

Edinburgh Napier University

Business School

**An INVESTIGATION into changes in GENDER EQUITY and
EQUALITY in SCOTTISH UNIVERSITIES from 1850 to 2011**

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Philosophy

By

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David Dick

DECLARATION

No portion of the work referred to in this thesis has been submitted in support of another application for another degree or qualification of this or any other university or institute of learning.

Signed

ABSTRACT

The central aim of this thesis is: to investigate changes in gender equity and equality in Scottish universities from mid-nineteenth century to 2011 with reference to the experiences and attitudes of female and male academics comparing their opportunities for promotion and equal pay. This is introduced with a review of Scottish social, workplace and educational history challenging the traditional Scottish claims for educational and intellectual democracy in terms of inherent inequity and inequality in female education. In addition, the social and educational history is analysed to reveal legacies of gender inequality as they feature in the present-day career experiences and opportunities of female in comparison to male academics.

The rationale of this research relates partly to the author's experiences and observations of gender inequity and inequality during 30+ years as an academic in higher and further education when females never achieved equality with males as far as seniority, pay and decision-making in the male-dominated cultures of the workplace. This research is further prompted from the fact that inequality still exists, although to a gradually lessening extent, in spite of over forty years of Equal Opportunities and Equal Pay legislation.

The main contribution to theory and practice in this research is in its analysis and comparisons of the state gender equity and equality in Scottish higher education through the perceptions of both female and male academics. It is unique in its analysis and comparisons of the impressions and ideas of twenty-four academics from lecturer to professor levels in relation to aspects of their everyday working lives which affect their opportunities for promotion and equal pay as they are affected by the organizational structures and the metaphorical glass ceiling in two Scottish universities, one pre-1992 and the other post-1992 with comparisons to universities worldwide.

The methodology in this research involves its research philosophy with reviews of Scottish, UK and worldwide literature sources of historical and current aspects of gender equity and equality in higher education from which the main themes and research questions are gleaned. These are used in the process of semi-structured interviews from which the responses of interviewees are analysed making comparisons between female male academics and between lecturers and academics in senior positions. The conclusions drawn are intended to reveal differences and similarities between the findings in literature sources and the responses of female in comparison to those of male academics in relation to gender equity and equality. Finally, recommendations are made towards improvement in the promotion processes, in closing gender pay gaps and for possible areas of further research.

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CHAPTER ONE

INTRODUCTION

1.1 Rationale

The rationale of this research is founded on historical legacies of sex discrimination socially, religiously, legally and educationally in the Scottish system of education noting ample evidence that female academics today are under-represented in senior positions and are paid less than their male counterparts (HESA, 30th March 2009; HESA press Release 173; UCU April 2007; ECU, Oct. 2009). The worth of this research can be justified from a recognition that, in spite of generally accepted aims for gender equity and equality through Equal Opportunities and Equal Pay legislation since 1970, there is substantial qualitative and quantitative primary and reliable secondary source evidence, as shown in chapters 2 and 3 (the literature reviews), that gender inequalities continue to exist to varying extents and at varying levels in universities in Scotland, the United Kingdom and worldwide. In addition, the firsthand past experience and observations of sex discrimination and marginalization in industry and during over thirty years of experience in higher and further education in Scotland of the researcher is, in part, the *raison d'être* for this investigation.

Further justification of the need for this research is verification of the findings of relevant literature sources with respect to the issues and concerns of researchers, mainly female, against the perceptions and opinions of serving academics in each grade who consented to participate in the process of semi-structured interviews. This is intended to provide new knowledge of improvement or deterioration in gender equity and equality through comparisons of the responses to interview questions between female and male academics in a post-1992 and a pre-1992 university. This differs from existing research in that a female-only perspective is commonly published and rarely, if ever, shows differences

in the perceptions and opinions between lecturers and senior academics as investigated in this research. Furthermore, the themes (see appendix 1) gleaned from the review of relevant literature sources provide a unique set of issues and concerns of academics from which an in-depth analysis and interpretation form the basis of interview questions addressed to female and male academics from lecturer to professor levels during the process of semi-structured interviews (see appendix 2) in relation to their work, their opportunities, or lack of them, for career progression and pay equality.

To capture an understanding of the perceptions and experiences of interviewees of their work practices and relationships this research is necessarily interpretive and qualitative. The experiences of and differences between the attitudes of female and male academics are investigated in relation to the organisational ethos and committee structures of their universities in terms of female/male representation in policy-making and decision-making committees as they are perceived to affect differences between female and male aspirations in terms of promotion processes and the closure of pay gaps currently in favour of males.

1.2 Primary Aim, Objectives and Research Questions

The primary aim in this research is to contribute new knowledge of the state of change in gender equity and equality in Scottish universities from mid-nineteenth century to 2011. In the context of this investigation **gender equity** means fairness of opportunity in the career progression and pay of female in comparison to male academics. It involves qualitative and interpretive investigations into the experiences of academics (male and female) in relation to such as educational and intellectual democracy, the metaphorical glass ceiling, the gender composition of influential committees etc. **Gender equality** refers to quantitative measures of the proportions of female to male academics in

senior positions and the extents of gender pay gaps each currently in favour of male academics as shown from quantitative data (see paras.2.17, 3.19 and Appendices 12 and 13).

The generic aim above to research changes in gender equity and equality from mid-nineteenth century involves a continuum of research objectives. The first is an investigation into the history of the extent of gender inequity and inequality in the workplace in general and in Scottish education in particular which involves a new challenge to the long-held Scottish traditional claims for educational and intellectual democracy. From a gender perspective this objective is also intended to identify the extent, changes and inheritances of male domination and the persistence of male norms which are shown to exist in the organizational structures of higher education today. The research questions associated with this objective include:

1. How have the traditional Scottish claims for educational and intellectual democracy affected the education of females in comparison to males?
2. Are there historical legacies which indicate differences between career opportunities for women in comparison to men in higher education? If so, how do they affect female in comparison to male academics today?
3. In what ways have legislative and educational reforms affected gender equity and equality in Scottish education?
4. What accounts for differences in the academic performance at school and in higher education between females and males?

The second research objective raises questions regarding the myth or reality of the metaphorical 'glass ceiling' in terms of the gender equity and equality in promotion and pay of academics in Scottish higher education with comparisons between universities worldwide. This involves the analysis of literature sources to identify the main themes (see para.3.5, Figure 5 and Appendix 2) which relate to the principal

issues and concerns of academics in their working lives in higher education and includes research into the extent to which the metaphorical glass ceiling affects the career progression and pay of academics in higher education. Associated research questions are:

5. To what extent does the metaphorical 'glass ceiling' affect the promotion and pay of female academics?
6. What are the principal thematic elements related to the glass ceiling in higher education?
7. In what ways was gender equity and equality in Scottish universities affected by the introduction of and greater emphasis on 'vocational' than on 'academic' higher education?
8. What are the main issues and concerns faced by female in comparison to male academics in relation to generally accepted criteria for promotion?

In relation to thematic elements concerned with the metaphorical thickening of the glass ceiling the following additional research questions are posed:

9. In what ways does gender blindness become problematic for female academics seeking equality?
10. How does work-life balance affect the academic work and promotion of females in comparison to males?
11. In what ways do career breaks affect the promotion and pay of academics?
12. How does networking affect the promotion of females in comparison to males?
13. What differences are there in the perceptions of job satisfaction and dissatisfaction of female in comparison to male academics?
14. What are the effects of flexible working in relation to job satisfaction?

A third research objective involves an investigation into the organizational structures of universities and the composition of influential committees in terms of the extent to which they affect promotion procedures, the relative opportunities for promotion between female and male academics and the causes of pay gaps currently in favour of males in all Scottish universities. Research questions created from relevant literature sources include:

15. Why are females still in a minority in the academic staffing of universities while they outperform males at school and in higher education?
16. Why are female academics under-represented at senior levels in higher education?
17. In the organisational structures of universities why are females in a minority in policy- and decision-making committees?
18. What are possible causes of pay gaps in favour of male academics as shown in literature sources?

A fourth research objective involves comparisons between the findings of literature sources and the responses of academics in the semi-structured interviewing process. The analysis of these comparisons is intended to provide a summation of findings and conclusions (chapter 7) to make suggestions and recommendations for possible improvements towards gender equality in Scottish higher education with suggestions for future research areas.

1.3 The Structure of the Thesis

The structure of this thesis is essentially linear, this 'Introduction' is followed by six additional chapters each built progressively upon the findings of the other with several references back for comparative purposes, for example, in making comparisons between the findings in literature sources (chapters 2 and 3) and the responses of interviewees (chapter 5). The historical survey of chapter 2 is intended to set the scene

as a 'prologue' for the research project as a whole. It is concerned with many origins of gender inequity and inequality and challenges traditional Scottish claims for educational and intellectual democracy from a gender position through a broad survey of literature sources dealing with the history of gender relationships religiously, socially, in the workplace and in higher education. A second literature review, that of chapter 3, follows from the findings of the historical survey and focuses on the main issues and concerns of academics in the system of mass higher education (post-1992) including career progression in relation to the metaphorical 'glass ceiling' and pay gaps in favour of males.

The Research Methodology (chapter 4) includes explanations of: (i) the research philosophy underpinning the ontology, epistemology and critical realism behind the investigations in this thesis, (ii) the methods of enquiry and data gathering, (iii) the identification of key thematic elements elucidating influences on promotion and pay from which interview and research questions are devised, (iv) analysis of qualitative data (v) validity and reliability testing and (vi) the ethical principles to safeguard the anonymity of interviewees.

The responses to interview questions of 24 female and male academics who participated in the semi-structured interviews forms the basis of chapter 5. This chapter contains representative samples of responses which are directly related to each thematic element. The selection of responses from over 900 responses of academics in one post-1992 university and one pre-1992 university exemplified differences and commonalities in their roles in relation to students, teaching, pastoral work, research and publications each being concerned with career progression.

The 'Discussion' chapter 6 provides an interpretivist and critically realistic analysis of responses to research questions of chapter 5 through

comparisons with the findings of literature sources of chapters 2 and 3. Finally, the 'Conclusion' chapter 7, following from the findings of chapter 5 and the discussion of chapter 6, is a summation of and comparison between findings of literature sources and interviewee responses to provide the final outcomes of what has been achieved and to answer the research questions as shown in chapter 4, para. 4.8. In addition, this chapter includes the contribution to new knowledge and suggestions of possible areas for further research with recommendations for improvements towards gender equality in Scottish universities.

1.4 The Content of Chapters

1.4.1 Chapter 2

The first literature review, that of chapter 2, entitled: 'History of Gender Equity and Equality', focuses on origins and historical aspects of gender relationships in the workplace and in academia from the Victorian era. This provides a broad introduction to the research project, to give it legitimacy and epistemological credence in an holistic overview of gender relationships. It is concerned with debates about gender equity and equality which have been a persistent theme in terms of classical liberal theories based on centuries of androcentricism (Middleton in Dawtrey, Holland & Sheldon (eds.), 1995).

The extent of male dominance and female segregation, discrimination and marginalization throughout the Victorian era and, to a gradually lessening extent into the twenty-first century, forms the basis of this enquiry an outcome of which is shown in legacies of gender inequity and inequality which persist in higher education today. This involves an exploration into gender roles in a range of themes which affect the metaphorical thickness of the 'glass ceiling'. The effects of mentoring, work-life balance and career centrality in relation to opportunities for promotion and causes of the persistence of pay gaps in favour of men are

investigated in relation to the relevance and legitimacy of the glass ceiling in 2011.

In dealing with gender equity and equality in academia the historical review contains a new challenge to traditional Scottish claims for educational and intellectual democracy from a gender position rather than from the customary position of upward social mobility and preparation for leadership for males only (Anderson, 1983; Davie, 1961, Davie, 1986). This is analysed in terms of access to higher education and democratic intellectualism, the latter relating to its elitism and curricular dichotomy (academic and vocational) in which women were excluded. A further area of investigation includes the effects of the changes in the system of Scottish schools from the 1870s to the 1960s and in higher education from the transformation of elite to mass higher education from 1992. The advice of educational reformers with the introduction of educational and Equal Opportunities legislation is investigated in relation to gender equity and equality and substantiated epistemologically using quantitative data referring to changes in female/male access, participation and performance in education (see chapter 2, para. 2.16 & 2.17). This is interpreted in terms of the improvements in the democratization of access for females and males through the broadening of entrance qualifications to Scottish universities and curricular expansion in the growth and variety of vocational full-time and part-time undergraduate and postgraduate diploma and degree courses creating and expanding educational and career opportunities.

1.4.2 Chapter 3

This chapter entitled 'Gender Equity and Equality in Higher Education from the 1990s' is mainly concerned with influences in higher education which affect the career progression of female academics in comparison to their male counterparts in the perusal of literature sources of Scottish, United Kingdom and worldwide origin. Of primary concern are causes for

the under-representation of females in senior positions and the phenomenon of pay gaps in favour of males. The influences on the career progression of female academics in comparison to their male counterparts are investigated in terms of the effects of male domination and the persistence of male norms in influential committees of universities and promotion processes. This is investigated in relation to a range of influences which are identified as themes for the formulation of research and interview questions.

This chapter investigates whether or not the glass ceiling continues to impede and obstruct the career progression of female academics and focuses on extrinsic factors and intrinsic factors which are identified as thematic elements. Extrinsic factors include such as: gender blindness (Kloot, 2004) in which females are perceived as invisible in a gender blind 'management male paradigm' (McTavish & Miller, 2006, p.38); criteria for promotion in terms of whether or not they are advantageous or disadvantageous to the career progression of female academics (Shaw & Cassell, 2007; Drennan & Beck, 2000); the Research Assessment Exercise (RAE) investigating tension between teaching and research in relation to 'quality of research, star ratings and league tables' (Shaw & Cassell, 2007, p.4; Drennan & Beck, 2000); the organizational structures of universities relating to the gender composition of influential committees; the influences of male dominance and male norms in promotion processes. Research into intrinsic factors which affect promotion, pay and the well-being of academics include such as: horizontal segregation; female/male traits; the effects of work-life balance and career centrality; mentoring; career breaks and job satisfaction and dissatisfaction.

Literature searches in this chapter reveal a range of arguments rather than theories in relation to career progression which lead to the creation of additional thematic elements. The themes (see appendix 1) include investigations into: (i) the 'pipeline effect' in which older male academics

block or delay opportunities for promotion (Marschke, 2004; Kloot, 2004); (ii) female lack of doctoral qualifications and inexperience (Moss & Daunton, 2006, Vol. 11; Ramsay, 2001, Vol.21); (iii) female choices of faculty and subjects – horizontal segregation (Austen, 2004; Forster, 2001, Vol.6); (iv) slower and lower application rates for research funding by females (CPPM, 2007; AUT, 2004 cited in Doherty & Manfredi, 2006); (v) the under-representation of females in decision-making committees (Denton, Zeytinoglu & Isik, 1993; Kloot, 2004; Mischau, 2001); (vi) career breaks and the dual role of females as academics and family carers (Wilson, 2005; Forster, 2001); (vii) the concentration of female academics on short-term contracts and the over-representation of females in teaching-only posts; (viii) female/male traits which suggest a tendency for female academics towards pastoral and administrative work at the expense of their research and publication work (Thomas & Davies, 2002; Doherty & Manfredi, 2006).

The existence of gender pay gaps in favour of male academics is investigated in relation to their causes, the extents of which are shown from quantitative data for all Scottish universities (UCU, 2007) and from Athena Bronze Award applications by universities. The persistence of pay gaps in spite of Equal Pay legislation dating back to 1970, the introduction of the Pay Framework Agreement (2004); (ECU, 2009, p.2; Rani, 2009, pp.47-65) and common pay scales prompted an investigation into possible causes other than simply the difference in pay expenditure of universities for female and male academics (UCU, 2007; ECU, 2009; Faggian & Giusta, 2008, pp.3-5).

The findings of the literature review of this chapter are of particular importance in dealing with the research objectives of para. 1.1 above and in identifying thematic elements in relation to the career progression of female in comparison to male academics and in the creation of interview

questions used in the field work of this research in the form of semi-structured interviews (see chapter 5).

1.4.3 Chapter 4 - Research Methodology

Chapter 4 is introduced with a brief outline of the sequence of methods from the 'proposal' to the final 'conclusion' in the research project as a whole. This is followed with an explanation of the philosophical approach adopted in terms of ontological, epistemological and critical realism methodology in comparing the analysis of literature searches with those of the responses of academics in the semi-structured interview process.

The processes involved in **data gathering** in relation to investigations into the changes in gender equity and equality include three methods of enquiry and data collection: (i) the review of relevant literature sources, (ii) the responses of academics to interview questions in semi-structured interviews and (iii) knowledge acquired from the researcher's participation and presentation of papers in seven conferences.

The **choice of method** is determined from the objective of seeking to understand the subjective meanings behind the perceptions and impressions of female and male academics of their work environment, its organizational structure, work practices and their social interactions with colleagues and students; the methodology is therefore qualitative, interpretivist and socially constructed in seeking acceptable knowledge from a position of critical realism.

This chapter explains the processes involved in the semi-structured interviews commencing with the provision of a printed statement: 'Information for Interviewees' (see appendix 3). A 'Consent Form' (see appendix 4) was supplied to each interviewee for completion and signature. In addition, this chapter also explains the axiological approach adopted by the interviewer to enable and encourage open discussion in

an emotionally neutral stance during interviews acknowledging and avoiding possible bias and the imposition of personal values which might have affected the responses of interviewees.

Initial **research questions** were conceived from experience and previous research into educational and intellectual democracy (Dick, 2006). The search for answers to them required the initial selection and interrogation of relevant literature sources as shown in chapters 2 and 3. This prompted new and more probing research questions leading, in turn, to further literature searches. This circular process was instrumental in refining and focusing the research process to achieve the research objectives and research questions as in para. 1.1. The interview questions (see Appendix 2) were apportioned to the thematic elements for later analysis in chapters 5 and 6.

Validity and Reliability: validity, which involves measurement, is problematic in this substantially qualitative and interpretive research process. This section of chapter 4 therefore deals with reliability in terms of the process in transferring the responses of interviewees from twenty-five audio recordings to the printed word by the researcher alone and is dependent on accuracy in playing and replaying the 900+ responses from the audio recordings to obtain, as accurately as possible, a true transcription.

The trustworthiness and authenticity of the responses themselves are dependent on the credibility of each interviewee's opinions, impressions and ideas in their responses to each interview question. The fact that each interviewee is an accredited and highly qualified university academic inspired confidence in the reliability of their responses even though answers to similar interview questions differed in emphasis and in the standpoints between females and males and between lecturers and

senior academics (this is exemplified in chapter 6 - 'Discussion of Research Findings').

A statement of **ethical principles and confidentiality** in which strict adherence to ethical issues is shown to form an important part of the semi-structured interview process. This is explained through assurances of confidentiality given to each of the twenty-five interviewees in that their responses would be anonymised, that digital audio recordings would be deleted after transcription and that only the researcher would have access to the transcripts from audio recordings of interviews.

The procedure for approval to conduct interviews in two universities was obtained through the home university's Research and Knowledge Transfer Ethics and Governance Committee in the completion of the appropriate approval form (Appendix 5). Assurances by the researcher are shown in relation to data collection methods, where data was gathered, how the sample of interviewees was selected and from whom permission was obtained, how interviewees were invited to take part and how validity and reliability of findings was tested. Permission to conduct interviews with academics in each university is explained in this chapter in terms of contacts made with deans of faculty or professors as the gatekeepers of staffing and confidential data.

1.4.4 Chapter 5 - The Field work

This chapter contains a major part of the research project in ascertaining, through semi-structured interview questions addressed to 24 female and male lecturers, senior lecturers, readers and professors, in one pre-1992 and one post-1992 their perceptions and attitudes under each theme of gender equity and equality. Within the limit of the word count a representative sample of one quarter of the 900+ responses of interviewees form the contents of this chapter with the analysis of the responses codified under each theme. A second stage of codifying

involved the subdivision of the responses into female and male responses and into lecturer and senior staff responses for comparative purposes. In each coded entity the opinions, perceptions and impressions of the interviewees are compared for their differences and similarities and further compared with findings of relevant literature sources to satisfy the research objectives outlined in para. 1.1 above.

Chapter 5 is introduced with an investigation into how it feels to be an academic in Scottish higher education from perceptions of **job satisfaction and dissatisfaction**. This involves investigations into the work preferences and features of work which give academics most satisfaction and pleasure in relation to their work choices and the outcomes involved in their teaching, research and publication work. Aspects of job dissatisfaction are investigated in terms of work environment, factors which interrupt and delay their preferred work choices, aspects of managerialism and the long-hours culture in which comparisons are made between female and male academics in the post-1992 and the pre-1992 university.

Interviews in relation the **glass ceiling** are introduced with questions and discussion to investigate whether or not it exists in the minds of recently appointed lecturers and older senior academics in terms of their effects on opportunities (or the lack of them) for the promotion of women. This involves an investigation into **organisational structures** of universities in terms of the gender composition of influential committees as they affect opportunities for promotion of females in comparison to males.

Other influences which may affect the glass ceiling are investigated from the perceptions and attitudes of academics towards the **Research Assessment Exercise (RAE)**. This is explored in relation to possible tensions between teaching and research and gender differences in opportunities for research in relation to the career progression of female

and male academics. In addition, the relative advantages and disadvantages of **flexible working** are investigated in terms of the freedom to work from home and the dual role of women as academics and home carers. The effects of **work-life balance** and **career centrality** are investigated in relation to career progression. Responses of academics about **female and male traits** in relation to differences in the work characteristics of female in comparison to males are investigated in terms of pastoral work, mentoring, teaching and administration in relation to their research and publications.

The extent of **discrimination and marginalisation** is tested in relation to whether or not academics are aware of the Gender Equality Scheme of their university or have had reason to consult it for the resolution of any grievances. This area of enquiry is extended in this chapter to encompass the effects of **gender blindness** comparing the findings in literature sources with the responses of female and male academics. Their responses are also investigated in terms of the values and advantages of **mentoring** in terms of its development and availability taking into consideration scarcities of females in senior positions with experience to provide effective mentorship (Thanacoody, Bartram, Barker & Jacobs (2006).

1.4.5 Chapter 6 - The Discussion

Chapter 6 is introduced with discussion about historical aspects of gender relationships in the workplace based on the findings of chapters 2 and 3. This provides a measure of ontological justification of the reality of gender inequity and inequality which inhibited the career progression and pay of females. The epistemological foundation based mainly on gender literature provides acceptable knowledge of origins as well as the extents of gender inequity and inequality.

The **research philosophy** underpinning this research is explained in this chapter in terms of the ontological and epistemological approaches above in the search for the reality, or as near to reality as possible through a position of critical realism and for acceptable knowledge of the changing and present states of gender equity and equality in Scottish higher education.

Problems associated with the processes involved in conducting semi-structured interviews with female and male academics are discussed from the standpoints of the interviewees and from axiological influences of the researcher in seeking to reach an understanding of the issues and concerns in the working lives and the work characteristics of academics in relation to their aspirations for promotion and equal pay. Part of the search for this understanding includes investigation into how it feels to be an academic from their perceptions of job satisfaction and dissatisfaction. This is discussed in relation to their preferences, pleasures and aggravations in work referring to such as student feedback, teaching loads, flexible working, bureaucracy and administrative work, research and publication work.

The **organisational structures** of the two universities involved are investigated in relation to the effects of male domination and male norms in the composition and promotion procedures of policy- and decision-making committees. Comparisons are made between the findings of literature sources and those of the responses of interviewees to ascertain differences or similarities between the two and between female and male academics as well as between lecturers and their senior colleagues in relation to their career progression and pay gaps.

Key areas for discussion and analysis in this chapter are **criteria for promotion** and the **career progression** of female academics in comparison to their male counterparts. This is researched in terms of the

aims of universities in relation to several variables including: teaching, income from research, publications, the RAE, networking, mentoring, pastoral work and administration. Career progression is discussed in relation to performance development reviews (pdr) in relation to the experiences of female in comparison to male academics.

The benefits of **networking** are discussed in relation to research and career progression in terms of the experiences of female in comparison to male academics taking into account the dual roles of females in their work as academics and home carers. The consequences of taking **career breaks** are investigated and discussed in terms of the interruptions in research, publications, networking and delays in promotion and pay.

Whether or not the metaphorical **glass ceiling** is as effective in inhibiting the promotion of female academics in Scottish higher education today as in the past is argued from the findings of literature sources and the responses to interview questions of young academics in comparison to their senior colleagues. Many aspects of the glass ceiling are discussed with reference to opportunities for promotion, discrimination and marginalization, gender blindness and female and male traits each of which are compared with the findings in literature sources to ascertain changes in gender equity and equality in Scottish universities.

The question of **pay gaps** in favour of men is examined from quantitative data in an investigation of possible causes for differences in pay starting from the position that all universities in Scotland spend more on male salaries than female salaries versus the situation of common pay scales. The discussion of the causes of gender pay differences from literature sources and the responses of female and male academics is supplemented with extended enquiry with an official of the University College Union to obtain a more in-depth knowledge of this area of research than was obtainable from interviewees.

In the adoption of a critically realist position generalisations from the analyses in this discussion chapter are mostly impossible in the qualitative nature of this research. However, evidence of some commonalities between the findings of literature sources and the semi-structured interviews is shown to be indicative of signs of change towards improvements in gender equality.

1.4.6 Chapter 7 - The Conclusion

In this chapter salient points are drawn out from the findings of the literature reviews (chapters 2 and 3), from the responses of academics in semi-structured interviews (chapter 5) and from the discussions, interpretations and analyses of chapter 6 to inform conclusions and recommendations for possible improvement of gender equality.

Conclusions are drawn from the analysis of qualitative and quantitative data in each thematic element, firstly, from the historical analysis of gender inequity and inequality and secondly, from comparisons between the findings of over 200 literature sources of Scottish, UK, European, American and Australasian sources (chapters 2 and 3) and those of the semi-structured interviews with female and male academics.

A **disclaimer** in this chapter explains the limitations of the research project as a whole with reference to the size of the sample of 24 academics who consented to participate in the semi-structured interviews and the two out of the 15 universities involved which are intended to provide a representative sample rather than purporting to present a full picture of gender equity and equality in Scottish Higher education as a whole. In addition, the research does not present a complete picture of all faculties in each of the universities involved; limitations of space and time restricted this to a sample of two faculties in one university and three in the other.

Conclusions in respect of how it feels to be an academic were reached through an investigation into perceptions of job satisfaction and dissatisfaction in terms of a range of intrinsic and extrinsic factors. From these factors a picture of the multi-faceted nature of academic work led to conclusions of what provides most satisfaction and the greatest aggravations as undesirable distractions from what most academics regarded as the *raison d'être* of their vocation.

The association between criteria for promotion and the career progression of academics is made from comparisons between female and male opportunities for promotion from the findings of literature sources and from the responses of academics in different grades. Conclusions about the relative importance given to teaching, administration, pastoral work, income from research and publishing which are deemed to be most valued are made from literature sources (see chapter 3, para. 3.12) and serving academics (chapter 5, para. 5.19).

Similarly, conclusions are reached in relation to a range of aspects of the metaphorical glass ceiling in terms of its myth or reality in their working lives. This was discussed in relation to opportunities (or the lack of them) for female promotion and pay equality which can be affected by male domination in policy- and decision-making committees, gender blindness, discrimination and marginalization, horizontal and vertical segregation and the effects of female/male traits.

An explanation of the contribution to knowledge of this research includes a new challenge to Scottish traditional claims of educational and intellectual democracy in terms of gender, a unique identification of a group of thematic elements pertaining to gender equity and equality from which the identification of previously unasked research and interview questions were derived. In addition, the inclusion of both

female and male academics in the field work provides a new comparative study which differs from other female-only studies.

Finally, this chapter suggests possible areas of further research and makes recommendation towards improvement in gender equality in Scottish universities.

CHAPTER TWO

History of gender equity and equality - Literature Review 1

2.1 Introduction

This chapter is intended to provide a broad introduction to this research through an historical review of literature sources pertaining to gender equity and equality in the workplace and in Scottish education from mid-nineteenth century. It provides the background of gender inequities and inequalities in the system of Scottish education with particular reference to higher education. The historiography of social, legal, religious and educational experiences of females in comparison to males provides the epistemological basis of gender inequity and inequality. An important by-product of this history is shown to be evident in legacies of inequity and inequality which still exist in the workplace and in the system of Scottish education today after over 40 years of Equal Opportunities and Equal Pay legislation.

Changes in gender roles which led to changes in female representation in the workplace are investigated through changing social attitudes towards the status of women and concomitant legislation towards equality in marriage, the franchise and for Equal Opportunities and Equal Pay at work. Various aspects of the metaphorical 'glass ceiling' in the workplace and in academia are investigated from reviews of over 200 literature sources. The main concerns and issues of females are related to their career progression in terms of such as: male domination, gender discrimination and marginalisation, pay gaps in favour of males, vertical and horizontal segregation in the workplace and in academia, the effects of career breaks and work-life balance, with comparisons of gender issues and concerns in Scotland, the United Kingdom (UK), Europe, America and Australasia.

2.2 Epistemological foundations of female discrimination

The epistemological foundation of gender inequity and inequality is based on the history of religious, social, workplace and educational activities over many centuries and provides overwhelming evidence of many forms of male domination, discrimination and marginalisation against women. The earliest and most obvious evidence emanated from religious beliefs in which:

Man is master by divine right; the fear of God, therefore, will repress any impulse towards revolt in the downtrodden female.
(de Beauvoir, 1997, p.632).

Before, during and after the Victorian era women were caught between two conflicting but deeply entrenched male-dominated beliefs: one, religious dogma and superstition, and the other: Enlightenment reasoning. The first believed from Scripture in the subservience and obedience of wives to their husbands - 'Wives submit yourselves unto your own husbands, as unto the Lord' (Ephesians VI, 23; Colossians IV, 18); 'Servants, be subject to your masters with all fear Likewise, ye wives, be in subjection to your own husbands' (Peter III, chapter II, 18 and chapter III, 1), and the second, in which the rationality of Enlightenment philosophers segregated women as 'irrational creatures of passion' (Dawtre, Holland, Hammer and Sheldon, 1995, p.141).

Mary Wollstonecraft (1759-97) in her *A Vindication of the Rights of Woman*, disagreed vehemently with assumptions of male domination arguing that women should be educated rationally and that 'their deficient education was the cause of their oppression' (Wollstonecraft, 1792, reprinted 1996, p.2). However, Rousseau (1712-78) in his *Emile* argued that women should be educated 'for the pleasure of men and do not need a rational education' (Rousseau, 1762, reprinted 2000). Immanuel Kant (1724-1804) in his *Observations on the Feelings of the Beautiful and the Sublime*, (Kant, 2006) argued against the education of

women: 'Laborious learning or painful pondering, even if a woman should greatly succeed in it, destroys the merits that are proper to her sex.'

However, a few philosophers and social reformers reasoned against gender inequality. For example, the eminent 18th century Scottish Enlightenment philosopher and historian David Hume (1711-76) argued: 'this sovereignty of the male is a real usurpation, and destroys that nearness of rank, not to say equality, which nature has established between the sexes' (Hume, 1741 reprinted 1903, p.188). The philosopher and social reformer John Stuart Mill (1806-73) in his essay which provoked much antagonism: *The Subjection of Women*, argued for 'equal rights with men to be educated, to vote, to own property, and to accumulate wealth' and that 'the legal subordination of one sex to another is wrong in itself, and is one of the chief hindrances to human improvement' (Mill, 1983, first published 1869). These arguments provide a snapshot indication of the circumstances of women throughout the centuries and provide acceptable knowledge in and justification for this research into gender inequity and inequality.

Epistemologically, acceptable knowledge of sex discrimination and gender inequity and inequality is also evident in well-documented campaigns and petitions for equality and women's rights through the existence of such as feminist movements, the Associations for the University Education of Women, Women's Suffrage and through public and political debate. As a result gender equality legislation included such as: The Married Woman's Property Acts, 1882, 1892 and 1882 which gave women the right to retain legal ownership of property (1882), full legal control of all property owned at marriage, of property inherited and earnings after marriage. The Representation of the People Act, 1918 gave women over the age of 30 years entitlement to register as a parliamentary and a local government elector, and the Representation of the People (Equal Franchise) Act, 1928 gave women electoral equality with men. Other Acts

of Parliament which provide incontrovertible proof and therefore justifiable belief in the existence of various forms of gender inequality include for example the Married Women's Property Act, 1964, Equal Opportunities and Equal Pay Acts of 1970, 1975 and 1984; Equal Employment Opportunity Acts of 1975, 1986 and the Gender Equality (Duty) Scheme, 2007.

In terms of Scottish higher education The Universities (Scotland) Act of 1892 permitted women the right to matriculate in Scottish universities for the first time. This was an important milestone towards educational equity and equality and a first towards educational democracy, but not without opposition particularly in faculties of medicine (Hamilton, 1983). Other reforms were made in the school sector through a succession of Education (Scotland) Acts of 1901, 1908, 1918, 1936, 1945 and 1946, but these had little effect on improving educational opportunities for females with persisting curricular segregation and pay gaps in favour of male teachers. Change, however, did occur with, for example, the replacement of the divisive junior and senior secondary school system (SED, 1921, Circular 44) with the introduction of comprehensive schools from the mid-1960s (SED, 1965, 'Circular 600').

Importantly, the doubling of the number of universities in Scotland from four to eight in 1965 (DES 1963, 'Robbins Report') led the way towards mass higher education in 1992 (DES, 1991) with removal of the 'binary line' between the traditional universities and some Central Institutions and Polytechnics (Further and Higher Education Act, 1992) which again doubled the number of Scottish universities to achieve mass higher education for around 50 per cent of the school leaver age group. The combined result of the introduction of comprehensive schools and mass higher education in Scotland was a further improvement in educational democracy and can be said to account for the improvement of educational opportunities for females such that they began steadily to

outperform males at school and in higher education (see chapter 2, paras. 2.15-2.17 below).

2.3 Workplace and Educational Gender Roles

The introduction of the 'factory system' at the end of the eighteenth century brought normative assumptions about the role of men and women when family wages were replaced by the 'family wage.' Men were the breadwinners in so-called 'respectable' families in which it was considered a mark of shame to allow their wives to work. In so-called 'unrespectable' families unskilled labouring men depended on their wives and children to contribute to family earnings for survival (Grint, 2006, p.65; McIvor, 1998, p.165). Following the massive social change from a rural to an urban society in Scotland in the first half of the nineteenth century, the education of children, as explained in Smout (1986, p.214) was severely hampered in that 'the demand for child labour in industry was the enemy of school attendance,' a finding confirmed in the polemic of the Reverend George Lewis in his *Scotland a Half-Educated Nation* (Lewis, 1834).

Throughout the nineteenth century trade unions preserved the position of skilled male workers but not that of women and unskilled men. The unions were reluctant to campaign for equal pay, women being, for the most part, excluded in the commonly held belief that the proper sphere for wives and daughters was at home where the husband was 'head of the household' (Davis, 2007, p.1; TUC Congress Report, 1875, p.14; Thane, 2006; Thom, 2009). Women's work in their homes and as servants in middle class homes was menial in cleaning, lighting the fire, emptying the chamber pot, cleaning the privies, cooking, polishing furniture, repairing and making clothes, negotiating with the shop-keeper or pawn broker, etc (Griffiths & Morton, 2010, p.83).

In the workplace most women were barred from work when they married because of the marriage bar (Davis, 2007) which was abolished in the Civil Service in 1946 but its disappearance in some occupations was slower than others (Thane, 2006). However, World Wars I and II necessitated the recruitment of women into work on an unprecedented scale. They were referred to as 'substitutes' and defined as 'replacements' or 'dilutees' - euphemisms to justify lower pay than men (Grint, 2006, p.79). After the war many women left the factories and other wartime work but with the realisation that they were as capable as men in many workplace tasks (Thom, 2009).

Figure 1 Some Gender Influences in the Workplace

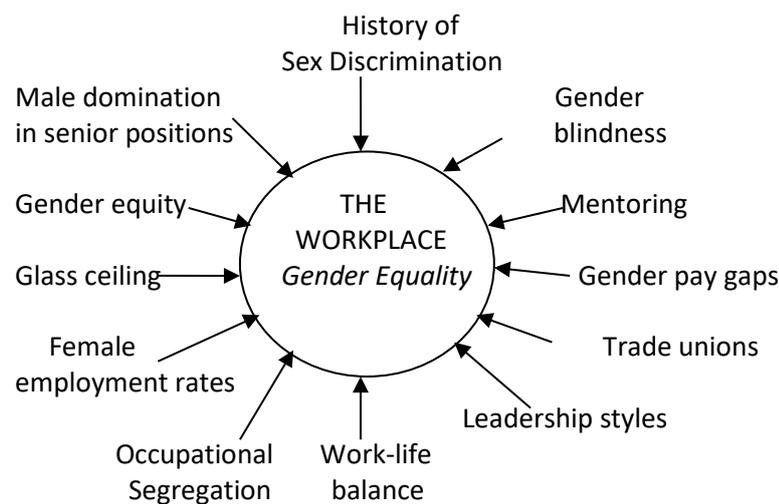


Figure 1 indicates several themes which influence gender inequality in the workplace. Each theme, some intrinsic and others extrinsic, can be shown to affect the career development of females in comparison to males in the workplace. Intrinsic influences refer to gender blindness, leadership styles, mentoring, work-life balance, occupational segregation and male domination. Extrinsic influences include: social norms, gender pay gaps, trade unions, female occupational rates and the glass ceiling. Each theme is explored below.

2.4 Female and male representation in the workplace

The well-publicised fact that women are mostly under-represented in the workplace (except in part-time, low status and low paid occupations) in senior and in policy-making and decision-making positions is evident from a wide range of primary and secondary sources including: Equality and Human Rights Commission, EHRC (2008); Tassier (2008); McTavish & Miller (2006); Fagenson (1993); Powell (1993); Davidson & Cooper, (1992). In spite of the introduction of Equal Opportunities, Equal Pay and Sex Discrimination Acts of 1970, 1975 and 1986 and concomitantly, in member countries of the Organisation for Economic Co-operation and Development (OECD) with the campaigns of a wide range of organisations and trade unions, the majority of workers in lower status and lower paid positions were women (Fagenson, 1993, pp.74-77; Dejardin, 2009, p.33). There is ample evidence of occupational segregation with the under-representation of women in the top tiers of management and pay inequality in the workplace and although the presence of women in workplace is growing in the UK and in member states of the EU inequalities persist (Davidson & Cooper, 1992; Lyonette & Crompton, 2008; NUJ, 2008; Crush, 2007; ILO, 2004; Fagenson,1993).

2.5 The changing role of women

From the 1960s the role of women in society changed radically during a period of 'women's liberation' through access to the new contraceptive pill, the availability of household labour-saving gadgets and unprecedented increases of women into paid employment which was no longer a mark of shame of their husbands (McIvor, 1998; Davidson & Cooper, 1992). Increases in the participation of women in the labour market were accompanied by modest increases in the proportions of qualified women attaining senior positions. This, in turn, led to some narrowing in gender pay gaps following the Equal Opportunities and Equal Pay Acts of 1970 and 1975 (ONS, 2009; Olgiati & Shapiro, 2002).

Between 1961 and 1991 the percentages of women in high status jobs in the UK improved from 4.6 per cent to 10.8 per cent but at a slower rate than for males which increased from 13.0 to 23.5 per cent (Richardson, 2009; Davidson & Cooper, 1992; Wirth, 2001). However, during the 1990s about 90 per cent (500,000 in Scotland) of all part-time workers were women in low paid and low status jobs mainly in personal services, clerical and distribution employments (McIvor, 1998, p.177).

International comparisons reveal that in 1997-8 'women occupied close to half or more of professional jobs' in 12 out of 23 countries, the other 11 being at or near the 40 per cent mark; the UK figure was 40 per cent (Wirth, 2001, p.29, Table 2.2, p.30). These figures have changed little since 1993 but indicate a trend towards gender equality, although there are variations between professions. In Scotland there were 1.31 million females in employment representing 47.7 per cent of the workforce in 2007, an increase of 7.7 per cent since 2001 (Scottish Government, 2009).

However, according to the Equality and Human Rights Commission, EHRC (2008, p.2) gender equality in the workplace is 'one of reversal or stalled progress'. The lack of significant improvement in attaining gender equality prompted legislation in the form of the 'Gender Equity Duty' (GED) which came into force on 5th April 2007 for all listed public bodies employing over 150 staff. They were required to produce their gender equity schemes by 29th June 2007 in Scotland and to provide their Equal Pay Policy statements by 28th September 2007 (Fitzgerald Associates, 2008, p.4). However, published statements of gender equity aims still have to be translated into action in most employments.

2.6 Female/male perceptions of job satisfaction in the workplace

According to Offerman and Armitage (1993) women are less likely than men to feel dissatisfied with their work in spite of apparent disadvantages in their lack of promotion opportunities, job segregation, marginalisation,

discrimination and lower pay. Explanations for this relate to 'women's recent ascendance to full participation in the labour market' and their low expectation rates. Men, on the other hand, 'fully expect an array of benefits including interesting and meaningful work' (Bolton & Houlihan, 2009, pp.8, 9; BHPS, 2004; Eurofound, 2004).

2.7 The 'Glass Ceiling' in the workplace

The metaphor 'glass ceiling' appeared during the early 1980s in America (Sargent, 1983) and in an article in *The Washington Post* in 1987 which stated that:

Women in corporate America are bumping their heads on the glass ceiling. Women are looking up at the top and not making it into the board room or executive suites.

The glass ceiling is described as an invisible organisational barrier which restricts the career prospects of women and effectively blocks their promotion in the workplace. Several sources explain the effects of the glass ceiling in a range of workplace scenarios in which men are described as 'the main obstacle in the way of creating a level playing field' (Pettengell, 2007, p.21.) The link between pay gaps and the glass ceiling is made in Olgiati and Shapiro (2002, p.6) and Eisner and Harvey, 2009) who also explore the extent to which the new and more highly qualified generation of women will break through the glass ceiling.

There are, however, conflicting arguments over the meaning of the glass ceiling: on the one hand, it is associated with the normality of patriarchal domination (Weber, 1978, p.1007 cited in Grint, 2006, p.192) and on the other, it is considered to be a consequence of a commonly accepted male management paradigm modelled on the 'aggressive, competitive, firm and just' emotionless male who was considered to be the epitome of efficient business acumen in which females were largely excluded unless they exhibited some of these male traits (McGregor, 1967) and became 'honorary men' (Pettengell, 2007, p.22). These views have been

construed to mean that the glass ceiling is an inevitable phenomenon brought about through assertions such as: 'females aspire to managerial careers to a lesser degree than males' (Powell, 1993, p.77) and that their lack of ambition, leadership skills, assertiveness and poor influencing behaviour combined with low confidence levels contribute to the dearth of females in positions of power (Terjesen & Singh, 2008, p.56, citing Powell, 1999).

Scientific approaches to management, leadership and organisational psychology of the 1960s and 70s ignored gender completely (Weber, 1967). Female promotion into management was inhibited partly through their lack of higher education before the introduction of comprehensive schooling from 1965 and mass higher education from 1992. Other reasons for the dearth of women in senior positions include such statements as: 'some women hold back' or are satisfied with their jobs (Corby, 2009, p.163; Bolton & Houlihan, 2009, p.28) and their lack of progress is partly due to the additional responsibilities of child care and/or care of elderly relations which involves career breaks affecting their promotion more than men (Parasuraman & Greenhaus, 1993, p.189; Jacobson, 1985, pp.16, 150, 154; Powell, 1993, pp.191, 193, 194; Fagenson, 1993, p.189). The fact that women form the majority of low status part-time workers and are more involved with family care than men is seen not only as a disincentive for women aspiring towards more senior positions but a disadvantage in terms of productivity in the minds of some employers (Paull, 2008; Lovell & Miller, Oct.2008).

The idea of females and males working together was new as late as the 1980s and thought of as 'an unprecedented social experiment' which would take generations rather than decades to resolve (Jacobson. 1985, p.21). In this sense Jacobson can be considered to have recognised that legacies of disadvantage from the long history of sex discrimination, male domination and occupational segregation in the workplace cannot be

undone quickly; he appears to support an evolutionary process. In this sense Fagenson (1993, Vol.4, p.221) referring to a 'Darwinian struggle' with the growing acceptance of the human resources approach, emphasised 'interpersonal communication, collaboration and the development of subordinate potential.'

In essence these perceptions suggested that the new and growing female presence in senior positions in the workplace was the start of an evolutionary change in the workplace during the 1980s. However, during the 1990s in spite of at least equal education and training, gender and occupational segregation remained pervasive, the glass ceiling persisted but became more permeable (Collinson & Hearn, 1994; McIvor, 1998; McTavish & Miller, 2006; Walters, Jan.2007).

Whatever reasons and opinions are expressed about the glass ceiling it is still considered problematic in that 'women comprise less than 15 per cent of corporate board members in the UK, USA, Canada, Australia and in many other countries and as low as 0.2 per cent in Asian countries' (Terjesen & Singh, Spring 2008, p.55). In the UK the number of non-executive women on the boards of FTSE 100 companies increased from 58 in 2000 to 78 in 2005, averaging only four per year. This increase is not reflected in the number of female executive directors which increased minimally from 10 to 11 over the five year period indicating the continuing strength of the glass ceiling (McTavish & Miller, 2006). However, from perspectives of female senior managers, referring to their success in breaking through the glass ceiling, they recognised the need to raise their profile and to become more visible - 'as men won't do it for us' (*ibid.*, pp.23, 79-86). Referring to work capacity, women believed that they had to work harder and perform better than men to be accepted. They also acknowledged that as long as women were in a minority nothing will change, but they admired 'male confidence, not competence, and men's self-belief in their own ability' (*ibid.*, p.81).

By contrast, changes in the attitudes of females towards their rights in employment are shown in Davidson and Cooper (1992) who emphasise that adapting to male norms is no longer acceptable. They argue that workplace organisational cultures must change to take account of differences in approach to such as leadership styles and flexible working, reactions to which are often negative and hamper the career prospects of women in spite of similarities with men in efficiency and performance (*ibid.*, p.16). The chapter on 'Positive Approaches to Helping Women into Management' (*ibid.*, pp.156-171) relates 'shattering the glass ceiling' to the choice of husband as an egalitarian strategy (*ibid.*, p.151). What is not mentioned is the male choice of wife in complementing his career progress which is arguably more commonly the case with more men than women occupying senior positions.

The relevance of the above brief review of glass ceiling literature is firstly, in recognising the legitimacy of the metaphor in the workplace, and secondly, that it continues to be problematic for women aspiring to senior positions and equal pay.

