/job satisfaction.

Figure 2: Rating sheet

Interview Transcript ID: **Rater:** CCB/CT

Colour	Relationship	Score (-2 to +2)	Comments
	Part-time working is associated with negative attitudes of co-workers/culture of organisation		
	Part-time working is associated with low control/job satisfaction		
	Poor work-life balance; responsibility for childcare/domestic responsibilities is associated with part-time working		
	Poor work-life balance; responsibility for childcare/domestic responsibilities is associated with psychological distress		
	Poor work-life balance; responsibility for childcare/domestic responsibilities is associated with negative attitudes of co-workers/culture of organisation		
	Poor work-life balance; responsibility for childcare/domestic responsibilities is associated with low social support		
	Low social support is associated with low control/job satisfaction		
	Low social support is associated with psychological distress		
	Low control/job satisfaction is associated with psychological distress		
	High demand/job stress is associated with psychological distress		
	There is an interaction between job stress/demand and job control/satisfaction in relationship with psychological distress the impact of one depends on the level of the other)		
	Negative attitudes of co-workers/culture of organisation is associated with psychological distress		
	Negative attitudes of co-workers/culture of organisation is associated with high demand/job stress		
	Negative attitudes of co-workers/culture of organisation is associated with low control/job satisfaction		
Overall	**Confidence that overall model is supported by interviewees comments** **Confidence that overall model is supported by response to anchor question (immediately after model is presented)**		

Appendix XII – Chapter Four: Synthesis of ratings and evidence for each association in the model.

Part-time associated with negative attitudes of co-workers/culture of organisation

Rating	ID number Gender/ Specialty	Examples/rationale for rating
+2	015 F/S	"I gave my full attention to my job. Unless you work hard you won't get there. I think PT working is not in the interests of patients"
	008 F/S	FT colleagues will feel "badly towards" PT colleagues if they have to sort out complications because they are not there.. Discusses friends who have moved from PT to FT working "to get respected at work" Has a senior colleague who is often not at work due to travelling around world giving lectures and admits she "feels resentment sometimes".
	012 F/S	There is a culture amongst surgeons that if you're PT you are not worthy
	017 F/S	If you are a female surgeon with family commitments and saying "I have to go now" I think that probably has a negative impact on how people think about you.
	001 F/R	"I get the feeling he [surgical colleague] is looking down on me the whole time as I can't go in on Friday's" "Working week is not set up for PT working" "You have to be prepared to give up quite a bit of that PT". Reciprocation (of flexibility) would be frowned upon. "they [prof of surgery] organise a protocol meeting, to discuss all the clinical protocols and they keep putting it on a Friday. And I keep asking them not to have it on a Friday [her day with her children] but they won't change it"
	013 F/R	"I know people who work 3 days and I perceive them not to be there enough to really have a handle on it"
	011 M/S	Discusses colleagues covering for PT being difficult because "where's the reciprocation?" it's difficult and reduces your control and flexibility. Acknowledges that it is doing the extras that earns you the kudos (therefore opposite of this is working PT and not being able to do the extras and so not having kudos).
+1	018 F/S	Discusses PT in terms of having less experience so being less good a doctor
	014 M/R	'second class' if don't take on the teaching/research elements of the job and you've got to be flexible to do those bits
	016 M/R	It's this 24:7 thing. I've never thought of nights or weekends as anything special and would work every sat and sun. PT workers (and EWTD) impact means less experience therefore lower quality doctors.
	009 M/S	"I firmly believe that this isn't from people being unpleasant but the work environment" Suggests that women should be given option to have 5 years off unpaid and then come back to work [implication that PT doesn't work for them/organisation/colleagues]. Says wife only went back to work PT as she would have to retrain otherwise.
	006 (M/S)	"Being a good father/husband is diametrically opposed to a professional career in surgery doing the hours and having commitment and being flexible to sort out problems" "it's no good me saying I'm picking the kids up at 4.30/5pm I'll have to leave about 3.30pm. 3.30pm for me is vaguely lunchtime and there's still another 5 hours of work to do and so it's almost like having a half day every day which isn't compatible"
	023 M/R	"I accept what you say about how people who work part-time might feel and I understand where it comes from. I'd like to think I haven't expressed negative views because I understand people's lives are different" [discusses people not liking being treated unfairly – whether it's the PT worker or the FT colleagues that have to pick up the work]
0 – not discussed	007 M/S 019 F/R	Not discussed at all/or not discussed in sufficient detail to make a rating
0 - mixed	021 M/R	Mixed: "To be a good surgeon you need to have enough operating time, see patients in outpatients, be on wards. All takes much more time". BUT he works his sessions over 4 days and has 2 half days off and always makes sure he leaves on time (very rare for him not to) and does not report any negative attitudes.
	004 F/R	Admits that lots of flexible working legislation cannot be applied unless you want the negative attitudes of co-workers; but also say's they 'definitely don't have that here – I've never felt that'; but also admits she never leaves on time (bit stricter with myself now than when newly appointed).

	010	Equates being a good surgeon with being there when something goes wrong at 2am. If you have child responsibilities you cannot be as flexible. But then goes on to say how well they work as a team "you could see a patient X, I could operate on that patient, and Dr Y could look after them post-operatively. That's the way we function… we try to maintain continuity but know its not always practical and so do next best alternative and make sure everybody's up to speed in terms of what's happening to that patient" Acknowledges that they are quite unique and that most surgeons work independently.
	003 F/R	Says "the part-time working leading to negative attitudes of co-workers, we definitely don't have that here – I've never felt that" but goes on to say "Yes I do feel pressure because I'm PT to work hard" "I was lucky that I could go PT" (goes to say that often there is opposition because they "need you to be there"
	002 M/S	Says ""Part-time working, I'm not aware of any negativity towards it" and that he felt that his organisation would support him going part-time if he asked, but then goes on to say "I think they [part time workers] find it very hard to get trained" and gives example of colleagues saying "all these part-time trainees they just want to come in and do all the interesting stuff"
-1	022 M/R	Says he's not sure this relationship exists (but acknowledges he has very few PT colleagues)
	020 F/R	Never felt negative attitudes "I feel I do my bit and don't feel bad the fact I only work 4 days"