2.8 Effects of Mentoring

Mentoring, described as 'career encouragement' in Tharenou, Latimer and Conroy (1994, p.4), is considered to enhance job satisfaction, assist in the promotion process and is seen as 'crucial to the career progression' of women (Thanacoody, Bartram Barker & Jacobs, 2006, p.13) through friendly advice from experienced to less experienced employees and from senior managers to subordinates. A problem for women in leadership positions in male-dominated workplaces, according to Starr (2001), is pressure to conform to male models of management and to develop commonalities with their male peer group. In this situation some women find themselves criticised for their lack of support to female subordinates in being less inclined towards a mentorship role. However, the suggestion

that women receive less career encouragement through mentoring than men follows from the fact that women are in a minority in male managerial circles (Tharenou, *et al.*, 1994).

According to Powell (1993) the prevalence of male managers in the workplace results in men commonly having long-established socialising processes and being generally better 'integrated into the organisation's dominant coalition.' This effectively provides superior mentoring processes for men who tend to mentor men rather than women to avoid suggestions of sexual impropriety, with the result that men tend to favour men for promotion (*ibid.*, p.206-7). Women, on the other hand, have less time for socialising with female or male colleagues outside the workplace having more responsibilities for their families than men and fewer opportunities for informal mentoring and networking relationships. In addition, women can be disadvantaged through their need to reduce their working hours to meet family responsibilities and thus miss mentoring and promotion opportunities (Eurofound, 2004; Wirth, 2001).

Although mentoring is not an essential prerequisite for promotion, the advantageous position of men as discussed above is effectively disadvantageous to women in seeking promotion, but as the number of women in senior positions increases, opportunities for female networking and mentoring also increase (Northcroft & Gutek, 1993). Successful female managers report benefits from introductions to formal networks of power relations in their organisations (Alpern, 1993; Davidson & Cooper, 1992) and, in relation to support mechanisms in the workplace, Offerman and Armitage (1993) suggest that mixed sex coalitions among managers reduces imbalances of power and empowers women managers.

A particular disadvantage to female aspirants for promotion is the 'Queen Bee' syndrome (Abramson, 1975). She fails to volunteer mentorship and

tends to be critical, negative and discouraging being characterised as anti-feminist. She is seen to be in denial of the existence of sex discrimination or marginalization in defence of her level of achievement in a male-dominated workplace where she considers herself to have outperformed men to reach her senior position. Conversely, women in senior positions who are prepared to act as role models to young executives aspiring for promotion provide the double benefit of encouraging young women in gaining promotion as well as in swelling the ranks of female managers with the advantage of possible increases in the supply of female mentors. This spiral effect could thus lead to the improvement of gender equality in the workplace (Collins & Singh in McTavish & Miller (2006)).

However, in each of the positive and negative attitudes towards mentoring in the workplace it has to be borne in mind that mentoring is usually a voluntary activity undertaken by those whose motives may be beneficial to the employer or simply altruistic rather than an allocated function of managerial duty. The notion of making mentoring a duty rather than a voluntary activity can be problematic in that not all senior managers have the natural ability to be effective mentors and some may not wish to become involved at all, as can be the case for the mentee who prefers to decide whether or not to avail themselves of opportunities for mentorship.

2.9 Gender Pay Gaps

The problem of gender pay gaps in favour of men has a long history dating back to the sixteenth century when on average women earned between 52 and 63 per cent of men's average earnings. Equal pay first became an issue during the 1830s with the first strike by the Women Powerloom Weavers Association in Glasgow in 1833 (Grint, 2006). In the textile industry, which was the largest area of female employment in Britain, the average wage for a female was 53 per cent of that of a male (Gordon, 1990; Grint, 2006). During World War I trade unions insisted

that women employed in men's jobs be granted equal pay which was ratified in the 1915 Treasury Agreement but not implemented (Smith, 1981).

A core principal of the European Union (then the European Economic Community) was equal pay for 'equal work or work of equal value' enunciated in Article 141, 2010, formerly Article 119, 1997 (EHRC (n.d.); Rubery (n.d.), pp.184). After the introduction of the Equal Pay Act, 1970, making equal pay for equal work a legal obligation, the gender pay gap reduced. Between 1989 and 2000 the pay gap in terms of average earnings improved from about 67 per cent to 82 per cent. The hourly earnings of women in 1989 was about 76 per cent of that of men improving to 79 per cent in 1995 to 82 per cent in 2000 (Grint, 2006). These figures refer to the workplace generally in the UK and provide a snapshot of persistent pay discrimination against women.

Reasons for differences in pay between female and male employees commonly relate to the employment of females into part-time work, the dearth of women in senior positions, career breaks, the undervaluing of women's work, occupational segregation, etc (ITUC, 2008, pp.10,11; Barnett-Verzat & Wolff, 2008, Vol.29, pp.486). Research into pay differences of employees in European Union member states found that age and years of service affected the pay of women conversely to length of experience (ITUC, 2008). For example, women with over 30 years of service were found to have a pay gap of 32 per cent and those with 1 to 5 years service had a pay gap of 22 per cent which is partially explained from the lower levels of education of older women (ibid, 2008, pp.10, 11, 47).

The effect of part-time work on gender pay gaps is particularly evident, for example, in 2007 in Scotland the gender pay gap for part-time workers was 35 per cent in favour of men based on mean hourly pay. For full-time

workers the gap was 15 per cent (Scottish Government Statistics, 2009). One explanation for the wide difference is attributable to fact that the tasks performed by women were mainly menial and lower paid. The hourly rate for men increased by 4.4 percent whereas that for women increased by 4.1 per cent in 2007 which is explained by a significant number of women entering full-time employment with lower rates of hourly pay. The employment rate for women increased from 56 per cent in 1971 to 70 per cent in 2008 and that for men reduced from 92 per cent to 78 per cent over the same period (ONS, 2009). However, the increases reversed in 2011 women having increased their hourly rate by 1.9 per cent and men 0.8 per cent, but in terms of median hourly earnings men continued to earn more than women at £13.00 for men and £11.91 for women (ONS, 2011).

In the European Union (EU) the female/male pay gap in employment in the 1980s was 24.5 per cent improving to 19 per cent in 1999 and to 14.5 per cent in 2006 (Olgiatei & Shapiro, 2002; Chubb, Mells, Potter & Storry, 2008). The improvements are partly explained by increasing female participation in the workplace and are influenced by job characteristics where, for example, in jobs which are similar for males and females the pay gap is smaller.

A recurring theme relating to gender pay gaps is that of career breaks which affect women more than men in their caring responsibilities after the births of their children or in caring for elderly relatives. The praxis that men generally leave these responsibilities to women means that they have fewer career breaks than women allowing them greater opportunities for promotion which in turn has a detrimental effect on female pay (Austen, 2004, p.115; Blattel-Mink, 2001, p.3).

Occupational choice also affects pay as found from research of Corby and Stanworth (2009, p.162) which revealed that many women “fell into” jobs

for the benefit of reduced working hours accepting that 'reduced hours and senior roles are seen as incompatible.' An empirical study by Cohen & Huffman (2007) indicates that a prevalence of female managers reduces gender inequality and pay gaps, and conversely, a dearth of women in authority sustains gender inequality.

2.10 Work-Life Balance

Work-life balance refers to retaining control of work level and private life so that life need not be 'all work and no play'. Two opposing attitudes to work-life balance reflect differences in the perceptions between some managers and some subordinate employees. From a management viewpoint the so-called ambitious 'company man' - the manager with a strong sense of work ethic (Grint, 2006, p.18) may perceive a subordinate who seeks work-life balance as having divided loyalties whose needs are contrary to perceived requirements for promotion in the workplace such as high levels of dedication, loyalty and unquestioning acceptance of long hours of work (Corby & Stanworth, 2009). This, however, ignores the fact that not all employees desire promotion and perceive work-life balance in terms of reasonable working hours, good pay and a satisfactory life style.

Social and workplace attitudes towards women's careers changed between 1950s and the 1990s. Women's careers in the 1950s were restricted by long-held notions of women as child-bearers who should concentrate on the home and home-making as a 'biological and social necessity' (Powell, 1993, p.189). It was considered that 'being in *Who's Who* and being female are incompatible' and that women were believed to want a "little" job to be in the company of men (*ibid.*, p.190). Male-domination in the workplace, exemplified in Jacobson (1985, p.5), refers to 'the aggression image' and dilemmas faced by women in presenting themselves in meetings where questions were directed to subordinate males ignoring female expertise.

Career women of the 1990s, on the other hand, are characterised not in terms of gender stereotyping but on equal terms with men and having similar career patterns (Powell, 1993, p.187). However, in spite of this more equitable attitude a consistent theme in many gender-based literatures is the relationship between balancing career and family life. Other factors include: gender differences in time use, and female aspirations for promotion suggesting that: women managers aspire to positions lower in the managerial hierarchy than men, they are more likely to experience career interruptions than men and tend to place somewhat higher priority on family life relative to careers than men Fagenson (1993, p.189).

Pettengell (2007, p.21-22) argues that women aspiring for leadership depend on the man at the top, that the world of work is 'ruled by men in suits focused only on self-interest, money and power' and that the 12.5 per cent of women who have made it to the top are 'honorary men.' This, however, ignores improvements made by women in their qualifications and experience superior to those of men as shown quantitatively in Wirth (2001, p.62, 63) and HESA (1994/95 – 2010/11). Also ignored are the increasing proportions of women in the professions such as doctors, lawyers, senior civil servants, primary and secondary school teachers, university academics and politicians where proportionally their presence has increased from the 1990s. This trend towards equality is shown from increasing numbers of women in senior positions and improvements in gender pay gaps (Royal College of General Practitioners, July, 2006; Equality and Human Rights Commission, 2008, p.3; Scottish Government, 2007).

Walters (Jan. 2007, p.14) promulgated the need for change in the attitudes of companies which consider that women returning from a break for family reasons are the recipients 'of a perk'. They are perceived by male management to be 'not committed to their career.' However,

recent changes in employer attitudes towards a 'family-friendly platform' in which flexible working and work-life balance suggest that career breaks should not be a disadvantage in aspirations for promotion.

Hakim in Corby & Stanworth (2009) propose a division of female employees into 'three ideal types: home-centred, work-centred and adaptive' and argue that home-centred women either prefer not to work or to work hours to suit their domestic priorities; work-centred women 'fit family life around their work or remain childless' and adaptive women manage an even work-life balance. However, classifying employees into ideal types ignores the fact that work preferences are never static nor are they necessarily singular; employees, female and male, inevitably exhibit a mix of typologies, changing their preferences with changes in family circumstances or education. For example, in terms of the 'evolution of work hours for women and men', there is evidence that women move towards part-time work with the first birth and continue steadily for ten years then change their work preference (ibid, Vol.26, p.164). A criticism of Hakim's theory is in 'reading preferences into outcomes without considering how circumstances frame preferences' Breugel (1996, pp175-7).

Balancing career and family life is of continuous concern to female employees with family responsibilities and continues to exacerbate the inequalities borne by women. If and when the responsibilities of family care are more equally shared between females and males and when improved flexibility of work conditions becomes the norm then equality in the workplace may become possible.

2.11 A brief History of Scottish Education

This research into changes in gender equity and equality in Scotland's system of higher education starts from mid-nineteenth century which marks a time of remarkable change socially, industrially and in education

in Scotland. The universities were under pressure to reform their traditional curriculum of liberal non-vocational education and become more Anglicized towards specialization. This time marks the start of female aspirations for higher education and, recognizing gender inequity and inequality, a minority of the all-male professoriate proposed equality of opportunity for females in higher education.

For an understanding of changes towards gender equity and equality in Scottish universities this research is introduced with a review of literature sources concerned with the history of the system of Scottish education in relation to the traditional Scottish claims for educational and intellectual democracy in a system which was imbued with meritocracy, elitism and patriarchy (Anderson, 1983; Davie 1961 & 1986; Devine, 1999; Scotland, 1969). These democratic claims are interpreted in terms of differences in the opportunities afforded to females in comparison to males from mid-19th century to the present. This broad view of the Scottish system of education with the slow but gradual progress towards educational equity and equality through educational reform, female pressure and educational legislation focuses on higher education. In addition, it is intended to draw lessons from the past for the present in terms of the effects of inheritances of male domination, organizational and curricular features of the system which continue to affect, but to a lessening degree, the career opportunities, subject choices and pay of female academics today.

The fact that the traditional Scottish claims for educational and intellectual democracy relate to opportunities for the upward social mobility open to talented working class males, excluding females is the starting point of the challenge to the Scottish tradition. In this respect the traditional claims of educational democracy may be interpreted as mythical because the system singularly failed to take into account the fact that half the nation's talent was ignored through curricular stereotyping

and segregation largely denying educational opportunities for females in comparison to males in higher education.

The concept of educational democracy was based on the opportunities, in a severely meritocratic Scottish system, for the talented 'lad of parts', but never a 'lass of parts', for a university education in which the student population consisted of about 22 per cent working class males during the nineteenth century (Devine, 1999; Smout, 1986). Intellectual democracy was based on a curriculum of general education, classics and metaphysics and held to be the best preparation for living in a civilized society ('democratic intellectualism') in which vocational education was dismissed as 'utilitarian anglicisation' (Davie, 1986, pp.ii, iii, v). The concept of intellectual democracy, although 'commonly associated with the needs of a leisured class' during the nineteenth century (Davie, 1961 & 1983; Anderson, 1986, p.359) was, in curricular terms, believed to be beyond the comprehension of females who at school level were confined to domestic training – the origin of curricular segregation (see para 2.14 below). The Scottish claims for educational and intellectual democracy are challenged because of their disadvantages for the educational opportunities for females in comparison to those of males firstly because of its lack of educational democracy insofar as women were denied access to higher education and secondly through long-held curricular restrictions which gave little recognition to vocational subjects.

Two nineteenth century quotations, one from a Scottish male academic and the other from a female source, set the scene of gender inequity and inequality in Scottish higher education in the past. David Masson, Professor of Rhetoric and Belle Lettres at Edinburgh, arguing in 1867 for the admission of women to full membership of Scottish universities makes the case for educational democracy :

The women of this country [Scotland] ought to be educated or to have the option of being educated at the same institutions as men,

up to the very highest, with the same gradation, by the same teachers, and in a manner as thorough, continuous and systematic. Till this is done our nation is unjust to half its members and exists spiritually, intellectually and in every other respect at but half its possible strength. (Masson, 1867, p. 432).

Pleading for university education for women, also in 1867, a member of the Edinburgh Ladies Education Association (ELEA) stated:

It is not the aim of the Association to train for the professions; but its promoters desire in the education of women to give them the advantages of a system acknowledged to be well suited for the mental training of the other sex. (Hamilton, 1983, p. 102).

The first quotation was exceptional in male thinking and anathema to most males who were against the promotion of equal educational opportunities for women and the second, by a female, demonstrates a cautious plea for the education of women in its modest clarification that they intend no threat to the professional status of men.

Plate 1 below illustrates the absence of women in a typical *Senatus Academicus* of a Scottish university in 1870 with its legal authority through the Universities (Scotland) Act which would have to be changed in parliament to allow the matriculation of women. The Universities (Scotland) Act, Ordinance No.18, 1892 after prolonged negotiations, involving three drafts and time-consuming argument, ultimately gave females the long-awaited legal right to matriculate and to graduate in Scottish universities (some fourteen years after the University of London permitted the award of degrees to women but 55 years before women were allowed to graduate at Cambridge University (Dyehouse, 1995).



Plate 1 The Senate of Glasgow University, 29th July 1870

2.12 The struggle towards equality - Promotion and Pay

After the passing of the Education (Scotland) Act of 1872 which transferred the control of the education of children from church to state control and made education between ages 5 and 13 compulsory the demand for teachers led to a virtually 'feminised teaching profession' at elementary level which increased from 35 per cent female in 1851 to 70 per cent by 1911. Women were 'cheaper to employ, being paid half the rate for male teachers' (Devine, 1999, p.399) the argument being that 'women were not main bread-winners' (Smout, 1986, p.220) but they were deemed to have greater empathy with children than men.

Secondary education in Scotland started as a 'movement' around 1870 (Anderson, 1983, p.163) for the sons of the middle classes (but rarely for daughters) and a minority of exceptionally 'talented poor' males in High Schools preparing them for university entrance or the professions.

However, early secondary education was substantially the province of private schooling outside the public system (Scotland, 1969, p.63).

The High Schools were staffed mainly by males, their preparatory or primary departments being staffed by female teachers and a male head teacher.

The 1918 Act which replaced the School Boards with *ad hoc* education authorities provided for 'free secondary education for all' with a common curriculum of general education except in practical subjects (Education (Scotland) Act, 1918). In 1919 the male:female pay differential for teachers was reduced. Equal pay was included in the 1944 Education Bill but was defeated in a second vote. In 1946 the Royal Commission on Equal Pay recommended equal pay for teachers, local government officers and civil servants which was eventually agreed in 1955 but phased in over a five year period (Davis, 2007). The marriage bar which applied to female teachers was discontinued after the Education (Scotland) Act 1945 (Corr, 1990; Harvie & Walker, 1990).

2.13 Female Career Progression

The slow promotion of females to senior positions is exemplified in the dearth female head teachers in secondary schools, principals of colleges, university principals and in the Scottish Inspectorate. In secondary schools female head teachers represented a mere 3 per cent of the total as late as 1992 (Scottish Affairs, 1993, No.5) improving in 2003 to 17.6 per cent and in 2011 to 30.9 percent of the total (EHRC, 2011, p.5). In the further education sector the first female principal was appointed in 1989 (FE News, 2008) and by 2003 female principals accounted for 22.9 per cent of the total increasing to 28.6 per cent in 2011 (EHRC, 2011, p.5; Scotland Colleges, 2011).

In Scottish universities the first female university lecturer was appointed in 1903, the first female professor in 1940 (Scotland, 1969, p.159) and the

first female Principal and Vice Chancellor in 2003 in Napier University (Edinburgh Napier, 2009). In 1996 of professorships in Scottish universities 8.1 per cent were female increasing to 15.4 per cent in 2005 and to 18.3 per cent in 2010/11. The corresponding figures for senior lecturers were 16.4 per cent and 28.4 per cent (SFC, 2006, SFC, 2008; CPPM, 2007; HESA Press Release 173, 2012).

In the Scottish Inspectorate the first female 'temporary schools inspectresses' were appointed in 1902 for cookery. The first permanent female HMI for general subjects was appointed in 1930 (Scotland, 1969) and the first female chief inspector in 1950. In 1996 female HMIs accounted for approximately 18 per cent of the total reaching 49 per cent in 2005 (HMIE, 2005-6).

Summary

The differences between the proportions of females in senior positions in schools, colleges and universities can be explained from the history of female access and achievement in each sector. Improvements in the diversity of subject areas in all sectors with Equal Opportunities legislation contributed to the increase in female participation and achievement which, in turn, was reflected in the staffing in each sector.

As shown in para. 2.12 above female teachers in elementary schools were in demand from 1872, but head teachers were all male. The early start for women in teaching combined with improvements in access to higher education and academic achievement led to the appointments of more women as head teachers of primary schools than in secondary schools, the latter from 3 per cent as late as 1992 to 30.9 per cent in 2011.

Further education with its origins of mainly technical education employed few females which accounts for the dearth of women in senior positions. After the removal of colleges from local authority control to central

government in 1993 the ensuing diversification of their curricula encouraged increases in female students and the appointments of female principals from zero in the 1988 to 28.6 per cent in 2011. In universities, male domination in their staffing persisted longer than in the other sectors mainly because of the higher level of qualifications required in terms of doctoral, research and publication activities.

The above brief quantitative survey of female progression in senior positions in academia indicates a trend towards equality but also its slow but accelerating pace.

2.14 Curricular segregation

Curricular segregation in schools reflected Victorian social values and workplace norms in that boys were directed towards technical education and girls to domestic subjects or 'homecraft'. In the High Schools academic courses for 'clever pupils' with liberal education, Latin, English and mathematics led to university entrance or the professions (Scotland, 1969, p.80). Against the advice of the Scottish Education Department's own Advisory Committee, the publication of the notorious SED 'Circular 44' in 1921 (National Archives of Scotland, files ED/26/215-217) effectively created socially divisive and curricular divisions between the Junior and Senior Secondary schools in Scotland (SED, 1921). Domestic and technical subjects, although included in the Leaving Certificate, were 'for those not good enough for anything else' (Scotland, 1969, p.81). During the 1920s some curricular developments in senior secondary schools and private schools together led to an increase in female participation in Scottish universities to just over 25 per cent of the student population (UGC, 1920-1950).

The introduction of Comprehensive Education in 1965 (SED, 1965, 'Circular 600') abolished Junior and Senior Secondary schools which were replaced with Comprehensive Schools. The system of comprehensive

education opened new opportunities for females, previously restricted to commercial and homecraft subjects, and for males restricted to technical subjects in the junior secondary schools. The evidence for the progress of females is shown in their achievements over males at school from the mid-1970s which ironically led to concerns about the relatively poor performance of boys (Forde, Kane, Condie, McPhee, & Head, March, 2006). Females outperforming males at school led to increases in female participation and improved performance over males in higher education from the mid-1990s (see Appendix 8, para. 2.18 and Figure 3 below).

The Equal Opportunities Act 1970 brought new opportunities at work and for educational equality in Scotland. The Sex Discrimination Act of 1975 made curricular segregation by gender unlawful (Paterson, 2003, p.123; Begg, 1994, p.150) but curricular stereotyping persisted with females opting for biological sciences, modern languages and office and information skills, and males taking physics, computing studies and engineering and technology courses (Croxford, Tinklin, Frame and Ducklin, 2003; SFC, 2006)

2.15 Female/Male Access to Scottish Universities - an historical Overview

The support of a minority of sympathetic university professors gave middle class women of the Edinburgh Ladies Education Association (ELEA) opportunities to attend university classes from 1867. The women were cautious in their demands for higher education in expressing their concern 'to steer clear of any controversy' or to suggest any threat to male-dominated professions (Hamilton, 1983, p.101). In 1873 The Edinburgh Essay Society and the ELEA organised the attendance of 335 women at lectures by David Masson, Professor of Rhetoric and English Literature at Edinburgh University (Begg, 1998) who strongly supported higher education for women (see para. 2.11 above). Some progress was made when women were allowed to attend classes in 'mathematics,

moral philosophy, chemistry, physiology, botany and Biblical criticism.’ From this base, Scottish universities trained many well-educated teachers of the future (Hamilton, 1983, p.102). At the University of St Andrews women were permitted through distance learning to study for the qualification Lady Literate in the Arts (LLA) but not for a degree (Smart, 1967, Vol. 49; Paterson, 2003). The LLA courses ran until 1920 in Scottish universities, a total of over 4000 women having gained the diploma (Scotland, 1969, p.158).

Opposition against women in their attempts to gain entry to Scottish universities during the nineteenth century was particularly strong in medical faculties amid fears that if women studied anatomy and physiology with male students and were taught by males ‘they would themselves be morally contaminated’ (Moore, 1992, p.138; Corr, 1990, p.301). Such was the opposition that male students rioted in Edinburgh to prevent women from attending anatomy classes who were considered a threat to the professional status of male practitioners (Hamilton, 1983, pp. 99-115; Corr, 1990, pp. 301-2). Permissive legislation in the form of an Enabling Bill permitted but did not compel all examining bodies to admit women as matriculated students to universities. The Bill was given Royal Assent in August 1876 (Ross, 1996, p.639) but in Scotland women would have to wait a further sixteen years for their matriculation.

Female access to the four Scottish universities was slow in the immediate aftermath of the Universities (Scotland) Act of 1892. The first eight female students graduated in 1893, their previous examination passes for their University certificates being recognised for their degrees (Hamilton, 1983, p.103). Female enrolments of middle class women mainly from private schools grew steadily from 8.2 per cent of the total student population in 1893 to 22.5 per cent in 1913 (Anderson, 1983, pp.352-7). The majority of the new female graduates were destined for the teaching profession (Devine 1999; Anderson 1983; Scotland 1969)

In 1914 over one thousand middle class women were capped in Scotland and female enrolments increased to 25.8 per cent of the student body by 1920 rising to 34 per cent in 1939 but reducing to 22 per cent in 1949, because of wartime restrictions (UGC, 1920-50, 1962:27). As shown in Appendix 5 female participation continued to increase slowly reaching 27 per cent in 1960. The absence of females in policy-making is still apparent in 1923 as shown in plate 2 below in which there are no females in the Court of Edinburgh University.



Plate 2 Edinburgh University Court, 1923

Courtesy of Edinburgh University

This absence of a female presence in the policy- and decision-making committees in Scottish universities was typical of most European and non-European countries. The male world of universities with its 'history of discrimination and conscious exclusion of women by men' (Mischau, 2001, p.1) was ready for change in terms of improved opportunities accompanied by improvements in the academic achievements of women as shown in para 2.17 below.

2.16 The Expansion of Higher Education in Scotland

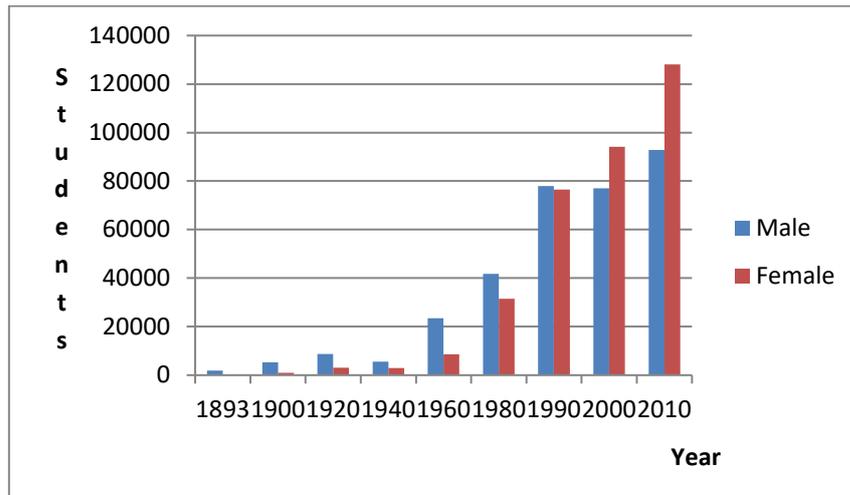
Following the publication of the Robbins Report in 1963 (DES, 1963) the number of universities doubled in Scotland from four to eight. The new universities were created from Heriot-Watt College and the Royal College of Science and Technology (Strathclyde University), Queen's College (part

of St Andrews University) to become Dundee University and a new university at Stirling (Caldwell, 2003, p.63). As a consequence of this expansion a surge in both female and male enrolments in higher education occurred with the creation of new vocational degree courses in new subject areas such as those allied to medicine, social work, sports science, catering/food/leisure services, tourism and business management/office studies, sports and recreation, business studies, marketing, etc., (SFC, 2006, Table 23). Females formed 40 per cent of all enrolments in 1970 (see appendix 6), an increase of almost four times in twenty years.

The next sharp increase in student enrolments occurred from 1992 following the publication of the report of the Department of Education and Science, (DES, 1991) and the creation of five more universities from the transfer of degree-awarding Scottish Central Institutions to University status - Napier, Glasgow Caledonian, Robert Gordon, Paisley and Abertay Universities. A result of the transfers to university status and the creation of new degree courses was an unprecedented increase in female university enrollees overtaking males from the mid-1990s and forming 58 per cent of the total student body in 2009, as shown below in Fig. 2.

The change in the gender balance was, in part, attributable to the uptake by females in subjects allied to medicine, education, languages, business studies, law, veterinary science and social studies. Males continued to choose engineering and technology, information technology, architecture, mathematics and physical sciences (SFC, 2005); SFC (2008); Scottish Government (2008). In 2006-07 and 2010-11 female qualifiers outnumbered male qualifiers in 12 out of the 18 subject areas (HESA Press Release 181).

Figure 2 Female/Male Participation in Scottish Universities

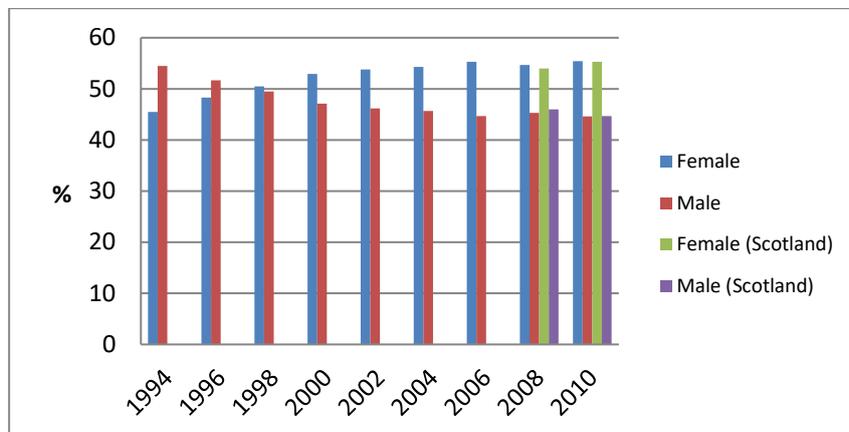


Sources: Anderson (1983, pp.352-56); Paterson (2003, p.167); UGC (1920-1950); SHEFC (1970-1993); HESA (1994/95-2010/11)

2.17 Female/Male Qualifications and Staffing

The above growth in female participation in higher education led in turn to improvements in their academic performance in comparison to male students. For example, females outnumbered males from 1996 at 52.6 per cent of all enrolments (see appendix 6) and began to outperform men at honours degree level from 1998 at 50.5 per cent (1st Class degrees) as shown in figure 3 below and at 59.6 per cent (2/1 degrees) (see appendix 8).

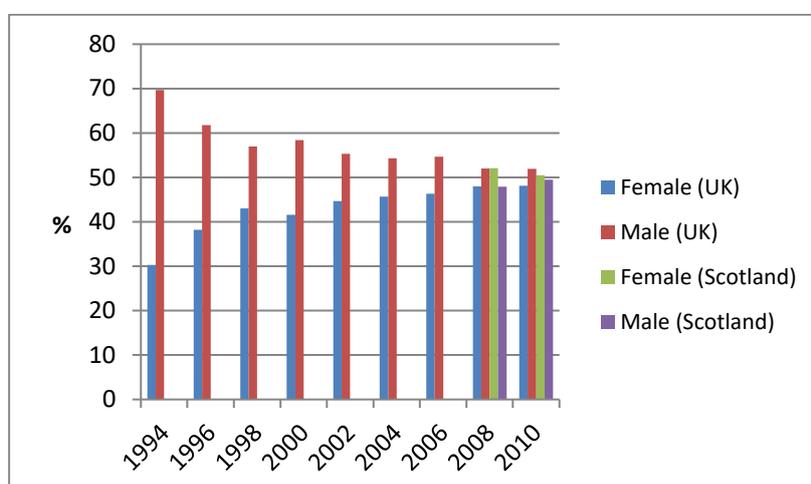
Figure 3 Female/Male First Degree Qualifications obtained by students (UK domiciled) 1994/95 to 2010/11; Scotland 2009/10 to 2010/11



Source: HESA (1994/05 – 2010/11)

At post-graduate level the females marginally outperformed males from 2006/7 and continued to do so until 2010 (see appendix 9). At doctoral level the performance gap for UK qualifiers, as shown in figure 4 below, closed steadily from 1994 at 30.3 per cent female increasing to 48.1 per cent in 2010. However, in Scottish universities females outperformed males at Doctoral level for the first time in 2009 at 52.1 per cent (see appendix 10)

Figure 4 Female/Male (UK) Doctoral Qualifications obtained by students 1994-95 to 20010-11, Scotland 2009/2010 & 2010/11



Source: HESA (1994/05 – 2010/11)

The above improvements in the academic performance of females, particularly at post-graduate level, account for increases in female academic appointments in universities from 1994 to 2010. This is shown in Table 1 below.

Table 1 Female/Male Percentages of Academic Staff in Scottish HEIs

Year	1994	1997	1999	2001	2003	2005	2007	2009	2010
Female %	30.3	33.1	35.2	36.7	39.7	41.1	40.7	41.3	41.8
Male %	69.7	66.9	64.8	63.3	60.3	58.9	59.3	58.7	58.2

SFC (March 2008, Fig.35, p. 50), HESA (March 2011), HESA Press Release 173

Extrapolating the female three-pronged growth in (i) female participation in Scottish higher education, (ii) improved performance at honours degree and post-graduate levels and (iii) academic appointments, into the future, it is not unreasonable to anticipate that the numbers of female academics will eventually equal that of male academics in the staffing of universities. However, it is unlikely that equality will be achieved uniformly across all faculties because of the probable persistence of horizontal segregation through gender differences in subject choices as discussed in paras. 2.14 and 2.16 above. In addition, greater numbers of females are likely to occupy senior positions as their research and publication profiles match or exceed those of males, the latter being important criteria in the selection process for promotion as shown in chapter 3, section 3.6 (Drennan & Beck, 2000; Ismail, Rasdi & Wahat, 2005).

2.18 Female representation in senior academic positions – international comparisons

A brief review of quantitative data shows the extent of vertical segregation in Scotland in comparison to the UK as a whole and countries worldwide. Between 1930 and 1939 all 118 professors in the four Scottish universities were predominantly the sons of middle class parents (Anderson, 1987, p.47). The first female professor in Scotland (obstetrics and gynaecology) was appointed in 1940 at Dundee University College (Scottish Government, 2004). Women formed a mere 8 per cent of all Scottish professorships by 1997 rising to 15.3 per cent in 2006 to reach 18.3 per cent in 2010/11 and 21 per cent in 2012 (SFC, 2006, p.49; SFC, 2008, p.50; HESA, Press Release 173; Herald Scotland, 2012). In England and Wales the first female professor was appointed in 1908 (Dyhouse, 1995). By 1931 female professors formed 1.56 % of the total and female lecturers formed 13 per cent of academics - a proportion which remained unchanged for almost the next fifty years (BFUW, 1931, cited in Dyhouse, 1995). In 2010/11 female professorships in England reached 20.3 per cent

of the total with females forming 44.6 per cent of all academic staff (HESA, Press Release 173) which indicates the slow progress of women in gaining senior positions over a period of over 70 years.

As far as university principals are concerned female progress was much slower. The first female university principal in Scotland was appointed in 2003 at Napier University, Edinburgh. As shown in para. 2.13 above female university principals in Scotland formed 14.3 percent of the total in 2003 increasing to 28.6 per cent in 2011 (EHRC, Aug.2011, p.5).

Internationally, the career progression of females varies from country to country but females in senior positions are, as in the UK, in a minority. For example, in Europe the average representation of female professors was 15 per cent of the total in 2007. The worst and best female professorial percentages were Malta at 2.2 to Latvia at 20.9 (Blattel-Mink, 2008, p.108; SFC, 2006, p.43). In developing and developed Commonwealth countries the percentages of female professors ranged from 6.6 per cent in Singapore to 16.9 per cent in Canada and Malaysia (Singh, 2002 cited in Ismail, Rasdi, & Wahat, 2005, p.18). In Australian universities females formed 53 per cent of 'base-level' staff (Kloot, 2004, pp.470-71) but the under-representation of female academics in senior positions in Australian universities is as prevalent as in Europe.

The American Council on Education (ACE) survey of 2007 shows that the percentages of female college and university presidents (principals) increased from 9.5 in 1986 to 23 in 2007 (Farrington, 2010, p.2), but the 23 per cent figure represents all 2148 colleges and universities in USA. A more accurate picture is gained from a study of each type of institution: in 2006 the 'doctoral' universities had 13.8 per cent female presidents; 'masters' universities had 21.5 per cent, 'associate-degree schools' had 29 per cent and 'baccalaureate schools'

had 23 per cent. Four out of the eight Ivy League universities had female presidents (Richardson, 2009; ACE, 2008).

2.19 Summary

The above historical background provides an indication of the long and arduous struggle towards equity and equality for females in the workplace and in systems of education. The handicaps imposed on females in the workplace and in education are explained through male domination, occupational and curricular segregation, with lower pay than males and opposition to their acceptance as matriculated students in Scottish universities until 1892. Quantitative data of female/male performance at school and university, access to higher education and increases in female academic staff levels in Scottish universities provide clear indications that gender equality is still affected from historical legacies of male domination, male norms and curricular segregation (see chapter 3, paras.3.3 and 3.9). However, improvements towards equality are evident from the gradual increases in proportions of female principals, professors, senior lecturers and readers.

The above review of proportions of females in senior positions provides a snapshot indication in percentage terms that the under-representation of women in higher education is a worldwide phenomenon and remains a persistent feature of university staffing. It may be concluded that the metaphorical glass ceiling has only been cracked rather than eliminated, but the crack is widening into a fissure as more women enter the senior ranks of higher education with doctoral qualifications and high research and publications profiles equaling the performance of men.

CHAPTER THREE

Gender Equity and Equality in Higher Education from the 1980s - Literature Review 2

3.1 Introduction

The objective in this chapter is to investigate issues and concerns of female academics in Scottish higher education from the 1980s to the present day as a sequel to the findings of chapter 2. This is carried out through a review of literature sources which are concerned with changes in the opportunities for promotion and pay of female in comparison to male academics. In addition, the analysis of literature sources is intended to identify the main themes relating to gender equity and equality in higher education. This analysis leads to the creation of new research questions, the answers to which are intended to satisfy the objectives of this research project as outlined in para. 1.1 above. The creation of interview questions for use in semi-structured interviews with a representative sample of practising academics in two Scottish universities (see chapter 5) is a further outcome of the analysis of the content of each thematic element.

3.2 Organisational structures in higher education

Universities experienced considerable change in the 1980s following reductions in public expenditure which deleteriously affected the budgets of universities bringing cultural changes of new managerialism fostering 'competition and market principles' with new processes of inspection and accountability (Silva-Flores, 2011, p.3; Fanghanel, 2012, pp.16,17). The changes brought about by the introduction of mass higher education from 1992 involved structural changes in the conditions of service of academics and changes in assessment procedures through Teaching Quality Assessments (TQAs), the Research Assessment Exercise (RAE) and from 1997 the Quality Assurance Agency (QAA) (Drennan & Beck, 2000, p.1; Fanghanel, 2012, pp.18,19).

In broad terms there appears little difference in the governance structures and academic management between the pre-1992 and post-1992 Scottish universities. There are, however, differences in their autonomy, their degree awarding powers and their employment contracts. The pre-1992 universities have a long history of their own degree awarding powers and in deciding their degree regulations, structures and programme developments. Following the abolition of the 'binary line' between the universities and degree-awarding colleges (Further & Higher Education (Scotland) Act, 1992), the new post-1992 universities have taken several years to shed their legacy of control from their local authority or their Central Institution past when, under the authority and regulation of the Council of National Academic Awards (CNAA), their degree submissions were subjected to external control and scrutiny (Shaw, 2003, p.666; Drennan et al, pp.1,2).

Professorial appointments in pre-1992 universities are commonly based on 'three areas and outstanding in two': high level research, a strong leadership (administration) background and teaching (Drennan *et al.*, p. 7) The early professorial appointments in post-1992 universities were made mainly for expertise in academic administration, course accreditation, management and degree programme expertise. Professorial appointments in the post-1992 universities during the last ten or so years have given greater emphasis to proven research and publication records at national and international level as indicated by improvements in their Research Assessment Exercise (RAE) results (RAE 2008), although in addressing the needs of post-1992 massification their emphasis on teaching quality is of equal importance (Drennan *et al.*, pp.1& 2; Caldwell, 2003, pp.68-9; Shaw, 2003, pp.668-72).

The 'new managerialism' brought external controls with internal direction through a form of hierarchical corporate management which replaced the old autonomous collegiate style (Doherty & Manfredi, 2006, p.554).

However, the new 'culture of performativity' was perceived as unwelcoming by some academics with its emphasis on economic, efficient and effective male-dominated management (Fletcher (2007, p.269; Fanghanel, 2012,p. 20), but changes in organisational structures led to some erosion of male domination in management processes (Thomas & Davies, 2002, p.372; Doherty & Manfredi, 2006, p.557; Mavin, Bryan & Waring, 2004, p.295). The cult of the chief executive officer was replaced by 'top teams' in which power sharing and a more collaborative approach to decision-making became evident (Noble and Moore, 2006, p.599) but, with the relative scarcity of female professors (see chapter 2, para. 2.18) in the policy-influencing and promotion committees, male dominance persists.

History appears to have repeated itself in the almost similar reasoning of Professor David Masson of Edinburgh University in 1867 (see chapter 2, para. 2.11) with that argued in Noble & Moore, (2006, p.598), each referring to wastage of female talent:

The ongoing wastage of management and leadership talent which arises from and is perpetuated by the current under-representation of women at senior levels seriously undermines organisations' ability to respond to change and threatens its future viability and vitality in the face of economic challenges of the changing workplace.

According to Doherty and Manfredi (2006, p.554) faculties in which courses allied to medicine, languages and education are conducted it is likely that women in senior positions are often equal in number to their male counterparts. An effect of this trend towards equality is seen to bring benefits of different perspectives and experiences of women through differences in leadership styles, pastoral work and in promotion processes towards greater openness and equality. Increases in proportions of female academics in some faculties in post-1992 universities, more so than in the old pre-1992 universities, are attributed to differences in the work characteristics of each. The former being more

involved in teaching which is their main source of income and the latter, being more research-intensive and having long-established male-dominated research profiles, are described as 'bastions of male power and privilege' maintaining the atmosphere of the 'exclusive men's club' in which female academics are promoted more slowly than males (Thomas & Davies, 2002).

Hanley, in a study of organizational decision-making refers to 'women's relative exclusion' and their 'low level of influence' (Hanley, 1994, p.11). This does not of course hold true for every faculty in every pre-1992 university today, particularly in faculties where increasing numbers of women are in evidence. However, there continues to be a dearth of women involved in engineering, technology, physical sciences and architecture and planning (SFC, 2006, p.42). For example, at Heriot-Watt University (pre-1992), with its technological strengths, only 12 per cent of professors are female – the lowest in Scotland. At Glasgow Caledonian University (post-1992), on the other hand, the figure is 31 per cent - the highest in Scotland (Herald Scotland, 2012).

Massification which brought numerical expansions in terms of students and staff in universities from 1992 with the increasing presence, and in some cases the prominence although not the preponderance, of women has resulted in greater acceptance of change in the organisational cultures in some faculties (Shaw & Cassell, 2007). On the one hand there is segregation, both vertically and horizontally with concentrations of women in the lower grades and with less secure contracts than men (*ibid.*, p. 478), but, on the other hand, less gender blindness, more amenability to flexible working arrangements and more transparency in promotion processes (Moss & Daunton, 2006).

Some universities are now perceived as 'egalitarian, friendly, open and warm a very flexible place especially in accommodating people's family

responsibilities' even though women are under-represented in senior positions and are therefore less well represented on the more powerful decision-making committees (Doherty & Manfredi, 2006, Vol. 28, p.556). However, the downside of 'academic practices and identities in performativity cultures' as shown in Fanghanel (2012, pp.20-22) is found in examples of overwork and 'narratives of despair'. Managerialist target-setting in which measurements and records of teaching time along with monitoring and performance review can cause feelings of 'constant surveillance' in aiming to improve the university's rating in international research rankings and the National Student Surveys.

3.3 The gender composition of committees

The minimal presence of female academics as members of policy- and decision-making committees is a feature of the glass ceiling. 'Women occupy few of the key strategic leadership positions' in Scottish Universities (CPPM, 2007, p.33). A female presence in relation to the influences they can exert can ensure that gender equity and equality is not overlooked. Literature sources of the 1980s and 90s show that academics who participated in decision-making bodies were commonly male in the highest grades and well-qualified with long experience. Because female academics were concentrated in the lower grades and regarded as newcomers their opportunities in becoming decision- and policy-makers were considerably lower than those of male academics (Denton, Zeytinoglu & Isik, 1993). In addition, Handley (1994, p.11), in her research into women and decision-making in academia, provided evidence of the relative exclusion of women from 'certain sources of information' and their low levels of influence on decision-making such that issues relating to equal opportunities are ignored.

Some literature sources of the 2000s continue to refer to the effects of male domination in decision-making committees and policy and promotion process outcomes in relation to the perpetuation and the

effects of male norms. For example, the poor representation of women in senior positions in relation to male networks and support systems is shown to be advantageous to men particularly in 'closed invitation procedures' (van den Brink, Brouns & Waslander, 2006, p.525, 529). Women are also seen to be disadvantaged in the promotion processes from policies which disregard career interruptions and focus primarily on research for promotion (Winchester, Lorenzo, Browning & Chesterman, 2006, Vol.28). The lack of 'a critical mass' of women in senior positions with a consequent scarcity of female mentors and role models partially explains the reticence of females applying for professorships (*ibid.*, p.507). However, the effect of the appointment of a female dean in the creation of 'a more feminine environment towards a more balanced gender distribution' helped to remove barriers to the promotion of women which in turn led to a diminution of female reticence in applying for promotion (Priola, 2004, Vol.19, p.422).

With the publication of Gender Equality Schemes by each university and the Gender Equality Duty (GED) which came into force in April 2007 improvements were expected. Notwithstanding these schemes, a survey of female membership of Scottish university Courts of 2009 from individual university websites reveals the range from 7 per cent at worst to 48 percent at best, the majority having about 18 per cent female representation (see Appendix 11) and the majority of promotion panels remain male-dominated. In some universities there are examples of decline in the proportions of women sitting on influential committees. For example, at Edinburgh University the gender balance on influential committees dropped from 47.1 per cent in 2006/7 to 35.8 per cent in 2008/9 (Athena Bronze Award, 2009, Table 10). At St Andrews University between 2009 and 2011 of six influential committees female representation reduced in three, increased in two and remained the same in one (Athena Bronze Award, 2012, Table 6-3).

Plate 3 below shows the improvement in female membership in the University of St Andrews University from one female member in 1923 (see Para. 2.15, plate 2) to 8 out of 23 (35 percent) in 2011-12 (Athena Bronze Award, 2012, Table 6-3)



Plate 3 St Andrews University Court, 2011-12 Courtesy of St Andrews University

Although male domination in the senior staffing of universities is shown as the major cause of the dearth of females in policy- and decision-making committees, the dearth is also attributed to their ‘time poverty’ from their dual roles as academics and family carers which limits their opportunities to engage in faculty, senate and court committees (CPPM, 2007, p.34).