Part-time working is associated with low control/job satisfaction

Rating	ID number Gender/ Specialty	Examples/rationale for rating
+2	007 M/S	Admits the more time he can spend working, the less stressed he gets and less he feels that he is not missing things
	008 F/S	Refers to PT friends "always been amazingly dissatisfied and tried to get back to FT as soon as possible .. to get respected at work" Analogy of a good boarding school "if you are a boarder you get all the fun of being a boarder, but if you're a day pupil you miss out on all the extra bits, the fun bits, and you're never really included – you're excluded from most things"
	017 F/S	"If you don't sit on committees you can't be involved in decisions".
	018 F/S	Agrees that there is a relationship between flexible working and status as a doctor
	001 F/R	I've had to be twice as good as someone else [FT] to keep my profile up. Reports about a important meeting that kept being held on a Friday [her day off] that they would not change so she often missed it. "the minute you mention you want a part-time job they'll take the juicy bits out of the job plan so you'll end up with the more mundane stuff" "if you say no to everything [extra/outside hours] you get very low morale .. even if you are part-time you have to be prepared to still give up quite a bit of that part-time in order to get [the negative attitudes] better and [job satisfaction] better.
	003 F/R	"When working 3 days a week I didn't achieve enough and felt slightly marginalised"
	013 F/R	PT workers are perceived/assumed that they won't do the work, therefore not given certain roles. Led to her pulling herself back and now won't work outside 8-6pm due to no recognition for this previously. Also says she has no support at work on the days she is off which leads to her being less in control when she is at work.
	002 M/S	His high control is partly attributed to face they get a lot of 'free work out of us'. Admits his wife cannot progress 'politically' even though she works FT as not willing to do evenings, networking, conferences etc. "its often the last 10% of your working hours which is the first to get shaved [if you work part-time] is where you make the actual networking progress"
	011 M/S	"If you do a lot more than your job plan you have [more] ability to negotiate [flexibility/including better things in job plan]" "Your ability to deal with the nitty gritty of everyday tasks disappears [if you work PT] as you lose everyday continuity". "It's the extra's that can make the job interesting"
+1	023 M/R	Admits he works on 'high status' things in his own time (evenings and weekends)
	019 F/R	Admits she would find PT difficult because "although supposedly sessional work you would never finish a task"
	014 M/R	Acknowledges that committees are not a 9-5 activity
	022 M/R	Admits the extra bits relating to status that he has gained are done outside of his day job
	016 M/R	Wife worked FT but didn't do 'extra' things (relating to status) as had children at home.
	009 M/S	"It's not very gratifying to find someone else has had to sort out a post-operative complication [for you] .. it can effect job satisfaction"
0 – not discussed	012 F/S 006 M/S	
0 - mixed	010 M/S	"The variety (clinical, academic, managerial) is what allows me to really enjoy it" but states that PT doctors should "find something interesting to do"
	021 M/R	Agrees that it would be very difficult to fit clinical, teaching and research into a part-time surgery (non-sessional) job but says that sessional PT workers he knows of in breast radiology have those elements in their job plans.
-1	015 F/S	Currently on sabbatical (therefore flexible working) but has complete control and high job satisfaction.
	020 F/R	Wants a career but doesn't want to have 'it all' as that would mean sacrificing family life. [reports good job satisfaction and control in order to ensure work-life balance –so this relationship does not exist for her]
	004 F/R	Reports having lots of control (despite working PT) due to lots of support in the department regarding flexibility.

Poor work-life balance; child/domestic responsibility is associated with part-time working

Rating	ID number Gender/ Specialty	Examples/rationale for rating
+2	014 M/R	Discusses the balance of work and home and having to decide where priorities lay
	001 F/R	Works part-time and has children, and often has to work on her day-off although describes her day with kids as precious and clearly does not want to. Acknowledges that her work-life balance is not as good as she would like it (too much work, not enough home), but that if she worked less she would not be able to get to meetings and then would have negative attitudes.
	003 F/R	When PT the responsibility for all child things falls on your shoulders [regardless if you are working too]
+1	010 M/S	"I will never have a meeting after 5 or before 8 where the workforce are predominantly female"
	007 M/S	Has a colleague who is a single dad and works one week on/one week off to care for his child. [does not discuss his work-life balance but relates PT working to having child responsibilities)
	019 F/R	Discusses fact that women often squeeze PA's into less days so can spent time with the kids. (ditto)
	008 F/S	n/a to this doctor but discusses other PT colleagues with kids (not in terms of their work-life balance but in terms of PT being linked to having child/domestic responsibilities)
	017 F/S	Admits she stays at work longer hours because she can [does not have responsibilities at home]
	022 M/R	Implicit agreement that part-time working is linked to having child responsibilities (discusses its direct link with stress, particularly due to having to leave at set time to collect from nursery). Questions whether it is harder for men to work PT as there are no male PT consultants in his department.
	020 F/R	Brings her kids into work quite often and does her emails late at night and admits taking work home with her mentally and emotionally.
	013 F/R	Works 10 sessions in 4 days so she can spend a day with her children. "All I do is work or childcare" – acknowledges that she has a poor work-life balance as has no time for herself for sport or anything else.
	009 M/S	Implicit acceptance that working part-time/flexibly is associated with having children. "I rely on my wife taking time off to look after the children" "the male consultant is not prone to these issues"
	011 M/S	"If you just do your job plan you have very limited flexibility"
0 – not discussed	023 M/R 012 F/S 016 M/R 002 M/S 006 M/S 021 M/R 015 F/S	
0 - mixed	004 F/R	Has worked FT and PT (8 sessions) and says that her work-life balance was the same/as bad in both but also says 'once you accept you're the PT worker you pick up the flack from home'
-1	018 F/S	Describes her experience of FT surgery (particularly when training) as working 'ridiculous hours' and it being 'all encompassing' – so poor WLB linked to working FT for her.

Poor work-life balance; child/domestic responsibility is associated with psychological distress

Rating	ID number Gender/ Specialty	Examples/rationale for rating
+2	001 F/R	"All childcare issues fall down to the woman… I don't do anything for myself – you are sacrificing wellbeing in order to be [mum and worker]"
	009 M/S	"I'm sure there is a relationship [between these factors]. Bringing up 3 kids is very stressful.
	021 M/R	Has good work-life balance because works 10 sessions over 4 days and admits this is good for his health to have time out. Rarely takes work home "Its' important as otherwise you start worrying at home – you have to learn to cut off work"
	016 M/R	Acknowledges that his work-life balance being far too 'work' meant he missed out on lots of lovely family holidays
	006 M/S	Has poor work-life balance (too much work) and admits it does him good when he does get home at a reasonable time (and mentions conflict with wife at home when he is not home on time)
	002 M/S	"work-life balance is major. Leaving kids to go to work can be very hard and upsetting … wife feels completely torn all the time"
	011 M/S	"there has to be a lot of flexibility at home and its hard .. its hard for the kids, my wife, its hard for me"
	010 M/S	"Getting that balance [between work and home] is always a challenge and it's really important to get it, for me"
	008 F/S	Makes sure she comes into work early so can leave around "5pm to go to the gym, see friends and get a proper break" "I start to go my most mad when I can't"
	019 F/R	Plans holidays in advance to ensure work life balance – says she finds this "very psychologically encouraging". Describes PT workers as never getting any "down time as either full-on work or looking after your kids"
	003 F/R	Trying to do everything (work and home) to best of ability is stressful. "You take on all the worry about kids as a woman … everything ratches up a notch"
+1	013 F/R	"All I do is work or childcare, I don't do anything else… it would be better for me to do some sport"
	023 M/R	Mentions going off to do research a year after first child was born and it was stressful.
	007 M/S	Admits that due to not having kids he can stay late if necessary to reduce stress the next day
	017 F/S	"it probably involves more planning than actually going to work [to ensure back up plans and kids are OK etc]"
	012 F/S	Acknowledges her work-life balance isn't very good and that "my number of working hours seems to have got stretched with all these big clinics". Acknowledges that if she didn't do private practice then perhaps it would shrink back but needs the private practice to pay the nanny to ensure she has any work-life balance and can do her job.
	004 F/R	"the main demand I feel is balancing exactly how much time do I want to be in work and exactly how much time do I want to be at home with my children?"
	020 F/R	"the day off gives breathing space to organise homelife".
0 – not discussed	022 M/R 014 M/R	
-1	015 F/S	Has responsibility for child and because of support she "has no problems at home that have an influence on my work"
	018 F/S	"when we were training nobody was thinking about work-life balance, it was just work ..so when they [new trainees] come to talk to me about it its hard, because I came up through the tough stuff… but their exposure to surgical experience is so different to ours [worse/must less] and that's quite scary I think". Equates having a good work life balance with having much less experience and therefore being 'scary' and 'not fair on them as can lead to all sorts of terrible things like being up before GMC"

Poor work-life balance; child/domestic responsibility is associated with negative attitudes of co-workers/culture of the organisation

Rating	ID number Gender/ Specialty	Examples/rationale for rating
+2	019 F/R WLB and culture	"There are times when colleagues away and day starts at 7am and may finish at 8/9pm". PT colleague cannot be flexible on day off as has got children.
	020 F/R WLB and culture	Get asked to do on-call 'unofficially' when not on-call – gives examples of coming into with her children.
	008 F/S Child resp and negative attitudes	Discusses very negative attitudes her colleagues (male surgeons) have re: pregnancy "unacceptable to be pregnant" Describes senior colleague saying to her on appointment "Now you've got a job think we probably ought to book you onto the next gynae list, have your tubes tied and then we know that you can't have any children … there was a semi-serious thing going on… they have this obsession that female surgeons that have babies … never come back the same person they went away"
	017 F/S WLB and culture	"as time goes on you realise how much work you do that's outside your working hours. Managers expect you to come in on your day off, they think they just have to pay you" (i.e. don't consider the importance of time off and work-life balance)
	011 M/S WLB and culture/ attitudes	Reciprocation of flexibility that he gives the NHS is "fairly difficult, very limited". Acknowledges that if you do the extras you earn rewards/kudos.
	002 M/S WLB and culture	"they try to offer you time off in lieu (of extra work) but you can't because of your patients"
	014 M/R	"It's not just 9-5 and never will be because of the range of things we're doing" Is critical of one PT colleague who does not 'disengage' from family whilst at work – always has her phone available etc.
	016 M/R	Acknowledges the 24:7 culture of medicine when he was training and that he would think nothing of working evenings and weekends. Discusses impact of EWTD and part time working as producing less experienced lower quality doctors.
	013 F/R	"Going through films for meetings would always be done from 6-8pm. I can do that, and did do that, but then I didn't see my kids all day. It's all or nothing. They do it in the daytime now so they could have done [when I did it]"
	001 F/R	"My stress is juggling home life and children and staying for late meetings or early starts" "If reduce days at work it will link to negative attitudes and not getting to meetings". "its frowned upon in medicine [to ask for a reciprocation of flexibility]"
+1	012 F/S WLB and culture	Reciprocation of flexibility is very limited. Not the same for nurses who can arrive at 9.30 having dropped their kids off.
	004 F/R WLB and culture	Work life balance could be better if term-time working was possible/supported.
	023 M/R Children and negative attitudes	Discusses the need to make sure structures are in place so PT does not impact negatively on those working FT
	022 M/R WLB and culture	Admits working longer hours to cope with volume of work
	009 M/S	Acknowledges there's a perception that surgery doesn't fit with family life
0 – not discussed	018 F/S 003 F/R	
0 - mixed	015 F/S	Mixed: acknowledges sense of responsibility and need to be around for patients to be a good doctor (which supports that culture and work life balance are related) – and describes continuing working through her maternity leave due to her sense of responsibility to trainees - but does not think that negative attitudes of co-workers relates to her having a daughter.

	007 M/S WLB and culture	Mixed: admits he can leave early but also that he works very long hours, and often weekends.
	006 M/S	Mixed: Wonders it if is an individual thing that some would just leave work if their kids needed them and not care (about work). Admits though that work life balance requires good support from work.
-1	010 M/S	Does not acknowledge that this is an issue
	021 M/R	Works 10 sessions over 4 days (has two half days off) and says he feels "no great pressure to stay at work" on his half days and rarely has to.

Poor work-life balance; responsibility for childcare/domestic responsibilities is associated with low social support

Rating	ID number Gender/ Specialty	Examples/rationale for rating
+2	021 M/R	Has reasonable amount of flexibility at work – can ask others to help take things on (good work-life balance is associated with high support at work for him)
	014 M/R	Has a very good team – supportive and will cover reporting films if he is off giving a lecture etc. Had a FT nanny when kids were younger and a secondary layer of support. Did not have to take much responsibility for children/domestic issues due to high social support.
	015 F/S	Has nanny and back-up and lives near hospital (high support allows OK work life balance)
+1	001 F/R	Ideally you would have a housekeeper too (as well as a nanny)
	013 F/R	Has a nanny etc but work support is poor and leads to increased workload
	023 M/R	Has lots of support and as good a work life balance as possible
	011 M/S	If PT you earn less money and therefore have less ability to employ the social support you need to be able to do the work.
	010 M/S	Has a lot of support and good work life balance
	017 F/S	Acknowledges you need lots of support to be able to do the job properly
	020 F/R	Has a colleague who covers (and vice versa) so can get to child's assembly etc – good practical support [to have a better work life balance]
	019 F/R	Poor WLB occurs when colleagues are away and have to stand-in
	004 F/R	Lots of support in the department and associates this with being able to be flexible.
	012 F/S	Discusses importance of nanny to being able to do job and also the difficulty having good WLB due to having to work long hours to earn more for support.
	002 M/S	Flexibility has not been an issue and acknowledges importance of support of colleagues
0 – not discussed	008 F/S 009 M/S 022 M/R 007 M/S 003 F/R 018 F/S	
-1	016 M/R	Had lots of support at work and home but poor work life balance due to wanting to succeed and not saying 'no'
	006 M/S	He has poor WLB but good emotional support from colleagues and practical support from wife.