3.4 Promotion in higher education – gender discrimination and marginalization

The argument in many literature sources that female academics are discriminated against in seeking promotion is commonly concerned with male-dominated, organisational structures and prescriptive gender bias in selection committees (Moss & Daunton, 2006, pp.505, 507; Luzardis, Wesolowski & Snavely, 2008, pp. 468-9). All-male committees, which

adjudicate applications for promotion, are seen as inequitable and 'not particularly accountable' in failing to recognise female/male differences in career development and in the belief that 'gender was not an issue' in the criteria for promotion (Thomas, Bierema & Landau, 2004, Vol. 23, p. 64; Todd & Bird, 2000, p.1).

Quinn (July 2008, p.9) suggested that an insistence on equally gender-balanced selection committees could be construed as 'positive action' and discrimination and that committees should 'stick to merit and don't mention sex' (*ibid.*, p.10). Winchester, Lorenzo, Browning & Chesterman (2006, p.16), on the other hand, proposed a promotion policy to include: 'an appropriate ratio of gender representation on promotion committees' in which monitoring of the promotion process and its results by an academic appointed with an equity brief could ensure that cultural and equity issues are addressed.

An example of discriminatory selection practices in terms of promotion is highlighted in an investigation by van den Brink, Brouns & Waslander (2006, pp.523-35) into the poor recruitment of female professors in the Netherlands in comparison to other European countries. This research reviewed the selection practices in fifteen universities between 1999 and 2003 from a study of 936 committee reports and the CVs of applicants. This research is of particular interest in comparing the success rates of female and male candidates in relation to 'predictions concerning the type of recruitment (open/closed) and the gender composition of the committee.' For example, it was found that ageing professors blocked the promotion of young men and women (the 'pipeline' effect) and that 'women and men were more likely to appoint a male applicant than a female applicant with an identical record.' There was evidence too of gender bias towards male candidates by female recruiters who were found to be more gender biased than their male counterparts. Predominately male committees were found to have negative

consequences for women due to the 'similar-to-me' effect (*ibid.*, pp.525, 530).

As shown in Todd and Bird (2000, p.1) an almost similar situation was found in some Australian universities where it is argued that 'inherent structural inequality' is part of patriarchal organisation systems which perpetuates the marginalization of women. A Canadian study of Denton & Zeytinoglu (1993, Vol.46, pp.320, 327) found that women, as 'relative newcomers' having achieved a measure of seniority and decision-making at lower and middle levels, are relatively absent at professor and assistant professor levels and are therefore rarely seen in senior level decision-making committees. Because of the relative absence of females in influential committees and related networks females are perceived as followers rather than leaders. This is construed as marginalization resulting in discouragement, even anger and resentment with adverse effects on their work. The hold on organizational power, wittingly or unwittingly, as argued in Hanley (1994, Vol. 9, pp.11 & 12), brings about the relative exclusion of female academics from sources of information thus minimising their influence in decision-making which is 'the most pervading influence of patriarchy' and is construed as marginalization.

According to Bird (2010, p.1) the slower female promotion rates are attributable to masculine organisational cultures in male-orientated selection processes. Bird argues that university leaders fail to recognise 'institutionalised gender barriers' in the 'gendering of organizational structures, cultures and practices' which are more advantageous to men in terms of their superior access to 'social networks and upwardly mobile job ladders' (*ibid.*, p.3). Suggestions that intellectual differences between females and males and the voluntary career choices of females account for their under-representation are refuted (*ibid.*, p.2). Winchester, Lorenzo, Browning & Chesterman (2006, p. 507) argue that a dearth of female mentors and role models results from the 'lack of a critical mass of

women in senior positions' and that women are therefore reticent to 'push themselves forward' for promotion. A monitoring exercise of data pertaining to the promotion processes in the two pre-1992 and two post-1992 universities in the UK by Doherty and Manfredi (2006) revealed that women applied for internally advertised senior posts 'in far fewer numbers than men' but when they did apply 'their chances of success were relatively good' arguing that 'men are promoted more quickly than women at all stages of the hierarchy' (*ibid.* p.557).

Literature sources in addition to those above reveal other features of inequity experienced by female academics and include: discrimination occurring 'because of women's actual or potential maternity' (Gatrell in McTavish & Miller, 2006, p.89), gender segregation through the 'pipeline' or 'funnelling' effect (Marschke, 2004, p.3), lack of transparency and gender blindness (Mavin, Bryans, & Waring, 2004, p.293-4), differing socialising and mentoring processes, the disproportional sharing of domestic responsibilities and female reticence in applying for promotion, each of which reinforce of the thickness of the metaphorical 'glass ceiling' (Thanacoody, Bartram, Barker & Jacobs, 2006, pp.537-8); Mischau, 2001, p.23, Olgiati & Shapiro, 2002, p.6; Shaw & Cassell, 2007, p.507& 509).

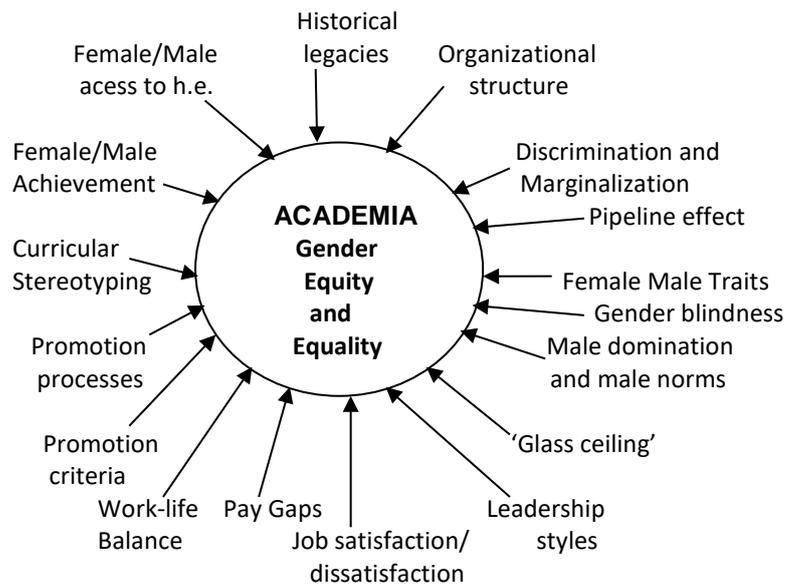
The need for training in awareness as part of the promotion process is explained in Moss & Daunton (2006) to assist recruiters to understand their own biases and other issues relating to the validity and reliability of interviews. Their research shows that references and informal contacts are relied upon heavily, suggesting a degree of patronage and informal lobbying more helpful to males than females. The problems associated with 'prescriptive gender bias' as investigated by Lizardis, Wesolowski & Snavely (2008, p. 470) and McTavish and Miller (2006, p.7) referred to agentic female applicants for managerial positions as 'more male than the

men' and as less socially skilled than agentic males indicating bias against aspiring female applicants.

3.5 Summary of Key Themes

The identification and analysis of key thematic elements is necessary to reach an understanding of the state of gender equity and equality in higher education and in the generation of ideas for research and interview questions. The process of indentifying individual themes involved the perusal and codification of data from over 200 literature sources contained in chapters 2 and 3. Each theme, as shown in figure 5 below, focuses on a particular issue in relation to an aspect of the metaphorical glass ceiling.

Figure 5 Themes related to gender equality in academia



Examples of what the above themes mean for this research are gleaned from chapter 2 in which historical legacies of inequity are identified and shown to persist in relation to male domination and assumptions of the legitimacy of male norms in the organizational cultures of universities. This is evident in themes related to promotion processes, the criteria for promotion and in the gender composition of influential committees each

of which are shown to be partially accountable for the under-representation of women in senior positions.

Other thematic elements which relate to the glass ceiling include such as: the 'pipeline effect' - large numbers of ageing professors blocking vacancies; 'gender blindness' – the lack of understanding of female attributes to higher education; 'lack of transparency in organisational procedures accompanied by low success rates for women' (van den Brink, Brouns & Waslander, 2006, p.525); the effects of career breaks - the cultural impediment of combining family responsibilities with an academic career; female/male traits - perceptions of the reticence of women to 'push themselves forward' for promotion (Doherty & Manfredi, 2006, p.559). These and other themes are investigated in depth in relation to the metaphorical 'glass ceiling' below.

3.6 The 'Glass Ceiling' in higher education?

A common theme in many literature sources concerned with gender equity and equality is the metaphorical glass ceiling (see also chapter 2, para.2.7). It is perceived by some women as an invisible barrier through which penetration is difficult in attempting to progress to senior positions. Men are perceived to sit in their customary managerial positions leaving female aspirants for promotion with an impression of 'the entrance an iron gate, then a sticky floor, at the top a glass ceiling, and in between a hurdle track' (Blattel-Mink, 2001, Vol.21, p.6).

The glass ceiling is a function of both vertical and horizontal gender segregation. Vertical segregation refers to the disproportional distribution of senior posts in favour of male academics (see para. 3.8 below), and horizontal segregation is concerned with the subject preferences of females (e.g. nursing, education, languages) and males, (e.g. technology and engineering) which affect opportunities for research and publications

(see para. 3.13 above) the latter being important criteria for promotion (CPPM, 2007, pp.7,8).

Reasons for the persistence of the glass ceiling refer to the effects of patriarchy, male domination and male norms in policies and procedures in higher education (see para. 3.3 above). Male domination and males in control of organizational structures of universities are legacies from histories of Scottish education which show the disproportional distribution of males in senior positions over females in schools, colleges and universities (see chapter 2, para. 2.18).

3.7 Some factors affecting the persistence of the glass ceiling

Historically, male dominance in the workplace was considered normal because of what Weber (1948 & 1978), cited in Grint (2006, pp.190-236) argued was 'the normal superiority of physical and intellectual energies of the male.' Although the notion of 'normal superiority' is long outdated and any case not 'politically correct', it is still seen as a barrier to the career development of female academics (Shaw & Cassell, 2007, p.499; Wilson, 2005, p.234). The effect of this attitude in the organisational cultures of universities is believed to have kept women as a minority occupying lower status academic posts with a higher proportion of women in fixed term contract grades than men (Forster, 2001). Many literature sources affirm these causes for the dearth of women in senior positions including: Arnot, 1995; Kloot, 2004; Austen, June 2004; Thomas, Bierema & Landau, 2004; Forster, 2001).

With the early appointments of female academics in universities it was taken for granted by male academics that females would simply accede to the existing male norms. It appeared to the male majority that there were no reasons to change the *status quo* (Mischau, 2001, p.20; Moss & Daunton, 2006, p.504). With the growth in numbers of female academics in new and old universities, but at a greater rate in the new universities

(Forster, 2001, Vol.6), a considerable body of gender-based literature emphasised the concerns of female academics over such as stereotyping and marginalisation where they were considered subordinate to existing male academics (Mavin, Bryans & Waring, 2004; Priola, 2004; Wilson, 2005; Winchester, Lorenzo, Browning & Chesterman, 2006). Female academics were, in some faculties, considered subdominant and labelled substandard with a 'low level of influence on organizational decision making' (Handley, 1994, p.11). Paternalistic attitudes added to the problem for women who were deemed to be unfit for professorships which are 'very hard for women because it is a demanding job and a vocation rather than an occupation' and that 'a woman with care responsibilities has to convince the committee that work will take priority' (van den Brink & Benschop, 2011, p.7)

According to Goltz (2005, p.2) in situations where female and male publication rates are similar 'women still receive fewer rewards than men and are promoted more slowly', in addition to which 'women are consistently underrated, particularly when doing what is considered to be men's work'. Dominant male practices which manifest themselves in 'the exclusionary effect of masculine information support systems' effectively exclude female academics from social networks concerned with information and support systems about vacancies and job criteria and add to discrimination against women (van den Brink et al., 2011, p.10).

3.8 Patriarchy and the Glass Ceiling worldwide

A brief survey of some impressions of researchers writing about the patriarchal nature of academic staffing in universities worldwide reveals notable commonality between them:

The United Kingdom – 'Universities are deeply patriarchal institutions and some are still in the Stone Age as far as recruiting and promoting women are concerned' (Forster, 2001, Vol.6, p.32); 'it is unacceptable that the UK's universities should remain bastions of male power and

privilege,' (Hansard Society Commission, 1990, cited in Forster, (2001, Vol.6, p.28); 'institutions are run according to masculinist notions of competition' (Fletcher, 2007, Vol.26, p.277); 'patriarchy is commonly used to describe the context and process through which men and male-dominated institutions promote male supremacy' (Mavin, Bryans and Waring, 2004, Vol. 19, p.295); 'the EO [equal opportunities] mindset produced an acceptance that white, non-disabled, heterosexual men's experiences and interpretations of organisational life were universally applicable' (Moss and Daunton, 2006, p.505); 'men are the main obstacle in the way of creating a level playing field.' The world of work is 'ruled by men in suits focused only on self-interest, money and power' (Pettengell, 2007, p.21).

USA - 'the scarcity of women in authority positions sustains workplace gender inequality' (Cohen & Huffman, 2007, p.681); 'women leave their jobs because they are unwilling to continue to work in masculine cultures' in which they are marginalized in being 'intentionally left out of introductions, social activities and meetings' (Goltz, 2005, pp.51, 61); 'Women's marginalization is particularly poignant in higher education. This traditionally patriarchal environment has provided limited access for women leaders and administrators' (Thomas, Bierema and Landau, 2004, Vol.23, p.62).

Australia - 'gender imbalance is a fact of life ... the problem lies not with women but with the way leadership is defined and conceptualized,' (Kloot, 2004, p. 474); 'organisational culture is the greatest hurdle for women in a culture of masculinity within universities which reflects the values, lives and norms of white males' (Todd and Bird, 2000, p.3); 'The ongoing wastage of management and leadership talent ... is perpetuated by the current under-representation of women at senior levels [which] seriously undermines organisations' ability to respond to change and threatens its future viability and vitality in the face of

economic challenges of the changing workplace' (Noble & Moore, 2006, p.598).

Germany - 'recent quality standards are gender biased in that they exclude women' (Baer, 2007 in Blattell-Mink, 2008, Vol.27, p. 108).

Switzerland - '... vertical inequality is very high. Women have less opportunities of advancement, they earn less than men. Women researchers publish less than men. Their networking is not so good and effective as those of men. Their mentoring is comparatively poor. Often they are engaged in marginal fields or fields with little prestige' (Blattell-Mink, 2001, Vol.21, p.6).

The above summary of male domination in the educational lives of women paints a discouraging picture for female academics worldwide, but there are some positive statements which allude to improvements in relation to gender equality through a diminution of male domination. According to Mischau, (2001, Vol.21, p.20) - 'academia is not a male world anymore'; Hampton, (2008, p.3) - academia today is more family-friendly and the prospects for women have never been better'; Moss and Daunton (2006, Vol. 11, p.504) - 'The last decade has seen a dramatic increase in the number of women pursuing managerial and professional careers'; Ramsay (2001, p.105) - 'The situation of women in higher education in Australia is remarkably better than in other Western countries'; Sipe, Johnson & Fisher (2009, p.340) - 'the equity gap between men and women in management careers appears to be closing' and 'students [male and female] perceive gender discrimination as being of little consequence'; Okpara, Squillace and Erondy (2005, p.179) - 'women in higher education have made significant progress in breaking through the glass ceiling'; Linstead (2000, p.1, in Mavin *et al.*, 2004), - 'the end of masculinity is upon us, with the end of patriarchy and the gender order';

Wacjman (1998) in Mavin *et al.*, (2004, p.295) – ‘the legitimacy of patriarchy has been eroded, it is far from being rendered obsolete.’

In the above rather more optimistic picture of female progress in piercing the glass ceiling each source contained notes of caution in pointing out the perpetuation of the under-representation of women in senior positions and male domination. The persistence of ‘the ever-present dualism’, as discussed in McMillan & Fenwick (2008, p.248), in which assumptions of gender differences of male rationality and female irrationality and emotion arrogated male superiority which is rooted in millennia of androcentricism (Middleton in Dawtrey, Holland & Sheldon (eds.), (1995, p.141). As shown above these attitudes have been subjected to critical re-interrogation in challenging perceptions of ‘manager equals male’ in which ‘universities are uniquely placed to play a unique role’ (Mavin *et al.*, 2004, p. 294).

3.9 Vertical Segregation

The fact that female academics are commonly in a minority in senior positions in universities and are generally unable to influence policy-making or decision-making in promotion procedures are principal areas of concern in Marschke (2004); Kloot (2004); Noble & Moore (2006); Doherty and Manfredi (2006). Factors which act against the promotion of female academics include: (i) the ‘pipeline effect’ - blockages at senior levels caused by older males; (ii) female lack of doctoral qualifications and inexperience; ‘less well developed research profile’ (Doherty & Manfredi, 2006, p.553); (iii) choice of faculty and subjects (Mischau, 2001); (iv) slower and lower applications for research funding by females; (v) career breaks taken by females for family caring responsibilities (Wilson, 2005); (vi) the concentration of female academics on short-term contracts and over-representation of females in teaching-only posts; (vii) the lack of a ‘critical mass’ of females in senior positions, (Winchester, Lorenzo, Browning & Chesterman, 2006, Vol.28, p.507); (viii) work-life balance

versus career centrality (Bird, 2006; Dowd & Kaplan, 2005; White, 1995) (ix) fewer opportunities for networking and mentoring (Gibson, 2004).

According to Austin (2004, p.115) females are disadvantaged by notions of merit and success which are 'based more closely on what men do well' and Forster (2001, Vol.6, p.29) found that policy statements in relation to Equal Opportunities were 'often little more than rhetoric'. A particularly critical view of 'closed procedures' in some Dutch universities suggests 'a purely decorative appointment procedure' in which the appointment of three-quarters of newly-appointed male professors were 'preferred candidates already known' despite public advertisements (van den Brink, 2011, p.9). According to Wilson (2005) the selection process commonly involves appraisals made by males and that this 'may reinforce values that fail to recognize the contribution made by female colleagues (*ibid.*, p.237).

3.10 The 'Pipeline' effect

One interpretation of the so-called 'pipeline' effect refers to lack of opportunities for promotion for females because there are fewer females than males with doctoral qualifications and high level research and publication profiles in the career pipeline (Marschke, 2004, p.3). A second interpretation is that of blockages attributed to large numbers of ageing professors whose presence reduces opportunities for promotion through a scarcity of vacancies (Marschke, 2004, p.3). However, from about the year 2000 increasing numbers of females obtaining first class honours and doctoral qualifications have resulted in increases in female appointments to senior positions (see chapter 2, paras. 2.17 & 2.18).

Interestingly, research into the low levels of female promotion in Dutch universities, where only 6.3 per cent of professors were female, refuted the notion of the pipeline blockage because of the fact that of 1850 new professors appointed only 11 per cent were female (van den Brink,

Brouns & Waslander, 2006, p.525). The pipeline reason for a scarcity of vacancies has also been refuted through schemes for early retirement which creates more vacancies.

3.11 Gender blindness

The metaphorical glass ceiling is perceived to be thickened because of gender blindness on the part of male academics. This is explained as 'not seeing, being unaware, suppressing gender or gender defensiveness' and 'failure to recognise the relationship between management and gender' (Mavin, Bryans, & Waring, 2004, p.293-4). In part, gender blindness is a consequence of male domination where the presence and influence of women is 'at best tolerated and at worst ignored.' Knights and Richards (2001) in Mavin *et al*, (2004, p.297) argue that 'men and masculinity are locked in to one another' such that women are excluded and marginalized and 'not worth serious consideration.' Ferrario (1991) for example, refers to 'a blackout of images of women' in senior management and in leadership. Fletcher (2007, p.269), from interviews with 22 male research managers, revealed acute male gender blindness in that they saw no problem with gender equity suggesting that 'the onus is on women academics to put themselves forward and have the same aspiration for leadership as men.'

Thanacoody, Bartram, Barker & Jacobs, (2006) suggest that some female academics suffer 'greater isolation, higher levels of stress, a lower sense of self-efficacy and self-confidence'. Experiences of 'being an outsider in masculine cultures' creates difficulties for females in establishing relationships with colleagues (*ibid.*, p.538). A 'boy's club' ethos in male dominated faculties is seen as a socializing process from which women are excluded, ignored and discouraged from applying for senior managerial roles (*ibid.*, p.539). According to Wilson (2005, p.234) 'men are the standard that women have to match' and women are considered to have 'different or inferior qualities'.

McTavish & Miller (2006, p.38), referring to the teaching of management in UK business and management education, explain that the 'management male paradigm' presents managers as male or at best gender neutral thus perpetuating the concept of a patriarchal organization in which women are marginalized and invisible. A common feature of gender blindness is concerned with the treatment of women as 'newcomers' in the staffing of universities who were regularly marginalized and excluded from the decision-making committees, their work being consistently under-valued labelled substandard and of lesser value, subordinate and suppressed' (Handley, 1994, vol.9, pp.12-13; Priola, 2004, p.423-24).

3.12 Criteria for promotion

Some literature sources show that the main criteria for promotion in universities are ' ... research and publication productivity ... as two of the most important critical determinants and indicators of status attainment and reputational standing within academia' (Shaw & Cassell, 2007, Vol.22, p.6). Similarly, according to Drennan & Beck (2000, pp.6-8) 'beyond senior lecturer ... published work; national and international recognition - becomes more important for both readership and professorship.' There is little evidence in Scottish universities that 'excellence in teaching and learning is overtly rewarded' and although Teaching Fellowships provide evidence of excellence 'teaching is something of a poor relation' (*ibid.*, p.8). Moss and Daunton (2006) and Ramsay (2001) suggest that the importance given to research and publication records and lack of management experience are seen as the principal barriers experienced by female academics mainly in the pre-1992 universities which have long-established records of quality research.

The promotion of female academics is also believed to be hampered through their reticence to apply for research funding which, in addition to

their scarcity on university committees, almost nullifies their opportunities to influence promotion policies and decision-making processes in the appointment of senior academics (Doherty & Manfredi, 2006; CPPM, 2007). According to Shaw & Cassell (2007) although females attach importance to research and leadership they show respect for the ideas and the perspectives of others and are committed to teaching. Males, on the other hand, are perceived to give most importance to research, quantitative outcomes and in being in control of their time in managing and prioritising their workload. This suggests that 'women's nurturing pre-disposition and concern for people' results in their lesser research productivity than men (*ibid.*, p.6) (see para. 3.15 below).

3.13 The Research Assessment Exercise (RAE) (renamed the Research Excellence Framework (REF)) – a system of quality assessment of the work of universities, with an emphasis on quality of research and publications, star ratings and league tables with the gradual erosion of 'traditional financial autonomy' (Shaw & Cassell, 2007, p.4). The RAE which was introduced in 1986 is conducted every five years on behalf of the Higher Education Funding Councils and is of major importance to university managements in terms of the distribution of public funds. Universities aspire to produce the highest of the four star ratings in as many subject areas as possible and to have as many of their academics accredited as research active as possible.

The emphasis on research and publication work is perceived as a cause of tension between teaching and research in that 'teaching is not valued as greatly as research' and is viewed as 'not bringing in money' (Drennan & Beck, 2000, pp.4, 9). As shown above (para. 3.6) the relatively slow promotion of female academics is related to their lesser research activity in which male academics in Scottish universities were, according to the RAE, 2001, estimated to be 1.6 times more research active than female academics. In terms of research in Scotland, only 35 per cent of research

active academics were female, the UK average being 32 per cent (CPPM, 2007, pp.25-28; AUT, July 2004). The European Research Area (ERA) Report of 2006 shows that out of 23,252 funding applications women made 7285 (31.3 per cent). In a later report 'men were 7.2 per cent more successful than women in funding applications' and applied for smaller amounts of funding. A report of the Association of University Teachers shows that males were 1.9 times more research active than females in 2002/03 and had a lower rate of RAE submissions (AUT, 2004; Millard & Ackers, May 2008, p.6).

In RAE main and sub panels female activity in Scottish universities was 26 per cent in 2008, indicating no improvement since 2001 (CPPM, 2007, p.28). Although the gender composition of RAE panels is consistently male-dominated some improvement towards gender equality is evident when comparing the panel membership of REF 2008 at 27 per cent female with that proposed in REF 2014 at 33 per cent. In the four main panels female percentages ranged from 23 to 42 (REF, July 2011, Tables 6 & 7). Universities are required to take into account 'special circumstances' which make allowance for difficulties encountered by academics in producing the expected volume of research output. These are often most helpful to female researchers and include such as 'absence due to maternity, parental, adoption, carers leave; women returning to part-time work after maternity leave; part-time work/fixed-term contracts and absence for more than six months.

3.14 Horizontal segregation - Choice of subject area

Opportunities for promotion for women can be affected by their choice of subject area and faculty which, arguably, is a function of the inheritance of the long history of occupational and curricular segregation (see chapter 2, para. 2.14). For example, in Scottish higher education a report of the Scottish Funding Council showed that in 2003/04 male academics outnumbered females in seventeen out of a total of nineteen broad

subject areas. The two remaining subject areas were subjects allied to medicine at 61.4% female and education at 56.6%. The subject areas of communication, biological sciences, languages and literature were shared almost equally between female and male academics. Male subject choices indicate preferences towards engineering (88.8% male), architecture, building and planning (81.4%), physical sciences (81.2%) mathematical and computer sciences (77%) (SFC, 2006, Fig, 36, p.42). However, there is evidence of desegregation and gender balance in subject areas such as business, law and medicine (CPPM, 2007).

A further measure of gender subject choice is evident from the qualifications obtained by females in comparison to males in higher education in Scotland. In 2006/07 and 2010/11 females obtained greater success in 12 out of 18 subject areas than males. Females qualifiers were clearly ahead in subjects allied to medicine (80%), biological sciences (64%), veterinary science (75%), languages (69%) and education (74%) whereas males were strongest in computer science (80%), engineering and technology (84%) and architecture, building and planning (66%). In other subject areas there were six marginal differences in favour of females and four in favour of males (HESA Press Release 181, p.4).

Horizontal segregation is found to be disadvantageous to women in that some of their subject areas attract less recognition and less research income than male subject areas with the result that their chances of promotion are diminished. However in post-1992 universities where female academics predominate in humanities, social sciences, languages, education and nursing there is greater equality in terms of the distribution of promoted posts as shown in Winchester, Lorenzo, Browning & Chesterman (2006); EUI (2010); Doherty & Manfredi (2006).

Academic disciplines in which female academics tend to be concentrated are often those less likely to attract research income, the Quality

Research (QR) grant being based on RAE outcomes, with the result that their opportunities for promotion may be poorer than those of males (Austen, 2004, p.115). The financial situation is more difficult for post-1992 universities in which their RAE ratings rarely reached the prestigious 5/5* units (RAE 2001). In universities with high RAE ratings the trend has been towards internationally recognised 'useful research' and knowledge transfer which have the greatest impact on practice (Munn & Ozga, 2003, pp.983, 989).

3.15 The administrative and pastoral workload – Female/Male Traits

According to Thomas & Davies (2002, pp.372-394) women 'take on ... the invisible emotional labour of universities' at the expense of their research and are expected to carry out more of the student counselling and administrative workloads than men, a situation which is exacerbated when women have childcare responsibilities at home. Doherty & Manfredi (2006, p.557) provide evidence that women take on 'some of the more punishing management roles in a way that men won't'. Female academics with or without children are expected to be 'motherly' and to 'bring to academia a caring and nurturing role for students as if they were their own children' (Wilson, 2005, pp. 235, 238-9). As a consequence of spending more time than men on 'the caring and nurturing tasks' women effectively reduce the amounts of time they can give to research and, because research and publishing activities are the important criteria for promotion, this can inhibit and delay female promotion (Todd & Bird, 2000, Vol.19, p.2).

Academics with strong research orientations are promoted faster than those whose work is predominantly based on teaching, administration and pastoral activities, and this, according to Ward & Sloane (Aug.2000, p.296) and Forster (2001, Vol.6, p.30), favours male academics because the 'reward system' fails to take into account the attributes of the latter in making promotion decisions. In theory, teaching, pastoral work and

community service are valued equally with research, but in many disciplines research is valued more highly and is the 'real criterion' on which promotion is based (Winchester, Lorenzo, Browning & Chesterman, 2006, Vol. 28, p.510). Differences between the work of female academics, whose workload consists mainly of pastoral and teaching activities, allows male academics to concentrate on their research and publishing is also noted in Tharenou, Latimer & Conroy (1994, Vol.37, p.900).

3.16 Career breaks and Promotion

Many literature sources refer to a recurring problem for female academics of child-bearing age: that of that career breaks for family and domestic circumstances which pose more problems for female academics than for their male counterparts. According to Wilson (2005, Vol. 29, p. 235) the act of ignoring career breaks when purporting to treat females and males equally in appraisal for promotion is discriminatory behaviour. Career breaks are shown to affect the opportunities for promotion for women because of interruptions in their research activity and publication work, being out of touch with changes which have taken place during their absence and missed opportunities for networking – each of which are important for career progression and in part explains the under-representation of women in senior positions (Doherty & Manfredi, 2006).

Forster (2001, p.30) explains that a female academic 'even asking for maternity leave' reduces her promotion opportunities. An effect of 'taking three or four years out' on loss of time can effectively mean the probable loss of 'double that time in real terms because research takes long-term planning' (*ibid.*, p. 34). The suggestion that 'women may not be as career-oriented as men' and that their academic records are less competitive than those of men is attributed to their domestic concerns (Wilson, 2005, Vol.29, p.235). Career breaks and part-time work are considered to be 'damaging to promotion chances' and are seen as not fitting the model for promotion based on male norms (Todd & Bird, 2000,

Vol.19, p.2). Tharenou, Latimer & Conroy (1994, Vol.37, p.903) note that 'female managers are more likely to be unmarried and childless' and that 'a spouse and children interrupt women's work experience and thus reduce opportunities for promotion'

According to Thomas, Bierema & Landau (2004, Vol.23, pp.63, 64) differences in developmental experiences are more complex for women in comparison to men who benefit from a more 'linear upward trajectory' and can lead to women opting for part-time work to balance work and family life. Furthermore, women experience different career encouragement and training in male managerial hierarchies the effect of which can result in reversals in the 'upward trajectory' of women partly because 'men prefer working with men' (*ibid.*, p.63). Thomas *et al.*, 2004, pp. 69,70 make several recommendations: upward mobility of women should be a strategic objective; administrators who promote women's careers should be rewarded; universities should 'expand how employees are evaluated' beyond the emphasis on research for promotion; universities should promote networking and mentoring for women, and should 'break the conspiracy of silence related to issues of sexism, racism, and other types of marginalization and exclusion'.

A UCU report suggests a 'tendency to appoint people like yourself' which, in a male-dominated ethos, can often lead to a preference to promote 'another white, middle-aged man' rather than a women. This report further suggests that the age when promotion prospects are most likely coincides with female involvement in family commitments and places them at a disadvantage due to possible age discrimination (UCU, 2009, pp.3,4). The problem for women in juggling career and family commitments, referred to as 'time poverty' in CPPM (2007, p.34) is a disincentive for women whose time is 'spread thinly' and therefore have less time than men to engage in the important criteria for promotion (see section 3.11 above).

3.17 Summary

Until around the 1980s male academics in universities encountered few females in what were described as their 'ivory towers' and 'bastions of male power and privilege' (Doherty & Manfredi, 2006, p.334). Women found themselves in "foreign territory" as "travellers in a male world" (Mavin, Bryans & Waring, 2004, Vol.19, p.297) in which the cultures and organisational structures were entirely the creations of male academics. With the initial appointments of female academics there was little perception in the minds of male academics that change was necessary or desirable; this can be considered as the origin of what is described in several literature sources above as 'gender blindness' (see section 3.10). Understandably, therefore, an aim of female academics was equal treatment in all aspects of their work and equal representation in the policy-making and decision-making bodies at all levels to achieve equality in promotion processes, seniority and pay.

The impediments above, which deterred female academics in the promotion processes in a system of mainly male-devised criteria, are determinants of the thickness of the metaphorical glass ceiling. However, there is some evidence of cracks in the glass ceiling today with increases in the proportions of females gaining senior positions. It is estimated that by 2020 'women could account for the majority of all academics' in the UK (EUI, 2010, p.1).

3.18 Gender pay gaps

In higher education common pay scales ostensibly meet the criteria of equal pay for equal work, however, pay gaps in favour of men remain problematic. The questions here are: to what extent and why are there pay gaps? With the introduction of the Pay Framework Agreement of 2004 implemented from 2006 with the aim achieving 'equal pay for work of equal value' including a commitment to undertake equal pay reviews

(UCU 2007, p.1; UCU, 2009, p.6) it would be reasonable to expect equal pay in its entirety.

3.19 Extent of gender pay gaps in higher education

The introduction of the Pay Framework Agreement (2004), in which university staff were 'assigned to a grade within a common framework', gave universities the opportunity to use a flexible structure for salary and career progression with the aim: 'to attract, retain and motivate academics rewarding appropriately their knowledge, experience and contribution' (Rani, 2009, pp.47-65). However, according to a report of the University College Union (UCU), this has 'had little effect on gender equality' as far as pay is concerned. This is explained from lower percentages of women at the top of their salary scales and 'that male academics were 1.5 times more likely than female academics to receive performance-related pay' (UCU, 2009, p.2). The Equality Challenge Unit (ECU) also reported that 'women are more likely to be earning less than men particularly at the top end of the scale' and stated that in 2006/07 in universities in the UK only 22 per cent of academic staff earning over £50,000 a year were women (ECU, 2008, pp.1-3).

Data published by the University College Union (UCU) provides gender pay gap data expressed as percentage averages for all female and all male academics for all HEIs in the UK from which Scottish figures have been extracted (see appendix 12). In Scotland the pay gaps range from the lowest at 0.3 per cent to the highest at 23.8 per cent (zero being equal pay). The pay gap range for pre-1992 Scottish universities is 12.1 to 23.8 per cent whereas that for post-1992 universities is 0.3 to 11.6 per cent (UCU, 2007, Table 3, pp.3-6) which indicates that the latter employ more female academics in senior positions than the former. However, these figures do not take account pay gaps within grades. For example, the pay gap at Edinburgh University is shown at 18.2 per cent (UCU, 2007, Table 3, pp.3-6) whereas female and male average salaries in Grades 6 and 7

are within 0.3 percent and 0.4 per cent respectively (Athena Swan Bronze 2009, Annex 1, p.13).

According to Doherty and Manfredi (2006, pp. 553, 555) pay gaps are caused in part by the enhancement of academic careers through the 'relative importance given to research and to management'. Research activity in pre-1992 universities is more male-dominated and more research oriented than in post-1992 universities (Moss & Daunton, 2006, Vol. 11, p. 504; Ramsay, 2001, Vol.21, p.105). Although gender pay gaps appear to be diminishing universities are sufficiently concerned that they are now examining causes for the overall pay difference between men and women for institutions as a whole rather than 'looking horizontally at jobs across similar grades' in their equal pay reviews (*ibid.*, p.2).

3.20 Gender Pay Gaps – possible causes

Causes of pay gaps in favour of men, in addition to the under-representation of women in senior positions are ascribed to such as: the concentration of women in lower grades and in less secure posts, occupational segregation - both vertical, with concentration of males in senior positions, and horizontal segregation with differences between female and male subject and faculty choices (Wilson, 2005, p.235). The possibility of gender bias of male senior academics and administrators who make recommendations for pay increases is suggested as a further cause of pay gaps in Okpara, Squillace & Erundu (2005, p.185). The fact that more females than males are employed on part-time contracts with fewer opportunities for promotion with 'significant amounts of unpaid overtime' contributes to the pay gap problem (Lovell & Miller, 2008, p.1). Several literature sources explain the effect of subject choice on pay. For example, males in subject areas such as engineering and the sciences receive higher average salaries than females in their subject areas of humanities, language studies, health and community studies and nursing

(Ward & Sloane, 2000; CPPM, 2007; ECU, 2008; Faggian & Giusta, 2008; Hampton, 2008; UCU, 2009).

Although progression through the pay scales is automatic with annual increments to a maximum point and the fact that these scales apply equally to female and male academics, differences in pay arise from other causes than simply the preponderance of males in senior positions. For example, females are commonly placed at the bottom of the salary scale on appointment and are reluctant to question their starting salary. Loss of salary increments because of career breaks for family responsibilities is more often experienced by females than males (AUT, 2004) and, according to Fletcher (2007, vol.26, p.276) females are more likely to question the need to push themselves for promotion, posing the question: 'is it really worth that extra money?'

Other causes of lower pay of females include: 'women working below their potential and below their qualification level' (SFC, 2006, p.34) and their preference to work flexible hours, most often for reasons of family care, making a trade-off between pay they are qualified to earn and other life choices. The Association of University Teachers (AUT, 2002) claimed that performance related pay (PRP) is 'divisive, demoralizing and discriminatory' and benefits those already highly paid. Furthermore, PRP 'would increase inequality and discrimination against women in HE' and that 'male academic and research staff are far more likely than women to be on discretionary salary points' (*ibid.*, p. 5).

Research into pay and job satisfaction in five Scottish universities by Ward & Sloane (2000, p.294) shows that 'men are more concerned about the pecuniary aspects of the job than women' suggesting that men are more likely to challenge their level of pay and aim for promotion than women. From a historical perspective, female expectations may be affected by their traditional role as homemakers. In work their lower pay is explained

from 'the effects of discrimination and occupational segregation', a scarcity of female role models, fewer opportunities for promotion than men and more females than males in part time contracts (*ibid.*, p.277). Hampton (2008, p.2) affirms that 'men readily put themselves forward for promotion, women might not do so until they are confident that they already have every qualification and criterion required.'

3.21 Summary

Explanations for gendered pay gaps in universities are so multi-faceted that pay gap resolution is inherently difficult. In spite of the legal requirements of public bodies, including universities, to address equal pay and gender pay gaps under Gender Equality Duty and the 2004 Framework Agreement, pay gaps in favour of men persist. In universities where males outnumber females in senior positions, the pay gap measured from the total pay bill, mirrors the under-representation of females in senior positions (UCU 2007). It therefore follows that improvements towards pay gap equality will occur when equality is attained in the proportions of males and females in senior positions (Winchester, Lorenzo & Chesterman, 2006; Fletcher, 2007) and when females gain equal representation on policy-making and promotion committees (van den Brink, 2006).

The pay gap problem is also exacerbated in universities where a preponderance of older senior male academics sit at the top of their salary scales thus skewing pay gaps in favour men – a problem which will be eased as they retire and vacancies are filled with female academics on a more equal basis with males. An optimistic view in Hampton (2008, Issue 23, p.3) suggests that the prospects for women have never been better and if females at every academic level increase their visibility in leadership roles then 'the gender pay gap will take care of itself.' The trend is towards improvement as increasing numbers of females are outperforming males in higher education and are being promoted to

senior lecturerships, readerships and professorships (see para. 2.18 above).

3.22 Job satisfaction/dissatisfaction

Job satisfaction or dissatisfaction is associated with many organizational, psychological factors and conditions in work which, according to Iacocca, Schumacher & Li (1995, p.1), are categorized as intrinsic or extrinsic. Intrinsic factors refer to personal achievement leading to feelings of 'psychological growth' which involves responsibility and the satisfaction in the work itself. Extrinsic factors relate to status, salary, overall work conditions and depend on organizational policy.

Sharma and Jyoti (2009) also associate job satisfaction with intrinsic, extrinsic and demographic factors in which intrinsic factors are related to teaching activities involving the daily interaction with students which can lead to 'attrition or to satisfaction.' Extrinsic factors are associated with work environment, pay, perceived support from administrators and the availability of resources (*ibid.*, pp.52-3). Demographic factors include age, marital status, gender and level of education. Other factors which affect job satisfaction intrinsically include the motivation gained from meaningful work activities, opportunities for further study and training, and societal and professional recognition. Extrinsic factors such as pay, relationships with colleagues, and working conditions were found to be less significant, but job characteristics and promotion as intrinsic elements accounted for 'maximum variation in job satisfaction' (*ibid.*, p.54)

The results of a survey by Sharma *et al* found that most male and female lecturers experience job satisfaction, professors enjoying higher levels of job satisfaction than lecturers and readers, readers being less satisfied than lecturers. Middle-aged academics were found to suffer a decline in job satisfaction and married academics were found to feel more satisfied

with their jobs than their unmarried counterparts (*ibid.*, p.62). Job dissatisfaction through gender bias in promotion processes is perceived as particularly problematic for female academics in traditionally male-dominated organizations. For example, the importance given to research and publications at the expense of teaching and administration, the latter being more difficult to assess, is a subject of tension particularly in terms of the greater recognition given to the former (Doherty & Manfredi, 2006; Drennan & Beck, 2000; Thanacoody, Bartram, Barker & Jacobs, 2006)

Job dissatisfaction among female academics in predominately male-dominated cultures, according to Kloot (2004, p.476-77, 482), relates to perceptions of gender inequity in masculine-oriented management, institutional discrimination and the devaluation of women's work even to the point of hostility which can lead to resignation. A further cause of job dissatisfaction refers to 'violations of expectations' and 'psychological contracts' in which interpretations of explicit or implicit promises made during the hiring process are perceived to be modified or broken over time (Goltz, 2005, p.51; Kloot, 2004, p.274). Female academics whose promotion prospects are diminished and delayed through their necessity for career breaks or maternity leave after which they can be 'relegated to the sidelines', is another feature of job dissatisfaction in several literature sources (Thomas, Bierema, & Landau, 2004; Noble & Moore, 2006).

According to Granleese & Sayer (2006, p.502) sex discrimination due to 'gendered ageism' is experienced more frequently by women than men and is a cause of job dissatisfaction among women through perceived barriers to their promotion and 'negative attitudes towards their age'. Physically 'attractive people' who experience enhanced career success and improved earnings is a cause of job dissatisfaction with women who were more likely to be judged on their attractiveness than men, particularly in a promotion process dominated by men.

3.23 Mentoring in relation to job satisfaction

In academia mentoring is considered an important ingredient in career progression as well as job satisfaction. Mentoring is described in Thanacoody, Bartram, Barker & Jacobs (2006, p.541) as a 'developmental relationship' in which lecturers are supported as protégés of their senior colleagues. Informal mentoring can also take place between colleagues of similar grades with differing lengths of experience. Gibson (Spring 2004, p.174) explains mentoring as a means of enhancing the career success of women, but noted that 'there is neither a consistent definition of mentoring nor a common description of mentoring roles'. Van den Brink, Brouns & Waslander (2006, p.531) suggest that mentoring systems are helpful in 'supporting and preparing women for a next career step'.

As discussed in chapter 2, para, 2.8, females encounter more difficulties than men because of limited numbers of female mentors (Fielden & Hunt, 2006). This was found to be exacerbated through feelings of female mentors who consider themselves to be lacking in 'knowledge, time and confidence' (Thanacoody *et al.*, (2006, pp.541,548). From research into the mentoring activities of senior female academics Mavin (2006, p.73) suggested that they should do more to help subordinate women and referred to female managers who have become 'honorary men' as a small minority group in a male dominated workplace. Comparing female and male professorial appointments, Mavin also suggested that males benefit through the influences of 'social capital in male networks and the academic sociality of men', whereas females attribute their lack of advancement to professor grade to the 'limited visibility of women' and scarcity of experienced mentors in senior positions (*ibid.*, p.526).

Although the findings above suggest that females will and are expected to support both their colleagues and subordinate women there is evidence to suggest that women as 'natural allies' can be problematic. For example, as argued in Bryans and Mavin (2003), women in senior

positions, as a minority in a peer group of men, are expected to 'fit in'. Because of their behaviours and style in becoming congruent to the group of males they can experience isolation from other women in acting like men and neglecting to represent the interests of subordinate women (McTavish & Miller, 2006). It is also argued that a minority of women in senior positions in extreme cases can be 'more combative and ruthless than their male counterparts' lacking in empathy and denying discrimination against women. This is the so-called 'Queen Bee' syndrome which exhibits female misogyny in that no attempts are made to mentor female subordinates (Gini, 2001, cited in McTavish & Miller, 2006, pp.76-78).

Clearly, the mentoring processes in academia are beneficial to mentees in improving their job satisfaction, career progression and work performance and to the university itself. De Vries, Webb & Eveline (2006), for example suggest that long-term mentoring for the academic development of males and females can lead to 'organizational change intervention' through improved understanding of gendering processes (*ibid.*, p.1)

3.24 Work-Life Balance as a function of job satisfaction

The term work-life balance refers to a reasonable balance between paid work and home and leisure life and is judged an important factor in perceptions of job satisfaction. The preferred level of work-life balance is an individual choice. Some academics may choose a low level in satisfying their achievements in work and career ambitions; they are described as 'career central' (see para. 3.25 below). Others require a higher level of work-life balance in order to balance their private lives with work. This often involves family caring responsibilities which can pose greater problems for women than for men, females taking a greater share than males (Corby & Stanworth, 2009; CPPM, 2007).

Work-life balance is variable over time and is a personal state of mind. For example, it may vary from one day to the next, or differ when single and when married or with or without family commitments, or starting a new career or nearing retirement (Bird, 2003). In academia levels of work-life balance are often determined by varying levels of workload such that work-life balance is impossible during periods of intense activity and possible at times of 'normal' working or during university vacations.

During the 1980s the introduction of more flexible work patterns, although welcomed by employees, was perceived by some employers as a contradiction to efficiency. They viewed married male managers as an asset, whereas married females were considered a liability because of the possibility that they may take career breaks for family reasons (Davidson & Cooper, 1992, p.133). However, the work involvement of the majority of female managers who were unmarried or married and childless was often considered 'equal to or higher than that of men' but their career aspirations were lower (Parasuraman & Greenhaus, (1993, Vol.4, pp.189,190).

During the 1990s the concept of work-life balance 'has become a key issue for economic policy makers, employers and social researchers' (Woodward, (2007, p.7). For example, since 1997 certain rights in relation to the promotion of work-life balance and family care included: maternity rights, paternity leave, adoptive leave, parents' and carers' right to request flexible working and time off for dependants in an emergency (Hogarth & Bosworth, 2009, p.1).

The willingness of senior managers to be sympathetic to the needs of academics who prefer reasonable levels of work-life balance because of family responsibilities or in their pursuit of leisure activities, is strongly associated with job satisfaction. Conversely, job dissatisfaction can be experienced by academics, predominately female, on short-term

contracts who are commonly employed to take a disproportionate share of teaching at the expense of their research, the latter being given greater recognition for promotion (Ward & Sloane, Aug. 2000; Thomas, Bierema & Landau, 2004; Thomas & Davies, 2002). In this respect female academics who require career breaks and juggle family life with long hours of work are disadvantaged in comparison to males in terms of their research activity and 'in developing collaborative research projects and in building career-related information networks' (Bird, 2010, p.8).

The preference of academics for flexible working arrangements enabling work-life balance, although seen to enhance job satisfaction, can be construed as showing less dedication to work and reluctance to seek promotion (Shaw & Cassell, 2007, vol.22). Academics who see work-life balance as unimportant in accepting long working hours are often the preferred candidates for promotion which can be disadvantageous to female academics who are commonly more involved in the responsibilities of family care than men. A preference for work-life balance can therefore lead to reticence in applying for promotion because of concerns over the long hours of work required in senior positions, the long-hours culture being more common in Britain than in other European countries (Woodward, 2007).

Woodward found that women without dependent children were more likely to be able to redefine boundaries to favour work in a long-hours culture, being more relaxed about differentiating between work and non-work and having a mindset of being 'at leisure at work or at home' (*ibid.*, p.13). Women with child care responsibilities are often concerned over the unfavourable reactions of some senior staff when returning from maternity leave particularly in cases of overloading and suggestions of being unable to cope are combined with suggestions to consider part-time work (Grandelease & Sayer, 2006; Shaw & Cassell, 2007).

In the promotion and practice of 'genuine work-life balance in a diverse workforce' as a means to attract and retain staff in the post-feminist and Equal Employment Opportunity (EEO) era, Noble and Moore, (2006, Vol.21, p. 599), referring to the empirical studies of Heywood (2005) and Probert (2005), are worth quoting:

... [of] women who rise to the top few remain and many more who aspire to leadership positions find it impossible to get there, while others having made it are leaving in disgust at the difficulty of combining work and family life and the unforgiving and relentless battle against the male stronghold of traditional organizational cultures and the continued dominance of the male leadership stereotype.

The need for balance in the lives of women as well as the need for policies which promote such as flexitime, job sharing and family friendliness is argued in Thomas, Bierema & Landau (2004). They stress the need to construct 'boundaries between their work and family lives.' The fact that women are much more likely to have career interruptions than men means that their careers cannot be aligned with a 'one size fits all' attitude, their career paths being liable to be unplanned and changed towards part-time work. It is argued that women's career development is not simply a women's issue, it is a social issue (*ibid.*, p.64).

According to Doherty and Manfredi (2006) the majority of male academics consider job sharing at senior levels to be undesirable and recommend that senior posts should be full-time appointments. However, the opposite view is taken by some female academics who considered that 'more part-time working could be made available at senior levels' and that greater flexibility in the organisational culture of universities is needed to embrace the notion of job sharing. However, job sharing can be thought of as 'not career-oriented' and participants 'end up doing full-time work for part-time pay' (Freeman, 2009, p.67).

In practice, work-life balance, however well-intentioned in the policies of universities in promoting it for their staff, is often made impracticable in situations of high levels of workload where academics find it impossible to 'just walk away' and where 'lunch breaks are a rarity' with women arriving early and leaving late in order to cope (Woodward, 2007, pp. 9-10). During an economic recession in which universities are required to find 'savings' this is commonly achieved through reductions in staffing levels and work-life balance can increasingly become a secondary consideration.

3.25 Career centrality in relation to promotion and job satisfaction

The relationship between work-life balance and career centrality is problematic in terms of promotion and pay and between female and male academics. Career centrality is described as 'the extent to which an individual sees involvement in a career as central to their adult life' and, according to White (1995, pp. 4,7), 'the majority of successful women display high career centrality'. It is concerned with academic freedom and intellectual autonomy and is seen as an 'important quality of any successful professionals' (Ismail *et al.*, 2005, p.126). Career centrality, according to Dowd & Kaplan (2005, Vol.58, p.2), is described in terms of those who are either 'boundaryless' or 'boundaried.' The former refers to workaholics who appear to have no boundaries or inhibitions about their work capacity; they have an attitude of 'publish or perish'. Boundaried academics, on the other hand, feel over-worked and over-extended and are concerned about work-life balance (*ibid.*, p.4). Boundaried careers are sometimes classified as 'local' and 'employer-dependent', meaning those who primarily identify with their university. Boundaryless careers, on the other hand, are 'cosmopolitan' and independent, meaning those whose careers are primarily concerned with their academic discipline and who build relationships outside of their institution with no inhibitions or constraints about their mobility in

seeking promotion (Gouldner, 1957 in Dowd & Kaplan, 2005; DeFillippi & Arthur, 1994).

A construct of career achievement and motivation by Farmer (1985) in White (1995, p.7) characterises high achievers with three interdependent components: (i) those with 'high mastery motivation' - those who seek opportunities to test their competence in setting challenging goals and persevere in the face of difficulties; (ii) 'aspirational' – those who seek their highest level or occupation; and (iii) those with 'career centrality' in which career is central to their lives and their 'self concept.'

Career centrality applies to both female and male academics who have clear career objectives in which success means achievement and promotion; they may look upon those who prefer work-life balance as dropping out. Other career centralists, who are not necessarily interested in promotion, are absorbed in the outcomes of their research and prefer to network with others of like mind.

In Hogarth and Bosworth (Jan. 2009, p.2) the problem of career centrality for female academics is analysed in terms of their greater responsibilities at home:

'the long working hours among men in the child-rearing years have disadvantaged women in two ways: they have made it less possible for men to share in childcare and home building, leaving the onus upon women to carry these responsibilities; they have made it less possible for women to compete for more senior jobs if a major criterion for promotion is commitment to the job, as demonstrated by long hours at work'.

3.26 Summary

Although the majority of literature sources of 1980s and 1990s vintage above provide evidence of a range of gender inequalities and emphasise the effects of male domination and the persistence of male norms in university life which inhibit the aspirations of female academics in terms of their the promotion and pay, there is light on the horizon which is shown in more recent publications from around 2005. For example,

females have been outperforming males at school with 4+ higher from the mid-1980s (Forde, Kane, Condie, McPhee, & Head, March, 2006; Tinklin, February 2000), at honours degree level from 2006 and at doctorate level from 2009 (HESA, 1994-95 to 2010-11, HESA, Press Release 181) resulting in increasing numbers of women entering university teaching where they now outnumber men in some faculties (see chapter 2, paras. 2.13, 2.15 and 2.18). The result of this is a gradual closing of the gender equality gap with a growing trend towards equality for female academics in senior positions (EUI, 2010, p.1-4; HESA 30th March 2009). In addition, some closing of the pay gaps between female and male academics is most evident in the 'new' post-1992 universities (see para. 3.21 above).

The treatment of female academics as newcomers and 'strangers in the academy' (Ismail *et al.*, 2005; Fletcher, 2007) accompanied by systemic failures to recognise female academics as equals in the promotion process through gender blindness, pay inequality and fewer opportunities for research in comparison to male academics are evident in many literature sources (Bird,2010; Davidson & Cooper, 1992; Mavin, Bryans, & Waring, 2004). Masculine orientated management cultures which show lack of transparency in promotion processes are deemed to account for the under-representation of women in decision-making committees in Doherty & Manfredi (2006). The 'pipeline effect' referred to gender imbalances in senior appointments through the blocking of senior vacancies by older male academics and the lack of suitably qualified female applicants (Marschke, 2004, p.3). In addition, the trivialisation of problems faced by women in relation to family-friendliness and work-life balance (Woodward, (2007) and the double jeopardy of age and gender are shown to be disadvantageous to women in career terms in Grandleese and Sayer (2006).

Many of the above concerns of female academics in Scotland and the UK as a whole appear in literature sources of European, American and

Australasian origin and have provided a range of themes and research questions for investigation through the process of semi-structured interviews (chapter 5) with female and male academic staff as discussed in chapter 6 from which conclusions are drawn in chapter 7.

Recent literature sources show signs of optimism in suggesting that gender is fading as an issue and that the representation of female academics in senior positions is increasing but mainly in subject areas preferred by women (Richardson, April 2009; Hampton (Aug.2008); Sipe, Johnson and Fisher (July 2009). It is not unreasonable to predict that gender equality will be achieved, but the time period will vary between one university and another (Olgiati & Shapiro, 2002). Although gender equity and equality may be achieved it is unlikely to be achieved at a uniform rate in all faculties. A trend towards equity and equality is dependent on females and males sharing similar attitudes and responsibilities in all aspects of work and domestic life.

CHAPTER FOUR

RESEARCH METHODS

4.1 Introduction

This chapter focuses on the sequence of methods used in the research project as a whole and encompasses the philosophy embodied in this research with the techniques used to gain an understanding of how the research was undertaken – the methodology.

The research process commenced with the ‘proposal’ which comprised of a short outline of the aim and objectives of the research with some initial research questions and a statement about its contribution to new knowledge. This was followed by a short abstract which was revised following the findings of later investigations through literature reviews and field work. The first search of literature sources was built on previous research into educational and intellectual democracy and expanded to provide a broad overview of origins of gender inequity, inequality, discrimination and gender relationships in the workplace in general and in Scottish education in particular.

An outcome of this historical literature review (chapter 2) was the creation of additional research questions and the identification of legacies of gender inequity and inequality which continue to affect the career opportunities and pay of female academics today. This was followed by further searches of literature sources (chapter 3) to gain acceptable knowledge of aspects of recent issues and concerns of academics in Scottish and universities worldwide. The outcomes of this literature review included the creation of further research questions associated with the research objectives (see para 1.1), the identification of themes for further investigation and the creation of new interview questions. The latter were used in semi-structured interviews with a representative sample of female and male lecturers and senior academics in two Scottish universities, one a pre-1992 university and the other a post-1992

university. Their responses to the interview questions were recorded and analysed in chapter 5 (Findings and results of the Field Work) the outcomes of which were discussed in relation to each thematic element in chapter 6 (Discussion of Research Findings). In the final chapter 7 conclusions were drawn from the findings of previous chapters and recommendations were made towards improvements in gender equity and equality with suggestions for future research. The ultimate objective in shedding new light on gender history in relation to gender issues and concerns of present-day academics was to discover whether or not improvements (or worsening) in gender equity and equality in the career progression and pay of university academics in Scotland have occurred since mid-nineteenth century.

4.2 Philosophical approach

The underlying philosophical approach in this research may be described in terms of a series of research questions (see para 1.1) to which no definite answers can be known to be true (Russell, 1912). **Ontology**, according to Fleetwood in Carlsson (2006, p.198), 'is non-optional in all research'. The metaphysical approach ontologically in this research involved an investigation into the nature of reality in relation to changes in gender equity and equality in Scottish universities from 1850.

Epistemologically, the search for justified belief in gender inequity and inequality was investigated from literature sources pertaining to gender history, gender legislation and recent researches of the authors of Scottish, UK and worldwide origin (see chapters 2 and 3) plus the acquisition of knowledge of the experiences of practising academics in their working lives through semi-structured interviews (see chapter 5, The Field Work). The research process was therefore qualitative and interpretivist in aiming to reach an understanding of the subjective meanings of the social actions of academics in relation to gender equity and equality in Scottish universities (Bryman & Bell, 2003).

In seeking to understand differences and commonalities in the experiences of female and male university teachers and researchers in relation to gender equity and equality a position of **critical realism** underpins what is necessarily qualitative and interpretivist methodology in this description-driven and explanatory-driven research in which generalisability is impossible in the constantly changing social world of academia.

According to Benton and Craib (2001) critical realism has four key features: (i) truth claims are not assessed as true or false; (ii) acceptance that knowledge is generated through a range of means representing reality; (iii) acceptance that appearances do not necessarily represent reality (Outhwaite, 1987); (iv) a requirement to uncover misleading appearances through and insistence of the existence of an independent reality in which currently held beliefs are subject to future correction

The position of critical realism was chosen in preference to that of **social constructionism** in which reality is viewed as socially constructed and 'concerned with the nature of knowledge and how it is created, [being] unconcerned with ontological issues' (Andrews, 2012, p.1). Looking at ways in which social phenomena are created and defined by society was deemed less appropriate than that of critical realism in researching the individual experiences of academics using a reflexive approach in which reality is represented in a variety of ways focusing on ontological concerns. **Direct realism**, equally inappropriate in this qualitative research, is preoccupied with 'prediction and quantitative measurement' and 'one size fits all' ontology (Fleetwood, n.d. p.1). It is directly related to positivism and may be defined in terms of that which is experienced through our senses and believed to provide an accurate portrayal of what we see – 'what you see is what you get' (Saunders, Lewis and Thornhill, 2009, p.114).

In this research **critical realism** may be defined as a position adopted in this qualitative and interpretive investigation which lies between social constructionism and direct realism. Critical realism therefore 'involves a switch from epistemology to ontology' (Danermark, Ekstrom, Jacobsen & Karlsson, 2002) in seeking to understand the nature of reality in respect of the experiences of academics in relation to gender equity and equality in terms of their opportunities for promotion and equal pay in this research.

It involves the search for an understanding of the nature of reality in the social actions of academics which, in this research, is gleaned from the analysis and sequencing of the experiential findings in both literature sources and from the responses of interviewees with the aim of eliciting differences and commonalities in their experiences related to career progression and pay. However, it is noted that Bhaskar (1986) arguing that the researcher in disturbing the field being investigated may create dissonance through the introduction of new insights about the real nature of things which challenge existing value systems in terms of inequity.

The rationale for the adoption of a critical realist perspective in this research 'as an alternative to positivism' (Carlsson, 2006, p.192) and '... a common-sense ontology' (Outhwaite, 1987, p.19) can be exemplified in differences and commonalities between the responses of academics (female and male, lecturer and senior academic) to interview questions with discussions concerning such as the sensations prompted through their experiences in relation to each thematic element concerned with gender equity and equality and the metaphorical glass ceiling in their workplace (see para. 3.5, fig.5). For example, in research and interview questions about interview processes the experiences of one interviewee may express dissatisfaction and another complete satisfaction, the first having been unsuccessful in gaining promotion and perhaps critical of the process, the other having been successful and believing in the fairness

and equity of it. Another relevant example was evident in relation to questions about the glass ceiling in which some female academics in senior positions, having experienced and overcome discrimination, marginalisation and gender blindness early in their careers, believed in the reality of the glass ceiling in its effects on career progression, whereas some more recently appointed female lectures, having had no experiences of discrimination or marginalization and of the glass ceiling, believed it to be non-existent and consigned to history (see para. 5.10).

Critical analysis of literature sources and the responses of academics to interview question also takes account of a wide range of intrinsic factors (personal, emotional, experiential) and extrinsic factors (colleagues, students, bureaucracy) which inevitably affect the outcomes of research (see para. 7.2 below). A position of critical realism therefore leads to a realization that finite answers to research questions and generalizations are impossible. What is gained in the context of this research is an understanding of the experiences in the lives and works of academics from a gender perspective.

In addition, comparisons between a critical analysis of literature sources and the responses of academics to interview questions takes account of a wide range of intrinsic factors (personal, emotional, experiential) and extrinsic factors (colleagues, students, bureaucracy) which inevitably requires researcher reflexivity (see para.7.2). A position of critical realism therefore leads to the realization that finite answers, as explained above, are impossible. What is gained in the context of this research through critical realism is an understanding of perceptions and changes in the lives and work experiences of academics from a gender perspective

The choices of research questions, themes and interview questions used in the process of semi-structured interviews inevitably influenced the direction of the research. Account was therefore taken of the beliefs and values which may be affected by social, cultural and past experiences of

the researcher in a wide range of life experiences. Axiological considerations, amplified below, are concerned with the researcher's values in the research process and with research strategy in terms of the researcher's involvement and immersion in the working situations of those being investigated (see para. 4.6). In addition, the fundamental experiential differences between being a female and a male inevitably affect opinions and perceptions in relation to differences in work choices and subject choices and differences in treatment at home, school and in the workplace as shown in paras. 2.7, 2.14, 3.5 and 3.13.

Keeping in mind the above influences and biases, the philosophical approach adopted in this research involves critically realist investigations in an interpretivist rather than a positivist approach in which the researcher was both immersed in and empathised with the world of academia through past experiences in industry and in teaching and educational management and policy.

4.3 Methods of Enquiry and Data Collection

The methods of enquiry used in this research consist of five elements:

- (i) the review of literature sources of qualitative data and some quantitative data, firstly to investigate the historiography of gender equity and equality (chapter 2), and secondly, to ascertain and interpret current experiences, attitudes, key issues and concerns of academics (chapter 3) from which:
- (ii) the creation and formulation of themes, the interaction between them providing an holistic view of gender equity and equality;
- (iii) the creation of research and interview questions gleaned from the themes and literature sources in chapters 1 and 2 (see para.4.9 below);
- (iv) semi-structured interviews with female and male academics from lecturer to professor levels in which interview questions within each thematic element identified from (i) above were used, and
- (v) knowledge acquisition through previous educational postgraduate research and participation in seven conferences and lectures (receiving

and presenting) with formal and informal discussions and debates with academics and research students of the home university and other universities in the UK and abroad over the four-year period of this research.

Quantitative data obtained from primary sources was used and made known to interviewees to support interview questions relating to the existence of gender inequality in for example: the extent of gender pay gaps in each university, female/male access to higher education, female/male academic achievements and differences in the gender distribution of senior positions. In other areas of enquiry, in which some academics were less aware than others, references to findings in literature sources were explained briefly to encourage discussion on themes such as: gender blindness, the glass ceiling, promotion processes, criteria for promotion and career centrality.

Each method of enquiry was designed and used to investigate and to add new knowledge of influences contained within each thematic element which affect gender equity and equality in higher education in Scotland comparing UK, European, American, Canadian and Australasian sources. In order to meet the principal objectives of the research the findings of the literature reviews combined with those of the semi-structured interviews with academics in at least two faculties in each of two Scottish universities formed a predominant part of enquiry in this research.

4.4 Data Gathering

Data was gathered firstly through the development of the **literature reviews** of chapters 2 and 3 with the aim of obtaining a comprehensive picture of changes in gender equity and equality in higher education from mid-nineteenth century to the present day. The literature sources in chapter 2 embraced those concerned with the history of gender in the workplace and in Scottish education. The literature sources of chapter 3 which deal with gender issues and concerns of academics in universities

worldwide were investigated comparing sources of the 1980s with those of the 2000s to ascertain changes in attitudes towards gender equity and equality in higher education.

The initial perusal of literature sources pertaining to the history of gender relationships was chiefly concerned with searches for origins of gender inequities and inequalities religiously, socially, in the workplace and in education and prompted the development of initial research questions. The results of this elicited several new ideas in the form of themes from which additional research questions were devised. The review process was cumulative but not linearly continuous. It involved re-reading, back-tracking and occasionally following blind alleys through curiosity and searches for new discoveries of new literature sources branching out from Scottish sources to those of the UK and abroad involving a more focused and in-depth study during the whole period of the research project.

The literature searches for primary and secondary data involved in-depth searches of books and journal articles from university libraries, the National Library of Scotland and the National Archives of Scotland. Extensive use was made of internet sources (Athens, ABI/INFORM Global (aka Proquest), Google Scholar), the media in the form of newspaper articles and television broadcasts (Open University) and university alumni journals. In addition, data was collected from official UK government and government agency sources including: Acts of Parliament, the Scottish Executive, Scottish Government, the Equal Opportunities Commission (EOC), the Equality and Human Rights Commission (EHRC), the Higher Educational Statistics Agency (HESA) and the Scottish Funding Council (SFC). From these searches a bibliography of over 400 sources was condensed into the references which were checked against the text of the thesis.

The second method of data gathering was carried out through semi-structured interviews conducted in the private offices of interviewees or in interview rooms where privacy was assured. Interviewees were contacted personally after obtaining permission from the Dean of Faculty or a professor in each university. They were provided with a letter of introduction from the researcher's Faculty Director of Research Degrees & Faculty Research Ethics Gatekeeper confirming the identity of the researcher and that *bona fide* research was being undertaken (this letter was also made available to each interviewee). Prospective interviewees were contacted directly by telephone and/or e-mail communication to seek their permission to conduct an interview and to arrange the place, date and time for the interview.

After obtaining permission from the appropriate deans of faculty twenty-four academics were selected randomly at each grade in two universities - professor, senior lecturer/reader and lecturer. An additional interview, external to the universities, was arranged with a union employee whose expertise lay in the pay of academics and who provided additional information about causes of pay gaps.

The breakdown of interviewees by grade and gender is shown in table 2 below.

Table 2 Breakdown of Interviewees by Grade and Gender

University	Lecturer		Senior Lecturer/ Reader		Professor		Total	
	Fe	M	Fe	M	Fe	M	Fe	M
Pre-1992	2	2	1	3	1	2	4	7
Post-1992	6	1	0	1	3	2	9	4
Total	8	3	1	4	4	4	13	11

Fe = female ; M = male

Plus one external male interviewee from the University College Union

The semi-structured interviews elicited the perceptions, opinions and ideas of female and male academics of the present state of gender equity

and equality in relation to each of themes identified from the literature reviews (see appendix 1). This brought new dimensions to a range of issues and concerns of academics which were compared to the findings of the literature reviews in this qualitative and interpretive investigation. In-depth questioning which involved discussion between the interviewer as an 'observer as participant' (Saunders, Lewis & Thornhill, 2009, p.293, Bryman & Bell, 2003, p.178) and the interviewees was an essential part of the process for the later analysis of the qualitative data obtained (see chapter 5).

Each interview lasted between sixty and ninety minutes, the first few minutes being spent in outlining the aims and objectives contained in an information sheet (see appendix 3) previously supplied to each interviewee with an explanation of how the data will be used. An agreement to participate was sought from each interviewee by means of a 'consent form' (appendix 4), requesting his or her agreement for voluntary participation, permission to use audio recording, the use of anonymised quotes in publication and the use of limited demographic details, emphasising absolute anonymity throughout in meeting the home university's ethical standards. This procedure was followed by brief questions about the background of the interviewee. The questions posed during the interviews were designed to encourage open discussion rather than brief answers to questions.

The digitally recorded data obtained from interviewees was stored in the personal computer of the researcher at home in which files could be accessed only by the researcher by means of a password, no access was possible by any other party. All recorded data was deleted after its transcription in which interviewees were unidentifiable and described in the text of this thesis only in terms of their gender, title of post, years of teaching experience in schools, colleges and in higher education (pre- or post-1992 university). There was no possibility of any harm (social,

psychological, professional, economic) to interviewees who participated in the semi-structured interviewing process in which there were no witnesses.

The interviews involved both extrinsic and intrinsic aspects of the work of academics. Extrinsicly, their opinions were sought in relation to changes in workplace policies and practices in their experience with regard to such as: organisational change, career structure, administrative work, committee work, the processes involved in the creation of new courses and degrees, the processes involved in quality assurance mechanisms, etc. This provided insights of their attitudes relating to changes in the policies of the institution in which they are employed relating (positively or negatively) to their opportunities for promotion and equal pay. Intrinsicly, questions relating to their teaching, research, job satisfaction/dissatisfaction, career choice, work preferences, criteria for promotion, relationships with colleagues and changes, if any, they would recommend towards improvements in their working lives.

4.5 Choice of Method

Semi-structured interview methodology using open-ended questions was chosen in preference to a strongly structured one, such as a questionnaire, in which the responses to specific questions would, in their analysis, tend towards an epistemological position of law-like generalizations. Such a positivist approach would not gain from the discussion elements in the semi-structured interview process and would negate many valuable perceptions, experiences, opinions and attitudes of female in comparison to male academics in relation to a range of activities in their everyday working lives.

The use of a questionnaire with no human contact and which depends on direct answers to specific questions the analysis of which, in quantitative and statistical form, would lead to a positivist approach precluding in-

depth understandings of issues and concerns relating to the motivations, emotions and conceptual issues about such as organisational structures, promotion processes, criteria for promotion, leadership preferences, job satisfaction and thematic elements which affect the glass ceiling. Admittedly, the questionnaire has the advantage of accessing many more respondents and is useful in a quantitative analysis in showing convergence and divergence of opinion in statistical form than is the case in the time-consuming processes of semi-structured interviews involving a limited number of interviewees. However, use of the questionnaire cannot provide knowledge of workplace side issues which relate to such as the understanding of differences between academics as social actors, for example, in how they view and interpret their academic environment or their interactions with their colleagues which can lead to changes in their own actions (Saunders, Lewis & Thornhill, 2009, p.115-6).

4.6 Research Strategy

During semi-structured interviews the approach of the researcher as an 'observer as participant' was made possible through many commonalities in the background of the researcher and the interviewees which facilitated a degree of immersion and empathy with the working lives of the interviewees. The previous experience of the researcher in teaching and management during a period of over 30 years in further and higher education enabled open discussion in a free exchange of views which enhanced and led to a close understanding of the issues and concerns of interviewees at each academic level in an academic environment familiar to the researcher.

This approach was preferred to that of a 'complete observer' in which the identity and purpose of the observer would have remained obscure thus limiting the degree of open discussion through a 'stand back' impersonal approach in observing from a distance. It was neither envisaged nor possible that any form of 'covert participant observation' (Mulholland in

Bolton & Houlihan, 2009, p.164) would be used in observing the dynamics of academics' relationships in their university environments. Instead an empathetic approach was adopted with interviewees in the investigation into aspects of their working lives with the aim of obtaining qualitative data for critically realistic narrative analyses as both original and as representative of truth as possible (Lofland in Huberman & Miles, 2002, pp.137-164, 230).

This research was flexible as well as dependent on the willingness of interviewees to allow the researcher to empathize with their activities allowing for the fact that the relationship between the student researcher and the practising academic can involve a division between them. However, in practice the relationships in every interview situation were conducted with mutual respect in an atmosphere of congeniality.

Axiology, being concerned with the values of the researcher in making judgements about the research process, is of importance in the selection of choices made in pursuit of the research objectives (Saunders, Lewis and Thornhill, 2009, pp.116-18). For example, in the choices made from personal experiences axiological skill was essential in the selection of data, the choice of themes and the determination of research and interview questions in order that the research achieves credibility and justified belief.

In this research, which is primarily concerned with gender relationships and equity and equality, the researcher's family background, education and training, experiences in the engineering industry (devoid of females), in several academic and management positions in higher and further education inevitably affected the choice of research topic. The choice was also influenced by previous undergraduate and postgraduate study and research in engineering (hydro-electric power design) and mathematics and, during the last 20+ years, in the arts, history and post-graduate

research into the history of Scottish education related to the early Scottish tradition of educational and intellectual democracy (Dick, Sept. 2006) (see chapter 2, para. 2.11).

During these experiences of the researcher working in mainly male-dominated environments an understanding of gender inequity and inequality was gained through a range of observations at work in the engineering industry, as a member and chair of committees of examination boards, in chairing national committees and sub-committees, interview panels and in a wide range of other cultural experiences including sport, music, clubs etc. Each of these experiences provided first hand evidence of some sex discrimination and marginalization in a variety of forms, some overtly and others covertly anti-female and inevitably led to value laden biases of social phenomena in the thinking of the researcher. However, this provided the motivation for research into gender equity and equality in the area in which the researcher developed greatest interest, that of the myth or reality of Scottish traditional claims for educational and intellectual democracy. A principal objective in this research was therefore to investigate to what extent sex discrimination and inequalities of the past continue to persist in the lives of academics in Scottish universities today.

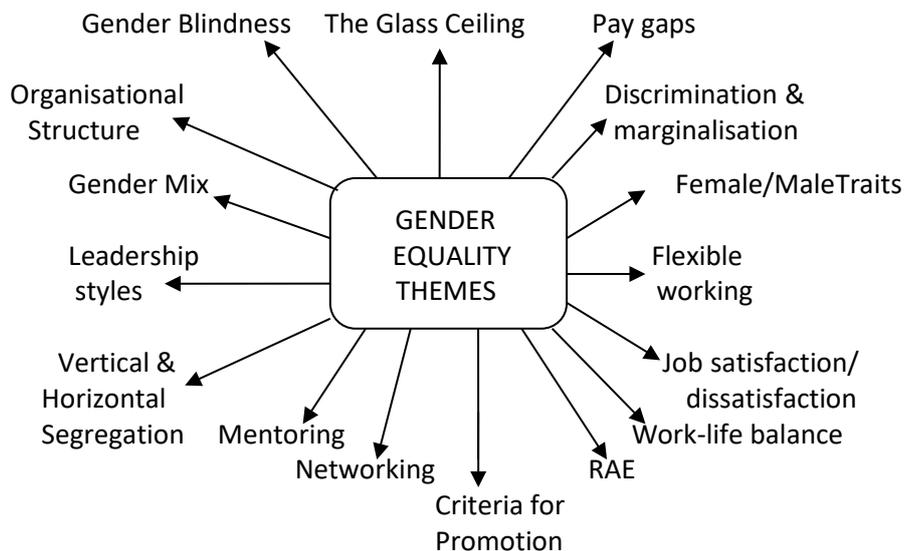
In framing the discussion themes and questions for the semi-structured interviews care was taken, as far as possible, to avoid the imposition of personal judgements and values which could affect the responses of interviewees. The fact that all interviews were conducted with highly educated university lecturers, senior lecturers and professors it seemed reasonable to expect that they would be unlikely to be influenced by any unintended subconscious value judgements of the interviewer. In the process of questioning, discussing and interpreting individual aspects within each theme care was exercised in the avoidance of preconceptions and biases which can lead to errors of judgement and inference (Sadler in

Huberman & Miles, 2002, p.123). In essence, an emotionally neutral stance was aimed at to avoid bias and any suggestion of criticism in the pursuit of enquiries 'in a spirit of ... naturalistic inquiry' (Lofland in Huberman & Miles, 2002, p.137)

4.7 Thematic Discussion Elements

The themes identified from the social and work experiences of the researcher and from the most commonly expressed issues and concerns of academics found in the literature reviews of chapters 2 and 3, as shown in figure 6 below, were used as the basis for the development of questions and discussions in the semi-structured interviews with academics. Frequent references to the organizational structures of universities and their promotion processes, which were noted to be consistently male-dominated with the persistence of male norms in decision- and policy- making, were found to feature in discussions about the metaphorical 'glass ceiling'.

Figure 6 Themes for use in Semi-Structured interviews



The themes chosen from literature sources involved extrinsic and intrinsic features and influences in the working lives of academics. For example, extrinsic features included organizational structures, the gender

composition of major boards and committees, promotion processes, criteria for promotion, pay gaps, leadership style preferences and the Research Assessment Exercise (RAE). Intrinsic features were concerned with such as teaching and research work, mentoring, gender blindness, networking, work-life balance, flexible work conditions and discrimination and marginalization.

4.8 Research and Interview Questions

The content of the themes above formed much of the basis of research and interview questions. Initially, research questions were prompted from both the industrial experience and experiences as a practitioner in the system of Scottish education of the researcher. In addition, questions arose from the author's previous research into the myth or reality of traditional claims for educational and intellectual democracy in the Scottish system of education (see chapter 2, para. 2.11) as in Anderson (1983); Davie (1961 & 1986); Devine (1999); Dick (2006); Paterson (2003); Scotland (1969). The search for answers to initial research questions leading in turn to an initial selection and interrogation of relevant literature sources from which new and more probing research questions emerged, leading, in turn, to further literature searches. This circular process was instrumental in refining and focusing the research process to achieve the research objectives with accompanying research questions as shown in chapter 1, para.1.1.

The investigation into the ontology and epistemology of gender equity and equality raised questions relating to the history of gender relations at work and to the nature and extent of the existence of inequities and inequalities socially, religiously, legally in the workplace and in education. This historical grounding led to the identification of, and investigation into legacies of inequity and inequality which have percolated, to varying extents and in changed and diminished form, in present day Scottish higher education. A prime example included the investigation into gender

vertical segregation with particular reference to male domination and male norms in organizational structures and procedures in which females are in a minority in policy- and decision-making. Other examples included: the persistence of horizontal segregation and assumptions that females are more suited to pastoral and administrative work than males which affects their opportunities for research and publication work. Initial research questions therefore dealt with some historical aspects of sex discrimination in the workplace and in Scottish education through interview questions.

The eventual recognition by reformers and educators of 'vocational' education as equally valued as 'academic' education, raised questions in relation to the transformation from elite to mass higher education today. The effects of the latter on educational opportunities and access to higher education through the provision of increased subject choices from an ever-widening range of vocational degree courses led to the creation of research questions relating to educational opportunities for females and males taking into account differences in their subject choices (horizontal segregation), their disproportional rankings (vertical segregation) and differences in pay, each from legacies of the history of sex discrimination.

Some quantitative data obtained from primary sources such as the Higher Education Statistics Agency and the Scottish Funding Council, relating to female/male differences in access and academic performance at school and university prompted research questions about the relationship between female/male performance in education and differences in the promotion and pay of female in comparison to male academics:

Research questions arising from the effects of changes in the organisational structures of pre- and post-1992 universities as they affect the proportions of female to male academic staff in universities relate to

the career opportunities for female compared to male academics and the dearth of female academics represented in policy- and decision-making committees (Everett,1994; Burton, 1997:11 in Todd, et al 2000):

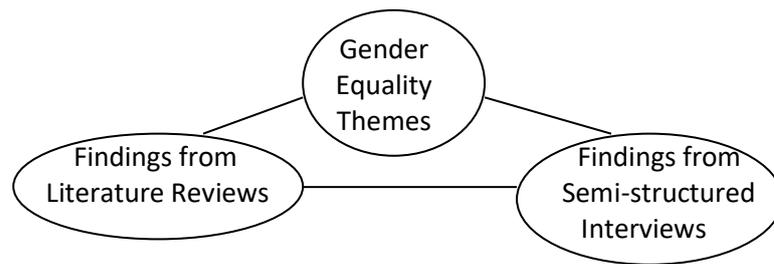
Investigation into the effects of patriarchy and male domination in universities raised research questions about female/male perceptions of gender bias, 'gender blindness', discrimination, marginalization, flexible working, work-life balance, family-friendliness, career breaks, job satisfaction, mentoring and networking, each of which, being investigated in the literature review, led to the generation of more in-depth research questions (see para. 1.1).

4.9 Analysis of qualitative data from Semi-structured interviews

The collection, sifting, codifying and interpretation of qualitative data relating to the perceptions of gender equity and equality between female and male academics, between one academic grade and another and between academics in pre-1992 and post-1992 universities made generalisability impossible. This is explained from differences in their experiences, gender, age, seniority, opportunities for promotion etc. The analysis of the data collected from the searches and interrogations of relevant literature sources and from the word-for-word transcripts of twenty-five interviewees involved codifying firstly, by allocating 240 responses out of the original 900+ responses to the appropriate thematic headings above (see Appendix 1). Secondly, female and male responses were allocated to thematic headings as were thirdly, lecturer and senior staff responses. The triangulations shown in figures 4, 5 and 6 below show the relationships between the chosen themes and three sets of qualitative data. In each coded entity the responses were compared and commented upon for differences or similarities with the aim of arriving at an understanding as near to the realities of their workplace milieu as possible within the limits of the research project.

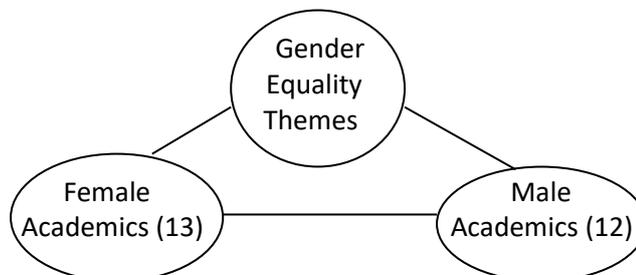
A three-pronged comparison between the most frequently occurring themes of gender equality provided a relationship between the findings from literature sources with the responses of academics obtained from the semi-structured interviews as shown in figure 7 below. This met the objective in ascertaining the extent of similarities and differences between them. For example, discussions with academics relating to the theme 'glass ceiling' indicated some commonalities between the findings in literature sources and the perceptions of senior academics. However, differences between literature sources and the responses of more recently appointed lecturers were considerable (see paras. 5.10, 6.12 and 7.7).

Figure 7 Gender Equality Thematic elements, Literature Sources and Semi-Structured Interviews



A second triangulation dealt with the relationships between themes, and female and male academics (figure 8) to discover commonalities or differences between them.

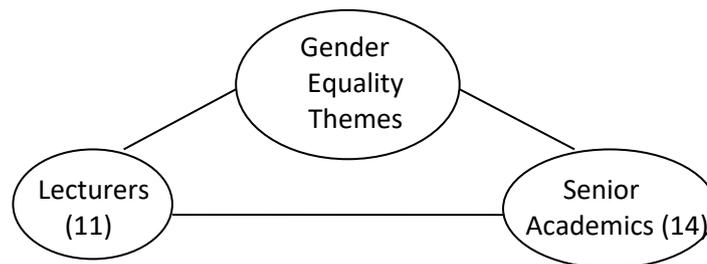
Figure 8 Gender Equality Thematic elements in relation to the responses of Female in comparison to Male Academics



A third process of triangulation involved the comparison between the themes and the perceptions of lecturers and senior academics (figure 9).

This was intended to explore differences in relation to their experiences in seeking promotion, in the case of lecturers, or in having achieved promotion, in the case of senior academics, as well as to seek explanations for pay gaps between female and male academics in favour of the latter:

Figure 9 Gender Equality Thematic elements in relation to the responses of Lecturers in comparison to Senior Academics



The main aims in carrying out semi-structured thematic interviews included exploration, comparison, conceptualisation and categorisation of the perceptions, preferences and opinions of individual members of academic staff in relation to their experiences of their work in academia under each of the themes shown in para. 4.7 above. The semi-structured nature in the interviewing process using open-ended questions was intended to obtain naturally occurring data through a non-directive approach and 'direct access to experience' (Silverman, 2000, pp.19. 32, 37). The latter is explained from a standpoint of mutual understanding of academic experiences and views between the researcher and the interviewee.

4.10 Validity and Reliability

The fact that this research is concerned with the experiences and impressions of academics in relation to gender equity and equality the research method is necessarily qualitative and interpretive. Validation of qualitative data is problematic because of the impossibility of ratifying the responses of academics to open-ended questions against a non-existent standard. Because validation infers measurement which,

although feasible with experimental and quantitative research, it has little bearing on qualitative research (Bryman & Bell, p.286). In this research the reliability of the responses of interviewees is partly dependent on the accuracy and quality of the transcripts of audio recordings and partly in terms of their trustworthiness and authenticity which in turn depends on the credibility, dependability and confirmability of the perceptions and impressions of interviewees in their responses to semi-structured and open-ended questions. The fact that all interviewees were highly-qualified, accredited academics gave credibility and trust in their answers which differed from each other in emphasis and interpretation because of variations in age, gender, family commitments, length of service, seniority and work pressures at the point of interview.

The qualitative data obtained from semi-structured interviews with individual academics whose answers to questions and points of discussion is subjected to 'descriptive validity' (Maxwell in Huberman & Miles, 2002, p.45) for factual accuracy but not to seek generalizations. In this research descriptive validity involved 'quasi-statistics' (ibid, 47) in which simple counts of interviewee responses are made to find the extents of commonality or disagreement between for example, lecturers and senior academics and between females and males.

The findings from interview transcripts were tested for their reliability from different answers to the same question which were analysed with the intention of ascertaining the reality (or as near to reality as possible) of the experiences of academics. For example, the responses to a question posed to a male professor then to a newly appointed female lecturer inevitably differed in terms of their experiences, one having been promoted and the other perhaps seeking promotion and one with no family responsibilities and the other with family responsibilities having had one or more career breaks. The intention, therefore, was not to seek commonality, nor to generalize, but to explain the differing perceptions

of their social worlds and to arrive at conclusions which justify both points of view by simply showing the differences. However, in posing the same question to two female lecturers with family responsibilities the level of similarity in their responses showing some commonality through common experiences provided a measure of reliability.

A feature of the reliability of findings, which is inherently difficult to test, is that of the effect of the imposition of the researcher in the working lives of interviewees whose preconceptions of the interview are inevitably affected by personal experiences and by the subject under discussion. For example, an academic in his or her daily working life may rarely consider matters of gender equity and equality (which was generally the case) and when confronted with this subject may feel impelled to provide responses which are tempered with what they imagine the researcher is looking for and may want to hear. In this respect the search for reality becomes problematic, but through judicious and supplementary questioning accompanied by an understanding attitude this difficulty was largely overcome. During the interview process with highly qualified and experienced academics there was little or no likelihood of answers to questions being influenced by any imagined expectations of the researcher.

4.11 Ethical Principles and Confidentiality

This research, involving one-to-one interviews with academic staff, required strict adherence to ethical issues and confidentiality. Assurances were given to each interviewee of strict confidentiality in that their responses would be anonymised, that digital recordings would be deleted and that only the researcher would have access to the transcripts from audio recordings of interviews. The importance of confidentiality was stressed because of the personal/professional nature of the questions posed to interviewees and the ensuing discussions in which an exchange of open and frank opinions and impressions of the states of gender

equality in several aspects of their daily work and in their relationships with colleagues was discussed.

4.12 Statement of the researcher to the 'Research and Knowledge Transfer Ethics and Governance Committee' of Edinburgh Napier University

Prior to the commencement of the process of semi-structured interviewing the researcher provided answers to a series of questions contained in the home university's 'Business School Research & Knowledge Transfer Ethics and Governance Approval Form'. This related to the research to be undertaken and the proposed semi-structured interviewing process, the aims of the research, methods to be used, data collection, arrangements for privacy of interviewees, data collection tools, validity and reliability, the research subjects, informed consent, other vulnerable individuals, guarantee of anonymity and the dissemination of findings. The answers provided to the 'Research and Knowledge Transfer Ethics and Governance Committee' of Edinburgh Napier University by the researcher are shown in appendix 5.

CHAPTER FIVE

Findings and Results of Field Work

5.1 Interviewee Profiles

1. Female lecturer in a post-1992 university with 3 years part-time teaching and 6 years full-time experience in a post-1992 university. Current work – mainly teaching, programme development and delivery. PhD candidate; interested in promotion

2. Female lecturer, 11 years university teaching and research in post-1992 university. Current work – some teaching, very research active, post-graduate supervision, interested in promotion.

3. Male reader in a post-1992 university with wide educational experiences in a secondary school, further education and in two post-1992 universities in England and Scotland over a period of 21 years. Current work - teaching, research, publication work and PhD supervision.

4. Male professor in a post-1992 university with 27 years experience having been promoted from research assistant, lecturer, senior lecturer to professor and director of research. Current work – leadership in teaching, research, publications, supervision of doctoral students, administration.

5. Male senior professor in a post-1992 university - previous posts held in higher education – lecturer, principal lecturer, now senior manager and professor; total of 21 years in university teaching and research in one post-1992 university. Current work- management and administration, research and publications.

6. Female professor in a post-1992 university, 28 years in university teaching, research, administration in one post-1992 university. Research and publications active, strong in networking.

7. Female senior Manager (Academic), in a post-1992 university, previous posts held in higher education: lecturer in a Scottish pre-1992 university (13 years), head of department in a Central Institution (6 years), assistant principal – academic (4 years), executive director of corporate planning in pre-1992 university (6.5 years), senior manager in post-1992 university; total of 34 years in Scottish higher education.

8. Female senior professor, previous posts in higher education: part-time lecturer, 5 years in pre-1992 university; research fellow, 2 years in a pre-1992 university; part-time lecturer; lecturer in an English post-1992 university, 2 years; senior lecturer, 2 years; senior lecturer in another English post-1992 university; senior lecturer in a Scottish university, 3 years; reader, 6 years in a post-1992 university also in Scotland; professor, 3 years. Current work: management and administration, supervision of PhD students, publishing and research.

9. Male lecturer and programme leader with 3.5 years in a post-1992 university teaching under-graduate students. Current work: teaching, and research for PhD.

10. Female lecturer in a post-1992 university. Worked in industry for 18 months; lecturer in an FE College, 7 years; teaching qualification part-time; completed her PhD with part-time teaching for 3 years; part-time university lecturer for three months, full time lecturer, 3 years. Current work: teaching degree and post-graduate students.

11. Female lecturer and programme leader in engineering in a post-1992 university, 2 years. Current work: research and teaching post-graduate and under-graduate students.

12. Female lecturer for 6 years in post-1992 university. Secondary school teacher, 5 years; part-time lecturer while working on PhD; research assistant, two years. Current work: teaching, publishing and research.

13. Female lecturer and programme leader in a school. Five years university teaching experience in a post 1992-university. Not interested in promotion. Current work: teaching and student counselling.

14. Female lecturer for 2 years in a post-1992 university and 12 years in a pre-1992 university where she completed her PhD in 3 years 3 months. After graduation in 1994 she was employed in private practice for 2 years, then invited to a lecturership in 1996 in a post-1992 university. Current work: teaching, research for PhD.

15. Male Professor in a pre-1992 university - appointed an honorary research fellow and started teaching from the late 1980s in an English Russell group pre-1992 university. In the 1990s moved to a Scottish pre-1992 university, appointed professor 3 years ago. Current work: teaching, teaching methods, research leadership and publications, supervision of post-graduate students.

16. Female lecturer for 11 years in a pre-1992. Five years in consultancy work in private sector. Offered a readership in another university but declined it for family reasons. Current work: teaching, research, publications and consultancy.

17. Female reader in a pre-1992 university. Research associate for 3 years, post-doctoral research associate for 2 years, research fellow for 2 years, then a lecturer for 10 years, senior lecturer and reader for 5 years. Current work: teaching, research leadership and publications, supervision of post-graduate students.

18. Male Senior Lecturer in pre1992-university. Appointed researcher then lecturer in 1996 to 2006, senior lecturer, 4 years. Current work:

teaching, publications and research, supervision of post-graduate students.

19. Male lecturer, 3 years in a pre-1992 university, previously 6 years as researcher in a pre-1992 university in England. Current work: teaching, publications and research.

20. Male senior lecturer in a pre-1992 university. Research associate in 1996 for 4 years, appointed lecturer in 2000, then senior lecturer for 3 years. Current work: teaching, publications and research leadership and income, supervision of post-graduate students.

21. Female professor in a pre-1992 university - started university teaching in 1986 – two part-time contracts, moved from an English Polytechnic to a pre-1992 English university but to a lower lecturer grade in 1991 for relevant research environment for 9 years. 5 years PT; 9 years lecturer; 11 years professor; total 20 years full time. Appointed professor in another pre-1992 university then to her present professorship four years ago in a Scottish pre-1992 university. Current work: teaching, administration, publishing and research leadership and income, supervision of post-graduate students.

22. Male professor for 4 years, 8 years senior lecturer, 11 years lecturer in one post 1992 university and two pre-1992 universities. Current work: teaching, administration, publishing and research leadership and income.

23. Male senior lecturer in a pre-1992 university – private sector work for 3 years prior appointment as a lecturer then senior lecturer, total of 16 years in university teaching. Current work: teaching, publishing and research leadership and income, supervision of post-graduate students.

24. Male lecturer in a pre-1992 university. Teaching experience: secondary education one year, college of FE from 1988-95. Appointed as

a lecturer in present post - job title director of studies. Total years in teaching 24, total in higher education 16 years. Current work: student advisor, teaching, administration.

25. Male University College Union (UCU) researcher - interviewed for specialist information about reasons for and measurements of gender pay gaps in pre- and post-1992 universities. Current work: research into academic pay structures.