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Low social support is associated with low control/job satisfaction

Rating	ID number Gender/ Specialty	Examples/rationale for rating
+2	015 F/S	Management in the NHS has eroded autonomy. Managers choose appointment of new staff rather than clinicians (don't end up with the right people).
	007 M/S	Has high support, means he can go home and switch off and know patients are in good hands.
	014 M/R	Very good team – supportive and will cover reporting of films if he is off giving lecture etc. Had FT nanny when kids were younger (and secondary layer of support) so could dedicate fully to job. Gives example of two PT females in department- one how has 'sorted out home' and the other that hasn't.
	023 M/R	Has support at work (clinical director) to promote his academic life.
	021 M/R	"I've got very good support from my colleagues … Its very rare for me to feel put on .. I have a reasonable amount of control over my job as it does offer me some flexibility (has two afternoons off). If there is a problem and I'm on call I will come and deal with it, but if I'm not on call one of my consultant colleagues will come and deal with it"
	013 F/R	Not having a 'wife' means less time for CPD/research. Not much support in work (colleagues/managers) feels isolated – gets begrudging help.
+1	018 F/S	Wishes that she had 'a wife' to do all the home stuff.
	012 F/S	No practical support at work or home. Managers changed recently and feel more approachable if a problem, but variable support from colleagues.
	004 F/R	Lots of support in department associated with high control re: flexibility in which she can work.
	003 F/R	Spent lots of valuable time sorting out management/admin things that are completely out of your control
	019 F/R	Department is like a family – all work hard to cover each other – if we didn't have that we'd be struggling. Lack of administrative structure though "you do it all yourself"
	020 F/R	Has good support practically and emotionally at work. Has a colleagues (more junior consultant) who has same specialisation so they can share workload and problems and cover for each other. Wider department get on very well, very supportive.
	017 F/S	Has a good team – selected as such – and can confide and share problems with them – one of main sources of satisfaction is working with her team "we get on really well"
	010 M/S	Has a lot of support and very high control
	011 M/S	Acknowledges importance of support to having any kind of flexibility at work/home.
	002 M/S	Main source of job satisfaction is working with good colleagues who are supportive and professional and interested in a common goal, which is patient care. Also discusses that sometimes when he volunteers to help out in free time the support (from management) is often missing which "makes me angry"
	022 M/R	If there was more support to do the extra things in working hours that would help
	009 M/S	Has low practical support and less control due to management decisions
	016 M/R	Has lots of support at work and high job satisfaction (no general manager at the moment which doesn't take away from job satisfaction but does cause stress)
	001 F/R	Not being able to attend early meetings makes you feel upset and dissatisfied
0 – not discussed	008 F/S	
0 - mixed	006 M/S	Has low control but high emotional support – says that flexibility when needed partly depends on having good relationship with management.

Low social support is associated with psychological distress

Rating	ID number Gender/ Specialty	Examples/rationale for rating
+2	020 F/R	I have a fantastic nanny who is flexible, very good friends/colleagues. When the support goes wrong it all goes wrong.
	002 M/S	Its not the work itself it's the lack of [practical] support. Support at home for work is massively important (has a mentor at work – his older brother).
	021 M/R	Had good support from senior colleagues otherwise would probably be 'a lot more stressed than I have been'
	008 F/S	"You have to be seen to be coping" "I see faces of mine that have died" (no support psychologically for surgeons). Describes feeling isolated at times – deals with other's problems as senior. Has got great friends can turn to and relies on good relationships with nurses and colleagues to ensure good patient care.
	001 F/R	"I don't have [a named] secretary .. its an enormous amount to do in my own time" "I've never had to take a day off as got good childcare .. god forbid if I had to"
	006 M/S	Has good colleagues and weekly social/debrief "if I didn't have colleagues support I'd be off sick"
	011 M/S	If there wasn't (good supportive colleagues) it wouldn't be possible to do the job. Good wife, good kids makes his work life balance work ok.
	019 F/R	Describes department as being 'like a family' and that if she didn't have that 'we'd be struggling'. Has close friends/family (non medical) which she describes as being 'extremely healthy'.
	003 F/R	Very supportive colleagues but a lack of practical support which she describes as being stressful. "the low social support, I can see how that would be a problem for psychological distress but I don't have that because I have a fantastic full time 5 day a week nanny who stays there until I get home and is amazing" "[nanny] keeps me out of psychological distress"
	004 F/R	Agrees it would be a huge problem if she didn't have a nanny "she keeps me out of psychological distress"
	012 F/S	"I think the support is huge .. in September my secretary resigned and she was not replaced until [late December] … so there I am running 450 students, 2 national meetings … on top of a quite heavy workload and lots of other things come through .. with no secretary, nothing"
	018 F/S	Has close network of friends (had them since training) "an incredible support system . it was very much a support group .. we still meet to this day. It has been a fabulous support"
	015 F/S	Describes importance of having lots of support in place at home and bought flat near work so could work. Good private secretaries she 'looked after' and they would look after her daughter if necessary in an emergency.
+1	017 F/S	Close colleagues can offload onto and good friends/family "we get on really well"
	013 F/R	Describes importance to her life that she has a nanny and her husband works 10 sessions too.
	016 M/R	No general manager which caused stress in his management position
	009 M/S	Practical support is high. Agrees that having a wife "is of value"
	022 M/R	Well supported by colleagues, and his wife and children. Colleagues were willing to operate with him (when not even on-call) when he was a new consultant.
	023 M/R	Has a wife at home as well as extended family. His colleague (specialist in same organ) was on maternity leave for nearly a year (with no cover) and he describes it as being 'tough on certain days'
	014 M/R	Acknowledges he couldn't have done job without having layers of support in place and a good team.
	007 M/S	Admits he has close friends in/outside work he can offload/confide in. Good practice support at work too.
	010 M/S	"I have a very strong circle of very close friends and a wonderful extended family" also has an executive coach and an 'outstanding' PA. acknowledges their importance in enabling him to do his job and maintain wellbeing.

Low control/job satisfaction is associated with psychological distress

Rating	ID number Gender/ Specialty	Examples/rationale for rating
+2	020 F/R	"When volume of work spirals out of control it can be an absolute nightmare" "when I'm not in control I feel stressed"
	015 F/S	Talks a lot about managers and them taking away control. Went on research sabbatical because of it and due to poor quality colleagues (not be in control of quality of work)
	010 M/S	Has high control which enables him to delegate and ensure he can get WLB.
	007 M/S	"I'd agree with this because I think I've got quite a lot of control … so I know that pretty much if I'm not on call at 5pm I can go and deal with my work-life balance"
	006 M/S	Has no control over demands and describes feeling stressed. "What is most stressful about working life is the things you have no control over"
	012 F/S	Has no control over clinics – leads to huge amount of pressure. "what promotes psychological distress? I think the high demand job stress is what we discussed right at the beginning, before you'd shown me the model, and the low control/job satisfaction that both those impact on it"
	004 F/R	"I think I feel in my job as if I've got plenty of control, as much control as I want of what I do in my job plan, so perhaps that's one of the reasons why I don't feel like I have any psychological distress because I feel like I'm totally in control of what I do"
	013 F/R	Describes having no job satisfaction "I don't really get much from my job at the moment" and that this has made her feel very isolated.
	002 M/S	"low control.. feeling disempowered quite a lot. Decisions are being made by non-clinical people – that's a distress"
	003 F/R	"the other thing that I've found quite stressful is that there are lots of drives for service improvement and efficiency, but I don't feel we have the tools to deliver that .. managers really don't understand" "there's a lot of pressure but then no one to necessarily support you to actually deliver the things that you would like to do, and I find that frustrating – I find that quite stressful". "I've got plenty of control, as much control as I want .. so perhaps that's one of the reasons why I don't have any psychological distress"
+1	001 F/R	Describes the satisfaction she gets from working as an examiner and impact on professional status "it raised my profile with the junior doctors more, which then makes me feel better about myself"
	019 F/R	"there are two days a week where actually theoretically I'm supposed to be in three places at one time and something has to give .. you end up not actually achieving what you want to .. this gives me huge stress …. It's a very intense time of the week and Wednesday evening I'm good for nothing"
	014 M/R	"the sheer volume of stuff we have to shift is pretty immense .. and sometimes it's quite difficult to juggle one's time effectively between that [and other things] .. I think that's probably where the potential stress comes in"
	023 M/R	Describes it being stressful when the workload is out of control "I can never go from a to c without having to pass through b .. sit down for a reporting session and I guarantee they'll be disturbances"
	022 M/R	Can control when doing the unpredictable bits of job and avoid making plans
	017 F/S	"Stress - it's things that aren't within my control"
	008 F/S	"I have over committed myself so the fact that I often have to be in two places at once. I find it incredibly stressful and I've overcooked it to such an extent that sometimes when it's really full on I can't do anything properly because I don't have enough time to concentrate doing the things I'm supposed to be doing and so I'm half doing everything"
	021 M/R	"I have a reasonably stressful job and I know that if I didn't control [my working week] that the stress would go up and up and up" [has strategies for ensuring he leaves on time – starts to delegate work to colleagues as it approaches his hometime]
	009 M/S	Management decisions out of his control cause stress
0 – not discussed	016 M/R 018 F/S 011 M/S	

High demand/job stress is associated with psychological distress

Rating	ID number Gender/ Specialty	Examples/rationale for rating
+2	019 F/R	Work demands are such there is "sadly" no time for research (which she would really like to do) Two days a week she is meant to be in 3 places at once "gives me huge stress" and Weds evening "I'm good for nothing"
	021 M/R	Describes feeling insufficiently trained for management role (as a new consultant) and in meetings finding it stressful "starting to sweat and my voice goes". Describes having "mechanisms for pressing the stop button" if things get too out of control (going out with friends/going away for a weekend).
	020 F/R	"Biggest pressure is volume of work.. when volume spirals out of control can be an absolute nightmare" Describes coming into work when not on-call as otherwise it would "bother me" (as a junior had called to ask her advice). Also describes her colleague in same sub-specialty "both very stretched with work.. if one on leave or sick it's an absolute nightmare"
	002 M/S	Describes working very long and intense hours when in US as a trainee surgeon and "my time in the States which was fearsome I must admit it wasn't good for my personality, it made me short-tempered, I lose my sense of humour, I'd no patience – I wanted everything done now… occasionally when things freak me out it happens to be every few months only, but when I do hit the roof and people dodge and run for cover. I don't abuse anybody, I don't bully anybody but I think it's not good for me and it's not healthy if I do that very frequently either"
	006 M/S	"the ability to fit in everything I need to do … having too much to do in too little time … you spend your whole day and your life punishing yourself for not having done all the things that you meant to have done"
	001 F/R	The number of meetings has gone prolific .. its time management that's the hardest thing. "I pack 5 days work into 4.. so I'll never have a coffee, never have a lunch, I'll never stop. I've been working here since 1997 and I've never been for a coffee. What's upsetting is that when I do a breast clinic, the radiographers go off for lunch and coffee, and the doctors never go off for lunch – we're just doing patient after patient and everyone else goes off .. you think why am I not human like you … as a doctor it is not acceptable, or frowned upon that you're allowed a break or a coffee. Noone thinks you have normal [needs]"
+1	013 F/R	High workload means no time for CPD which leads to low morale
	014 M/R	Workload and juggling everything is where the potential stress comes in
	023 M/R	Volume of work is the main cause of stress
	008 F/S	Overcommitted herself and has to be in 2 places at once – finds it 'incredibly stressful' "two things that give me psychological distress are being overcommitted and job stress"
	012 F/S	Agrees that job demand is an important factor (in explaining psychological distress)
	011 M/S	It's a fairly stressful job.. it's a very busy week. Early starts, late finishes, unplanned extra things .. plan to finish at 5 and end up staying until 8 or 9pm.
	018 F/S	Describes 'tossing and turning worrying about patients when on-call"
	015 F/S	"High demand job stresses a little there [points to psychological distress]"
	022 M/R	Main stress is finding enough time to do all the things I need to do – volume of work
	016 M/R	Discusses various stressors at work that could be very stressful – e.g emergency procedures (life or death) and management – being responsible for budgets and having to make cuts.
	003 F/R	Describes responsibility when becoming a new consultant as being stressful "when you feel out of your depth it's stressful"
0 – not discussed	017 F/S 010 M/S	
-1	009 M/S	"It's part of the job really to have stress"
	004 F/R	Discussing staying late at work "isn't down to demands from the dept. it's a personal thing, you just want to do your work and you want to do it well and you don't want to leave before you've done this or that or the other…. Within the department there aren't any particular pressures on you that you must stay .. it would be very easy to say to someone else actually I need to go now, could you do this?"
-2	007 M/S	Does not get stressed as life or death job so puts daily stressors (demands) into context. Does not think high demands add to his stress but lack of control definitely does.