5.2 Introduction

This chapter contains narrative and analysis of the responses of twenty-four female and male lecturers, senior lecturers, readers and professors, in one post-1992 university and one pre-1992 university in Scotland (see chapter 4, para. 4.4, Table 2 for breakdown of interviewees). Over 900 responses were obtained in the semi-structured interviews in relation to the principal enquiry of this research: changes in gender equity and equality in relation to the promotion and pay of academics. An additional interview was conducted with an official of UCU in order to gain a greater insight into causes of gender pay gaps in Scottish universities than was obtainable from academic interviewees.

The main aim in investigating the perceptions and opinions of academics in relation to their working lives is: to seek answers to the research questions as shown in chapter 1, para.1.1 and to achieve the research objectives. This involved making comparisons between the findings of literature sources of chapters 2 and 3 and the responses of interviewees in each thematic element with the aim of ascertaining whether or not changes in gender equity and equality have occurred in Scottish universities.

Each academic was invited to answer the same set of interview questions. The subject of gender equity and equality was not a topic which was uppermost in the minds of the interviewees. This necessitated occasional prompting, often in the form of supplementary questions with explanations of meanings of gender terminology, to obtain amplification of some brief responses. In this respect the author's previous knowledge of and experience in further and higher education was used to gain a naturalistic and interpretive approach aiming towards an understanding of the issues and concerns of academics in relation to gender equity and equality.

The main areas of investigation related to the promotion and pay of academics. For example, the impressions of academics who have been promoted were adduced from their experiences of the promotion processes and compared with those of their junior colleagues some of who were seeking promotion. Each of themes above (see chapter 4, para. 4.7) formed the basis of the main areas of questioning (see appendix 2) from which comparisons were made between the impressions of female and male academics and between lecturers and senior staff.

5.3 Being an academic in Scottish universities

The interview process commenced with an investigation into the roles and everyday activities of academics from their impressions of what gave them **job satisfaction and dissatisfaction**. From conversations with academics and from literature sources, for example: Fanghanel (2012); Dowd and Kaplan (2005); Drennan and Beck (May 2000), the job of an academic can be described as multi-faceted requiring high levels of intelligence and intellect. These attributes are required by academics in the creativity of their teaching, mentoring, pastoral work, research and publishing.

Although the job has advantages of flexible working it involves the pressures of time constraints in revising and producing teaching programmes, research papers, income generating research and consultancy work, added to which are constant streams of e-mails and telephone messages with demands of time from students, committee work, administration, management and external bodies, some involving distractions from what they regard as their prime functions of teaching, research and publishing.

Although flexible working was generally seen as advantageous in terms of job satisfaction a downside was expressed by a male senior lecturer (20) in a pre-1992 university in terms of accessibility:

I got an e-mail from someone in another university at 7 minutes to 6 on Sunday morning and occasionally you get e-mails in the evening from the head of school and very occasionally he obviously expects a reply before 9 the next morning, that's because he knows that I check my e-mails in the evening.

Being an academic primarily requires certain personal characteristics of human nature involving personality traits of altruism, inter-personal skill, natural inquisitiveness and self-motivation. Their altruism and emotional intelligence manifests itself mostly in their teaching and pastoral activities with an innate desire to help and guide students in face-to-face classroom and one-to-one mentoring in which clear and effective guidance and empathy is important. Teaching commitment involves lecturing, inviting and answering the questions of students, marking coursework and examination scripts, the preparation of teaching modules, research and publications. The importance of the latter in relation to teaching was explained by a senior female professor (8) in a post-1992 university:

Doing research makes you a very different academic. In terms of up-to-dateness - that is a scholarly activity in which every member of staff should be active and using out-of-date material is unforgiveable.

The supervision of masters and doctoral students requires advanced levels of expertise involving high levels of competence, experience and concern for the successes of their research students. This was expressed emotionally by the above professor:

With research students doing their PhDs I am in agony, absolute agony, but when they get that I can look at half a dozen people and say 'I actually made a real contribution to you getting that, - that is fantastic.'

The research work of academics, which involves curiosity, imagination and deep concentration, occupies copious and unmeasurable amounts of their time in the university and at home, can involve not only the research itself but the preparation of journal articles, book writing, editing and the preparation of research proposals for income generation, the latter being important in terms of the financial health of the university. These

activities vary in emphasis depending on the time pressures of such as the approach of examinations, marking, the submission of honours degree and post-graduate dissertations, doctoral theses and the preparation research grant proposals. Arguably, further pressures arise as the focus on research activity and associated administration intensifies towards the year of the Research Excellence Framework (REF), previously the Research Assessment Exercise (RAE).

5.4 Job satisfaction – interviewee responses

The responses to questions and discussions relating to job satisfaction and dissatisfaction as perceived by academics provide an indication of what it feels like to be an academic in Scottish universities. An aim in this section was to gain a sense of their pleasures, annoyances and anxieties in which comparisons between female and male academics at different levels of seniority are made and which in turn are compared with the findings in the literature reviews of chapter 3, para.3.22.

Responses of female and male lecturers to the question: *In your life as an academic what gives you a sense of job satisfaction?*

A female lecturer (11) nearing the end of a two-year contract in a post-1992 university compared her attitude towards her teaching with that of an experienced male lecturer in her school (engineering) who had commented on what he perhaps perceived as her over-exuberance and unrealistic enthusiasm: 'after twenty years you won't care anymore.' Her response was emphatic:

In teaching my priority will always be my students and see them happy with their achievements. I want to help the students to do well after such a lot of work. He seemed so bored. If one day I become like that then I shall need to get out of a career that means something is going wrong - I will have lost the purpose of my job.

In her aim to achieve a permanent post she explained the pressures of her work:

I have been working so hard for the last two years. I was the only person under a contract. The others are full-time and I work until 7.00, 8.00, 9.00 o'clock sometimes – I do research, I do counselling, I do my lectures and I have more teaching hours than my colleagues. I am expected to do that because I became a programme leader and responsible for lots of modules. I take a lot of responsibility.

A similar expression of enthusiasm for the successes of her students was evident from another female lecturer (10) in a post-1992 university whose sense of job satisfaction related to her workload in a mixture of frustration and pleasure :

I was so overworked and so busy that I was stressed all the time. Normally when I get feedback from students I get a lot of pleasure from that because the students will say, 'I really thought it was great and I really enjoyed it' and this time some of the feedback was: 'I wanted to do this but I couldn't ask because the lecturer was too stressed' and 'the lecturer was bringing her stress into the classroom.' I got really upset at that and I realized that what gives me satisfaction is from over-achieving, being a bit of a perfectionist. I like to deliver the 'wow factor' and go the extra mile. I like my lectures to be 'all singing, all dancing,' I managed to get the 'tutor of the year' and I managed to enjoy myself and I am still over-achieving at 120 per cent. At 120 per cent I was still managing to over achieve but, I was on my knees and you can't over achieve at 140 per cent.

A different approach towards teaching was expressed by a female lecturer (16) in a pre-1992 university:

We have one teaching fellow in the school. It's not a route that this university pursues actively we prefer to have research active staff.

This reaction to her sense of job satisfaction suggested a difference in functional emphasis between the pre-1992 and the post-1992 universities involved in this research, the former being oriented more towards research than the latter. However, comparing her experiences of work in the private sector with academia she expressed a high level of job satisfaction in her appreciation of the freedoms of space, time and choice of work:

I think the freedom. I have very much my own space physically, and also in the job tasks I have a lot of space and room to choose what I want to research, something that interests me which then enthuses my teaching and you can see the returns that you get from your students learning. Being an academic is a vocation in choosing to teach something that interests you. I don't have a boss who breathes down my neck, I don't have a timesheet. In industry I had a time sheet and had to write down every fifteen minutes of what I was doing which was stifling to creativity of which there's loads here. I think flexibility allows me to come in at any time between 7.0 and 10.00 in the morning or whenever I choose and to leave whenever it suits me and work till 2.0 am if I want to.

A male lecturer (19) in a pre-1992 university with a strong interest in research gained most job satisfaction from both teaching and in meeting research and publication targets set as a consequence of discussions during the professional and development review (pdr) six-monthly meetings with a senior colleague:

When I set some targets and when I meet them. For example if I aim for two research papers and get funding - this sort of thing - and I get good feedback from students about my teaching, if I get 80% or 70%, this is special to me.

However, he expressed some anxiety about the consequences of not achieving his targets explaining that fruitless time can be spent on a research proposal and emphasizing the importance of research income:

At the moment we have performance measurements if we don't meet or achieve them we don't know what will happen, maybe it will affect promotion if in two consecutive years we cannot meet the targets. We have another problem which lets us down in applying for research funds: in writing a proposal we spent on average 9 to 12 months in writing it and the probability of winning is very low. You can spend one year and in the end – nothing. So this preparation doesn't count for anything. A research article might come from it but the target is to make money, not to publish from it. Money is now important for promotion.

A male lecturer (24) in a pre-1992 university in common with female lecturers above had the interests of his students at heart and appreciated the freedom in his work conditions.

I get real satisfaction from seeing students being able to solve problems in the laboratory and seeing them graduate. These are the points I treasure. I also treasure the autonomy I have and the flexibility in working.

Responses of Senior academics

The responses of senior academics to the question about job satisfaction are compared with those of lecturers taking into account their longer experience and their roles in management and leadership.

A male professor (4) in a post-1992 university expressed his satisfaction in the process of teaching and in his colleagues:

The teaching side I find very satisfying, you know right away whether it has worked or not, there's quite instant feedback. If you have made a mess of it you can fix it. The actual job is good, colleagues good because that's your network of support which can greatly enhance job satisfaction.

A senior male professor (5) in a post-1992 university gained his job satisfaction from the success of the school and 'the fact that I may have played some part in that'. In an attitude of optimism, he took pleasure in the achievement of his colleagues and in helping their careers. However, he confessed that 'there are days when it's painful to come in when things aren't going as you want them to'.

I love coming to work because I think we are moving in the right direction, I work with great people and I work with some frustrating people, some great people are frustrating too (laughter). The environment is wonderful. I think the ethos of work here is really important. When I came here the first few talks I gave expressed how wonderful a place this is. It is fantastic, what a place! So what I want is to impress visitors when we tour the building. I am proud of where I work especially of our improving record of achievement in the RAE. But when you listen to one or two disillusioned people don't believe them. I am certain they have got it wrong.

A female reader (17) in a pre-1992 university also gained job satisfaction from her colleagues, the congenial atmosphere of her workplace

substantiating her belief of this through staff retention:

I never for a minute expected to be here so long. I've worked with clever, very nice supportive colleagues that have become really good friends. So I think it's the people you work with. The students, under-graduate and post-graduates, all of the people that you meet are different and really interesting and transient. In this school and certainly in the groups that I work in the turnover of staff is pretty low; they stay for a long time and I think that tells you something – that you have a close-knit, well-functioning, well-oiled machine that gives people job satisfaction, because otherwise I would go if I wasn't happy. So I think you have to be part of a team that is positive and wants to do their best and be friendly.

The support of colleagues was also important to a male reader (3) who was immersed in research and involved in the supervision of postgraduate students and research income generation:

I get a lot of satisfaction from it [research] because I like the institution I am now working at, I love the city, and the colleagues that I work with are far more collegiate and supportive than in my previous institution [an English pre-1992 university]. There's an acknowledgement from the management here ... I now have a high level of job satisfaction.

Appreciation of the work environment was echoed by a female professor (6) in the same university who gave an impression of real enjoyment in her work:

The fact that you are in an environment where you are helping other individuals to learn, I think is very satisfying. The flexibility of when you do your work, how you do your work and you have quite a lot of autonomy in what you are doing; it all adds to job satisfaction. I'll add one more thing – it's about having fun, enjoying the job and feeling part of a community.

A male professor (22) with substantial teaching experience in both pre- and post-1992 universities gained job satisfaction from his publications and the progress of his students and colleagues:

I like to see my papers cited. I like to see students being able to do the things I've taught them. I like working in a team. I like my team doing well. I like seeing that my colleagues and my students are thriving in what they are doing. I like solving problems and understanding things.

A male senior lecturer (20) in a pre-1992 university expressed both job satisfaction and pride in his choice of profession in 'making a difference to people's lives':

In any job what gives you satisfaction is in having an impact. It's great to see final year students get a job as a result of one of my courses. Of course there's money and the flexibility. I say to students who come to open days, 'whatever job you do it's about making a difference to people's lives.' I remember a professor from Glasgow University when he retired at age 62 he went to Malawi to build water treatment works to provide water for a million people, even a doctor couldn't have that effect.

Summary

Comparing differences in job satisfaction of lecturers with senior academics, the former in the post-1992 university expressed most satisfaction from the progress and the achievements of their students and the flexibility of their working conditions, whereas lecturers in the pre-1992 university emphasized most satisfaction from their research and publication work also aiming for high quality teaching and appreciating flexibility. For the most part, senior academics in both universities expressed their feelings of satisfaction from the progress of their junior colleagues, postgraduate students and pleasure in seeing their publications in print, but were conscious of pressures to achieve income from research and to publish. Other expressions of job satisfaction, included: mixing with and enjoying the company of their colleagues, networking, the ethos of their workplace and the variety of their work.

5.5 Job dissatisfaction

Inevitably, in every occupation there are areas of work which are more irksome to some employees than others. A female lecturer (12) in a post-1992 university whose work was divided between teaching and research expressed her concern about the imposition of administrative work on the quality of her other work:

Too much admin. It seems to detract from the primary purpose of getting a job well done. It takes up time spent on something that just seems to be unnecessary – unnecessary bureaucracy.

This complaint was repeated by a female lecturer (11) in a post-1992 university:

What I hate the most is the paperwork (laughter). Bureaucracy, that's what stops everything all the time. I see a need for it, a minimum need for it, yes, that's for sure, but I don't see the need for so much bureaucracy.

Another female lecturer (16) in a pre-1992 university related job dissatisfaction to the stress and pressure of the Research Excellence Framework (REF):

I suppose one of the least enjoyable things is probably the REF or RAE - to make sure that your research is up to scratch and if you are not having success at getting money and papers published, that gets very stressful.

A female lecturer (1) explained the dilemma for women with their dual role of being an academic and a carer at home:

... it's about the nature of the roles and how demanding they are in terms of time and, if you go back to the issue of family and domestic commitments that women have, I think that women are put off going for these more senior positions because of demands of time and the role that comes with it.

Senior Staff reactions to job dissatisfaction

A female professor (6) in a post-1992 university related needless bureaucracy to job dissatisfaction:

Bureaucracy generates work for the sake of generating work that needn't be done, and that detracts from things you enjoy doing and detracts from job satisfaction in stopping things.

In agreement, a male professor (22) explained differences in bureaucracy between post- and pre-1992 universities:

Bureaucracy, it's all imposed from outside in response to the quality framework that the government establishes. The post-1992 universities have far more bureaucracy than the pre-1992 universities because they inherited that from local authority

regimes and the CNAA (Council of National Academic Awards) which we [in a pre-1992 university] never had.

He expressed an unusual cause of dissatisfaction referring to:

The grey men in grey suits - managers who lose any sight of common humanity in how they deal with staff; they are more concerned about spreadsheets than about people. I think it's getting worse.

His dissatisfaction also included his impressions of committees and financial restrictions:

I don't like committees particularly, but you need a minimum amount of committee work to make things happen. They are mostly reactive and procedural rather than creative. It's very hard to be innovative, money is very tight, if you want to do something new then you have to divert money from somewhere else and that involves telling people that they cannot do the things they've always done.

A male professor (4) in a post-1992 university expressed a measure of dissatisfaction with the advent of mass higher education in terms of its pressures and what he described as 'internal competition' and 'continual change':

The real downer on job satisfaction is massification and the amount of work that is expected. The continual pressure to produce things - always trying to get internal competition developed amongst staff, and I think that's detrimental. Continual change is a thing that I am fed up with completely. It's been continual for maybe ten years or maybe longer.

He exemplified the pressure on academics to adhere to a long-hours culture (see also 'work-life balance and career centrality para. 5.22 below) referring to the frustration of insufficient time to attain excellence in teaching and research:

Through massification there is an expectation of a lot more [work] for a lot less resource which means people work huge amounts of hours, people work late and get up early in the morning and work during weekends

Summary

The main feature of job dissatisfaction expressed by lecturers and senior academics referred to the amounts of administration and paperwork which was considered to detract from their teaching and research activities. Other areas of dissatisfaction included the pressure of the RAE, 'massification' and continual change. Interestingly, there were no references to such as male domination, the imposition of male norms, gender bias, pay or ageism which are featured in literature sources (see chapter 3, para. 3.22). However, the time pressures involving a long-hours culture concerned both female and male academics, females finding this of greater concern in their dual roles as academics and as the main carer at home. Other than the dual role problem there were no apparent differences in the perceptions of job dissatisfaction between female and male academics.

5.6 Organisational structures

Literature sources which deal with organizational structures in universities commonly referred to the effects of male domination and the imposition of male norms in policy- and decision-making committees with particular reference to promotion panels (see chapter 3, paras.3.2, 3.3, 3.4). This prompted the interview question: *Do you think that male domination in promotion processes is a cause for the scarcity of females in senior positions?*

Responses of lecturers

A male lecturer (9) in a post-1992 referred to change towards more research rather than the effects of male domination:

In the organizational structure, well, yes we are a post-1992 university but we are shifting to take on board more of a research role and therefore resources are made in that way and the pressure is asking more of people in that way. Support mechanisms are slowly being added to reflect that.

A female lecturer (1) expressed no objection to male domination in her experience:

There is a nice mix below the second in command, but there is no getting away from the fact that the Dean and Deputy Dean are both men, and I don't object to that in any way and I think it [the faculty] is well run and I have a good relationship with these two people. There's no sense of marginalization from them.

A female lecturer (10) in post-1992 university discussed the gender composition of selection committees but with no reference to the effects of male domination:

I think you would find a mix. I don't know whether or not we have to have men and women but they would have to have two professors and a couple of senior lecturers on this committee. They would end up being a mix of male and female just because of the people in that role in this school. In engineering it would probably be all male, it depends entirely on the subject area. In my school there's very much a mix of male and female.

Responses of senior academics

A male senior lecturer (23) who had served as a member of his university court in a pre-1992 university took a positive view in relation to equal opportunities but conceded male domination as influential in decision-making bodies:

If we think about the decision-making bodies of the university the university court is dominated by males, the senate is dominated by professors who are all male and so the awareness of or desirability of equal opportunities is a strong equalities policy. The university court does increasingly take a view which looks more like a proper selection process.

Another male senior lecturer (18) in the same university agreed that male domination in the composition of policy-making and promotion committees is simply due the preponderance of males in senior positions:

That's just a feature of the fact that there are more male staff and therefore if that's your population and sample, but the school director of quality is a woman, our director of studies is a woman. If you've got less of them then by definition there's going to be less of them in prominent positions in these committees.

A female reader (17), absorbed in her research in a male-dominated engineering school with male leadership in the pre-1992 university, appeared oblivious of male domination:

I think there is gender equality in committees. I've never seen anything to indicate otherwise and I've never been uncomfortable in the processes of any boards in terms of the representation of any boards. I've never scrutinized or dissected the composition of any boards. I have never ever taken anything negative at all. My view would be that it is as it should be actually. It's not a discussion I am engaged in directly.

A male reader (3) in a school composed of equal numbers of female and male academics in a post-1992 university believed that gender equality now existed:

I haven't consciously seen that [male domination] happening here, so, for example, in an appointments panel here there were three females and two males. When I was appointed for my promotion at my previous institution there were two females and one male and certainly in this institution and in my last institution there seemed to be a reasonable amount of promotions going to females as to males.

A male professor (15) in a pre-1992 university negated gender considerations in making appointments in his belief that the 'best person for the job' was always selected:

All I'm saying is that people will recruit in their own image. I think when females and males are equally qualified and equal in numbers as academics then the selection panels will be equally split. I don't think that you can ever engineer that bias out. I have not experienced in all the interview panels that I've sat on – it has always been – what is considered as the best person for the job.

Summary

In general, the responses of academics, although conceding male domination, suggested an absence of male bias apart from one observation that 'people will recruit in their own image'. These perceptions are contrary to the findings of literature sources which highlight male domination and the imposition of male norms as

disadvantageous for female academics in the promotion processes (see chapter 3, para. 3.8).

5.7 Research Assessment Exercise (RAE) – Tensions between Teaching and Research

Tensions between teaching and research can occur where one activity distracts or interrupts the other. The pressures of the Research Assessment Exercise (RAE), now the Research Excellence Framework (REF), to produce high quality research and publications, as found from literature sources (see chapter 3, para. 3.12), show that 'teaching is not valued as greatly as research' and is viewed as 'not bringing in money' (Drennan & Beck, 2000, pp.4, 9). The questions posed to interviewees were:

*Is there any tension between the RAE (REF) and teaching?
How does the RAE affect women in comparison to men?*

Female and male lecturer responses

A female lecturer (12) in a post-1992 university explained her perception of the build-up in pressure towards the time of the RAE:

The RAE here tends to be forgotten about for several years year until it actually happens and there's a scramble around to get people to come up with activities. It's one of those things that doesn't get focused upon until it is immediate within this particular institution. There was an incredible flurry of activity around the last one.

A female lecturer (2) in a post 1992 university explained the effect of her heavy teaching load on her research and publishing work:

I wouldn't say tension between the two, partly because there are very few staff that are put forward for that [the RAE]. When I started in this university I had a high teaching workload, but I continued writing papers from my previous research post ... but it was very difficult to start new research when I started here because of my high teaching load which interfered with my research.

A male lecturer (19) in a pre-1992 university explained the pressure to publish, his pleasure in the successful completion of his published work and success in income generation from research in collaboration with the private sector, but with a price to pay:

The time towards the REF definitely affects teaching. The tension becomes greater, we have the problem of the balance between teaching and research. We have targets to publish and to submit and time is limited. We focus on research and don't give as much to teaching. We are definitely under pressure.

Responses of Senior academics

A female reader (17) in a pre-1992 university suggested that the increased level of activity towards the RAE was administrative rather than involving a change of pace for more research and publications at the expense of teaching:

The REF is a long period. It started in 2008 and finishes in 2013. I think there's an increased level of activity but not necessarily in research activity. I think there has to be an awful lot of activity about gathering information but that's not the same thing as saying there's a rush on to get research done in conflict with teaching. Again part of my job is to make sure that we have people producing their outputs from the beginning of the REF period with consistently high quality, as high quality as we can possibly manage without jeopardizing all of the other things and without having that rush at the end. I have been involved with the REF for a long time now. I can feel the administrative aspect of it beginning to build into the second half of the period.

A male professor (22) also in a pre-1992 university agreed the need for continuity in research and publication activity rather than a surge of output towards the year of the REF:

The REF returns are in two years time, you can't do anything that is going to have any impact in two years. If it's going to have impact, you've done it already. They are too late. They get time to get new research grants, but it's impossible. How can you have a high impact? If I write a paper now, it's not going to appear for a year, if the REF is in two years time – I'm not Einstein, if I was Einstein then possibly a paper that I publish in a year's time would impact in the following year. Impact takes a long time to happen. So having a push for the REF doesn't really mean anything.

Referring to the effect of the RAE on women in comparison to men a female professor (8) in a post-1992 university explained:

I think there is a big difference. In the national debate, because women are having families and career breaks they miss out on a key bit of their career and publishing and so they are at a disadvantage.

A male professor (4) in a post-1992 university explained the pressures of teaching and research:

Of course, there is huge tension [between teaching and research]. It's to do with balancing and managing time. Teaching is a very time intensive activity and so is doing research. In the Research Excellence Framework the very top research just takes a long time to do, that's where the main tension arises.

A male reader (3) in a post-1992 university explained his perceptions of the tension in terms of the expectations of management and the status accorded to researchers:

I think there is [tension] between the management and the lecturers in universities, because if you are research active then you will most likely go into the RAE and you are seen by the management as contributing to the benchmarks that the university has to achieve in terms of the external agencies and the government etc. If you are a lecturer who isn't engaged in research, and there are some, then you feel very much excluded from that, and I've heard it said - a lesser citizen for not being in the RAE.

Summary

Academics are conscious of the prime of place given to research income and publications over teaching to satisfy the requirements of the RAE and to meet the main criteria for promotion (see para. 5.21 below). The tension between teaching and research work appears to arise not simply from differences in the nature of these activities but from the higher status given to research and publications. The latter is more problematic for female academics who require career breaks for childbirth and family

care with inevitable interruptions in their concentration and continuity in their research and publication work.

The discussion about tensions between teaching and research changed direction during questioning towards differences between female and male academics' research activity: A male reader (3) in a post-1992 university perceived a bias towards women because of their under-representation:

Women were committed equally to research provided the line managers who oversaw the projects were prepared to give money for conferences or research training and if anything there was a bias in favour of women because the line manager was a woman. She tended to encourage women because she felt they were under-represented.

A female senior manager (academic) (7) in a post-1992 university, on the other hand, reasoned that more males than females are research active because of greater research activity in subject areas which are dominated by men:

It is definitely more men [involved in research]. A lot of research is in science and engineering and these tend to be the areas that have more men working in them. They are expensive areas of research.

A male professor (4) in a post-1992 university also referred to subject bias and the family responsibilities of women, but in his school he noted that 'there are a lot of very strong female researchers':

Numerically, more men do research than women, yes, but not by very much. I think there is subject bias, but women have family responsibilities. The problems are the same [for females and males] in trying to balance workloads.

A female lecturer (11) in a post-1992 university referring to her group agreed that more men are research active than women:

I think men are more involved [in research] than women. There are two women out of twelve in my group and I am the only one involved in research and all the rest are men.

A female senior professor (8) in a post-1992 university in a school in which the female male ratio was roughly equal referred to female/male RAE submissions:

Our last submission [to RAE] was fairly representative of men and women and I think some of the younger women coming through are publishing from a much earlier stage and are getting going with their research and publishing. It may be different in some institutions but I don't think we have a major male/female difference.

Summary

Comparing the findings in literature sources (chapter 3, para. 3.12) with the responses of academics, the former suggests that men are more research active than women arguing that 'women's research careers are less well developed than men's' (Doherty & Manfredi, 2006, p.555). From the sample of responses above differences in research activity between females and males relate to subject bias, career breaks and family responsibilities rather than lesser development. Generalisation is not possible: some academics suggested that males are more involved simply because there are more males than females and others suggested that female academics are as much involved as males. All academics were well aware of the outcomes of the RAE in relation to their promotion and the reputation of their school and university and its financial health in a market oriented and competitive system of self regulation.

5.8 Flexible Working and Work-life Balance

Flexible working in terms of when and where work is carried out allows academics the freedom to work from home when they are not involved in timetabled teaching or scheduled meetings. This gives academics opportunities to attend conferences, present academic papers, participate in networking and to attend to caring responsibilities at home. The objective in this section is: to investigate differences (if any) between the perceptions of female and male academics in relation to their work in

terms of flexibility, work-life balance and career centrality as they affect their career progression.

A female lecturer (10) in a post-1992 university explained difficulties in obtaining work-life balance:

Looking at the last semester in the fifteen weeks of it there were only two weekends when I didn't work [at home] and the other weekends I worked at least one full day on preparations, marking, etc. So when it comes to having to work all weekend just to keep up with what you are supposed to do during the week, that's not right.

Her concerns over her overloaded teaching timetable also related to pay:

I found I was actually sitting at 140 per cent of a normal workload allocation. So I was trying to do a job and half and get paid the same as before.

However, she appreciated the flexibility afforded to academics but she believed it was paid for through long hours of work:

I think they [work conditions] have been flexible particularly for lecturers. It is flexible, whether or not you need that for family reasons. If we are not up in front of students we can work from home. I just write in the diary that I shall be working from home. So if you need to be off in a hurry for something, yes I would say it is flexible. We work long hours, way over the number of hours that are allocated and our boss is accommodating that way.

A female lecturer (11) in a post-1992 university compared the conditions of her employment in her previous job as a chartered professional in the private sector with those in academia:

We have a very good head of school, he is very understanding, and very flexible. I speak about flexibility because when I worked in industry I had strict hours, so here when I am not teaching I can go and pick up my son from school or have him with me at home when I work from home. This flexibility, from my point of view, is priceless and it is worth every bit of the job as well, sometimes when I have difficulties I remember what it was like in industry.

A female lecturer (1) in a post-1992 university and with no family responsibilities also compared her work conditions in the private sector with that in her university:

We are in a job that is perhaps more than any other organization such as the private sector, more flexible. I think the way we work in terms of our annual leave, which is generous, and in terms of the hours we work in a week, we can work from home.

A female lecturer (16) in pre-1992 university was categorical in her need for flexibility in her work suggesting that if it did not exist she would have considered part-time work:

I wouldn't be an academic and work full-time if there wasn't the flexibility, definitely not.

However, a male lecturer, a union representative (24), in a pre-1992 university expressed reservations over the extent of flexible working and part-time working:

It is not hugely flexible and not hugely practiced. There are very few examples of job sharing. There are very few examples of part-time working. It wasn't very long ago that maternity cover, although a legal entitlement, had to be negotiated quite intensely, that has changed.

His final comment, not in the least 'tongue in cheek', gave food for thought:

I think it [family-friendliness] will have arrived when a pregnant member of staff is promoted.

The majority of lecturers although agreeing the advantages of flexible working appeared to accept its disadvantages in terms of the long hours culture and in spite of continuous streams of e-mails while working from home. Flexible working was especially appreciated by female academics with child care responsibilities. A general impression of the benefits of flexible working for academics was a recognition that the university gains from the unpaid overtime which is inherent in the long hours culture.

Senior staff perceptions of flexible working

A female professor (6) who described her enthusiasm for her research was also appreciative of her flexible working conditions and its autonomy which gave her adequate scope for research:

The flexibility of when you do your work, how you do your work gives you quite a lot of autonomy in what you are doing; there's flexibility in terms of when you need to be here. They [academics] realize that what they've got is good, it allows them freedom

A female professor (8) with teaching and research experience in both pre- and post-1992 universities also compared the levels of flexibility between the two:

By the nature of it higher education has always had a degree of flexibility. If anything, I think the modern university has become less flexible in the sense of whether people work at home or not when they are not actually teaching. I think there is a lot of attention given to being accountable. If someone tried to ring you at home and didn't get you, they just couldn't get you in a pre-1992 university, whereas now, [in this post-1992 university] if you are working at home, you have to be accessible partly because of the electronic age.

A male senior lecturer (18) in a pre-1992 university appreciative of the lack of 'clock-watching' and flexibility but nevertheless found it negated through ever-present e-mails:

It is flexible and family-friendly in as much as our contracts which don't require us to be here for an amount of hours per day. It's not a 9-5 job, no one is clock-watching. There's still that flexibility as long as you do your classes and meet your responsibilities. The modern scourge is your e-mail even for half a day there's another 30 or 40 and I find that a real source of stress. I find it quite difficult to switch off at night because the e-mails never stop.

Summary

An analysis of the 900+ responses of all 24 interviewees shows that approximately 25 per cent, mostly female, strongly appreciated flexible working as very advantageous. Over half, mainly male, considered that it was 'fairly good' and the remainder (16 per cent), although appreciative of flexible working, expressed reservations about its advantages taking into account their additional unpaid hours of work and the 'modern scourge' of being pestered by e-mails when working from home and at weekends. Female academics were especially appreciative of flexible

work conditions which enable them to cope with their full-time job and family care.

5.9 Female/Male Traits

Some literature sources refer to female traits in relation to their tendencies towards pastoral and counselling work often at the expense of their research (Blake & La Valle, 2000). Male traits which are portrayed as agentic behaviour give them the advantage of greater focus in their career progression. To ascertain whether or not female/male traits are perceived to exist and if so whether they affect the promotion prospects of female in different ways to those of male academics the question posed was: *Are there differences between female traits and male traits in respect of their roles in work?*

Responses of female lecturers

A female lecturer (1) in a post-1992 university recognised a tendency for and an expectation that females take pastoral roles more than males:

I think one of the issues faced by academics is an increasing requirement for women to perform pastoral roles. From anecdotal evidence the women in the team get involved with that more and there is an expectation that women should be more involved, but equally students approach female lecturers more over personal problems or medical problems etc. So I suppose there are emotional female traits which we can't deny; we wear our hearts on our sleeves a little more perhaps. It may not sound politically correct, but I think that is the case and men are less inclined to adopt the pastoral role.

A female lecturer (11) in a male-dominated school in a post-1992 university agreed that females give more of their time to student counselling than males:

We [females] spend more time with students whenever they have an issue or a question. It is true that they come more easily towards us and I give more time to them whereas my male colleagues, most of the time they would just say, 'sort yourself out and on you go'. But to be honest, I am learning from my male colleagues, because it [counselling] takes up a lot of time.

A female lecturer (12) in a post-1992 university who was heavily involved in her research appeared content to leave pastoral work to a designated student counsellor. Her response to the question of female and male traits suggested that females are no more active in student counselling or administrative work than males:

Not in my experience and not in my area. In my subject group we have a specific student counsellor, a male. As for roles, I wouldn't say that admin roles are particularly covered by females. They [the students] can use student support services to be honest.

Another female lecturer (14) in a pre-1992-university agreed that females take the greater share of student counselling:

All academics do mentoring, but I certainly would say that nine times out of ten it would be the females who would be approached more when students have an issue and they want to talk to somebody about it. They would find a female academic to talk to rather than they would probably go to a male.

A female lecturer (16) in a pre-1992 university, in similar vein, was concerned about the effect of the 'open door' on her research and suggested this was more prevalent in post-1992 universities:

I think we [females] probably do empathize more with students and want to do something to help them. I would say it really affects my ability to do research work. In post-1992 universities it is possible that they have more of an open door policy therefore students are perhaps going to gravitate towards female lecturers who might listen better and end up with a queue at their door fifteen students long and the males have two students at their door, I don't know. We [in a pre-1992 university] have less of a culture of the open door.

Summary

From female responses the majority agree that they provide more counselling to students than their male counterparts and that students appear to gravitate towards female academics for advice and reassurance. Female academics also believed that male students look for more counselling than female students. It was recognized by female academics that because of their propensity to provide counselling their research and publication work suffers.

Responses of senior academics

A female senior professor (8) recalled the nonchalance of her male colleagues towards student counselling and the preferences of students towards female academics:

Certainly at my previous job the students liked talking to the women about their problems because they listen to them and they were kind. The men often, not in every case but often, the male teachers couldn't be bothered and did the minimum, so the women ended up doing more and more of it due to student demand and spent more time on it.

A female professor (6) in a post-1992 university with active involvement in the Research Assessment Exercise (RAE) agreed that female academics were more sympathetic to the needs of students than male academics:

Yes, women take on more administration and pastoral roles than men allowing men to get on with their research. Some women have an empathetic way and it is thought that they will make good programme leaders, or make good tutors because they are more likely to lend a sympathetic ear.

Referring to accessibility a female senior manager (academic) (7) also referred to the 'open door' and suggested that:

Women have an awful tendency to allow themselves to allow the open door and when someone asks for help they feel compelled to help.

However, a female reader (17) in a pre-1992 university steeped in her research admitted to 'being completely oblivious' to who takes the greater share of pastoral work and disagreed:

I don't think I am any different to my male colleagues. I have no inkling of that [women taking a greater share than men] happening here at all. We have an open door policy in dealing with the pastoral issues of students. In general men do the same amount as women.

Summary

From the above sample of female responses, apart from two dissenters, it is evident that senior female academics believe that the involvement of

women in pastoral and counselling work is greater than that of their male colleagues which accords with the findings in literature sources (see 3.15). As a consequence, female academics, by their own admission, suffer greater distractions in their research and publication activities from their tendencies to be more available than their male counterparts in coping with a greater share of pastoral work.

Responses of Male Academics

A male senior lecturer (18) in a pre-1992 university believed that pastoral work is shared between female and male academics:

Here we've all got a pastoral role and we are allocated to students as personal tutors and mentors. So, in a sense we try to manage it so that we all do that.

A male senior lecturer (20) in pre-1992 university also considered that pastoral work was evenly distributed between male and female academics, but that women discuss it and men 'aren't proud of it'; he conceded that mentees prefer female mentors:

In this school these things [pastoral care, counselling] are evenly distributed, but I do notice that some members of staff, maybe women talk about it more and men aren't proud of it. Students, male and female who are their mentees do come to see them [women] more often.

A senior male professor (5) in a post-1992 university, expressed doubt in relation to female academics in taking on a greater share of pastoral and counselling work and was aware that 'most women have traditionally been disadvantaged in being seen as the main carer in the family':

This idea that females are often more understanding or compassionate, I'm not sure that's true. I've seen males that are far more compassionate to their students than females, but again that may be just the people I've been in contact with.

A male lecturer (19) in a pre-1992 university tentatively agreed that women take most pastoral work:

I think so, to some extent maybe - the dominant characteristics of women having a maternal instinct.

A male reader (3) in a post-1992 university conceded that female academics do carry the burden of pastoral work particularly for younger students observing that:

There is a mothering role that is appreciated by the students and sometimes students can't approach men and sometimes for females coming to university it is difficult for them to approach men and therefore women tend to be an easier option for them. They [women] take on those sort of roles particularly where you have younger students who are away from home and international students who are away from home. Women are seen as more sympathetic to the issues of female students and I've seen males who have taken on counselling type roles as well as females, but on balance it's probably more female, I have to agree on that.

A male professor (22) in a pre-1992 university also thought that women take most of the pastoral work and suggested 'explicit rules' to ensure equal sharing:

I think they [females] perform a disproportionate share in some of these things - pastoral stuff. Pastoral work affects their research. Unless we have explicit rules in pastoral work and mentoring for students then we [men] will be expected to take more of this work.

He acknowledged the superior social, listening and mentoring skills of women but through socializing rather than 'hard wired' :

Women traditionally have better social skills, better listening skills and better mentoring skills; I think that's through socializing, I don't think that's inevitable. I don't dispute that that may be the case but I don't think that's hard wired into people – I think that's learned, I think it's culturally determined. We can't govern individuals to mass effect.

Summary

From the responses of male academics their perceptions of the sharing of pastoral and administrative work show that some believe that pastoral work is equally shared between female and male academics. The majority of males conceded that female academics do take a greater share of pastoral work. Almost all female academics, on the other hand, accept that they are more naturally inclined to take on the bulk of pastoral work

having a more 'sympathetic ear' and 'an open door' at the expense of their research and publication work.

Vignette One: unintended discrimination

A male senior lecturer (23) in a pre-1992 university explained a case in which an all-male selection panel interviewed two candidates, one female and the other male, for a post of programme director for a course in which the majority of students were from overseas and that, culturally, they were accustomed to open-door access to academic staff. The female applicant was appointed on the assumption that being female she would be best suited to cope with the pastoral and counseling demands of these students. Although no conscious discrimination was intended she was, in being offered this post, effectively removed from her research and associated activities which could deleteriously affect her future opportunities for promotion because of the importance given to research and publications in the promotion process. In this decision the senior lecturer concluded that unconscious gender discrimination and gender blindness could be considered to have occurred in choosing the best person for the job.

5.10 The 'Glass Ceiling' ?

The question here is: does the metaphorical glass ceiling exist and if so, does it affect the career prospects and pay of women? In literature sources (see chapter 3, paras. 3.6, 3.7, 3.8), there are many references to the glass ceiling in terms of male domination not only numerically but in terms of the imposition of male norms in policy- and decision-making. These male norms are shown in literature sources to manifest themselves in the dearth of female academics in influential committees, in promotion processes, discrimination and marginalization, gender blindness, vertical and horizontal segregation and gender pay gaps each of which are investigated below comparing the responses of female and male academics.

5.11 Perceptions of the glass ceiling

Differing views about the glass ceiling between female academics as well as between female and male academics are evident from, for example, a

female professor (8) who explained that the glass ceiling exists but was now 'more permeable':

Absolutely, definitely, [the glass ceiling still exists]. The difficulty is that because you can point to the odd women in senior posts that's evidence that it has stopped. The glass ceiling is more permeable, it is still there. Up until four years ago [2007] I think there was a really solid glass ceiling in the faculty, but with a new dean and a whole new approach the change was dramatic. He genuinely likes to have a mix of male and female round him.

A quite different response was given by a female senior manager (academic) (7) with long experience in both pre- and post-1992 Scottish universities: she was more concerned about competence and suitability for promotion and tended to denigrate the notion of a glass ceiling:

No, I don't think the glass ceiling exists. The phrase itself came in at a particular point in time. There is still a glass ceiling network of women who get together. I went to one meeting of a Scottish branch of it that was being proposed and they still meet. It was full of people whinging (sic) about their lot and I thought if you don't see a glass ceiling there won't be a glass ceiling. You might have failed to get the job because you weren't good enough.

Responses of female lecturers

The responses of female lecturers in both pre- and post-1992 universities are compared here with the findings in literature sources (Chapter 3, paras. 3.6, 3.7, 3.8):

I don't feel that there is a glass ceiling here. I don't think gender is an issue for promotion (Female lecturer (2) in a post-1992 university)

It was probably more true in the 1990s when there was a glass ceiling. I think that women who want to get through the glass ceiling can do. (Female lecturer (10) in a post-1992 university)

I have never heard of it. (Female lecturer (11) in a post-1992 university)

At lecturer level some people feel there are barriers but I wouldn't say it is gender specific. (Female lecturer (12) in a post-1992 university)

I don't think so here, but certainly in private practice. I never really come across it in terms of there being a barrier imposed by anyone here. (Female lecturer (13) in a post-1992 university)

I know what the glass ceiling is. I remember talking about this in sociology in my undergraduate degree in the 1990s. It was probably more true in the 1990s (Female lecturer (14) in a pre-1992 university)

To me personally, no, I don't think so. It is difficult to get promoted. Promotion is not something that happens easily. I don't think there's a gender issue, it's just difficult. I think if you are a young male who is prepared to spend 80 hours a week working, you will find it an easier hurdle to jump than if you are female with a family, you just can't put in 80 hours a week. (female lecturer(16) in a pre-1992 university.

These responses of female lecturers clearly indicate disagreement with the literature sources above in that the metaphorical glass ceiling appears to have been consigned to history and to have no effects on the career progression of women today.

Responses of male Lecturers

I am not aware of one [glass ceiling] based on gender. I am not aware of it based on anything really, I don't think so, no. It is the same for males. I've never heard of the glass ceiling, I don't think there is a glass ceiling here. Earlier when we did have positive discrimination, sometimes you did feel that the wrong person was getting the job because it wasn't done 100% on merit. (Male lecturer (20) in a pre-1992 university)

It [the glass ceiling] doesn't stand out as something that is talked about very much. (Male lecturer (9) in a post-1992 university)

I don't think so, no. It is the same for males. I've never heard of the glass ceiling. (Male lecturer (19) in a pre-1992 university)

Yes, the evidence is very very clear. Percentages of female academic staff who are lecturers, to senior lecturers to professors goes from 30%, to 15% to 8%. I think it's because of the cultural requirements for promotion rather than specifically sexist. In other words male norms apply. (Male lecturer (24) in a pre-1992 university).

Agreeing with the responses of female academics above most male lecturers, although largely unaware of the concept of the glass ceiling, believed it has no effect on female promotion. Male references to the glass ceiling that 'it is the same for males' infer a misunderstanding of the term glass ceiling which, in the context of gender equity, relates only to females. Interestingly, some male interviewees required a brief explanation of the meaning of term 'glass ceiling' before responding to the question; an explanation which was not required by female academics.

Responses from senior academics reflected their long experience in higher education and their observations of changes in the proportions of female to male academics in senior staffing:

I haven't come across this [glass ceiling], no, I don't think so. I have never come across any barriers or seen any sign of it.
(Female reader (17) in a pre-1992 university).

I haven't consciously seen that [the glass ceiling] happening here, so, for example, in an appointments panel here there were three females and two males. I think it's more prevalent in different faculties, for example in the engineering sector where females are under-represented by the nature of the training they have had in the past (Male reader (3), in a post-1992 university).

No. I don't think there is a glass ceiling. (Female professor (6) in a post-1992 university).

A male professor (4) in a school in which the number of female academics is almost equal to the number of males in a post-1992 university believed in an aim to reach equality:

I don't think it [the school] is male dominated. Equality will never be achieved but there is a genuine attempt to try. One group will always think they are getting hard done to by another. There will always be examples of where males are not considered properly because they are in a female-dominated department or vice versa; that's human nature. As far the glass ceiling is concerned, no, I don't think there's a barrier particularly at higher levels. However, there is a ceiling but it could well be more to do with socio-

economic background than gender. At lower levels there isn't a glass ceiling.

He explained his reference to socio-economic background:

I think there is quite a strong bias to people with the right social background in terms of how they have been socialized.

A senior male professor (5) in a post-1992 university mythologized the notion of a glass ceiling but acknowledged its increasing permeability towards gender equality in some disciplines more than others. He believed that the dearth of females in senior positions is due to the greater interest of males than females in seeking promotion:

It's a myth, but like a lot of myths with roots in reality but there is some truth and I think that's the case here and if it's repeated often enough people believe it. There is a whole raft of reasons for the disproportionality of men in senior roles. I think proportionately more men than women are interested in promotion. It's getting better from ten years ago when the first female principal was appointed. On that basis you could say that there probably was a glass ceiling, but I do think that the glass ceiling has become more permeable. I don't think it will take very long [until gender equality occurs] because the change has been quite exponential, but I think it will vary from discipline to discipline. In some disciplines women will overtake men and in other disciplines they won't and for the foreseeable future there will probably be a preponderance of men. More female candidates for senior posts are arriving.

Summary

Comparing the findings in literature sources with the responses of academics above the difference is considerable. When the metaphorical glass ceiling first appeared in American journalese in the 1980s, it was conceived as an invisible organisational barrier through which females rarely penetrated in male-dominated workplaces. Today, as shown from the responses above, the change is such that female lecturers seem hardly aware of the concept of a glass ceiling. However, in male dominated faculties the scarcity of qualified female applicants can create an impression of the existence of a glass ceiling with assumptions that 'more men than women are interested in promotion'.

The responses of lecturers varied from, at one end of the spectrum - a small minority who believe that the glass ceiling was clearly evident, to the middle of the spectrum in which it was considered out of date and more permeable, and at the other end where a female lecturer had 'never heard of it' and another who did not feel that it existed at all. The general consensus was that the concept of the glass ceiling today played little or no part in preventing the career aspirations of female academics.

Female and male senior academics appeared to have accepted aims in policies towards gender equality and predicted equality but not uniformly in all faculties.