There is an interaction between job stress/demand and job control/satisfaction in relationship with psychological distress

Rating	ID number Gender/ Specialty	Examples/rationale for rating
+2	004 F/R	Stress of workload is counterbalanced by having more control due to a) being a radiologist b) supportive colleagues c) having a nanny
	001 F/R	Discusses being an examiner "huge amount of extra work but huge satisfaction, so it's a trade-off"
	006 M/S	Is so busy he admits he does not have control. Lost 10 days annual leave last year due to not having enough time in the year to take it. High demand leads to low control "as work is then driving you. Best is when high demand but the capacity to meet the demand"
	007 M/S	Admits that it is because of his high control that he can leave at 5 and deal with his work-life balance and therefore be less psychologically distressed
	020 F/R	Biggest pressure is volume of work and no control over it. Higher expectations and not in control. I do extra [work] when it works for me.
	011 M/S	"If there wasn't flexibility to increase control then people wouldn't cope with it" (being a doctor)
	012 F/S	Discusses feeling increasingly pressured at work and that the main source is being "given all the responsibility, you get all the flack, it's your name at the top of the bed, it's your name in the notes, it's your responsibility irrespective of whether you have caused whatever people are not happy with .. but you have none of the power, you have zero power" "You have all the responsibility but none of the control, and certainly none of the power. That leads to a huge amount of pressure"
	008 F/S	Describes feeling isolated – partly due to senior leadership role and so "people come to me with their problems .. sometimes have to do things that people don't necessarily 110% agree with .. you sometimes feel it's quite lonely". Also admits that she recently had "a few conflicts with my colleagues so I don't have low control but my job satisfaction definitely dipped and I was the lowest I've ever been I think" "the two things that give me psychological distress are being over-committed and job stress"
	023 M/R	Demand can be increased by people coming and interrupting him but that's also good for his job satisfaction (as he enjoys being an expert in field)
	014 M/R	"most consultants can cope with stress, but if it happens in a chronic way, and there's no mechanism to tell you that, yes it's really stressful but actually you're doing a really good job and look at all the good you're doing, that's fantastic and lets talk about how we might be able to develop the service to maybe make it less stressful. If there's not that engagement I could see it would be utterly soul destroying"
	021 M/R	Spontaneously mentions that there should be an interaction line between stress/satisfaction (was erroneously missing on diagram shown in interviews) "I do wonder if actually there's a bit of interaction between those two [stress/satisfaction] then leading to that [psychological distress] than just directly, because if you've got a very stressful job you will find it less satisfying.. and not being satisfied in your job is in itself stressful .. if you've got high demand you're probably less in control because you don't have the time to be in control"
+1	003 F/R	Discusses major stressor being drive for improvement without having the tools to deliver.
	002 M/S	Its having demand without support (that causes problems)
	015 F/S	Discusses the stress from having "Managers…people who don't understand what patient care is" interfering and making decisions and impact on patient care.
	016 M/R	Describes interplay between stress/satisfaction in terms of the stress from publishing (extra demand and work in own time etc) but satisfaction from it.
	022 M/R	Volume and depending on others to help workflow (e.g portering service) – infrastructure – no control over it. Admits doing a lot of work at home but enjoys it.
	009 M/S	High demand and management control leads to "frustration"
	010 M/S	Acknowledges that he has high control over his demands
	017 F/S	Main sources of job stress are "things that are out of my control .. it's difficult really.. and potentially patient care is compromised, which is the major stress"

	019 F/R	Discusses impact of days when demands are out of control "By Weds evening I'm good for nothing"
	013 F/R	"where you have a continuous workload, you don't have any time to do anything but work. There's not time for CP etc that doesn't really help the morale of the place"
0 – not discussed	018 F/S	

Negative attitudes of co-workers/culture of organisation is associated with psychological distress

Rating	ID number Gender/ Specialty	Examples/rationale for rating
+2	001 F/R	Provides lots of examples for negative attitudes relating to gender and working part-time and that it causes stress. "[negative attitudes of co-workers" that's the one that makes you feel the worst"
	012 F/S	Clash between culture of organisation and her needs post-partum (would not allow her to work part-time on a temporary basis while she got better). Feels "downgraded" as she no longer does what they call mainstream work in head and neck "they consider it a Cinderella specialty.. and I now always get given the most junior registrar .. or sometimes no one at all or the SHO .. leads to a lot of frustration"
+1	015 F/S	Acknowledges that gender discrimination existed but because of her race it did not affect her "very fortunate"
	008 F/S	"you have to knuckle down and be one of the boys. Don't let yourself be offended by sexist jokes.. they do it to test you to an extent"
	021 M/R	Describes the pressure in a room full of senior colleagues and the impact on him (starting to sweat and his voice goes)
	013 F/R	There is a degree of this (negative attitudes) but I work what sessions I like so I can't complain. Describes feeling "isolated" due to lack of support in department.
	019 F/R	Men who don't accept 'failing' are considered more driven, focussed, committed
	010 M/S	"never seen active discouragement at medical school/trainee level of women into surgery but there is a lower tolerance when not performing well"
	018 F/S	Describes herself as being "incredibly lucky" not being subject to negative attitudes.
	002 M/S	Describes the problems his wife has had to face in her career.
	003 F/R	"probably one or two people definitely think like that .." describes feeling pressured to work hard and felt marginalised when working fewer days.
0 – not discussed	017 F/S 014 M/R 023 M/R 011 M/S 016 M/R 006 M/S	
0 – acknowledge exists but not link to psych distress	007 M/S	Acknowledges that gender negative attitudes definitely did exist "and probably do still"
	009 M/S	Denies that people are unpleasant. Argues that the environment breeds negative attitudes.
-2	022 M/R	Negative attitudes don't exist in his department/experience
	004 F/R	Does not acknowledge that negative attitudes exist in her experience
	020 F/R	Not experienced negative attitudes

Negative attitudes of co-workers/culture of organisation is associated with high demand/job stress

Rating	ID number Gender/ Specialty	Examples/rationale for rating
+2	003 F/R	Surgical colleagues can be judgemental/unappreciative (cited as a cause of job stress)
	001 F/R	Describes meetings with "aggressive men". PT working associated with stress "very frowned on" (working PT) "male world does not take flexibility into account"
	015 F/S	acknowledges that negative attitudes "have a heavy bearing on people's work" "Interference from manager" and the culture of organisation (EWTD lower quality training leads to more stress.
	017 F/S	"you have to be seen as working at least as hard as the boys do… there is certainly an expectation that if there's a problem you will stay and sort it out rather than leaving it for someone else"
	021 M/R	"I don't suffer from this as always seen to be working hard .. I don't slope off or have time off or days off and have worked 24:7 [when training]"
	010 M/S	"females probably do have to perform that little bit better to be acceptable"
+1	013 F/R Culture and high demand	Discusses colleagues not being in the department when they are supposed to be due to private practice and the extra work this generates
	020 F/R	Not had negative attitudes but attributes this to the fact she has always done extra work.
	008 F/S	"you have to be seen to be working as hard (as men) and doing the time"
	012 F/S	About half of her colleagues in her team will "let me down" if she asks them to look after her patients when she is on leave or cannot be there for any other reason. "it will be a disaster .. but they might not act like that with someone else but they will with me"
	023 M/R culture and high demand	Acknowledges lots of work is done out of hours
	006 M/S	Refers to female surgeon who has respect but as she's single and hasn't got kids so "can behave like a man"
	002 M/S	"Women have more difficult relationships with co-workers/nurses.. they have to network a lot more"
	014 M/R	Culture of teaching hospital and expectations are only met outside 9-5 hours. One colleague who is more disengaged obviously frowned upon.
	022 M/R	Working hard negates the need for negative attitudes
0 – not discussed	016 M/R 007 M/S 011 M/S 019 F/R	
0 – acknowledge exists but not link to job stress	018 F/S	It's too difficult to get to the top if you've got children
	009 M/S	Denies people are unpleasant. Says the environment breeds negative attitudes.
-2	004 F/R	Does not acknowledge that negative attitudes exist in her experience

Negative attitudes of co-workers/culture of organisation is associated with low control/job satisfaction

Rating	ID number Gender/ Specialty	Examples/rationale for rating
+2	003 F/R	Surgical colleagues can be judgemental/unappreciative and nurses don't respect female doctors as much
	001 F/R	One main stressor is being seen to do by job properly, not the clinical bit, it's all the extras
	014 M/R	Job planning culture of organisation = loss of autonomy and restrictive about allowing time for unplanned activities. You are viewed as "second class" if you don't take on the teaching and research.
	015 F/S	Culture changed about 10 years ago – loss of control due to big mergers and managers coming in etc.
	017 F/S	PT colleagues find it difficult [working PT] and their colleagues find it problematic [covering for them]
+1	013 F/R	Describes some colleagues as "bullies" and "no one challenges them, and if you do they knock you down"
	019 F/R	Agrees that her reaction to 'failing' (not being able to complete a procedure for example) may mean she is viewed more negatively by her male colleagues.
	023 M/R	Culture of organisation in terms of poor infrastructure leads to low control and low job satisfaction
	008 F/S	Discusses damage that positive gender discrimination can do in terms of how women are subsequently viewed. Gives example of gender discrimination experienced when she was training.
	018 F/S	Says she did not experience it personally but was aware it existed and describes one colleagues experience as a registrar "saying how tough it was .. how difficult it was with the men and how they didn't treat her very nicely and didn't take her seriously"
	012 F/S	Describes being less able to leave patients confidently in some colleagues hands due to their negative attitude.
	002 M/S	Acknowledges that sex discrimination in surgery existed and may still do and that if you give in to the advances of male senior colleagues you will always be known as getting the job due to giving in. Nurses respect a male doctor a lot more in general.
0 – not discussed	021 M/R 016 M/R 010 M/S 006 M/S 011 M/S	
0 – acknowledge exists but not link to job stress	009 M/S	Denies people are unpleasant – says the environment breeds negative attitudes.
	007 M/S	
-2	004 F/R	Does not acknowledge that negative attitudes exist in her experience
	020 F/R	Not experienced negative attitudes
	022 M/R	Do not exist in his department/experience

Appendix XIII: Poster presentation at The European Health Psychology Conference, Galway, Ireland: September 2005

Exploring the relationship between work and mental health in male and female hospital consultants

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Background

•Levels of psychological distress have been found to be higher in hospital consultants than in the general working population (*Ramirez et al, 1996; Taylor et al, 2005).*

•This has implications for their own health and for the quality of care they can offer their patients.

•Two theoretical models been influential in explaining the association of occupational factors with poor mental health:
Karasek's Job Demands-Control Model (1979) and
Siegrist's Effort-Reward Imbalance Theory (1996).
Put simply and taken together, these models indicate that individuals in jobs which are highly demanding (or require a large amount of effort) coupled with lack of control at work (or lack of rewards from work) are most at risk of poor physical or mental health.

•Previous studies of hospital consultants have supported these models, most recently showing that a deterioration in mental health between 1994 and 2002 was accounted for by increased job stress without comparable increases in job satisfaction (*Taylor et al, 2005*)

•The number of women entering the medical profession has been increasing steadily since the early 1970s. In 2002 61% of medical students were female.

•There is little evidence regarding gender differences in consultants' job stress and satisfaction. If male and female consultants have differing experiences of work in terms of stress and satisfaction, these differences should inform interventions to protect the medical workforce.

Aim

•To explore the relationship between work (stress and satisfaction) and psychological distress in female hospital consultants compared with male hospital consultants

Methods

Secondary analysis of data resulting from a questionnaire-based postal survey sent to 1794 UK hospital consultants in late 2002. Participants were consultants from five specialties:

Surgical oncologists all members of the British Association of Surgical Oncology
Clinical oncologists all members of the Royal College of Radiologists
Medical oncologists all members of the Royal College of Physicians
Gastroenterologists 2 in 3 random sample of members of the British Society ofGastroenterology
Radiologists 1 in 5 random sample of members of the Royal College of Radiologists

Questionnaire measures

Psychological distress – GHQ-12 (cut off of ≥4 to identify consultants reporting level of distress likely to be interfering with functioning at work).

Job stress and Job satisfaction using a questionnaire developed specifically for hospital consultants. 36 sources of job stress and 22 sources of job satisfaction are rated according to the extent to which they contribute to overall stress/satisfaction on a scale from 0 (not at all) to 3 (a lot).

Job and demographic characteristics

Statistical analysis

Pearson's X2 (categorical data), Fishers exact tests (binary data) and independent t-tests (continuous data) were used to compare male and female consultants.
Hierarchical logistic regression models (treating GHQ score as a binary variable <4 vs ≥4) were built to explore the relationship between gender, job stress, job satisfaction and psychological distress.