5.12 Gender Equality Scheme

The Gender Equality Duty (GED April 2007) required all public authorities including universities to produce a Gender Equality Scheme which pays 'due regard' to eliminate unlawful discrimination and harassment, and to promote equality of opportunity between men and women (GES, March 2007). To seek partial reliability in the findings in para 5.11 above each interviewee was asked: *Does this university publish a Gender Equality Scheme? If so, have you perused it?*

The aim here was firstly, to check whether or not academics were aware of the scheme and secondly, to ascertain whether or not they had read it and used it, the latter to provide indications of any situations which may have given cause for grievance in relation to gender equity and equality.

A selection of responses revealed the following:

I would imagine that they do [have a gender equality scheme] and that's the sort of thing the union would demand and if it didn't exist that's the sort of thing that should be in place. (Male lecturer (9) in a post-1992 university)

I have no idea. They probably do [have a gender equality scheme]. I've never felt inclined to look. (Female lecturer (10) in a post-1992 university)

I haven't seen one [a gender equality scheme], but then I probably haven't looked for one and I have never had the need personally to look for the gender equality scheme published by this university. (Female lecturer (12) in a post-1992 university)

Yes [there is a gender equality scheme] for students and staff. I think it is how people apply them in practice. I haven't needed it so far. (Female lecturer (13) in a post-1992 university).

The same question was posed to senior academics some of whom had received training in the implementation of the scheme:

Yes it has, and I have perused it ... because I have been involved in recruitment. It has been part of my job particularly in preparing job adverts and being involved in selection training with the HR [Human Resources] side in doing quite a good job in promoting this. (Male professor (4) in a post-1992 university).

Yes, I know that it's being reviewed at the moment. It is part of our training when I came here as a manager I had to be familiarized in it, for example before we could make any appointments I had to go through internal training which included all the qualities. (Senior male professor (5) in a post-1992 university).

Yes, it [gender equality scheme] is looked at by individuals when an issue of discrimination arises. I don't think people generally look at it. (Female professor (6) in a post-1992 university).

We certainly have a gender equality policy and an ethnic based employment policy as well, so we have equal opportunities. I think it's appropriate that we have one and I don't think it's about the individual ensuring that it happens in the spheres they move in; that would be the weakness of any policy that some people will not try and make it happen. (Male professor (15) in a pre-1992 university).

Yes it does. I have seen it because I had to write about it. When you write research applications you have to show that you are being fair and state your equality policy. (Female professor (21) in a pre-1992 university).

Summary

The majority of academics were aware of the existence of their university's Gender Equality Scheme; some had never heard of it and no one felt the need to consult it. This suggests a lack of any grievances in terms of harassment or discrimination. Most senior academics were not only aware of and had received training in the Gender Equality Scheme but had on occasions used it in drafting such as research proposals and advertisements for job vacancies. This finding represents the views of a relatively small sample of academics in higher education and does not suggest that grievances or complaints have not occurred elsewhere in universities. However, from the responses above it seems reasonable to conclude that the glass ceiling is of little concern today.

5.13 Gender Blindness

Gender blindness is described in literature sources as 'not seeing, being unaware, suppressing gender, or gender defensiveness' (see chapter 3, para. 3.11). In relation to the glass ceiling gender blindness is considered to contribute to its metaphorical thickening particularly in male-dominated faculties. To gain an appreciation of the difference (if any) of how female and male academics interpret the concept of gender blindness all interviewees were asked: *As a feature of the glass ceiling, what does 'gender blindness' mean to you?* The first reaction by most interviewees was to question the meaning of the term 'gender blindness' which was explained as described in the literature sources.

Responses of Female academics:

A female lecturer (1) explained gender blindness in terms of a lack of understanding of 'those at the top' through not 'walking in another's shoes':

Those at the top often don't have a family; there are more of them that have no family and anybody who hasn't walked in another's shoes doesn't understand.

She compared female/male attitudes referring to a perceived male notion that females are less capable in relation to student discipline:

I've never heard of the concept [gender blindness] but it definitely does happen. It is not something I have really thought about, but I think it's definitely inherent in male academics who have different attitudes towards students. It's true that some male academics think that female academics are less capable in their attitudes towards discipline etc.

A female lecturer (2) in a post-1992 university explained gender blindness comparing male and female opportunities for promotion:

Yes, I think that it [gender blindness] is a realistic issue that exists in all careers and it must affect the promotion of women. Men appear more ambitious, can work long hours and come home to a cooked meal and have everything done for them whereas women in the same position often have a family to look after and have to juggle their time.

A female professor in a post-1992 university also related gender blindness to promotion:

It [gender blindness] tends to be by one or two individuals, but it's not general in this university. I've come across it in academic conferences. I think it could affect the promotion prospects of females in terms of men being unable to see different attributes that females can bring, and some [males] think that female attributes are less important than male attributes.

Responses of Male Academics:

A male reader (3) in a post-1992 university thought that gender blindness became visible and advantageous to female academics when they excused themselves from evening class work because of their child care responsibilities.

I suppose as a male you could argue that are never going to see things from the point of view of a female as they are physiologically different. However, I can give you one example of that where I'm more aware of that, and it has been said by other colleagues that when timetabling for example, some classes are in the evening and certain lecturers seem not to be timetabled in the evening. Reasons that are given is because they [females] have child care responsibilities and therefore, if there were gender blindness, it only becomes very visible that gender is important,

and someone who doesn't have children to look after would then be doing the night classes, so that it actually works in favour of someone who has to look after children, which is predominately women.

A male professor (4) post-1992 university believed that gender blindness 'can go both ways' and has little effect on promotion:

I have heard the term gender blindness. I think that people overlook things but not by intention and it may lead to the ball back into the female court as well. I think sometimes that they [females] are blind to the actions of males and are being deliberately discriminatory. I think people often can't see themselves as biased or gender blind, I think it can go both ways. I don't think gender blindness has a very strong effect on promotion

A senior male professor (5) in a post-1992 university related gender blindness to unbiased decision-making:

It's a question of whether gender blindness is a good thing or a bad thing, because you can have it both ways. We are expected, when we make appointments, to be gender blind. In other words we are supposed to appoint on the basis that gender makes no difference as to who we appoint. I can tell you absolutely categorically, we have never taken gender into account either way when making an appointment. I have always appointed the person who is appropriately qualified and has the best experience for the job ... so at that level I am gender blind. I'm sorry, I don't like the expression gender blind because I don't think of it as a gender issue. It depends on individual arrangements.

Vignette Two – An opportunity for overseas teaching – Gender Blindness?

A female senior lecturer when offered an opportunity to teach overseas, although keen to do so, felt compelled to turn down the offer because it coincided with her daughter's final examinations at school even though her husband would be at home. The offer was then made to a married male colleague who accepted the opportunity with alacrity. During a discussion with him after his return from abroad she explained her reason for refusing the offer. He expressed complete surprise saying that he had completely overlooked the fact that his own daughter was also sitting her school final examinations while he was away.

This example of the dual role of a female as an academic and family carer provided no such dilemma for the male – male gender blindness or female maternal protection?

A male professor (15) in a pre-1992 university conceded gender blindness reasoning male lack of knowledge of child care and therefore blindness to this responsibility:

I think there probably is [gender blindness] and I think it easier for males not to understand if you haven't actually got the responsibility of it [child care]. I recognize something of that. I am not sure that appointing in one's own image and gender blindness are linked but I do see gender blindness as being there, yes, I think it probably is actually, it is an issue.

A male senior lecturer (18) in a pre-1992 university again used the term 'it cuts both ways' but discounted any 'adjustment' for female academics with 'responsibilities outside', the latter meaning child and family care at home:

I've never heard of the term gender blindness. I suppose it cuts both ways. If there's to be equality of opportunity it has to be merit based so that the expectation on female members of staff are the same for advancement or promotion rather than any adjustment being made for some responsibilities outside.

Summary

Interpretations of gender blindness by some male academics differed, in some cases markedly, from those of their female colleagues, for example, in believing that it has no effect on promotion. However, from a study of all 900+ responses the majority of males agreed that they are gender blind in varying degrees. Some male responses indicate a degree of defensiveness in their interpretation of gender blindness in expressions such as 'sometimes that they [females] are blind to the actions of males and are being deliberately discriminatory' and 'it cuts both ways'.

A quasi statistical analysis of all 900+ responses showed that more males than females, over 60 per cent, agreed the existence of gender blindness in their workplace. Of the males who admitted to gender blindness senior

academics outnumbered lecturers by 3 to 1. Another surprising outcome was that six times more females than males denied that gender blindness was problematic and that almost one third of responses indicated gender blindness affects both females and males.

The incident described in vignette two above raises questions in relation to gender differences in caring, responsibility and mutual trust. On the one hand the female felt the need to be at home to provide support to her daughter at a time of potential stress even though her husband was at home. The male felt no need to provide support, leaving it to be provided by his wife. This raises questions in relation to female and male traits, sharing of caring responsibilities and gender blindness.

In terms of its effect on the glass ceiling it may be concluded that gender blindness cannot be ignored – a finding which is in broad agreement with the findings in relevant literature sources as a barrier to the career development of female academics (see chapter 3, para. 3.10)

5.14 Discrimination and marginalisation

Literature sources relating to discrimination and marginalisation against female academics refer to feelings of being ignored, excluded, undervalued and disadvantaged in the male-dominated promotion processes and in earning less than their male counterparts (see chapter 3, paras. 3.3 and 3.18).

The recollections of senior academics show differences between the attitudes of senior academics and lecturers. For example a female senior manager (academic) (7) having experience in both pre-and post-1992 universities recalled:

I spent 13 years as a lecturer in a traditional pre-1992 university and nobody progressed any faster than me to senior lecturer. I was only one of two females, he [the male head of department] assumed that, given I was newly married, I might have a baby. It

was his absolute assumption that were I to have a baby I would be bound to leave. I think it slightly startled him when I did indeed have two children but I carried on working full-time which at that time, in the 1970s, was uncommon.

She explained the attitude of a male colleague in her decision to continue working full time:

One of my male colleagues raised some concerns with the head of department about whether I was available for taking certain classes. I remember discussing it with the head of department, who seemed unconcerned.

Literature sources show that marginalization was a difficult problem for female academics who, earlier in their careers, were newcomers in male dominated faculties. This manifested itself in several ways including the impressions that 'men are the main obstacle in the way of creating a level playing field.' (Pettengell, March 2007, p.21) and 'women's marginalisation is particularly poignant in higher education' (Goltz, 2005, pp. 51, 61).

Vignette Three: coping with marginalization

One of the key informal barriers was humour and that's much less tangible. In an earlier role working with a group of men, the way they related to one another was through joking. Not just jokes, it was often about football, insulting each other, pulling the leg and being a bit cheeky and I think what's interesting is if that is the way you operate that's what the culture is, but you cannot do that to women. It can lead to bullying but it's one particular sort of culture that has existed not across all institutions or universities, but in certain sectors. It's just a way of being and it's very exclusive. It can be an ingredient of the glass ceiling in one way, but you can do it more overtly, you can do it through discriminating. In my career I've observed some of the men doing this, but when it came to actions they would pride themselves in treating everyone equally.

She adopted an interesting strategy to overcome the banter:
I tried one tactic with a group of men I worked with and I told all of them that I thought that's what they did and it excludes me when it has that sort of hint of insult to it. It is completely inappropriate for a man to speak to most women in that way. It would be really disastrous for a woman to speak to a man like that. So what I said to them was, 'it's so interesting, the way you behave, I'm going to write a book about it and each time I observe these behaviours I'll record it.' I would say 'that's a good one for my book.' It had the effect of stopping their rudeness, it made them think.

A different perspective was expressed by a male professor (4) in a post-1992 university who found an element of positive discrimination and what he referred to as 'enforced bias':

There's sometimes a bit of positive discrimination towards women rather than just equal. This place has been run by women for a long time which is isn't really compliant with the legislation but it is rooted in peoples' minds who keep thinking about balance. There's an enforced balance rather than getting the best people.

A male professor in pre-1992 university took an opposing position being conscious of what he perceived as an element of unfairness to a female academic who had taken a number of career breaks. He recognised that no allowance was made for her unavoidable absences when she applied for promotion; he suggested inequality but not discrimination:

I am aware of one female colleague having some issues to do with the performance required of staff in order to get promotion because she, over the period of time she was lecturing, was interspersed with a number of times out for childbirth. The bar remained the same height and there was no recognition for the fact that some of her time was taken out for childbirth. So to become a senior lecturer she still had to perform the same as her male colleagues. In that instance there was not equality there, but I think it should be balanced in that we [men] should be better at looking after the children.

The **responses of lecturers** painted a picture of their professional lives free of discrimination. For example a female lecturer (10) in a post-1992 university was unaware of discrimination:

Discrimination no, not really actually, a lot of my work areas have been dominated by women so I've been in amongst equals in that respect. In this school there are men but there are just as many females and there are just as many female professors and readers, so I have never felt discriminated against.

Another female lecturer (11) in a post-1992 university had not experienced discrimination other than in industry when she was initially marginalized in an all male environment:

Overall I don't think so because being a woman was also an advantage sometimes. When I was studying I was the only female, I was surrounded by guys who treated me like a princess, they

were courteous. In academia it is better [than in industry] but we are only two women in a group of twelve in which the professor and senior lecturers are male.

A female lecturer (13) in post-1992 university:

No, I don't think so, certainly not, maybe if I'd been here longer but not in the time I've been here, there's been no evidence of it [discrimination].

A female lecturer (14), 12 years in pre -1992 university:

I did on a construction site quite early in my career but never in academia.

Summary

Although the senior female academics above experienced some discrimination and marginalization early in their careers, they were clearly able to overcome these pressures in that they gained promotion in male-dominated faculties. The experiences of more recently appointed female lecturers appear to have been devoid of discrimination and marginalization apart from one case in which a female lecturer felt age discrimination in being considered too young during an interview but was nevertheless successful in her appointment to a full-time lectureship. It is therefore reasonable to conclude that, as far as the glass ceiling is concerned, the opportunities for promotion for female academics appear to be approaching a level playing field and that discrimination and marginalization is unlikely bearing in mind that the consequences of legislation have inhibited if not removed discrimination against women in academia.

5.15 Career breaks and their effects on work and promotion

The effects of career breaks on career progression of women were investigated from responses to the question: *Do you think that career breaks affect the future careers of academics in terms of promotion?*

This question was prompted from literature sources which show the disadvantages of career breaks to female academics (see chapter 3, para 3.16).

Interestingly, the majority of male interviewees expressed some sympathy and understanding of this situation. For example, a male senior lecturer (23) referring to the long-hours culture which he perceived to be prevalent in his pre- 1992 university expressed his concern that female academics inevitably find the need for career breaks disadvantageous in their career progression.

A women who has two career breaks may not seem much of a hindrance but there is still an expectation in most families that the women will be the primary carer. It's not what's happening between 9 and 5 that's the problem it's that it's actually quite difficult for somebody working with long hours working in the evening which is often what research requires.

A male reader (3) in a post-1992 University also acknowledged the disadvantages suffered by women from career breaks:

A lot of females have career breaks due to family commitments and they can be disadvantaged in terms of research outputs having taken time out and are disadvantaged in not having had that opportunity.

A male professor (4) in a post-1992 university agreed and added other disadvantages:

Yes, I think career breaks do disadvantage females. They miss out in training, they miss out in being around. Career breaks inhibit progression. I think if a man took a career break it would have the same effect, it's just that men don't require career breaks.

A male lecturer (24) in a pre-1992 university believed that women returning from career breaks receive little support and have few opportunities for promotion in choosing to be a 'homemaker' and because of the 'commitments' necessary for career progression:

The policies and procedures of the university are not demonstrably sexist but the commitments required [for promotion] would preclude anybody who was a homemaker or even anybody who took leave of absence because of pregnancy. Very little support is offered to those who take maternity leave and then come back to resume a research activity. There are universities that do support and encourage women returning to the workplace after having a family, this university is not one of them.

Responses of female academics:

A female professor (6) in a post-1992 university explained the difficulties in 'catching up' and in coping with changes faced by women as a result of career breaks:

Yes, definitely, women suffer because they take career breaks. They are left behind and have a lot of catching up when coming back into the workplace. Nothing stays the same in an organization. Things move on, goal posts change in terms of priorities, in terms of what is seen as important, in terms of the skills that you need.

A senior female professor (8) in a post-1992 university sympathized with the challenges faced by young female academics:

Thinking of some of our female staff who have young children: they struggle to do everything, teach, do research, write papers and look after a family, I think that's an enormous workload to ask of anyone. I am thinking of women ... with younger children that need a lot of attention, I think it's really challenging.

Some female interviewees viewed career breaks as temporary disruptions with delays in their research which cause no irreparable damage to their promotion prospects. For example, a female lecturer (14) in a pre-1992 university although agreeing that promotion is delayed, added that determination and a competitive nature are prerequisites for women:

I think a career break puts promotion on hold but I don't think it stops women from being promoted. They are able to come back and pick up where they left off and progress in their career. I think women have to be very determined. One of the other ladies, still in her 30s, she joined us 11 years ago and she's been off and she has had four children and has gone off on maternity leave; she's back and she's working brilliantly and she's working really well and her career in the next couple of years is going to blossom. It is down to determination and she has a very competitive nature.

The female lecturer (16), referred to above, took a positive view of her own career prospects while juggling the responsibilities of family care and her enthusiasm for her research in a male-dominated research intensive

school where it was not expected by her professor that she would return to work when about to take her final fourth career break:

I was due to go on maternity leave for the fourth time and I was asked to clear my office to another office and I wasn't happy about that. I said I was coming back to which there was a laugh as a response from a very senior person who thought I wasn't going to return and I was not pleased at the time and clearly he didn't know me very well.

Vignette four: a female lecturer's view in coping with her career breaks

It's a momentum issue, you lose your momentum. I've had four children and I've taken a year off for each of them, a year every second year so I lost four years out of eight. It is murderous to momentum, networking, trying to get projects to roll and keep going, it's very difficult. Frankly, that's in the past, I am not going to go back there. Since I haven't been on maternity leave for two or three years I can see the momentum building up again. There's a positive effect to come out of that, if you become good at multi-tasking when you have small children and you keep going at that pace and you apply that effort to your job as children grow up then you are going to be a very effective member of staff.

A female lecturer (1) in a post-1992 university, appointed from the private sector, expressed an atypical and pragmatic view in posing the question:

If I'm not here, how can you promote me? If I've not been doing the work then I don't feel justified in being given a job that I'm not here to do. Of course it's unfair, but the biology gives women no choice.

Summary

From the responses of each of the interviewees, female and male, there was general agreement that career breaks are disadvantageous to career progression, especially to female academics. The main disadvantage relates to two important criterion for promotion - research and publications (see chapter 3, para. 3.11) which are interrupted and difficult to resume after returning to work. It was accepted by both female and male academics that career breaks delay promotion rather

than prevent it and in this sense the glass ceiling is non-existent bearing in mind that according to Wilson (2005, Vol. 29, p. 235) the act of ignoring career breaks when purporting to treat females and males equally in appraisal is discriminatory behaviour.

5.16 Vertical and horizontal segregation

Vertical segregation refers to the concentration of female academics in the lower rungs of the promotion ladder. In literature sources it is related to a multiplicity of reasons (see chapter 3, para. 3.3) which are investigated further in the question to academics: *With reference to vertical segregation, do you find that women occupy the lower rungs of the promotion ladder? If so, why is this?*

Responses of lecturers

A male lecturer (9) in a post-1992 university expressed the hope 'that higher education is an area that could reflect a balance between the genders' but he suggested that vertical segregation may be due to 'women's lifestyle' and their lesser drive towards promotion:

I think we would have to be careful, particularly on the part-time front, as seeing that as necessarily a negative state of affairs. Maybe it [vertical segregation] is because women's lifestyle and career opportunities suits them very well indeed. Perhaps there is a greater drive among male lecturers to become senior lecturers, or maybe their expectations that they should have those ambitions is stronger. I think that within a family structure that still carries some weight in that men are seen to be the breadwinners, I think that attitude is still there. Women might be more reticent than men to seek promotion where there is a gendered division of labour in a nice nuclear family. Promotion can be seen to lead to a loss of free time so there's lots to be said for having a settled career while you do other things.

A female lecturer (14) in a pre-1992 university suggested, with a measure of optimism, that 'vertical segregation might change as we develop further and the balance might not be an exact balance but it may improve

from a female point of view.’ Another female lecturer (16) in the same university explained :

We (women) are just a casualty of just not having the number of hours in the day. If they want to progress, they may not have the same drive and ambition [as men], I don't know. Any academic job now in a university you have to have a doctorate. If there are fewer women with doctorates then there's a lower number in the pool of people available for a post.

A male lecturer (19) in a pre-1992 university revealed a more optimistic attitude noting that females are outperforming males as students:

The system has helped the change in this way and culturally family responsibility is now shared and this now gives some sort of commitment for women to work more and to study more. In the last two years here the majority of women gain higher marks than males.

Responses of senior academics

A male professor (5) in a post-1992 university explained vertical segregation as a matter of choice the consequences of which may or may not lead to promotion. Referring to career breaks he made no distinction between a career break for family responsibilities and time spent on leisure activities. His attitude towards promotion was related to the need to make sacrifices particularly in the acceptance of a long-hours culture:

Vertical segregation may be true in universities as a whole but I think in some schools and departments you will find that this is the case in some places but not in others. It depends how the segregation occurs, some of it is because some women choose to change their way of working or take a break because they want to be with their kids and that's a decision you make. As a man, if I made the decision to go off round the world for a year, I am making a decision which will have an impact on my career. If I make that decision I'll live by the consequences of it. For example, to be promoted I knew I had to work at weekends, I wrote papers and books because I knew that I had to do that to move up in the hierarchy and I did enjoy doing it. It was my choice, I could have gone and played football or squash.

He noted that vertical segregation was generally evident, but referring to its history he observed improvement: ‘twenty years ago when I am sure

there was gender bias and the very fact that there wasn't a female principal until ten years ago is clear evidence.'

A female professor (6) in post-1992 university suggested that more women than men prefer to remain at lecturer level because of long holidays and the freedom of flexible working:

I think for some women, staying at that level [lecturer] suits them. I think it's because of the type of work they are doing and the holiday situation. We have long summer breaks and there's flexibility in terms of when you need to be here. They realize that what they've got is good, it allows them freedom. So I think for some it is actually a conscious choice, even a subconscious choice.

Another female professor (8) with wide experience in both pre- and post-1992 universities in England and Scotland attributed male domination as a cause of vertical segregation: 'In the past I think it [vertical segregation] was a result of the scarcity of females in senior positions, but to be fair to men I don't think there were men who were discriminating.' She exemplified this recalling the changes in vertical segregation towards equality from a change in attitude of a new dean of faculty (male):

Vertical segregation has changed dramatically in the last four years. Four years ago we had extreme vertical segregation; that has changed enormously.

A male reader (3) in a post-1992 university also suggested that vertical segregation was a result of female lifestyle preferences in relation to child care and part-time work:

I think it's an issue of part-time working, and you do have a majority of females in that because it suits their lifestyle that they have in child care and their domestic commitments. There is a majority of males in senior positions and more females in junior positions, but again I think that is fairly sector specific and very department specific.

A male senior lecturer (18) in a pre-1992 university believed that 'it will probably take decades for equality in senior positions', but on the other hand a female reader (17) in the same university believed: 'I really don't think it's a huge issue here.'

Summary

The responses above reveal that reasons for the under-representation of women in senior positions differ in some respects from those found in literature sources (see chapter 3, para.3.11). For example, interviewees made no mention of the pipeline effect in blocking promotions through a scarcity of vacancies nor were there references to lack of female mobility. Some female lecturers and senior academics referring to 'lifestyle' choices suggested that some females prefer not to apply for promotion 'because it suits their lifestyle' and that the long-hours culture is a disincentive to women with family commitments. References to the 'greater drive among men' for promotion and the advantages of flexible working conditions at lecturer grade were seen as reasons for the perpetuation of vertical segregation. However, there was some agreement that vertical segregation has improved in the last few years. A continuing quandary in the promotion process was epitomized in the words of a female lecturer: 'If I'm not here, how can you promote me?' or from a male lecturer: 'family friendliness will have arrived when a pregnant member of staff is promoted'

5.17 Pay Gaps

In this thematic element the objective is: to explore reasons for pay gaps which exist in every Scottish university in favour of male academics from answers to the question: *Published statistics show that male academics are paid more than female academics, why is this so?*

A female lecturer (2) in a post-1992 university believed the historical legacy that the male is still considered as 'the breadwinner' and 'that women don't need so much money, ... it's not so important for women':

Yes, we are all on the same scale, but in my small group, it is the men who are asked to do extra work and are paid quite well, but females have never been given as much chance. We have the ability to do the work but we've never actually been involved.

Again, referring to legacies of gender history another female lecturer (1) in a post-1992 university believed that pay inequality was 'an embedded social or cultural problem':

Men are still seen as breadwinners, they are seen as the dominant sex, they are seen as professionals and therefore can command higher salaries. I don't think it is done necessarily explicitly, I think it is done subconsciously, unconsciously even, by those who decide salaries in placing someone on the salary scale.

Some female and male academics referred to differences in female in comparison to male negotiating skills in their starting pay, for example, a female professor in a post-1992 university:

Men are better at negotiating, they are more comfortable at challenging their rate of pay than women.

A female senior manager academic (7) in a post-1992 university agreed:

There is some evidence ... [that] men are more likely to negotiate their way to a higher starting point than women. Women are less likely to negotiate a good starting point.

A female professor (6) in post-1992 university agreeing with female lecturers above also recognized the difficulties for females with family responsibilities to gain additional income:

Very often the opportunities for extra income require extra hours and input which is more difficult for women who have family responsibilities.

This attitude was expressed by several female lecturers each of whom entered higher education with a background of professional experience in the private sector. They explained their reluctance to negotiate their initial placing on the salary scale or to question the possibility of incremental allowances for their professional experience.

Am I really going to push for my career to be promoted or do you stay where you are? So I suppose males are better at pushing in getting themselves promoted than females. I would never think to go back and argue about that [starting salary]. If you are getting appointed to a job you are so pleased to get the job you don't go back and ask for more. (Female lecturer (14) in a pre-1992 university).

Maybe men are better at negotiating starting pay. Maybe they are better at being hard-nosed in asking for what they think they deserve. Women don't like to upset people, we don't like to rock the boat so much because we probably care more than men do about what people think of us. (Female lecturer (16) in a pre-1992 university).

I certainly was quite surprised that they didn't take my professional experience into account. I was told that it was HR's policy that everybody started on the bottom rung I think everybody starts at the bottom - I don't think that is necessarily true. I don't think everybody starts at that level, but I have no evidence. (Female lecturer (13) in a post-1992 university).

I think one of the problems here is not so much gender but the fact that you have professional experience and you start at the same salary as someone who is just out of university. To me that seems wrong. Your professional experience isn't counted for salary positioning on the scale. The starting salary - it doesn't seem to be realistic. I was earning my present salary 15 years ago in practice; it was a sacrifice but I gained certainly in the hours of work and flexibility. (Female lecturer (13) in a post-1992 university).

Interestingly, female academics unhesitatingly discussed their reluctance to negotiate starting pay, whereas in interviews with male lecturers there was neither reference to nor speculation about starting pay:

A male reader (3) with experience in pre-and post-1992 universities took a pragmatic stance:

If you have been out of education for some time bringing up children, clearly that will disadvantage you in the university on a lower point than a male who hasn't had that career break.

A male professor (4) in a post-1992 university suggested the 'pipeline effect' and bonus payments as causes of pay gaps:

There are a lot of older academics still around from times when there were more males and are in more senior positions at the top or near the top of the pay scales. They are a statistical artefact that makes the [pay] gap seem bigger. Another feature is in terms of bonus payments, which may or may not be counted here: males are more able to pick them up as additional bits of consultancy work. They don't have the same constraints on time as females who have family responsibilities.

A senior male professor (5) in a post-1992 university also explained pay gaps in terms of the preponderance of males in senior positions and loss of increments due to career breaks:

It [the gender pay gap] is down to seniority, with more men in senior posts that creates a pay gap. The other thing would be, and this is where gender may come in to it, if you took a longer period out it would mean, in terms of incremental progression, you've lost some increments on returning.

Referring to consultancy work, a male reader (3) with experience in both pre-and post-1992 universities related pay to expertise and talent rather than gender:

I never ever heard it [consultancy work] being gender specific, it has more to do with the expertise and the talents of an individual - if they happen to be female then great, if they happen to be male then equally great. I've never seen any distinction at all.

A male professor (22) in a pre-1992 university considered consultancy work simply as a matter of choice ignoring the time constraints on female academics with family responsibilities:

If women choose not to do consultancy work that's up to them. In this university there's no pressure to do consultancy. It's not like a post-1992 university where it's a major job expectation, the focus here is on research.

A male senior lecturer (23) in a pre-1992 university referred to causes of difference in pay from knowledge transfer activities:

Knowledge transfer, or knowledge exchange, is one of the ways in which opens a wide range of things: computing, consultancy – it would cover people who are examiners which can be quite lucrative, teaching for other institutions is particularly rewarding. I suppose that the big thing with knowledge exchange in a university like this one, there's always pressure for us to spin out companies and develop our own intellectual property. My impression is that here people who are most assertive about this are all male which means that they receive additional pay for this. As well as being employed by the university they are also running their own business.

A female perspective on the question of who benefits most from consultancy work differed from the perceptions of senior male academics above:

Males tend to keep it [consultancy work] to themselves or give it to other males, but perhaps I'm being a little unfair in that (Female lecturer (2) post-1992 university).

Consultancy work, I am not really quite sure [gender split]. I do it myself but I don't really get paid much. It is additional to my work and the university gets a big chunk of the money that we generate but at the same time the consultation work is a bonus, but it is not a regular income. (Female lecturer (11) in a post-1992 university).

Men get more consultancy work and are more involved in marking external examination papers. As a female, you [have to] get into good networks to get the opportunity. (Female Professor, aged 55, Post-1992 university)

From the above most male academics believe that consultancy work is equally divided between female and male academics whereas some female academics hold an opposing view which is expressed in terms of men having more time for it and males 'keeping it to themselves'.

Additional income from **teaching overseas** was found to be more advantageous to male academics again because of the burden of family responsibilities borne by females; two professors agreed:

It's possibly the case that women having caring responsibilities at home are prevented from overseas work. There are short stints for a few months and it's less likely that a female would, and possibly the females who go [abroad] tend to go for a year where you can maybe ship your family as well for a serious length of time, or it tends to be senior colleagues going off for a year after their children have left home. (Male professor (15) in a pre-1992 universities).

Very often the opportunities for extra income require extra hours and input which is more difficult for women who have family responsibilities. (Female Professor (8) in a post-1992 university)

Some academics believed that opportunities for overseas work were equally available to females and males: a male professor (4) in a post-

1992 university thought it about equal but appreciated the constraints on women:

There's extra money to be earned for teaching overseas which causes a pay differential, but as far as I know in this university there are as many females going overseas as males, but they [females] have constraints over family responsibilities

A female senior professor (8) in a post-1992 university noted the change towards equality in allocations of overseas teaching:

Historically men benefited from overseas teaching. This is becoming more equal as in the commercial world which is probably more even male to female which is income-generating for the university.

A female reader (17) in a pre-1992 university agreed equal opportunity for teaching overseas:

Teaching overseas – I don't know if men get the chance more than women. I don't see any difference in opportunities between men and women.

From the responses of female and male academics a lack of unanimity was evident, some believing that there are equal female/male opportunities for work overseas, others recognizing that family responsibilities inhibit women from travelling abroad for long periods of time. However, equal opportunity for overseas teaching becomes apparent as family responsibilities diminish when children become self-sufficient.

Several literature sources (see chapter 3, para.3.16) attribute the gender pay gap to the preponderance of males in senior positions with more males sitting at the top of their salary scales for longer than women. In these respects the responses of both female and male academics are in general agreement with the findings in literature sources. For example a female lecturer (12) in a post-1992 university referred to women 'remaining in the lower grades':

It's a consequence of there being more men in higher paid positions. If there are 18% women in the professoriate then you've

got 82% men in the highest paid positions. Salary grades are fixed. It can't be within an institution, so it must be younger women who are at the lower end of the lecturer scale and more men who are at the top of the lecturer scale.

A male professor (15) in a pre-1992 universities agreed that women appear to remain in the lower grades and lower in pay scales:

Clearly, what's happening is that women get into a particular pay band in a lecturer or senior lecturer position and it looks as though they are remaining in the lower grades within that. I am trying to think why that would be. We have what's called accelerated pay scales.

A female reader (17) in a pre-1992 university suggested that the pay gap was simply a function of more men than women at professorial level:

The majority of professorial staff is male and that's because the pool is different and so inevitably you'll see a pay difference.

A male professor (22) in a pre-1992 university agreed:

You need to look at the proportion of women employed and you need to look at the proportion of promoted women. I believe that there is equal pay for equal work and because there are fewer women in senior posts women tend to get less income. If most women are employed as lecturers then the female rate is going to be lower than the average male rate. If you look at the distribution of people in the job there are far more men in promoted posts than women in promoted posts so the net effect is that on average men earn more than women

However, he extended his argument reasoning that a calculation of the average pay of females and males in each level or grade shows that 'there's more or less equal pay':

If you look at it in terms of level then there's more or less equal pay. So men are at the top of the scale for longer than women, but they are still earning the same money.

Referring to an independent pay audit:

The independent audit is saying that there is equal pay for equal work but there is not equal opportunity, it distinguishes between equal work and equal opportunity.

A male senior lecturer (23) in a pre-1992 university, agreed that within grades gender pay gaps are zero, but conceded that differences exist because men are 'pretty much at the top of the grade' and that differences exist because they 'are largely due to promotion'.

A female lecturer (12) in a post-1992 university related pay gaps to professorial ability to generate research income. Her reference to 'a higher deal' referred to discretionary pay awards:

If you are generating an awful lot more income for your institution you are likely as a professor to negotiate a higher deal than a professor who is being a bit stagnant.

A male senior lecturer (16) in a pre-1992 university suggested that horizontal segregation affected the pay gap due to male domination in technological universities:

In a more technological university you would expect it [the pay gap] to be dominated by males who are older. You get to the top of the scale quite quickly, the bands are not very big - maybe about six or seven years.

Summary

The perception that gender pay gaps in favour of male academics is due to the fact that there are more men in senior positions than women was the view of two thirds of interviewees and by twice as many males as female academics. Pay gaps were also believed to be due to the fact that there are more males than females at the top of their pay scales for longer periods of time than females. Surprisingly, some female academics suggested that pay gaps exist because men are still 'seen as the breadwinners'. Other factors which affect the pay of female academics include: the effects of career breaks and family commitments, the main burdens of which are borne disproportionately by women and result in the loss of salary increments. In addition, although female academics had fewer opportunities to earn additional pay for teaching overseas and consultancy work it was suggested that there is trend towards equality. In knowledge transfer activities in spinning out companies and developing

intellectual property males have the advantage over women who are currently less involved with these activities.

To explore the pay gap problem further a supplementary question was posed: *Is there a difference in the pay gap between female and male academics when calculated from average pay in each grade?* As statistical data was unavailable to answer this question it was decided to accede to a suggestion from one interviewee, a University College Union (UCU) representative, to approach a full-time union researcher of the UCU.

5.18 University College Union (UCU) explanation of Pay Gaps

The pay gap data published by the UCU (UCU, April, 2007; UCU, Sept. 2009) provides mean average salary data of all female and male academics for each university. This is a reflection of the disproportional gender representation in senior positions rather than the female and male average salaries within each grade. For this reason it was decided to interview an employee official representative of the UCU to ascertain averages salaries by grade. His responses were as follows:

Certainly, I've looked at all the job grades across Scotland and the differences in pay. Somewhat surprisingly the professor grade doesn't actually show much of a difference, but there are differences between universities. We can also look at the differences by the points on the scales. You can look at the figures above professor grade, and when I did the average on that there's an absolutely huge difference between female and male averages. It's not necessarily female professors getting paid less it's more to do with those above professor level who are mostly male.

Referring to the effect on pay gaps of the more recent appointments of female academics in comparison to the longer service of men as stated above (female lecturer (11)):

More women have come into universities fairly recently, in the last decade, but they are still at the bottom of the scales because there are more females at lecturer levels. University managements have now said that they are going out of their way [to ensure] that women are employed in universities but they are all employed at

the bottom of the scales. If you look at the grades: it's not just about the pay gap, it's about where the women sit on grades.

Referring to professorial pay gaps:

The other thing, of course, is that there is no difference in the pay gap at professor level, but there is a difference in numbers [of females and males] and that's what gives you the overall pay gap.

In restating the position of women at the lower end of their pay scales he suggested that in time this 'should iron out' but could be accelerated if pay scales were shorter.

Another determinant which affect pays gaps was that of 'discretionary pay' considered as undesirable by the union and noted that more men than women benefit from this:

At the top of grades there are extra points and there may be more men on those extra points. It is called discretionary pay, you can apply for it. If somebody goes for promotion and doesn't get promotion it's a kind of way of retaining their services. It can be paid to those at the top of their scale. We [the UCU] are trying to get rid of these discretionary points. They get involved in negotiations. There was a big change when they amalgamated two different pay scales in England. In Scotland they were pretty well the same and the pay scales became longer because it meant that the older universities only used part of that pay scale. Each university used the scale slightly differently using a national scale.

A factor which affected differences in the levels of pay gaps between pre-1992 and post-1992 universities (see chapter 3, para. 3.20) was related to starting pay:

What happens when someone is appointed in a Russell Group university, less so now, people would often get higher up the scale when they started because it was up to the university where they started and that wasn't always at the bottom of the scale. It's something that we [UCU] are very aware of. Equal pay legislation means that they have to start people at the bottom of the scales, unless you can justify paying more. It used to be very prevalent in the old scales. What does happen is people do get appointed straight to senior lecturer or straight to professor if they've got vast experience. That would happen if they moved from one university to another but if somebody had published research and

had a good record in industry then they could be appointed to professor.

Summary

This investigation into reasons for pay gaps in favour of male academics revealed considerable agreement between the findings of literature sources (see chapter 3, paras. 3.18 - 3.20) and the evidence from the respondents above. However, no reference to gender bias or the preponderance of females in part time appointments was made. Although female and male academics have common salary scales the evidence is that women, as relatively more recent entrants to universities than males, find themselves at or near the lower end of their scales in comparison to men who, with longer service, are nearer or at the top of their scales. In addition, there is evidence that in pre-1992 universities starting points are seen to be generally higher than in post 1992- universities which suggests that starting salaries can be negotiated contrary to the assumptions of some female lecturers that *'Equal pay legislation means that they have to start people at the bottom of the scales, unless you can justify paying more.'* Discretionary pay which is negotiated mainly by males is seen to exacerbate pay gaps.

5.19 Criteria for promotion and Career Progression

A key part of this research is concerned with the career progression of academics in Scottish universities. The perceptions of academics are investigated in relation to how they view the criteria for promotion and how the criteria affect the career progression of female in comparison to male academics in a post-1992 and in a pre-1992 university.

To ascertain the important criteria for promotion interviewees were asked: *What do you think are the most important criteria for promotion in this university or in this school?* As will be seen the depth of their responses depended on their knowledge of promotion processes, their experiences in these processes and their level of interest in gaining

promotion.

Responses of female lecturers

A female lecturer (2) in a post-1992 university, whose concentration on her income-generating research work was pre-eminent in her working life, indicated a measure of disinterest in criteria for promotion particularly in a dismissive attitude to networking:

I don't think there is any clear cut guide on what is important. I believe that there's nothing I can really do which would stand me in good stead for promotion. It's maybe rather who you know than what you know. I think networking is more important here than your actual abilities and publications.

She expressed doubts over the interest of management in her career:

It's difficult to know what they value or what they under-value. I feel that my line manager doesn't really know what I do or what output I give. He may have a rough idea but I doubt if he's seen my CV to know what I actually do. It seems as though there's very little interest from above and very little interest in my career progression.

Although the above response may appear to be symptomatic of assumptions of female reticence and lack of faith in the promotion process as featured in the literature review (see Chapter 3, para. 3.6) this, as will be seen, was an atypical response. In the majority of interviews with female academics reticence was rarely in evidence. For example, a female lecturer (16) in a pre-1992 university was forthright in comparing her work rate with that of male academics:

I think for women in general it [promotion] is now much better, but they have to show more evidence of hard work. In my case at the moment we are two women and 10 men and I think the persons that work the most are the two women. We take the biggest teaching load out of whole subject group. I have the biggest teaching load in the subject group, plus, I do administration, plus I do research and although that is not about promotion, it shows that we always take on more, and the more we are reliable the more work comes to us. So we do our job and then we do more jobs and more jobs. With regard to promotion, I think we need to be more assertive, but I don't think it's impossible for us to be promoted; it is less difficult than it was a few years ago.

An equally forthright view from another female lecturer (14) in a pre-1992 university emphasized leadership and support of colleagues as criteria for her promotion:

To get promoted I need to show that I have leadership skills, in the leading of courses, the development of teaching techniques, doing scholarly activity that adds to the student experience, promoting that amongst other colleagues so that I can support them. So that's where I need to display leadership and management which hopefully I am on the way to doing by being the discipline director here.

A third female lecturer (1) in a post-1992 university with considerable professional level experience in private practice before her appointment as a lecturer and who was more involved in teaching than research exhibited her awareness of criteria for promotion in terms of her future research and keeping in contact with her previous workplace activities:

It should be on the nature of the particular job, it's not just a matter of going from lecturer to senior lecturer, it's about management responsibility. It's not just about you being a good academic, it's about your commercial activities and your research, it's about the way you develop programmes, your students, the success of your programmes.

A female lecturer (16) in a pre-1992 university emphasised research funding (income) and publications, leadership in the development of new teaching programmes and the importance of networking:

Any academic job now in a university you have to have a doctorate. If there are fewer women with doctorates then there's a lower number in the pool of people available for a post. Prerequisites are research funding, research publications, responsibility within a teaching perspective – being a programme leader or driving a new initiative and some more than just the daily grind. Networking is key to getting involved in some groups and institutions. That in itself is not worthy of promotion but it opens up opportunities for research. I think who you know can open up opportunities to demonstrate your skills.

Another female lecturer who was a late entrant into university teaching in a post-1992 university was not attracted to a route for promotion which involved research or publishing:

The only way [for me] to become a senior lecturer is to become a teaching fellow and that's a possibility, it is on my agenda. I have a lot to do and I am focusing on my teaching because that's what my forte is. ... I know that I am a good lecturer and a good teacher. I get a lot of feedback from students – I got my tutor award last year as one of the best lecturers which is awarded by students. It's a yearly thing that we do where students vote for us.

Responses of male academics

A male lecturer (9) in a post-1992 university whose work was primarily teaching undergraduate students and who was in the process of preparing his proposal for research towards a higher degree displayed some uncertainty as to criteria for promotion: 'Becoming a senior lecturer, I am not too sure what the criteria would be.'

I think that what's probably going to be much more feasible is a route taken by some of my colleagues: to become a teaching fellow and after that maybe a senior teaching fellow. Certainly in terms of support, the university is enabling me to kickstart my PhD process so that to some extent, as with the teaching qualification... and teaching abroad ... is experience which could lead to promotion.

A male lecturer in a pre-1992 university who was involved in both publishing and income generation through his research explained criteria for promotion in terms of targets set in consultation with a senior colleague in the university's system of annual 'progress development reviews' (pdr) which he appeared to accept with equanimity.

Here there are certain targets that we should hit to get a number of publications in journals in terms of the number of PhD supervisions and for funding – how much we can bring to the school from outside funding bodies. We have targets for each of these and once we have set the targets we can apply for promotion. We have to do our teaching but the most important work is research to reach the standard of the Russell Group universities. In applying for promotion we have to show skills in administration and leadership but it is measured by research and the other things follow. We have a number of under-graduate students to mentor and supervise in their final year, post-graduate students and PhD students. So there is an element of supervision and mentoring.

Another male lecturer (24) in a pre-1992 university who was deeply involved with student counselling described his work environment as 'a very strong research intensive school' in which 'it is quite rare to gain promotion without active and profitable research activity'.

In this school they have to conduct research which will encourage external research funding and a significant amount of it. They would also be expected to teach and to conduct administrative duties. Research and research funding are pre-eminent and teaching third; it has to be conducted and there will be questions asked about teaching. If an individual of either gender can give 60 to 65 hours of work a week for years at a time then promotion will be quite possible.

Summary

An analysis of the responses of lecturers in the post-1992 university revealed that a majority, fifty-five per cent, believed that high quality teaching combined with high ratings of student satisfaction and the acquisition of a teaching fellowship combined with academic leadership and management skills in the delivery and development of new and up-to-date programmes and modules were important criteria for promotion. Although acknowledging the importance of research income and publications their emphasis on teaching and leadership reflected their main work activity.

A minority of lecturers in the post-1992 university, about 12 per cent, of whom three times as many female academics as male academics, believed that research and income generation together with publishing were essential criteria for promotion. A smaller group referred to networking and working unpaid extra hours as important criteria for promotion. Four responses out of the total of twenty-four appeared doubtful about the main criteria for promotion and showed little interest in promotion. Performance and Development Reviews (pdr) were not mentioned by any respondent in the post-1992 university where the acquisition of a doctorate was important but not essential for appointments to lecturer grade but essential for senior positions. The

responses of all lecturers in the pre-1992 university recognized the need for research income and publishing as the dominant criteria for promotion which is actively encouraged through pdr in which targets for research and publications are discussed and negotiated annually.

Responses of Senior Academics

Senior academics, having experienced promotion processes were inevitably knowledgeable about criteria for promotion. Their responses were related to what they would expect of candidates applying for promotion.

A male reader (3) in a post-1992 university who, having been promoted firstly to senior lecturer, then reader and having served on promotion panels, placed the importance of research income above teaching in his criteria for promotion – ‘teaching, I don’t think, figures that highly these days in terms of promotion, it’s whether you have a reasonable profile in research; obviously teaching is part of the job.’ Recalling the changes which have taken place since the introduction of mass higher education from 1992 he observed:

The acquisition of a doctorate was something that became very important in terms of progressing up the ladder and also links with other universities overseas became one of the criteria in creating new business ... also consultancies in bringing money in is important. Increasingly, income generation is something that is being looked for in promotion. For example, as a reader or professor the ability to bring money in for research contracts is now seen as one of the criteria for appointments.

A male professor (4) in a post-1992 university who was deeply involved in the teaching and supervision of research students and, having served on several interview panels, suggested that research was not always the main criteria for promotion:

I know there’s been talk about the need to have a research background to gain promotion ... often the best researcher isn’t given the post. There’s a preference for balance, there is a genuine attempt to keep things to suit the job criteria for the moment. I

think it's to show competence, not necessarily to excel in a particular area. It is better to ride two horses: research and teaching or teaching and committee work.