Results

Response rate

•73% (1308) consultants responded to the survey
19% (251) were female

Job and demographic profiles

Female consultants were:

•Younger in age (p<0.001)
•Less likely to be married (p<0.001)
•Less likely to have children (p=0.02)
•Less likely to hold a lead (p<0.001) or academic (p=0.01) post
•More likely to work part-time (p<0.001) … than male consultants

Job stress and satisfaction

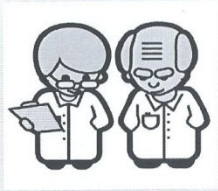
•Job stress levels were similar (p=0.73)

•Female consultants reported significantly lower job satisfaction than male consultants (p<0.001), particularly with regard to:

•Having professional status and esteem (p=0.001)
•Deriving intellectual stimulation from their work (p<0.001)

Levels of psychological distress

•Female consultants had higher levels of psychological distress (39% vs. 31% scoring ≥4, p=0.02)



Relationship between gender, job stress, job satisfaction and psychological distress

•Gender explained very little of the variance in psychological distress (Figure 1)

•Job stress explained the largest amount of variance in psychological distress, but did not explain any of the effect of gender (Figure 2)

•Job satisfaction independently predicted psychological distress from job stress and partially mediated the effect of gender (Figure 3)

Figure 1: Relationship between gender and psychological distress (r^2=0.004, p=0.02)

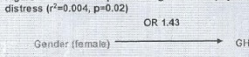


Figure 2: Relationship between gender, job stress and psychological distress (r^2=0.13, p<0.001)

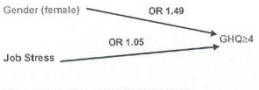
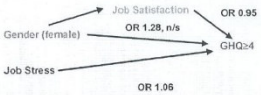


Figure 3: Final model (r^2=0.16 p<0.001)



Conclusions

•Female hospital consultants had higher rates of significant psychological distress than male consultants

•High levels of job stress and low levels of job satisfaction were associated with psychological distress in both male and female consultants

•Female consultants reported similar levels of job stress to male consultants, but reported lower job satisfaction, which may account for the higher rates of psychological distress

•Two specific components of consultants work are rated lower by female consultants: '*having professional status and esteem*' and '*deriving intellectual stimulation from work*'

•These findings are in line with Karasek and Siegrist's models indicating that it is the combination of demand/effort (eg overload) with poor control or reward (eg status and esteem) that is most likely to lead to poor mental health

Implications

A majority female consultant workforce is predicted for the future. Further investigation of sources of job stress and satisfaction for female consultants is needed to inform interventions to protect the medical workforce of the future.

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Appendix XIV: Poster presentation at The 2011 European Multidisciplinary Cancer Congress (ECCO), Stockholm: 23rd -27th September

Gender differences in the relationship between work and psychological distress in cancer physicians

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Background

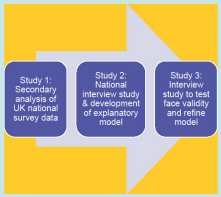
- Levels of psychological distress amongst physicians are high and attributed to the nature of their job (e.g. Coomber et al, 2002; Ramirez et al, 1996; Arigoni et al, 2009; Bressi et al, 2008)
- According to Karasek's job strain model the combination of high demand coupled with low control and support at work puts individuals most at risk of poor mental and physical health.
- Cancer clinicians may be at particular risk of psychological distress due to increases in job stress without comparable increases in job satisfaction in recent years (Taylor et al, 2005)
- Few studies have examined gender differences in risk of psychological distress but there are gender differences in some vulnerability and protective factors such as marital status, parenthood, seniority & specialty, that may put women more at risk.
- The changing demography in medicine, with an increasing proportion of females entering the profession makes this an important issue to investigate.

Aim

To investigate gender differences in levels and sources of job stress and job satisfaction reported by male and female consultants, and in the relationship these have with psychological distress

Methods

A mixed methods sequential series of three studies:



Study 1: Do male and female consultants experience work differently, and if so, are differences associated with risk of psychological distress?

Methods: Secondary analysis of UK national cross-sectional postal survey of consultant physicians (sent in late 2002)
Participants: all UK consultant clinical, medical and surgical oncologists, and a random sample of 2 in 3 consultant gastroenterologists and 1 in 5 consultant radiologists (n=1308/1794 responded, 78%)

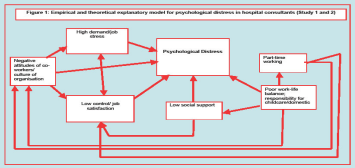
Measures: Psychological distress (GHQ-12); Consultants job stress and satisfaction questionnaire (Teasdale et al, 2008)

Main findings:
Compared to male consultants, female consultants reported:
- more psychological distress: 39% vs. 31% had GHQ-12 scores >3, p=0.02
- equal job stress but lower job satisfaction, particularly in relation to perceived work control and having professional esteem (p<0.001)
- In multivariate logistic regression analysis, this lower job satisfaction was associated with their higher prevalence of psychological distress.

Study 2: What factors might explain female consultants reporting lower job satisfaction?

Methods: National semi-structured interview study with 28 male and 26 female consultants (respondents to Study 1 survey).

Main findings: Lower job satisfaction may relate to:
- Part-time working and/or domestic/childcare responsibilities
- Lack of social support (managerial, emotional and practical support)
- Perceived negative attitudes of co-workers and/or the culture of the organisation
- An explanatory model representing the findings from Study 1 and 2 and previous literature was developed(Figure 1)

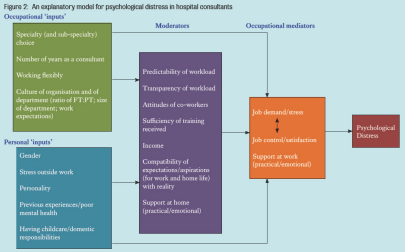


Study 3: Does the explanatory framework for understanding poor mental health in hospital consultants have face validity?

Methods: Interviews with 12 male and 12 female consultant surgeons (male dominated) and radiologists (balanced gender specialty) working at one of two UK NHS hospital Trusts.
Analysis: Each relationship in the model was rated on a 5pt scale from "confidently supported" to "confidently not supported".

Main findings:
All consultants confirmed the face the validity of the model when asked directly. Disconfirming ratings were mostly in relation to 'negative attitudes of co-workers' and involved consultants stating they had no direct experience of this. Various refinements to the model were suggested directly or indirectly. All were noted and reflected in a refined model (Figure 2)

Figure 2: An explanatory model for psychological distress in hospital consultants



Conclusions

- Attention should focus on ensuring physicians can balance high demand with having sufficient control and support at work.
- Interventions are necessary at the individual and organisational level.
- In particular, organisational policies regarding childcare, maternity cover, and flexible working require review to ensure that physicians' mental health is considered alongside the needs of the organisation.

References
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