A senior male professor (5) in a post-1992 university who as the chairperson of many promotion panels explained what he expected of candidates in their applications for promotion:

We would expect people to be in possession of a PhD or similar professional qualifications. We would expect them to have demonstrated a track record in learning and teaching but also in academic leadership and management and not just be able to deliver programmes but also to develop new programmes and modules in new areas of study. We would expect them to engage in research as we have a strong focus in this school on applied research. Finally we would expect them to engage with business and professional bodies to keep their knowledge up to date.

A female professor (6) in a post-1992 university involved in the selection process for senior posts reiterated the requirement of a doctoral qualification and active involvement in publishing and income generating research work and networking:

In terms of the promotion criteria used in this university it is about being active in research and in external networking. You've got to know what it is that counts and you have to be very determined to tick those boxes. However, males do dominate the promotion process ... I think that the criteria that are used to select can inadvertently block women from wanting to go higher up in the organization. You can go up the professorship route with pure research, but that is quite difficult. That only takes you to a certain level.

A senior female professor (8) in a post-1992 university also emphasized research and publications:

To get promoted there are two things that they need, publications and income generation. The first criterion is a PhD which has become an essential pre-requisite within the last five years. They also need external links, they need to be very entrepreneurial, go-getting and these things are usually more important than maybe teaching experience.

A male senior lecturer (16) in a pre-1992 university referred to three performance 'dimensions' towards promotion:

On paper you have to perform in three different dimensions: admin, teaching and research. In one of these three you have to show you can perform in a leading way which encourages others to progress as well. In reality the focus is on research and research income, it's about money.

The emphasis on income bearing research contracts for promotion was quantified by a male professor (22) in a pre-1992 university who believed that there was no gender bias, the opportunities for success being the same for males and females:

You need research income. You need two big research grants and publications with good citations. You have to look at how long people have been in post, you would expect a couple of strong publications a year. For research income you are looking for two grants each at £200,000 for lecturer to senior lecturer.

Another male professor (15) in a pre-1992 university emphasised the importance of research vis-a-vis teaching:

If someone is going to fall down and not get promoted, more times than not it's likely to be their research that lets them down rather than teaching ability. Although, teaching ability is important and you get lots of opportunities to do that well. First, they must carry out teaching in a proficient way and research in a proficient way. I think you need to have taught the right number of modules and get the certain level of student feedback for your teaching. You should produce a certain number of research outputs and provide a certain number of PhD students.

Concerns about the system of performance and development review (pdr) were expressed by a male senior lecturer (18) in the pre-1992 university:

There is a cynicism, a fear that performance and review can manage people out the door, at the worst. If you don't get on with your reviewer there are mechanisms to change. But the whole issue of performance indicators is everywhere.

In special cases in which high levels of expertise in a specific field of research is looked for by the university the normal selection procedures may be set aside; a senior lecturer in the pre-1992 university explained:

For senior positions we are moving from simply advertising and allowing candidates to apply we are actually employing head-hunters. We employ firms who are recruitment consultants to identify a suitable field of candidates for senior positions.

Summary

In agreement with the findings in literature sources (see chapter 3, para.3.6) a substantial majority of senior academics explained that income from research and high quality publications are the strongest determinants for promotion. A male professor in a pre-1992 university explained: 'if you're not performing in RAE then you are not likely to be considered for promotion.' A doctoral qualification is a prerequisite for the majority of appointments to a lectureship. To be promoted evidence of leadership, entrepreneurial skills, effective networking and supervision of a substantial number of post-graduate students are additional criteria.

The emphasis on research income and publications was more evident from academics in the pre-1992 university than in the post-1992 university. These criteria, although repeatedly emphasized and of greatest importance, were not exclusive. High quality teaching, the acquisition of a teaching fellowship and networking were the second most mentioned criteria towards promotion, opinion being approximately equal between senior female and male academics in the post- and in the pre-1992 universities. In terms of gender equity in relation to promotion, this can be summed up from the statement by a female lecturer in a pre-1992 university:

Gender wouldn't come into it and I would hate to think that they [females] were put in a position because it was the token female or put in a post so that we can tick the box to say that we were meeting that target. I would say that this has definitely gone in this school.'

5.20 Career Centrality versus Work-life Balance

The objective in this thematic element is: to investigate the effects of work-life balance and 'career centrality' in relation to differences, if any,

in the opportunities for promotion between female and male academics. Several literature sources refer to the contrast in terms of career progression between a working life which has reasonable balance between work and leisure or family responsibilities and one which is career central as in the case of those described as 'workaholics' for whom 'publish or perish' is their key concern (see chapter 3, paras.3.24 & 3.25).

In interviews with female and male academics the question posed was:
How does career centrality in comparison to the need for work-life balance affect the promotion of academics?

Responses of female lecturers

A female lecturer (1) in a post-1992 university explained her preference for work-life balance having experienced a long-hours culture in the private sector :

I'm sure it [career centrality] affects progression. I'm very happy in my career but equally I have a lot of outside interests, so I'm not someone who works to two o'clock in the morning writing papers and lectures because I have outside interests – I have work-life balance. I have worked in an organization doing a 13-hour day six days a week; I am not doing that again. So I have sought out a career which allows work-life balance and this job does allow me to have work-life balance.

A female lecturer (2) in a post-1992 university related ambition to career centrality:

I think the work-life balance here is good. An academic who is completely absorbed with work and doesn't have a life outside the university is possibly more ambitious and so more likely to expect promotion.

A female lecturer (10) in a post- 1992 university whose work consisted almost entirely of teaching believed that 'people who are committed to the job are much more likely to be promoted.' Her experience of an overloaded timetable which necessitated regular weekend work was such

that she exclaimed: 'I've had all work and no life and if I ever had a new year's resolution this year it is to regain my work-life balance.'

The relationship between a commitment to research and promotion was argued by a female lecturer (12), in a post-1992 university in which she was heavily engaged in research:

Career central people will benefit. If you're doing more work because you're spending all the hours of the day and you're going to get more research done it will benefit your chance of promotion. You can't force down time on people who want to research into the middle of night. For some people work is absolutely pure pleasure.

This lecturer adopted a pragmatic *a priori* position relating opportunities for promotion to willingness to do extra unpaid work and provide benefits to the university in a business sense:

Promotion for a person with a good life balance depends on how much work they put in with no additional pay. They can bring benefits to the university. If you want to do work for the university as a business, if you want to employ people at higher grade to boost up your RAE or whatever, you are looking for a return on your outlay, so in that case they would probably prefer to promote somebody who is turning out research.

A female lecturer (14) in a pre-1992 university whose work consisted wholly of teaching exemplified career centrality in describing the work of a colleague:

I think work-life balance does affect promotion. I had a member of staff quite recently who was 100% work, work. He would send e-mails at 2.0 o'clock in the morning, he was never away from the place, his diary was filled up every week with stuff to do with his research and teaching, and he had no life at all. He worked extremely hard and he produced more research papers, more than anybody else but it was at the sacrifice of not having a life.

She explained management policy in her school in attempting to create a balance of work activities:

The other thing that we do here within the school is to look at the workload we give academics to do, so we are asking them how many students they have to teach on their modules, their commitment to research and how that links with their admin

duties. We are currently trying to get that in an even balance that the staff member is willing to accept and we don't think it is that different to working in any other university. I think because we have the flexibility we are helping people to get a balance.

Responses of Male lecturers

A male lecturer (9) in a post-1992 university:

It's much easier to be a workaholic during term time because you've got much more work to do. In terms of promotion, if I look within my faculty it seems to me that the people who have the more senior positions are there because of their ability and I think that has probably flowed in to output in terms of their working. They do work hard, but I wouldn't necessarily say that those lower down the scale would feel that they were getting off lightly.

In noting that work-life balance is possible during vacations he compared his situation with some senior staff members and referred to career centrality as additional work with no pay:

It annoys me that I can't switch off. I don't feel that I have a great work-life balance during those busy six months of the year. That doesn't necessarily mean that I feel closer to promotion because of it. If you look at some of the readers within the school they have very healthy family lives and don't necessarily have to work full time here, they can take time off. I can think of some people who are career central and how much work they put in with no additional pay.

A male lecturer (19) in a pre-1992 university disapproved of career centrality and believed that it affects men more than women:

Men are more career central than women to some extent. I can think of a number of examples and almost all are men who spend their whole time in the office doing work. I haven't seen this in women. It is not a good sign to have this kind of behaviour that you just focus on your career and forget about life.

Another male lecturer (24) referred to the long-hours culture involved in career centrality as a disadvantage to women in terms of their promotion:

I think it is easier for a person who is able to give 60 to 65 hours of work a week. So if an individual of either gender can give those hours for years at a time the promotion will be quite possible. Given that the majority of female staff can't always give that

amount of time that would be the reason why fewer women are promoted in this school.

Summary

The responses of most female lecturers indicated that work-life balance is a preferable option but acknowledged that career central academics are the most likely candidates for promotion. Women for whom career centrality is unrealistic because of their dual role as academics and home carers can succeed in showing evidence of research income, a good publishing record and qualities of leadership along with 'how much work they put in with no additional pay'. Male lecturers accepted that career central academics are usually the preferred candidates for promotion and are usually male. They appeared to understand the difficulties for women in a long-hours culture in which career centrality is difficult for them because of their family responsibilities suggesting that this explains, in part, the dearth of females in senior positions.

Responses of Senior academics

A male reader (3) in a post-1992 university related work-life balance to health but agreed that academics with issues about work-life balance may be seen to lack the commitment necessary to be considered for promotion:

My idea would be that an academic should maintain a work-life balance, that work should not affect their health and contributes to the institution they work for. I think those who have issues with work-life balance find it more difficult to get promoted. They will just not be able to show that they are doing enough for their CV nor will they be seen to be as committed as those who are putting all their energy into their work.

A male professor (4) in a post-1992 university referred to difficulties for research-active staff in achieving work-life balance:

I think this [work-life balance] hits researchers more because it's hard to package up the time it takes to do the jobs.

A senior male professor (5) in a post-1992 university was unequivocal about the relationship between work-life balance and promotion. He explained the competitive element in achieving promotion:

It [work-life balance] is about choices. I made decisions about researching, writing books and articles which didn't come particularly naturally to me but I recognized that in my field I had to do those things. I damn well did them. With work-life balance, if you choose to take all the holidays that you are entitled to and if you only work the hours that you contractually required to do then, yes, the need for work-life balance probably will hold you back in promotion because there will be other people there who, when it comes to promotion, can demonstrate with the same length of service they have achieved much more than you have, and frankly I am one of those people. I am not saying that we don't need a balance. I know people who do at least what's in their contract and as long as they are doing that I am not going to interfere.

A female professor (8) in a post-1992 university agreed that extra work leads to career progression:

I think in higher education you can progress if you are willing to use some of your own time in giving extra. People who are career central have a better chance of promotion because they do not see leisure as important.

She believed that males and females are equally career central:

I think that career centrality and work-life balance affects males and females roughly the same. It's really difficult to be an academic and get promotion if you don't put a lot in, because all the things like writing have to be done in your own time; it is impossible to fit it in the working day. So that inevitably means it is harder for women and their families who take prime responsibility for the family. I would say it is evenly mixed male and female [who are career central].

She summed up briefly and succinctly:

There are those who do nothing but work to get on and then there are those that literally do their job and go home, if you are one of those you are not going to get promotion.

A male professor (15) in a pre-1992 university believed that career centrality suits men more than women:

It is probably down to the promotional prospects in universities being driven by research which probably suits the male rather than the female because by their nature women have to have a better work-life balance. That's why when you count the number of people across the whole of the university there are more males and there are more opportunities for them in their character to succeed, because they've got this dedication for research work

A female reader (17) in a pre-1992 university acknowledged the difficulty in achieving work-life balance and career progression:

This is not a 9.00 to 5.00 job and if it was I would probably have to think differently. If you are research active and you are teaching then you don't finish at 5.00 o'clock. So part of the culture is that you continue to think - I'll do work at the weekend. So it's a regular occurrence that I do work at the weekend and I think you need to keep an eye on work-life balance because it's quite easy for work to drift in to your seven days ... I know I do get that wrong sometimes. At the same time part of my sanity is in knowing that I've done the best job I could here as well.

Referring to the effect of work-life balance on promotion, she believed that gender had no bearing on it:

We are all individuals, we all want the right work-life balance, it doesn't matter whether you are male or female, you have to strike the right work-life balance for you. There are times when I couldn't work until 10.00 or 12.0 at night; there has to be a partnership.

Summary

An analysis of all responses indicated that as many female as male academics accepted that career centrality and willingness to adopt a long-hours culture was beneficial, if not essential, for career progression. The majority of all 24 respondents (55 per cent, both male and female) believed that career centrality influenced promotion prospects and a minority (21 per cent) indicated their preference for work-life balance. Marginally more males than females believed that career centrality was harder for women with the dual role of being an academic and family carer. A minority of males suggested that males are more suited to and dedicated to research work than females. Acknowledging that career centrality is more difficult for females some academics believed that

females are as career central as males.

5.21 Mentoring and career progression

The glass ceiling, career progression and job satisfaction are closely associated with mentoring as shown in literature sources (see Chapter 3, para.3.22 and 3.23). mentoring is considered to be an essential but scarce facility for women due to the lack of a 'critical mass' of female academics in higher education. In this thematic element the objective is: to ascertain the impressions of academics in relation to the effects of mentoring on promotion. Contrary to some literature sources the responses of female and male academics today show that females mentoring females is not only acceptable but beneficial in many respects. For example, a female lecturer (1) in a post-1992 university agreed that her involvement not only with a main female mentor but with other informal female mentors, was supportive in her work and her career:

I've been very lucky in the fact that I've had a female mentor for many years. She is a member of staff in this university and it happened by chance, she is someone who has supported me in my career since I started working part-time here. We have our differences of opinion but she is very influential to me in shaping my career, so I think that I've been very lucky in having a very successful, very strong female academic who has encouraged me, very much a role model and also a mentor, very much so.

When asked whether or not a university system of mentoring could be helpful she indicated her preference for the status quo;

I am very sceptical of a contrived system. I am not sure that it would work. The mentor-mentee relationship is very much based on understanding, trust, respect and common ground.

A female professor (8) who, having experienced an arduous route through several promotion processes in both pre- and post-1992 universities, explained her attitude towards and sympathy for female academics, especially those with family responsibilities:

People would criticize me for it – that I try and help if I see a woman with potential I make a point of trying to see if there is anything I can do to ease her route, but a lot of people see that as

inappropriate or discriminatory, but there are a lot of women at senior levels who wouldn't do that. I do it for men as well but I have a view that women have found things more difficult in the past.

For newly appointed lecturers she explained that mentoring for the first year is provided to:

oversee you, how you are performing and give you some support. I always say to new readers, the most important thing they can do is to facilitate other people.

Contrary to a finding in the literature review in which females in senior posts were not necessarily 'natural allies' to subordinate females (chapter 3, para. 3.23), she was a beneficiary of female mentoring and was anxious to continue to help female academics:

To get on in academia you have to have mentors and when my career took off it was because I started working with a senior woman who acted as mentor. I don't think females are accepted equally with males. I think it has improved and I have to say, having got to my role [professor] I take it as one of my endeavours in life is, whenever I can, to act as mentor to whom I believe have potential; not just women but particularly women because I think there are still barriers. I always do whatever I can to support them and do for them what someone eventually did for me even though it took a long time. I think there are some very talented people, so it's a thing that I regard as the most important part of my role – trying to help others achieve their potential regardless of whether they are male or female.

A female senior manager (academic) (7) who had experienced several promotions in further and higher education, the latter in both pre- and post-1992 universities, found 'mentoring and coaching to be very helpful' during the early days of her academic career in the late 1970s. When asked about who benefited most from mentoring – female or male academics her reply referred to the greater need of women:

Women, because of that risk that women more than men underplay what they are capable of, they are not ambitious and they don't think ahead ... whereas men do.

A female professor (6) in a post-1992 university agreed that although mentoring was beneficial to those seeking promotion it is neither fundamental nor gendered :

Yes, I think it [mentoring] can, depending on the nature of it and also who you choose as a mentor. Apart from when I was doing my PhD I've never had a female mentor, she was my supervisor. I think mentoring can assist promotion but it's not fundamental. I think it depends on what the individual wants out of it, I don't think it is a gender thing.

In terms of whether or not a university system of mentoring is preferable she was clearly against it:

No, we had a system of mentoring here, it was for new employees and it didn't work because it was mechanistic, too controlled in how many meetings you were expected to have and the allocation of mentors and mentees wasn't all that well done, that it worked by chance rather than by design.

A female lecturer (2) in a post 1992-university appeared unaware of opportunities for mentoring and recalled her experience when she was first appointed to her lectureship:

That's something that would have been very good if it had existed when I first got here. It would have been really very worthwhile to have had a mentor. There were people I could have asked but it would have been helpful to have had something a little bit more structured.

Another female lecturer (11) in post-1992 university was cautious about mentorship:

No, I do not have a mentor. I feel I can talk to any of my colleagues. I suppose there is one of them, but I wouldn't take all of his advice. It really depends on the person, but I do know where I can get advice if I need it.

Male responses

A male lecturer (9) in a post-1992 university explained his need of mentorship in the first two years as a lecturer 'from certain key colleagues ... sometimes it was my line manager who I would go to most of the time, other times it was with colleagues' :

That was all very important to me, so mentoring got me through my first couple of years here when the pressures were big and I was very young and very new to the job. My mentors here have been women in this job. Having a kind of portfolio of mentors is an advantage because you can go to different people.

A male reader (3) in a post-1992 university rather than give his experiences of mentoring he explained his experience of female misogyny:

I have experienced the aggression of women towards other women which is often worse than women to men or men to women – female misogyny. It is something that I've noticed here too, there are different traits and if certain women feel threatened by other women - that causes a conflict.

His reaction to a university based system of mentoring was fairly neutral:

I think it's got to be needs based at the end of the day and everybody is different and I think having a centralized system might be useful if it were voluntary, but I think the reality is that you don't get the best out of anybody if the relationship between the mentor and the mentored is not a good one.

A male professor (4) in a post-1992 university had a clear view on the advantages of mentoring in general and for females returning from career breaks:

Mentoring cannot be done enough because it is essential especially with massification problems in doing more with less. I think career mentoring coming back from a career break would be a big help in becoming adjusted to getting back into the work.

Another male professor (5) in a post-1992 university believed that female academics benefited more than males because of their reactions to mentoring:

I think mentoring is good, period. I think women are probably more likely to listen which is to their advantage. I think there is a problem with men that they think they can do it and even if they can't they don't like to be told how to do it, they'll find out for themselves.

A male professor in a pre-1992 university also explained his impressions of differences in mentoring female and male academics:

I think probably women tend to listen more and as a consequence probably get more out of the mentoring experience. I think men quite often have a preconceived notion of how to get to a place, how to get their promotion, occasionally go at it irrespective of what advice they are getting. Probably in that respect women are smarter than that, they listen and then they act. Whereas men go at it, a bit like a bull at a gate.

Referring to the mentorship arrangement for new members of staff he related mentorship to the university's professional development programme, a feature of the pre-1992 university:

Each new member of staff is appointed to a senior academic who drops in and out of their work life and offers guidance on this and the other as need be. Obviously, we have a professional development programme which is a formal meeting with someone set up as a coach. You sit with your coach and go over the last six months. Each one of us, even the principal, sits back and looks at their performance of the last six months and casts forward over the next six months and says I plan to do this or that.

A male senior lecturer in a pre-1992 university also related mentoring to the university's professional development programme:

Everybody, myself included, is allocated a reviewer which sounds a bit sinister. He or she is more senior than the mentee. So we are all subjected to performance and review which is about setting targets and the performance in meeting these once a year. We have a chat about the work of the previous year and then set goals and expectations. It is done by consent and should be the result of self reflection. You negotiate it. An outcome could be that you are underperforming and new targets are set.

Summary

Contrary to the findings of some literature sources (see Chapter 3, para.3.23) in which women were deemed to be disadvantaged in comparison to men because of the limited numbers of female mentors and that few senior women make the effort to mentor younger women, the findings from the responses of female and male academics were generally positive. Mentoring appears to be an ongoing voluntary activity in that there was no mention of 'inappropriate remuneration' as referred to in one literature source, rather it is assumed to be part of the normal

function of experienced academics.

Mentoring is generally perceived to be a useful influence both in helping newly-appointed academics to become familiar with their new surroundings and work through a short induction process in the post-1992 university. The adoption of a long-term mentor as a role model for advice and career support was seen as beneficial both for help with day-to-day problems and for guidance in the promotion process. The question of whether or not mentoring should be *laissez-allez* or institutionally organized was discussed during interviews. Most interviewees were doubtful of the value of a central system of mentoring and preferred that the choice of mentor was that of the mentee rather than having one assigned with regular appointments. However, a difference in approach was evident between the post-1992 university and the pre-1992 university with reference to the system of professional development reviews (pdr). In the pre-1992 university pdr was interpreted by some academics as a form of procedural mentoring or coaching annually. In the post-1992 university pdr was neither mentioned nor related to mentoring by any academic but informal mentoring was evident from the responses of the majority of academics.

5.22 Networking in relation to Promotion

Networking both internally and externally by academics was deemed to be advantageous not only for the exchange of and collaboration in research interests but to develop one's profile in becoming known in the university's research community, nationally and internationally and was considered beneficial in the promotion process. Two questions were posed to all interviewees:

(i) How important is networking in terms of promotion an research activity?

(ii) Do you think that men have more opportunities for networking inside and outside of the university than women or vice versa?

The responses of female and male academics and those of lecturers and senior academics were compared to ascertain the levels of opportunity open to and the importance given to networking by each group.

Responses of lecturers

A female lecturer (10) in a post-1992 university attributed her networking experiences for her success in achieving promotion in the private sector and expected to pursue it as an academic:

It's not what you know but who you know (joking). I am very good at networking. I do a lot of networking. I have never had a job that I have been formally interviewed for all my life. Every job that I have ever had I've been recommended by somebody.

However, she was aware of some advantages which males have over females:

The boys' clubs. It could be that they [men] went to the same school - the old school tie. That kind of networking does take place and women would be excluded from that.

A female lecturer (12) in a post-1992 university found that networking was beneficial to her research:

Networking is always important. It is an important element of research in maintaining your network.

A female lecturer (2) in a post-1992 university suggested that networking appeared to take precedence over her abilities and publications:

Yes, I think that [networking] is more important here than your actual abilities and publications.

A female lecturer (13) in a post-1992 university, although believing in the value of networking, had neither the desire nor time to pursue it. She believed that women were not good at it:

I think that [networking] is important. Who you know would seem to be there in practice and that's one thing that I think women are not particularly good at. I certainly have no inclination to go to things after work just to socialize. There's too many other things in my life that I need to do. I am always happy to do the actual work but family responsibilities are my choice.

A male lecturer (9) in a post-1992 university did not consider networking important in the promotion process:

I suspect that the formal promotion process and recruitment for promotion will probably be quite formal and regimented. These faculties are recruiting people because of their research output and I don't think networks will necessarily make a difference.

A female lecturer (11) in the post-1992 university found a scarcity of networking opportunities for those who are not research active:

I think networking is important in general. I find it quite hard because, how do you get to know about the expertise of others if you don't do research? I find it hard to find a way of communicating with experts in my field. I try to go to conferences but I meet a lot of people from industry more than academics and I can meet them slightly more through my consultancy work.

A female lecturer (14) in a pre-1992 university was clearly convinced of the value of networking

Yes, I think it [networking] is. I think that is important to anybody regardless to get yourself known internally within the university and externally. I have quite an active profile through my professional body. In a year I'll be chairman for Scotland for that, and a few years ago we have a junior section for under 35s and I was chairman and that was worldwide. So I have a high profile.

However, she was aware of the difficulties for women with family responsibilities:

Networking normally happens outside office hours. It happens at conferences or in the evenings, at social functions, if you have the opportunity to do that. I think women with families have the responsibility to ensure that home life is sorted out.

Responses of senior academics

A senior female professor (8) in a post-1992 university had a positive view on the advantages of networking in relation to promotion:

I think to get through promotion, I think of internal PR. It works at every level, it works for an individual member of staff, it works for groups in the faculty, it works for the whole faculty. I think the really important role is in making sure that the wider university knows what you are doing and knows what good things you are doing. When panels have a line of people to look at – shall we

promote this person? If they haven't come to anyone's notice then they are just getting judged on the paper work. Each application has a pile of documents and with the best will in the world key information can be missed, whereas if someone has caught the attention of people on the panel in a positive way I think it makes a big difference.

A female professor (6) in a post-1992 university viewed networking not only from the perspective of promotion but in a wider sense as a support mechanism for research involving a wide range of contacts:

Networking is very important. It can be about who you know. Networking can mean all sorts of different things. I have been in women's development groups where the focus is very much about how women can get on. In these groups the networks are all female which are about providing support. Networking should be much wider, you've got to think about providing support. In terms of networking it cannot be with just females it's got to be much wider, you've got to think about with whom you need to network in conferences, business meetings, external contacts in professional bodies and internally in making sure that you are seen. If you are trying to progress in an organization in your faculty and nobody else knows who you are or what you do or how they are thinking of you then that's going to make it very difficult for you to move on, visibility is very important.

A male professor (15) in a pre-1992 university recommended networking to raise ones profile in terms of work and recognition at interviews:

Yes, networking is an important feature in raising your profile. You can network amongst your colleagues in the school, you can network throughout the university and begin to be known. If your profile is if you as a person and the work you are doing is beginning to get known across the university, when you turn up for an interview for a senior lectureship then you may have met the dean or the vice principal or whatever, then I think this awareness and keenness to lead is part of gaining your reputation.

A female reader (17) in a pre-1992 university believed that she had equality with men in networking but through a helpful husband:

I don't think that men have better chances at networking. I had to take time out when I had my family and that was two fixed periods. After returning to work and from a family perspective it was very much a team effort. My husband was quite accommodating actually ... the number of times I am away at

meetings and conferences is quite significant actually – it's never really been an issue.

Summary

From the responses of all interviewees, there was general agreement that networking was difficult for women acknowledging that female academics are disadvantaged through career breaks and with greater responsibilities for family care which interrupts opportunities for networking internally and externally in participation at conferences. Only two interviewees (one lecturer and one senior lecturer, both male) viewed networking as unnecessary for promotion in suggesting: 'it's not what you now but who you know'. They believed that networking should play a minor role in the promotion process. The responses of lecturers indicated a range of opinion of the value of networking in relation to promotion. Some suggested its importance in research and others doubted its value. Senior academics, on the other hand, viewed networking positively in both the promotion process and in improving their research activities through exchanges of ideas with other researchers. Some believed that being known to members of promotion panels through internal networking is helpful in applications for promotion.

CHAPTER SIX

DISCUSSION OF RESEARCH FINDINGS

6.1 Introduction

The history of gender relations in the workplace, in the system of education in Scotland and worldwide, which was investigated from literature sources contained in chapter 2, shows that females were consigned to subordinate roles in almost every sphere of work. They were largely prevented from advancement through denials of opportunities socially, politically, in the workplace and in education. The review of literature sources relating to the Scottish system of education is of particular interest because of its traditional claims for educational and intellectual democracy and from male beliefs of their intellectual superiority over females which were used to justify curricular segregation and the exclusion of females from higher education until the end of the nineteenth century.

The Scottish claims for educational and intellectual democracy are re-interpreted in this research to take account of the inequities and inequalities in the system of education in which women campaigned for the right to matriculate on equal terms with men in the universities of Scotland and did not succeed in doing so until 1892 (see chapter 2, para. 15). Outcomes of this re-interpretation include a challenge to the Scottish traditional claims for educational and intellectual democracy in relation to its neglect of female education and in the identification of legacies of male domination and the imposition of male norms in the workplace in general and in higher education in which, to a diminishing extent, are still evident today. As shown in chapter 5, para. 5.17, there are still references in the responses of female and male academics in the semi-structured interviews that men are seen as the 'breadwinners' the 'dominant sex' and as 'professionals', that females are better suited to pastoral and

administration work, that they are more reticent in applying for promotion and in challenging their starting pay.

Comparisons between the findings in literature sources and the responses of female and male interviewees are particularly interesting. For example, explanations from research into gender inequity, inequality, discrimination and marginalization in literature sources published between 1980 and 2000 and those published from around 2006 show signs of change in the findings and conclusions of authors (mostly female) and suggest improvements towards gender equity and equality. This was found to be not dissimilar to the changes in attitudes between long-serving senior academics and more recently appointed female and male lecturers in their responses to questions in the semi-structured interviews. For example, the early literature sources paint a picture of agentic male domination in which discrimination and marginalization of females as newcomers in powerfully patriarchal academic environments was prevalent. This was experienced by some senior female and male interviewees but not by newly appointed lecturers suggesting improvement, even equality, of opportunity between the sexes (see chapter 3, para. 3.3, vignette 2).

Some recent publications suggest that 'academia today is more family-friendly and the prospects for women have never been better' (Hampton, Aug.2008, p.3; see chapter 3, para. 3.7), that the agentic alpha male has largely disappeared and that universities are more welcoming to women. This accords with the attitudes of most of today's young academics (see Chapter 5, para. 5.15) in terms of equity and equality in which the female presence in universities is largely devoid of discrimination and marginalization which, in any case, is no longer tolerated under Gender Equality Schemes and deemed inappropriate by both male academics and the management.

Whether or not the change is due to the experiences of males in becoming accustomed to the female presence in universities as normality, or their appreciation of the added values brought into higher education with the quality and effectiveness of female teaching, pastoral activities, research and publications, or their recognition that females in coping with the stresses of multi-tasking in their dual roles as academics and carers at home with a more difficult career trajectory than their male counterparts, or the fact that grievance procedures are seen to be more effective than in the past is open to question, but for whatever reasons it seems clear that female academics have equality of esteem and are progressing, albeit slowly, towards equality in their presence on influential committees and numerical equality in senior positions and pay.

6.2 Research Philosophy

The philosophical approach in this research which forms part of the 'Methodology' (chapter 4, para.4.2) embraces the branches of metaphysics of ontology and epistemology. Ontologically, an objective is in the search for reality, or as near to reality as possible, for the existence and origins of gender inequity and inequality socially, in the workplace and in higher education in Scotland. From an epistemological position the approach adopted is concerned with the search for acceptable knowledge and justified belief of gender relationships to reach an understanding of the perceptions of female and male academics in relation to their experiences and attitudes towards their career progression from a position of critical realism.

Given the above broad philosophical approaches which are amplified in chapter 4, para 4.2, the methods adopted in gathering data included: firstly, an extensive review of literature sources of Scottish, UK and worldwide origin from which the main themes and interview questions were created from the most common issues and concerns of academics in relation to gender equity and equality. Secondly, the responses of

academics in answer to interview questions posed in semi-structured interviews and thirdly, the acquisition of useful knowledge from seven conferences as a contributor and participant in the UK and abroad (see chapter 4, paras.4.3 and 4.4).

6.3 Problems in conducting the semi-structures interviews

For the majority of the 24 academics confronted with the subject of gender equity and equality it was evident from the outset that it was not uppermost in their minds in their day-to-day work. Although it was for them an unusual area of discussion and questioning, they, without exception, entered into discussions of all aspects of this subject with the openness and interest typical of academic curiosity. However, in many instances, interviewees, having confessed little knowledge of some aspects of gender terminology or of related quantitative and qualitative data, such as: the extents of pay gaps in favour of males, female/male academic achievements, the glass ceiling, gender blindness, career centrality etc., were prompted through explanations of the meanings behind particular questions as found from literature sources.

The fact that prompting was involved might suggest axiological influence in that interviewees may have been unintentionally influenced by the values of the researcher (see Chapter 4, para. 4.6). However, the intention in prompting interviewees was not to influence or make suggestions towards answers to questions but to assist in understanding the meanings of conceptual issues, to provide quantitative data and to invite interviewees to extend the brevity of some of their responses.

It is possible that the researcher's choice of themes and questions could suggest bias in giving importance to some questions over others. Bias, as far as possible, was avoided from the fact that the selection of themes (see appendix 1) and interview questions (see appendix 2) were devised

and formulated mainly from literature sources and reflected the most commonly expressed issues and concerns of academics.

The findings of literatures sources under each theme are compared with the responses of interviewees for differences and commonalities. A pertinent starting point was that of 'how it feels to be an academic' which provided an insight of the work and working lives of academics in terms of job satisfaction and dissatisfaction (see chapter, para. 5.3). This was followed with questions in relation to a continuously nagging dilemma for academics: the tension between teaching and research. Other themes relating to work-life balance and career centrality were discussed with reference to criteria for promotion, opportunities for promotion and the pay gaps in favour of males. Themes which affect the opportunities for promotion in relation to gender equality included vertical and horizontal segregation and networking. Other themes which affect the welfare of academics included: the effects of discrimination and marginalization, gender blindness, female and male traits, each in relation to the metaphorical glass ceiling.

6.4 How it feels to be an academic – job satisfaction and dissatisfaction

How it feels to be an academic was investigated through questions relating to their sense of job satisfaction and dissatisfaction. This enquiry provided knowledge of the nature of the work of academics in terms of their preferences and aggravations. It also revealed what they believe to be of importance in their work which, from a critical realist position, was important in understanding and explaining their social world in academia. For example, some academics expressed their aims in gaining good student feedback which could be deleteriously affected by pressures of too great a teaching load and excessive bureaucracy. Others appeared to gain most satisfaction from their research and publications. For example, in the pleasure from 'seeing my name in print', in successful research outcomes in gaining income for the university and in the improvement of

their *curriculum vitae* were pre-eminent (see chapter 5, paras. 5.3, 5.4 & 5.5). In this area of investigation although generalisability was impossible a common theme from responses was that of the importance given to research income and publications in top journals as the main criteria for promotion with teaching and pastoral work, although important, taking second place.

Two features in the working lives of academics which all interviewees agreed upon were: (i) their appreciation of **flexible working** which allowed them varying degrees of autonomy with freedom to work from home and to participate in networking in their university, at conferences in the UK and abroad and involvement with professional bodies; (ii) their dissatisfaction of too much administrative work which was deemed to interfere and interrupt that which academics consider the *raison d'être* of their vocation namely: teaching, research and publication work.

Female academics, especially those who compared their working lives in private practice with their present conditions of work, appreciated and valued the flexibility in their working conditions which enabled them to attend to family responsibilities at home. However, the freedom of flexibility for both females and males often extended their hours of work into weekends in a long-hours culture in the universities involved in this research. Networking proved to be more problematic for female than male academics because of the family caring responsibilities of female academics with young children or elderly dependant relatives.

The most common complaint of academics relating to 'too much admin' was in agreement with the findings of literature sources (see chapter 3, para 3.15) in which it was found that female academics spend relatively more time on administrative duties than their male counterparts often at the expense of their research activities. Apart from two professors academics had a negative view, of administrative work and indicated little

knowledge or willingness to gain knowledge of benefits to the university from their administrative work, in some cases judging it to be unnecessary duplication.

In interpreting whether or not job satisfaction outweighs job dissatisfaction in the work of academics account was taken of their impressions and opinions of what gives them most satisfaction and dissatisfaction. A broad overview of the responses of all academics clearly indicated that they have a strong sense of vocation which manifests itself in their satisfaction gained from teaching and in seeing their students mature and progress into fully qualified professionals. They expressed satisfaction from their work environment with, for the most part, supportive colleagues and in being part of a team of positively motivated and friendly researchers. Allied to flexible work conditions is the feeling of having autonomy in freedom of 'space, time and choice of work' which is seen as a function of the professional trust placed on their academic judgements.

In addition to perceptions of 'unnecessary bureaucracy', other features of job dissatisfaction included a minority view of 'colleagues not pulling their weight', the 'whinging' of a minority, the pressures 'to do more with less', 'continual change, we need a period of stability', the demands of work which necessitate its completion in evenings and at weekends in a long hours culture. The pressures of the RAE in an ethos of performativity leading to feelings of being 'managed academics' in the processes of performance development reviews suggested some dissatisfaction. Although measurement is impossible, on balance, interviewees appeared to indicate a stronger sense of job satisfaction than dissatisfaction in that they showed no anxiety to change career. Interestingly, no opinions were expressed about pay satisfaction or dissatisfaction.

6.5 Tension between teaching and research

The tension between teaching and research arises from difficulties in 'balancing and managing time' particularly when 'a high teaching load [makes] it much harder to do research' (see chapter 5, para.5.8).

Although interviewees at all levels expressed their concern for the progress of their students through high quality teaching and a desire for the successes and favourable opinions of their students, the majority agreed that the tension between teaching and research is problematic in attempting to satisfy the pressures of performativity in an ethos of an 'externally driven agenda' with its rankings and league tables. These tensions appeared more acute for female academics in their dual roles as academics and the main carers at home with consequent disruptions and delays in their research and publications especially during career breaks, as discussed under 'career breaks' (para.6.6) and 'gender blindness' (para. 6.12 below).

As shown in literature sources (see chapter 3, para. 3.12) and from the responses of most interviewees (see chapter 5, para.5.7) the emphasis on and status given to research income and high quality publications as the important criteria for promotion and for submissions to the RAE places teaching in second place creating tension between the two. Female academics are also disadvantaged from the tendency of students to demand more counselling from them than from their male counterparts. In addition, there was general agreement that females take a greater share of teaching and administrative work than males at the expense of their research work as discussed in chapter 5, para.5.10 under 'Female/Male Traits'.

6.6 Work-life Balance v Career centrality

The question of work-life balance was found to be an ongoing dilemma for academics many of whom acknowledge that work-life balance is a preferred and natural option against which is work- or career-centrality.

The latter is attributed to academics whose lives appear to be entirely devoted to their research and publication work (see chapter 5, para.5.22). The long-hours culture, commonly accepted by or imposed upon many academics and more so by work-central academics as 'workaholics', can be seen as problematic for the career progression of female academics who have no option but to divide their time between their academic work and their family responsibilities.

The question: *How does career centrality in comparison to the need for work-life balance and/or career breaks affect promotion and pay?* elicited interesting responses. There was general agreement that working beyond the contractual hours without additional pay is conducive to better opportunities for promotion provided that research income and high quality publications are consistently achieved. However, a contradiction lay in the recognition that although work-life balance is seen by managements and staff as a desirable feature of working life there was general acceptance that in order to complete day-to-day workloads working beyond contractual hours without extra pay is a feature of academic life which is compensated for, though not in terms of time, through the flexibility of work conditions.

Most senior academics, having achieved promotion, were of the opinion that promotion is partly dependent on willingness to sacrifice work-life balance believing that academics who insist on working contractual hours are less likely to be considered for promotion. In addition they believed that more males than females are career central because of the female need for work-life balance which places them in a disadvantageous position in terms of promotion and pay. However, some female academics disagreed believing that gender has no bearing on dedication to research and publication work. It was also generally accepted that few promotions in higher education are made in recognition of teaching excellence, apart from the elevation of some lecturers to the status of

teaching fellow (see chapter 5, para. 5.20). Equally, academics, usually female, whose workload involves counselling, mentorship and administrative work find less time for research and publication work which deleteriously affects their opportunities for promotion (see chapter 5, para. 5.22).

6.7 Career Breaks

An area of broad agreement between the findings in relevant literature sources and the responses of interviewees is that of the effects of career breaks on the promotion and pay of academics. The fact that female academics are more likely than their male counterparts to require career breaks for reasons of giving birth and family care results in inevitable delays in their research and publication work with delays in promotion and loss of pay increments. These disadvantages were voiced by female and male interviewees (see para. 5.15 above) added to which were further disadvantages through loss of opportunities in networking, training and in re-engaging with changes which have occurred during their absence, each of which are encompassed in the criteria for promotion (see para. 5.19 above).

Literature sources (chapter 3, para 3.16) explain the difficulties for female academics in terms of contradictions such as: 'the disadvantages of motherhood are greater than fatherhood'; 'being a good mother is contrary to being a successful academic'; 'female managers are more likely to be unmarried and childless' and assumptions that 'women are not as career-oriented as men'. The responses of interviewees (chapter 5, para 5.15) in agreement with literature sources show differences between female and male academics: male academics, for example, accept that females will be the primary home carers and that the commitments required for promotion make it difficult for homemakers. The male responses were generally based on the recognition of the greater need of women to take career breaks than males, acknowledging

the greater disadvantages for women in suspending their research and publication activities, in losing touch with networking opportunities, missing out in curricular developments and in training.

Female responses in a small minority of cases were pragmatic: 'how can you promote me if I am not here? Of course it's unfair, but biology gives women no choice'. A general impression from female academics was expressed in their acceptance that a career break is 'only a temporary disruption with no irreparable damage to promotion opportunities'. Some senior female academics expressed their sympathy in recognizing the 'enormous workload' and challenges for women in coping simultaneously with their research, publication and family responsibilities.

6.8 Organisational structures

The organisational structures of universities were found to be a principal bone of contention in literature sources being concerned with the effects of male domination and male norms in relation to the gender composition of policy- and decision-making committees in terms of their effects on gender equity and equality (see chapter 3, paras. 3.2 & 3.14). Contrary to the findings of most literature sources the responses of academics indicated much less concern about male domination and no references were made to any impositions of 'male norms' in the recruiting processes or in policy-making. Although males continue to dominate numerically at Court and Senate levels and in promotion panels, the effects of male domination in the sense of the agentic alpha male appears to have diminished particularly in faculties which have recruited increasing numbers of female academics, but male academics still occupy the majority of senior positions. Interviewees in general perceived that the system, as far as promotion processes are concerned, is fair and equitable but with the observation that females 'have to show more evidence of hard work'.

The perceptions of both female and male interviewees differ widely in relation to the extent of patriarchy found in literature sources which refer to 'masculinist notions of competition' (Fletcher, 2007, Vol.26, p.277) claiming that 'some [universities] are still in the Stone Age as far as recruiting and promoting women are concerned' (Forster, 2001, Vol.6, p.32) and that 'men and male-dominated institutions promote male supremacy' (Mavin, Bryans and Waring (2004, Vol. 19, p.295). Such sentiments appear out of date today in an ethos of more respect and professionalism between female and male academics and between lecturers and senior academics in which the requirement of female academics who take career breaks appears to be accepted as a normal feature in university life. Statements such as: 'it is as it should be' (a female reader) and 'it has always been what is considered as the best person for the job' (male professor) suggest that equal opportunity rather than equality exists in the minds of female and male academics at all levels, although a male professor made reference to: 'a bit of positive discrimination towards women rather than just equal' (see para.5.14).

6.9 Criteria for promotion and Career progression

There is general agreement between the findings in literature sources (chapter 3, para. 3.11) with the responses of interviewees (chapter 5, para. 5.20) in what constitutes the important criteria for promotion in universities. For example, literature sources (see chapter 3, para.3.12) indicate that 'teaching is not valued as greatly as research' and is viewed as: 'something of a poor relation' in comparison to the recognition given to research and publishing. For promotion to professor level internationally recognized research, research income and a sustained record of high level published work were given as important criteria (chapter 5, para.5.20). However, the responses of most interviewees show that the emphasis on and recognition given to research income and publications can be disadvantageous to the career progression of

academics, mostly female, who are more heavily involved in teaching, counselling and administrative work than research.

A comparison of the responses between lecturers to the question of criteria for promotion and those of senior academics indicates differences in attitudes and knowledge of the generally accepted criteria. A minority had little or no knowledge or interest in promotion with suggestions of 'who you know' opening better opportunities for the promotion of males than females. The majority of lecturers recognized the need 'to show leadership skills' and management responsibility. Others, usually those with heavy teaching loads, preferred the teaching route to promotion in showing excellence through the acquisition of a teaching fellowship and from student appraisals in becoming 'tutor of the year'.

Senior academics, whose experience as members of selection panels and in their work in mentoring and in interview sessions with academics in annual performance and development reviews (pdr), were fully conversant of the key criteria for promotion. They emphasised the importance of research income and high quality publications as the main criteria for promotion in encouraging academics towards the stated aims of their university. Their main criteria for promotion included a range of attributes, firstly the acquisition of a doctoral qualification with ongoing income-bearing research activity ('two grants each at £200,000 for promotion from lecturer to senior lecturer' was suggested) and a record of high quality publications gaining top RAE ratings. In addition, they recommended that candidates have to show evidence of leadership qualities and substantial experience in the supervision of doctoral students. Although they conceded that teaching was subordinated to research income and publications, evidence of teaching competence was also a requirement. Networking, both in the university and with universities at home and abroad and engaging with businesses and professional bodies was also considered advantageous.

The question as to whether or not these criteria were devised through what is commonly referred to as 'male norms' in literature sources was not referred to in the responses of female academics apart from the observation of a female professor: 'males do dominate the promotion process ... I think that the criteria that are used to select can inadvertently block women from wanting to go higher up in the organization'. As far as male impressions of female reticence in applying for promotion is concerned, the majority of female interviewees showed no signs of reticence.

6.10 The Research Assessment Exercise (RAE)

The pressures on universities to gain research funding through their submissions to the RAE, as shown in literature sources (chapter 3, para. 3.12), can lead to tension between teaching and research, as discussed in para. 6.4 above. Literature sources refer to the research activities of female academics in comparison to their male counterparts, the minimal presence of female academics on RAE subject panels and the 'special circumstances' which allow for maternity leave, and other reasons for absence from work in relation to the research and publication activities of academics.

The effects of the RAE on the work of academics formed part of the interview process in relation to pressures of their work, performance development reviews (pdr) and to horizontal segregation. Some lecturers in the post-1992 university, referred to the pressures in 'a scramble around to get people to come up with activities' or an 'incredible flurry of activity' which inevitably affects teaching activities - perceptions which were not evident from senior academics. On the other hand, female and male academics at all levels in the pre-1992 university discounted the notion that research and publishing can be accelerated towards the RAE. Their general view was: 'the very top research just takes a long time to do

... the REF returns are in two years time, you can't do anything that is going to have any impact in two years'. A female reader explained that preparation for the RAE requires 'an awful lot' of administrative activity rather than 'a rush on to get research done in conflict with teaching' (see chapter 5 para. 5.7).

Comparing the responses of female with those of male academics in relation to their involvement in the RAE reveals several differences. Lecturers in the post-1992 university, for example, referred to their high teaching workloads which leave little time to devote to research and publications. Others, mainly in the pre-1992 university, were concerned about the pressures in meeting targets negotiated in performance development reviews (pdr). Some female lecturers expressed concerns over the effects of career breaks in interrupting and delaying their research and submissions for the RAE. Senior academics noted that male academics are more likely to be more research active than females because females tend to gravitate towards subject areas which are less involved in research activities (horizontal segregation). However, they noted that the numbers of research active females have increased in recent years and were well aware that the research and publication activities of females are impeded because of their greater need for career breaks.

6.11 Networking

Networking as seen by the majority of interviewees related to its effects on their research work, publications and promotion. They describe networking in terms of becoming known and 'raising your profile' in the academic community at several levels, for example, in being active on major boards including the University Court, the Senate and other policy-making committees of the university. Internal networking also involved collaboration with colleagues in the development of new under-graduate and post graduate degree programmes and short courses. Externally,

networking through participation in academic conferences, consultative work in business meetings in the private sector and contacts through membership of professional bodies are considered important in the dissemination and exchange of research work through negotiations of research proposals and in the presentation of research papers and published work.

Because networking, both internally and externally, often involves work in excess of the normal hours of work and is usually a voluntary activity, female academics with domestic responsibilities inevitably face greater difficulties than their male counterparts in active participation which involves absences from home. The effects of networking in assisting academics in their aspirations for promotion appears to be an acceptable strategy in making oneself more visible through the use of contacts. This strategy appeared to some female academics as advantageous over others whose networking is not as active particularly in the case of female academics who require career breaks and have family care commitments.

6.12 The glass ceiling?

The metaphorical glass ceiling, an invisible barrier through which penetration is difficult for females aspiring to senior positions, was the subject of much discussion in the media and in the workplace during the 1980s and 90s. Interpreting the responses of the present generation of female and male lecturers, some appeared unaware of the notion of a glass ceiling and others considered it to be an historical artefact. This was exemplified in statements of female lecturers such as: 'I don't feel that there is a glass ceiling here; It was probably more true in the 1990s; I have never heard of it,' from which it may be interpreted that they believe the promotion process to be fair and equitable. Senior female academics, on the other hand, having experienced various levels of discrimination and marginalisation in their early careers as newcomers in academia were

more aware of the concept of a glass ceiling but believed it to be 'more permeable' today.

Several aspects of the glass ceiling are tested below in relation to how interviewees perceived such as their university's Gender Equality Scheme and whether or not discrimination and marginalization is problematic today. Other influences on the metaphorical thickening of the glass ceiling include the effects and extent of gender blindness, the notion of female and male traits which can affect the work characteristics of female and male academics in different ways and the effects of vertical and horizontal segregation.

6.13 Vertical segregation

Vertical segregation in relation to the lack of career progression of female academics as shown in literature sources (see chapter 3, paras.3.4) reveals a variety of causes for the under-representation of females in senior positions. These include such as: the 'pipeline effect', female lack of doctoral qualifications and inexperience, the importance given to research and published works, choice of faculty and subject areas (horizontal segregation), female lower rates of applications for research funding, the under-representation of females on decision-making committees, the effects of career breaks and family care responsibilities, the concentration of female academics on short-term contracts and the over-representation of females in teaching-only posts. The discussion here is intended to explore the extent to which these causes for the dearth of females in senior positions are still in evidence in universities today.

Female and male academics in response to questions relating to vertical segregation revealed a range of causes and concerns some of which agreed with those found in literature sources. Several male academics believed that vertical segregation was simply due to the 'lifestyle choices'

of females. For example, a senior male professor appeared uncompromising in comparing the consequences of choices. For example, those who choose to take career breaks and are unable or disinclined to accept the long-hours culture are less likely to be promoted and conversely, academics who show career centrality in their acceptance of the long-hours culture who take no career breaks are the most likely to be promoted. He made no distinction between a career break for family care (a parental duty) and for leisure pursuits (enjoyment). A small minority of male academics suggested that vertical segregation could be explained through female preferences for part-time work which, it was suggested, 'suits their lifestyle' in family care. The notion that there is greater drive among male lecturers for promotion and that men are seen as the 'breadwinners' was proposed by two interviewees, one female and the other male, but this was a minority view.

Female perceptions, in contrast with those of males, concentrated on the amounts of and the multi-tasking nature of their work especially in coping with the dual role of academic and home carer. There was general agreement among female and male interviewees that promotion for women had improved in recent years and a recognition that in order to progress 'they [women] have to show more evidence of hard work [than men]' and 'need to be more assertive.' A female professor attributed vertical discrimination to male domination in the past but noted considerable improvement which was brought about through a change in attitude with the appointment of a new male dean. However, another female professor, referring to holidays and the flexibility of working conditions, believed that 'staying at that level [lecturer] suits them [females]'.

Career progression in relation to suggestions of positive discrimination was negated by a male dean:

I can tell you absolutely categorically, we have never taken gender into account either way when making an appointment. I have always appointed the person who is appropriately qualified and has the best experience for the job.

Equally, a female lecturer expressed clear disapproval of the notion of females being appointed as a 'token female' or 'so that we can tick the box to say that we were meeting a target'.

Increasing the representation of female academics in senior positions, as shown in literature sources, towards a 'critical mass' is predicted to increase their influence in decision-making committees (see chapter 3, para.3.9) which in turn will lead to gender equality in senior positions. However, the present position was explained by a female professor: 'males do dominate the promotion process ... I think that the criteria that are used to select can inadvertently block women from wanting to go higher up in the organization.' A female lecturer believed that progress towards equality was now more evident: 'I think we need to be more assertive, but I don't think it's impossible for us to be promoted; it is less difficult than it was a few years ago.'

Both female and male academics recognise that promotion is directly related to the competence and ability of academics, irrespective of gender, preference being given to those who generate income from research, produce quality publishing, teach effectively and show willingness to work long hours.

6.14 Discrimination and Marginalisation

Discrimination and marginalisation against female or male academics, although featured under the heading of job dissatisfaction above (see para.6.3), was relegated to the past experiences of senior academics who, early in their careers, were in a minority in the male world of academia, but as expressed by a senior female professor: 'over the last ten or fifteen

years there have been enormous changes and things have improved immeasurably.' On the other hand, more recently appointed female academics, who are no longer a small minority group in their school or faculty, were largely unaware of discrimination or marginalisation which, in any case, is actionable under Equal Opportunities legislation and the university's Gender Equality Scheme, the latter never having been used in any complaint or grievance by any interviewee.

The question of discrimination and marginalisation against female academics therefore appears to be much less serious than as indicated in literature sources of the 1990s (chapter 3, para.3.2) which refer to 'stereotyping and marginalisation in the workplace when women were considered subordinate to existing male academics'. Such behaviour today would be regarded as intolerable in university life which, from the evidence of today's academics in both the post- 1992 and the pre-1992 universities, is a thing of the past when males believed that females were unreliable and would be unlikely to remain in academia following the births of their children. Today it appears, from the responses of interviewees, that female academics have gained recognition and respect for their teaching, research and publication work and in having brought new attributes to university life and work. However, although the above paints a picture of freedom from discrimination it cannot be claimed that it does not exist. This was tested through the knowledge and use of Gender Equality Schemes below.

6.15 Gender Equality Scheme

To test the level of awareness of the glass ceiling and whether or not academics have experienced discrimination and marginalization they were questioned about their knowledge and use of their university's Gender Equality Scheme. It was found from their responses that lecturers, female and male, had neither read it nor had reason to use it. Senior academics, on the other hand, having had training in its use when

appointed to a managerial role and in their involvement in recruitment procedures, in writing research applications and preparing job advertisements, were well-versed in their university's Gender Equality Scheme.

The interviewees expressed no experiences or need to use the Gender Equality Scheme for any form of grievance in relation to gender equality, discrimination or marginalization, implying that the glass ceiling is no longer effective and that discrimination and marginalization is either exceptional or non-existent. However, it cannot be assumed that no grievances have been made in each of the universities. The levels or frequency of grievances made in the two universities under investigation was not investigated because of their confidential nature.

6.16 Gender blindness

Another constituent part of the glass ceiling, according to literature sources, refers to the effects of gender blindness (see chapter 3, para.3.6) in unintentionally or inadvertently blocking the promotion of female academics through male inabilities to see or understand the multi-tasking problems faced by female academics. In questioning academics it was found to be necessary to clarify the meaning of the term gender blindness as interpreted in literature sources (Chapter 3, para. 3.6). From initial responses to the question of gender blindness it proved to be a concept that few interviewees had previously encountered.

Their responses indicated that female academics interpreted gender blindness as a lack of understanding on the part of male academics of the pressures of the dual role as academics and carers at home, whereas some male academics discussed gender blindness in terms of ensuring that the interview processes for promotion should be merit-based and gender blind. It was suggested that for equality of opportunity the promotion process has to be merit based 'rather than any adjustment

being made for some responsibilities outside'. There was no suggestion from female academics that any special allowance should be made for their additional home caring responsibilities.

The suggestion by a minority of males that 'you can have it both ways' referred to a perception that females can be 'blind to the actions of males and are being deliberately discriminatory.' However, an analysis of all responses indicated that the majority (57 per cent) accepted that gender blindness was disadvantageous to female academics in the promotion process and a majority of males admitted their lack of awareness of the problems encountered by women in coping with the responsibilities of a full-time academic job and in carrying most of the burden of family care.

Interestingly, of all responses fewer females than males believed that gender blindness was problematic, six females and one male believing that men are not gender blind. This is contrary to the findings in literature sources (see chapter 3, para.3.6) which claim gender blindness to be a consequence of male domination in the workplace where the presence and influence of women is 'at best tolerated and at worst ignored' and 'not worth serious consideration' Ferrario (1991). Academics today appear to negate the effects of gender blindness in terms of career progression and insist that academic appointments must be based on merit, an interpretation of which is that as far as the glass ceiling is concerned gender blindness *per se* has little effect in blocking the promotion of female academics.

6.17 Female and male traits

The investigation into whether or not differences between female and male traits exist exposed some agreement and some denial that traits related to gender exist at all. Whether or not traits result from social influences or are hereditary, most female academics agreed that they were more involved in pastoral work than males. This observation was

made partly because students tend to gravitate towards them for advice and counselling and that as a consequence their research and publication work suffers in comparison to that of male academics.

Literature sources (see chapter 3, section 3.15) show that female academics are expected by their male counterparts to be 'motherly' and to 'bring to academia the ability to care for and nurture students as if they were their own children' (Wilson, 2005, pp. 235, 238-9). An analysis of the responses of male academics revealed a dichotomy of opinion: one group believing that pastoral work was shared equally between female and male academics and the other conceding that female academics tend to accept this work in the belief that males are less interested and less competent in it. Interpreting this in relation to the glass ceiling it is evident that female academics who are heavily involved in pastoral work suffer the double jeopardy of its lower rating in the criteria for promotion and in loss of time for their research and publication work which are highly rated for promotion.

6.18 Mentoring

Several literature sources show that mentoring is generally considered beneficial for work-related advice and guidance and in understanding the promotion processes in which senior academics support lecturers 'as their proteges'. However, mentoring for female academics was shown to be less well developed because of their limited numbers (see chapter 3, para. 3.23). A further disadvantage for females, according to literature sources, arises from the criticism of women in senior positions who, acting as 'honorary men' in male dominated faculties, ignore mentoring for the female subordinates.

In interviews with female and male academics informal mentoring from a senior academic to a lecturer was viewed as beneficial in discussions about work-related problems and procedures and in advice in relation

promotion processes. Interviewees indicated their preference for the individual choice of mentor rather than an imposed centralized system. The latter was viewed with a measure of scepticism in the belief that 'the mentor-mentee relationship is based on understanding, trust, respect and common ground'. Apart from the response of one male reader relating his observation in a previous appointment there was no evidence of female misogyny in the universities involved in this research. Senior academics, female and male regarded mentoring as part of their function as experienced academics.

Contrary to literature source evidence that female academics do not benefit from mentoring as much as their male counterparts because of the dearth of females in senior positions, female interviewees in male dominated faculties involved in this research expressed no such disadvantage, several having benefited from male mentoring. In most cases females benefited from female mentoring. However, mentoring was not seen as a panacea for all problems or an easy route to promotion. A senior female academic, although advocating mentoring as an important part of her responsibilities and suggesting it as an important part of the work of all senior academics believed that 'it depends on what the individual wants out of it, I don't think it is a gender thing'.

6.19 Pay gaps

The question of pay gaps in favour of male academics which, as shown in literature sources (see chapter 3, para, 4.2), remains problematic and is re-examined and compared with the responses of interviewees who, having been shown pay gap data pertaining to all Scottish HEIs (appendix 12), were asked for their impressions of possible reasons for pay gaps in favour of men. A mixture of surprise and disbelief was expressed by some interviewees at the extent of the pay gaps as published by the University College Union (UCU, April 2007). Their reactions varied from that of a female lecturer who believed that 'men are still seen as

breadwinners ... they are seen as the dominant sex ... they are seen as professionals and therefore can command higher salaries' to that of a male professor who explained: 'It is down to seniority, with more men in senior posts'. The latter view explained the published figures which are a reflection of the seniority gaps between female and male academics and relate directly to the gap in a university's overall salary bill between male and female academics.

Further questioning relating to the common pay scales within grades for all academic staff irrespective of gender and in compliance with equal pay legislation elicited several other reasons for pay differences. A common response related to differences in the starting salaries of female and male academics which were attributed to the greater ability of males to negotiate higher starting salaries than females who were, often by their own admission, more reticent in challenging their starting pay. The responses of female academics agreed that 'men are better at being hard-nosed in asking for what they think they deserve.'

Other causes of pay gaps included the availability of consultancy work which was less available to female than to male academics mainly because of the burden of family care responsibilities borne by females. However, a minority of female academics believed that consultancy work was equally shared between female and male academics. Opportunities for additional income from overseas work were also seen to be more available to males than females, again because of the additional responsibilities of home care. It was noted that as family responsibilities diminish when children reach an age of independence, opportunities open to females for overseas work become possible and pay gaps diminish.

The evidence of an official of the University College Union (UCU) whose expertise lay in pay negotiation was sought on the advice of an

interviewee. The UCU official's approach initially defended the UCU publication (UCU, April 2007), that is that pay gaps are caused from the disproportionately high number of males in senior positions and that males remain at or near the top of their salary scales for longer than women (see also chapter 3, para.4.2 - ECU, 2008, pp.1-3). However, further investigation into pay gaps within each grade indicated much smaller pay gaps in favour of men apart from academics above the level of professor. With reference to discretionary pay, it was noted that universities appoint more males than females directly to senior positions to attract academics with exceptional experience and evidence of internationally recognised research and publications which explains a further cause of gender pay gaps.

Signs that gender pay gaps are closing are attributable to gradual increases in the appointments of females to senior positions at differing rates in different faculties. This trend towards a 'critical mass' of females, referred to in literature sources (chapter 3, para. 4.3), with increases in female appointments to senior positions will reduce the pay gap in terms of the university's salary bill. In addition, as the length of service of females increases their positions in the salary scales will tend towards the same levels as their male counterparts diminishing the pay gaps within each grade.

CHAPTER SEVEN

CONCLUSION

7.1 Introduction

The primary aim in this research is to investigate the changes which have occurred since mid-nineteenth century in gender equity and equality in Scottish universities with special reference to the career progression of female academics and gender pay gaps in favour of men. As shown in para.1.1 this involves a range of research questions starting with some historical aspects of gender inequity and equality which are addressed as follows:

1. How have the traditional Scottish claims for educational and intellectual democracy affected the education of females in comparison to males?

This question was addressed from the review of educational history (chapter 2) which provided a new challenge to the long-held traditions and claims in the Scottish system of education for educational and intellectual democracy. It was investigated in terms of its democratic failings in denying equal opportunities for the higher education of women through the nineteenth-century curriculum of philosophy, metaphysics and classics which was deemed unsuitable for the female brain and intended only for the upward social mobility of males in an elite and meritocratic system of liberal non-vocational education (see para. 2.11).

2. Are there historical legacies which indicate differences between the career opportunities for women in comparison to men in higher education? If so, how do they affect female in comparison to male academics today?

This question was addressed through historiographical research and revealed the principal legacies of male domination, masculinist leadership and occupational and curricular segregation in all Scottish universities and universities worldwide. The effects on the career progression of female academics were also investigated in relation to patriarchy and male norms which excluded female academics in policy- and decision-making

committees (see para.3.3) which perpetuated vertical and horizontal segregation still prevalent but in diminished forms today.

3. In what ways have legislative and educational reforms affected gender equity and equality in Scottish education?

This question was addressed in para.2.2 in terms of the epistemology of gender inequity and inequality in the system of education to provide evidence from historical and legislative primary sources such as successive Acts of Parliament including the Education (Scotland) Acts, Universities (Scotland) Act 1892, Equal Opportunities and Equal Pay Acts from 1970 and the Gender Equality (Duty) Scheme, 2007, each leading to improvements in gender equity and equality.

4. What accounts for differences in the academic performance at school and in higher education between females and males?

Quantitative data sources (paras. 2.2, 2.16 and 2.17, Appendices 8, 9 and 10), were used to show the changes in the academic performance of females outperforming that of males at school and in higher education in Scotland. The changes were explained from the introduction of Comprehensive Schools (SED Circular 600) in 1965 and the Sex Discrimination Act of 1975, the latter making curricular segregation by gender unlawful. The Robbins Report (DES, 1991) followed by the Further and higher Education Act of 1992 in Scotland provided mass higher education after which the superior performance of females over males occurred in higher education.

5. To what extent does the metaphorical 'glass ceiling' affect the promotion and pay of female academics?

The invisible barrier through which penetration is difficult for women in attempting to progress to senior positions was investigated from literature sources and field work and found to manifest itself through patriarchy, male domination and male norms in universities with vertical and horizontal gender segregation. It was found to be exacerbated in

situations where females are in a minority of senior positions through a dearth of support mechanisms such as role models, mentoring, opportunities for networking and a dearth of female academics in influential committees.

6. What are the principal thematic elements related to the glass ceiling in higher education?

From literature sources the principal thematic elements in relation to the glass ceiling were found to include: male-devised promotion processes, the gender composition of influential committees, criteria for promotion, gender blindness, the effects of career breaks, work-life balance, female/male traits, etc., (see figure 5, para.3.5). Each theme, according to literature sources, including those of UK and worldwide origin, contributes, to varying extents, to the metaphorical thickening of the glass ceiling. However, from the responses of interviewees the glass ceiling was considered to continue to exist by some senior academics but in a more permeable state. According to younger academics, female and male, it was confined to history and considered non-existent today (see paras. 5.10 and 7.7).

7. In what ways was gender equity and equality in Scottish universities affected by the introduction of and greater emphasis on 'vocational' than on 'academic' higher education?

This is addressed from a standpoint of the expansion of curricular choice brought about by the increasing emphasis on vocational higher education, from the mid-1960s, which overtook 'academic' subject areas previously and commonly the province of males (see para. 2.11).

Research into the growth of and need for vocational higher education and the provision of greater curricular diversity and choice with the introduction of new subject areas is shown to have enabled greater access to higher education for females thus improving both gender equity and equality in the student population (see para. 2.16). With the introduction of mass higher education from the mid-1990s further

expansions in new vocational degree and higher degree courses led to increases in female and male access and improvements in female performance over males leading to improvements in gender equity and equality (see para. 2.17).

8. What are the main issues and concerns faced by female in comparison to male academics in relation to generally accepted criteria for promotion?

Addressing the issues and concerns faced by female academics in terms of the predominant criteria for promotion literature searches revealed the importance given to research and publication productivity in comparison to teaching and pastoral work (see para.3.12). The responses of academics, male and female, to interview questions revealed that female academics suffered more interruptions than males in the important criteria for promotion than their male counterparts because of a female tendency to be available for pastoral work and their greater need for career breaks and work-life balance for family commitments (see para. 3.16) with the overall effect of delaying their promotion (see paras. 3.15, 5.9 and 6.17).

9. In what ways does gender blindness affect female academics in terms of gender equality?

The question of gender blindness, addressed from both relevant literature sources and field work was addressed from relevant literature sources and semi-structured interviews (see paras. 3.11 and 5.13) for its effects on the career progression of female academics through such as the effects of male domination through discrimination and marginalization and lack of male understanding related to the burdens of family care borne by women. In addition, assumptions of a 'male management paradigm' in 'not seeing, being unaware, suppressing gender, or gender defensiveness' are noted to contribute to the metaphorical thickness of the glass ceiling.

10. How does work-life balance affect the academic work and promotion of females in comparison to males?

From literature sources and the evidence of interviewees a dilemma for female academics with family responsibilities was found to be the need for work-life balance in a culture of long-hours in which male academics are relatively unaffected. This gives career central academics (commonly male) advantages in terms of research and publications which are important criteria for their promotion and additional pay. Perceptions of some male managers towards work-life balance as a contradiction to efficiency and suggestions that females have less interest in promotion were found to further disadvantage to female career progression (see paras. 3.24, 5.8, 6.6, 7.6)

11. In what ways do career breaks affect the promotion and pay of academics?

Comparisons between the career progression and pay of female and male academics in relation to career breaks indicated general agreement between literature sources and the responses of male and female interviewees (see paras. 3.16 and 5.15). The principal areas of agreement related to inevitable interruptions and delays in the research and publication work of females which is 'damaging to promotion chances' making the upward career trajectory less linear for women than for men.

12. How does networking affect the promotion of females in comparison to males?

Because of a dearth of literature sources in relation to networking this was investigated through the process of interviewing in terms of its importance towards promotion in becoming known in the research community and in gaining opportunities for the exchange of research ideas. General agreement between female and male academics was evident in the importance of networking internally and externally not only for benefits in knowledge transfer and career progression but for the

reputation of the university. However, female academics with family responsibilities found greater difficulties in networking than their male counterparts because of their domestic responsibilities and their greater need for career breaks and work-life balance which both inhibits and delays their promotion (see paras. 5.22 and 6.11).

13. What differences are there in the perceptions of job satisfaction and dissatisfaction of female in comparison to male academics?

Investigations into literature sources show that many female academics express job dissatisfaction in situations of masculine-oriented management in which their work is devalued with 'violations of expectations', 'gendered ageism', lack of mentoring and in being relegated to the sidelines after career breaks (see paras. 3.22 ,3.23, 3.24). However, these features of dissatisfaction were absent in the responses of female academics during interview sessions. Instead, job satisfaction was expressed in the advantages of flexible working and enjoyment in teaching, research and publications. The most frequently expressed facet of job dissatisfaction by female and male academics was that of excessive bureaucracy and paper work (see paras. 5.4 and 5.5).

14. What are the effects of flexible working in relation to job satisfaction?

From literature sources and the responses of interviewees flexible working arrangements were found to be especially appreciated by female academics with family commitments in freedom to work from home. However, according to some literature sources a preference for flexible working was construed as showing less dedication to work and reluctance to seek promotion (see para. 3.24). From the responses of both female and male interviewees other advantages, not simply in job satisfaction, were found to benefit their universities in gaining from work in excess of contractual hours of work and in the enhancement of the reputation of

the university from participation in conferences and in the presentation of research papers enabled through flexible working (see, para. 5.8).

15. Why are females still in a minority in the academic staffing of universities while they outperform males at school and in higher education?

This was addressed from the changing state of female educational inequity in terms of access to higher education and curricular segregation from 1850 to the mid-1990s when females began to outperform males in universities following the introduction of mass higher education (see figures 2, 3 and 4 in paras. 2.16 and 2.17). The length of time taken to reach a reasonable level of gender equity effectively delayed the educational progress of females and accounted for their late entry to university teaching which was further restrained in male-dominated patriarchal environments as shown in para. 2.15.

16. Why are female academics under-represented at senior levels in universities?

This question was investigated in relation to a range of factors related to vertical segregation including: (a) the pipeline effect (see para. 3.10), (b) gender blindness (see para. 3.11), (c) gender discrimination and marginalization (see paras. 3.4, 5.14 and 6.14). In addition, differences in the research and publication outputs and involvement in the Research Assessment Exercise of female in comparison to male academics, female reluctance to apply for senior posts (see paras. 3.12 and 3.13) and horizontal segregation (see paras. 3.14 and 5.16) were each given as reasons for the dearth of females in senior positions. From the oral evidence of female and most male academics the principal reasons for the disproportional representation of females in senior positions related to factors which delayed female promotion including career breaks and preference for work-life balance because of the need for family care.

17. In the organisational structures of universities why are females in a minority in policy- and decision-making committees?

This question was addressed from the standpoints of: (a) the perpetuation of male domination and male norms (see para. 3.3 and Appendix 11), (b) the scarcity of female academics in senior positions (see paras. 3.2, 5.6 and 6.8 and (c) the 'time poverty' of female academics in their dual roles as academics and family carers (see para.3.3), each contributing to the minimal presence of females in policy- and decision-making committees.

18. What are possible causes of pay gaps in favour of male academics as shown in literature sources?

The extents of pay gaps in favour of male academics in all Scottish universities were firstly obtained from primary source quantitative data reflecting the disproportional representation of female academics in senior positions (see appendix 12). The extents of pay gaps in each grade in which common pay scales exist provided a more accurate picture in which indicated relatively small pay gaps within grades (see paras. 3.20 and 5.17), the main causes of which were found to be loss of increments due to career breaks, lower starting salaries for female academics, fewer opportunities for overseas teaching and consultation work and discretionary pay awarded mostly to male academics (see paras. 5.18, 6.19, 7.18).

Disclaimer

This research although aiming to present an understanding of the attitudes and perceptions of academics in Scottish universities in relation to their career progression and pay does not claim to present a complete representation of all academics in all Scottish universities. It does, however, in attempting to achieve the main aim and objectives of the research, as shown in chapter 1, para. 1.1, make comparisons between the findings of literature sources in the literature reviews of chapters 2

and 3 and those of a representative sample of the perceptions, opinions and attitudes of the interviewees at lecturer, senior lecturer/ reader and professor levels in two universities, one pre-1992 and the other post-1992

It is recognized that no two universities exhibit identical characteristics and that there are obvious subject differences between faculties within universities particularly in relation to the nature and scope of their academic activities and in their proportions of female to male staffing which affect gender equity and equality and pay gaps. Academics were interviewed in at least two different faculties in each university in order to obtain a reasonable representation of academic disciplines within the limits of time and space in this research.

Consideration was given, during the early stages of this research, as to whether or not it should concentrate on female perspectives alone or whether male perspectives of gender equity and equality should be included. Following debate with the supervisors of this research the author decided to include both perspectives. This decision was based partly to avoid any suggestion of bias in presenting a one-sided view had a female-only or a male-only perspective been considered. It was also noted that the majority of literature sources deal with female-only perspectives and attitudes towards gender equity and equality in higher education. As shown below (para. 7.14 below), the inclusion of male perspectives and attitudes alongside those of females in this thesis provides new knowledge in comparing differences in the perceptions towards equity and equality in the themes chosen between female and male academics as well as between lecturers and senior academics.

7.2 Being an academic in Scottish universities

The research objective in investigating what it feels like to be an academic is intended to introduce aspects of the working lives of academics in

relation to that of which they are most familiar – their work. This involved an enquiry into the nature of what they believe to be the important and enjoyable as well as the irksome areas of their work through questions about their sense of job satisfaction and dissatisfaction. Critical analysis of their responses relating to their work activities, although providing a picture of the pleasures and pains of academic life, is inherently problematic. From a position of critical realism the responses of interviewees to interview questions can be affected through intrinsic and extrinsic influences. For example, their responses may be influenced by differences in the individual work preferences, the effects of their relationships with colleagues, the timing of interviews in relation to their level of work activity at the point of interview, the temperament of the interviewee whose mood can be affected by many variables within and outwith their work environment and the age and gender of the interviewer. Each of these are imponderables in the interview process and make generalizations impossible.

However, the investigations into **job satisfaction and dissatisfaction** elicited some consistencies in the responses of female and male academics in relation to their job descriptions but with some differences in emphasis concerning their work preferences in the multifaceted and complex nature of their work (see chapter 5, paras. 5.4 and 5.5). For example, the majority of senior academics stressed the importance of research income and publications, not only for the enhancement of the status and financial health of their university but for their successes in gaining research contracts, the pleasure in seeing their names in print following the publication of their researches, in the satisfaction of successful teaching through student satisfaction and in enhancing their prospects for promotion and additional pay. Some lecturers in the post-1992 university, on the other hand, indicated the importance of high quality teaching and good student feedback but recognized that teaching

was often placed second to research and publishing in the prevailing system of performativity and league tables (see chapter 5, para. 5.19).

Academics whose academic preference is in teaching rather than research generally gained satisfaction from student feedback and an innate sense of a well-delivered and interesting lecture. Their sense of 'a job well done' is also gained from observing the changes in their students from, as a female lecturer described them, a state of 'not knowing anything' into professionals 'ready for practice' or from 'a wet behind the ears' person to a person who can go out and represent the university. A consequence of the importance given to research and publications arises from the apparent relegation of teaching to second place because, in the words of a male professor: 'research active people are probably giving students less attention and worse feedback to the students.' This aspect of job dissatisfaction may be interpreted as an underlying philosophical dilemma in the minds of some academics: that of educational ideology (Fanghanel, 2012, p.7).

This dilemma is concerned with individual perceptions of academics in relation to educational policy and the role of academics in reconciling the distinction between education *per se* and vocational (utilitarian) education for employment and the economy (see chapter 2, para.2.11). This dilemma manifested itself in responses of academics in relation to their sense of satisfaction from the progress of their students in the development of their intellectual and professional skills for their future in the workplace. Whether or not the university experience for students was a means to an end or an end in itself appeared as a tacit question. As a means to an end academics recognised the intellectual rigour and ethical character of vocational subject disciplines which are involved in the achievement of a university degree in terms of knowledge and expertise for entry into the labour market, for the economy and as a transferable skill.

As an end in itself, academics were equally aware of the advantages gained by students in their acquisition of cultural capital in family life and in the possession of a qualification with transferable knowledge and skills not simply for paid work and the economy but to enable the broadening of learning and study from one discipline to another having gained in confidence and having proved their personal intellectual ability in gaining their first degree.

From discussions with interviewees and conference delegates relating to educational ideology, higher education as a means to end appears as the dominant model in higher education today leaving distinctions between 'academic' and 'vocational' higher education as outdated legacies from the history of Scottish education. In this respect academic education is defended in literature sources which argue that philosophy, classics and general education in the humanism of democratic intellectualism is 'the open door of social advancement' and the best preparation for living in a democratic society (Davie, 1961, p.xii, 7) and was debased by 'English utilitarianism'. Vocational education was defended as 'undervalued by a society which, although dependent on the products of industry, clings nostalgically to a pre-industrial (or even anti-industrial) culture' (Cuming, 1989, p.69).

In the above discussion of educational ideology, education as a means to an end manifests itself in the importance given to income-bearing research and publications which are directly related to industry and commerce. This was clearly evident in both the pre- and the post-1992 universities involved in this research in their aims of achieving high ratings in the Research Assessment Exercise (RAE) and in aspiring to 'Russell Group' status. The emphasis towards research and publications, although important, was perceived as less emphatic but growing in the post-1992 university, more attention being given to teaching and pastoral work. This

difference in emphasis was explained by academics in three ways: (i) that the pre-1992 university had several decades of advantage in their research and publishing activities supported by greater financial advantages than the post-1992 university; (ii) it has been less affected from the changes from elite to mass higher education in terms of the academic levels of its student enrolments, and (iii) it made greater use of pdr in target-setting on research and publication output than in the post-1992 university.

In terms of teaching, academics expressed their **job satisfaction** in seeing the transformation in their students from a state of relative ignorance into professionals for the labour market - an indication that academics regard their purpose in educating and training their students as a means to an end as discussed above. The development in students of their new-found abilities and understandings of the techno-ethical standards of their chosen profession, their criticality and their sense of 'whatever job you do it's about making a difference to people's lives' was seen as a vital outcome of university life. Equally, academics whose predominant activities include research and publication work and who are aware of tensions between teaching and research gained job satisfaction from successful research proposals in collaboration with the private sector. Research active academics, although self-motivated, are encouraged or coerced through pdr to publish their findings from which they gain job satisfaction. This arises from 'seeing my name in print', in adding to their list of qualifications towards their promotion, to enhance their reputation nationally and internationally, and in contributing to their university's standing in the RAE.

The pressures on academics to produce high level research income and publications were found to be offset by a highly treasured feature of their job satisfaction - that of **flexible working**. This was specially appreciated by female academics with family responsibilities in such expressions as:

'flexibility, from my point of view, is priceless and it is worth every bit of the job'; I wouldn't be an academic and work full-time if there wasn't the flexibility'; 'Being an academic is a vocation in choosing to teach something that interests you. I don't have a boss who breathes down my neck, I don't have a timesheet'. However, the downside of flexible working was expressed by several academics in terms of the inherent long-hours culture of weekend work at home to catch up on work not completed during the normal working week, to pursue additional work on research and publications and to respond to numerous e-mails. The long-hours culture was found to be more problematic for female academics who have additional responsibilities of home care for their families while pursuing their research work; this aspect of work is discussed in greater detail in para. 7.6 below.

Although this investigation into the perceptions of academics of their job satisfaction and dissatisfaction provided some features of their lives as academics, in retrospect, it did not probe pay satisfaction or how their job affected their lives outside work in terms of work-life balance, except that flexible working was valued and beneficial especially to female academics. As shown in chapter 5, in-depth investigations were carried out through research questions about work-life balance (see para. 5.20), flexible working, family friendliness and influences which determine the effects of the metaphorical 'glass ceiling' (see para.5.10).

Comparing the responses of interviewees with the findings in relation to job satisfaction in literature sources the difference is marked. For example, interviewees made no mention of or objection to the effects of male domination or male norms, whereas literature sources paint a picture of masculine-oriented management, institutional discrimination and job retention affected by the devaluation of women's work even to the point of hostility (see Chapter 3, paras. 3.6 3.7). It may be concluded from the responses of academics, female and male, that male

domination although evident numerically in both universities which participated in this research, was of little concern to female academics in promotion processes which were generally deemed to be 'fair and equitable.'

Conclusion - female and male academics agree that their work as a vocation is 'intrinsically satisfying and never boring'. They expressed pleasure in the successes of their students despite the areas of job dissatisfaction which were explained in terms of administration, bureaucracy and excessive paperwork as distractions from what they regard as the *raison d'être* of their work, namely teaching, research and publications. These areas of job dissatisfaction were accepted simply as undesirable distractions in the work of academics the detail and extent of which were not investigated in depth but could form the basis of further research (see para. 7.15).

7.3 Career progression

The career progression of academics from a gender perspective was investigated from a standpoint of possible causes for the under-representation of women in senior positions in higher education. Explanations of this, as found in literature sources (chapter 2, paras. 2.17, 2.18 and chapter 3, para. 3.3, 3.7), referred to male domination and the persistence of male norms in the influential committees of universities which can affect the metaphorical thickness of the glass ceiling.

To reach an understanding of differences between the career progression of female and male academics their opinions were investigated firstly in relation to what they believed to be the main criteria for career progression taking account of their individual preferences in relation to their perceptions and knowledge of the aims and policies of their university. The majority of interviewees believed that the procedures for promotion were fair and equitable even though they were aware but not

particularly conscious of male domination in policy- and decision-making committees. This conclusion disagreed with the findings in the literature sources in which male domination and the impositions of male norms are commonly featured. The contention of some female and male interviewees that female academics prefer part-time work because 'it suits their lifestyle' is open to question and could be refuted by part-time academics aspiring to full-time status and promotion, an area omitted in this research.

7.4 Criteria for promotion – responses of academics

The responses of interviewees in relation to their perceptions of criteria for promotion varied from scant knowledge to clear ideas of their university's policies and aims relating to promotion. The former group consisted of a small minority of equal numbers of female and male lecturers whose experiences of academic life were relatively short or whose primary interest was their research and publishing work and for whom thoughts of criteria for promotion appeared to be of little concern. As expected, the most knowledgeable group were senior academics who had experience of the promotion processes, had mentored younger colleagues and who had participated in promotion panels.

The majority of interviewees in both the post- and the pre-1992 universities were conscious of the importance of a track record of research income and publications in the criteria for promotion. Evidence of high quality teaching with the acquisition of a teaching fellowship, although an asset for promotion alongside research and publication work was viewed by some interviewees as: 'teaching, I don't think, figures that highly these days in terms of promotion'. This attitude towards teaching was also found in literature sources in comments such as: 'teaching is not valued as greatly as research [and is viewed] as not bringing money in' (see chapter 3, para. 3.11). In addition to providing evidence of nationally and internationally recognized research and publications most academics

recognized that those who show their acceptance of the long-hours culture in sacrificing work-life balance are often the preferred candidates for promotion.

The acquisition of a doctoral qualification was taken for granted as a normal requirement for a first appointment to a lectureship in the pre-1992 university. A doctoral qualification was an essential prerequisite for a senior appointment in the post-1992 university and a preferred rather than essential qualification for a lectureship. For example, the evidence of some interviewees that a well-qualified candidate whose professional experience in the private sector would provide leadership in the development and delivery of teaching modules for undergraduate, post-graduate and specialised short courses with evidence of bringing research and consultancy work to the university may be appointed to a lectureship without a doctoral qualification in the post-1992 university. Other criteria for promotion included evidence of leadership skills, active networking, supervision of post-graduate students and 'fitting in' with the aims of the university in satisfying external quality assessments of the Scottish Funding Council (SFC), the Research Efficiency Framework (REF) and National Student Surveys of teaching quality.

The emphasis given to research in the pre-1992 university was evident partly from mentoring and partly from the implementation of annual Performance and Development Reviews (pdr). In the latter academic staff were involved in negotiating and setting agreed targets for research income and publications, a system which appeared to be less systematic and formalised in the post-1992 university. Although interviewees in the pre-1992 university appeared to accept, with relative equanimity, the processes involved in performance reviews it cannot be assumed that such acceptance was generally the case. For example, two male interviewees expressed concern that: 'there is a cynicism, a fear that performance and review can manage people out the door at the worst.'

However, there was no apparent evidence or expressed opinion from interviewees that the system of target-setting and assessment was more beneficial (or threatening) to males than to females in terms of their well-being or opportunities for promotion. Through this process the majority of academics exhibited their awareness of their university's aims to improve its rating in the Research Assessment Exercise (RAE) and in satisfying the requirements of Quality Assurance Agency (QAA) (see chapter 5, para. 5.19) and importantly in gaining research grants.

Conclusion - The majority of interviewees agreed that academics who maintain high levels of research income, and produce publications in top journals and whose works are regularly included in the Research Excellence Assessment (RAE) with experience in the supervision of doctoral students, who show expertise in teaching and are prepared to work 'beyond the stated hours' are the most likely candidates for consideration in the promotion processes. There were clear indications that research income and publications are preferred criteria placing teaching and pastoral work in second place.

Although income from research and publishing are key determinants for promotion an aspect of the work of academics which was not salient in discussions with academics in terms of criteria for promotion nor in literature sources, was the research work involved in the creation of new teaching modules, the up-dating of syllabi and the creation of new degree and masters courses. This work is concerned with ensuring that teaching modules are both relevant and up to date and involves consultancy work and the maintenance of contacts with practitioners in the private sector to ensure that teaching modules are ahead of the requirements of the private sector. This ongoing activity which involves high levels of expertise in research contributing to teaching and continuous investigation into modern theory and practice in private sector activities, prepares new graduates for their work as professionals in the private sector. Bearing in

mind that university courses, including under-graduate, post graduate and short specialist courses, attract income from fees this research work, being essential for the reputation of the university in keeping ahead of private sector developments, appears to have less recognition in the criteria for promotion than income from research and publications in top journals .

7.5 Career progression – gender differences

According to relevant literature sources (chapter 3, para.3.12) the criteria for promotion affect the career progression of females less favourably in comparison to males. The finding that research, publishing, RAE submissions and funding applications are important criteria in achieving promotion and that female performance in each is lower than that of males suggests that women are less research active and therefore have fewer opportunities for promotion than their male counterparts.

From the responses of female and male academics during semi-structured interviews there was general recognition and acceptance that female academics require career breaks because of they take the main burden of family care. This allows males more time and freedom to pursue their research and publication work than females. The effects of career breaks inevitably interrupt and delay research and publication work. In addition it was found that female academics commonly have heavier teaching loads and cope with more pastoral activities than males each of which detract from their research and publishing work thus reducing their opportunities to submit to the RAE (see chapter 5, paras. 5.15 and 5.19). Career progression for women is therefore more problematic than for men which is in agreement with the findings of literature sources (see chapter 3, para. 3.11).

The effects of male-dominated promotion panels on female career progression, although frequently featured in literature sources as

disadvantageous to women (see chapter 3, para. 3.2), did not feature in the responses of female interviewees as problematic in their career progression (see chapter 5, paras. 5.6, 5.16 & 5.19). A male dean of faculty suggested: 'I don't think it [equality] will take very long because the change has been quite exponential, but I think it will vary from discipline to discipline.' A comparison between the perceptions of female and male academics indicated that the majority of males (86 per cent) and all females believed the promotion procedures to be fair and equitable even though promotion panels were commonly male dominated (see chapter 5, para. 5.6). However, since only two universities were involved with 24 interviewees it cannot be assumed that this is a nationally representative view.

The absence of criticism relating to male-domination in promotion procedures from female and male academics differs markedly from the findings in literature sources (see chapter 3, para. 3.8). Relevant sources are critical of some promotion procedures in terms of their 'closed procedures'. Lack of transparency is exemplified in the belief that 'the preferred candidate is already known' in spite of advertising the vacancy and that accountability is doubted with suggestions of 'a purely decorative appointment procedure' (van den Brink, 2012, p.9)

In the responses of interviewees a minority of senior male academics conceded that the composition of most promotion panels, being predominately male, can affect the choice of candidate in showing preference for those who display 'similar to me' characteristics and attitudes, in other words – appointments being made 'in one's own image' (chapter 5, para.5.13). This suggests disadvantage to female candidates in agreement with the findings of literature sources (see chapter 3, para.3.10). However, quantitative data (see appendix 13 and chapter 2, para. 2.18) shows that increasing numbers of female academics have gained promotion over the past four years showing a

trend towards equality between senior female and male academics in some faculties.

Interviewees attributed the change towards equality to such as: improvements in academic performance of female over males (see chapter 2, para. 2.17, 2.18 and appendices 8, 9 & 10) with increasing numbers of females with doctoral qualifications and records of research activity with internationally recognized published work equal to that of males, their increasing presence in decision-making committees, the absence of discrimination and marginalization, and adherence to gender equality schemes.

Female interviewees, although disadvantaged in terms of their aspirations for promotion during and after career breaks when coping with the burden of family care, gave no signs of having experienced exclusion or discrimination but recognized its delaying effects on their promotion. In appreciating the benefits of flexible working a minority of female and male academics expressed little interest in promotion. Contrary to the findings of literature sources (see chapter 3, para. 3.10) the effects of male-dominated policy- and decision-making committees appeared to be of little concern to female academics who expressed their beliefs in their research and publishing as equally well-recognized as those of their male counterparts, negating the notion of 'male norms' in acting against their promotion chances.

Conclusion - career progression is delayed and to some extent inhibited for female academics partly through their need for career breaks which interrupt their research and publications and limit their networking within the university and externally in attending conferences. The suspension of their supervising role for post-graduate students and being less able to accommodate the long-hours culture in their need for work-life balance (see chapter 5, para. 5.3) adds to delays in female promotion.

7.6 Work-life balance and career centrality

The responses of academics about the effects of work-life balance and career centrality indicated general agreement that normality in work is seen as a reasonable balance between paid work and life at home or leisure (see chapter 3, para. 5.3). Academics who agreed with the desirability of work-life balance found it difficult to attain partly because of the multifaceted nature of their job as discussed above in chapter 5, para. 5.3, and partly from the tensions between teaching and research in which most academics find that six- or seven-day working is unavoidable during particularly busy periods in the academic year.

The responses of many academics suggest that their work involves many periods of unpaid work 'beyond contractual hours' and that a work ethic of long hours is intermittently unavoidable. A male professor explained his attempts to ensure an 'even balance that the staff member is willing to accept' in attempting to ameliorate their teaching load with their commitment to research and their administrative duties. Although flexibility of conditions of work in higher education helps academics to achieve work-life balance a senior male academic observed: 'It is not a good sign to have this kind of behaviour [career centrality] that you just focus on your career and forget about life.'

The majority of academics agreed that 'it [promotion] depends on how much work they put in with no additional pay.' A female lecturer commented: 'You can't force down time on people who want to research into the middle of night. For some people work is absolutely pure pleasure.' Interviewees generally agreed that career central academics are often the preferred candidates for promotion because their outputs in research and publications are usually exceptionally high and correspond to the general aims of their university in terms of RAE ratings.

This raised the question of whether or not female academics will ever achieve equality in terms of senior positions in universities. From a female perspective their dual role was seen as a temporary phenomenon in the sense that as their children reach school age and become more self-sufficient their caring role will diminish and their academic role may then increase so that female academics can, if they choose, become as career central as men thus negating the argument that equality in terms of career progression will never be achieved for women. In addition, it was conceded by some female and male academics that the modern male is increasing his share of family responsibilities especially where the female holds a responsible job.

Conclusion - Career centrality was found to be more difficult for female academics whose family commitments usually preclude sustained adherence to the long-hours culture. Females therefore find themselves at a temporary disadvantage in aspiring for promotion. The responses of interviewees suggest that academics who can be described as career central are a minority group of both female and male academics who have few if any family responsibilities and are less interested in leisure activities. Equality of opportunity for promotion is therefore less attainable for female than for male academics in the early stages of their careers because of their greater need for work-life balance. Suggestions or recommendations to remedy this situation for female academics are elusive, partly because males have less need for career breaks.

7.7 The 'Glass Ceiling'?

Whether or not the metaphorical glass ceiling still exists in the minds of academics today is questioned in terms of the findings in literature sources in comparison to the responses of interviewees. The former suggest that the glass ceiling is persistently problematic for women (see chapter 2, paras. 6.1, 6.2, pp. 45-49) and paint a picture of male domination in patriarchal cultures in which female academics perceive

that their career development differs from that of men through marginalization, segregation, career breaks, gender blindness, less access to training and the need to suppress their identity in order to gain promotion. In interviews with female and male academics the above discriminatory features were by no means salient in discussions about the glass ceiling *per se*. Instead, their concentration tended towards what they believed were important criteria for promotion rather than any acute consciousness of male domination or inequity in the promotion processes.

During interviews it was evident that research active female academics have become as equally involved as their male counterparts in their teaching, research and publications as shown in para. 7.6 above. Importantly, the majority of male academics recognized that female academics with young families deserve consideration for the difficulties they experience in their need for career breaks and in performing their dual role of being an academic and a carer at home involving their children and/or elderly relatives. It was conceded at all levels that promotion chances are more difficult for females being delayed because of their additional home care responsibilities.

The responses of interviewees were found to differ between lecturers and senior academics, the former expressing little or no knowledge of the concept of the glass ceiling and the latter, having experienced some facets of it during the early part of their careers in academia, were still conscious of its effects in some areas of their work. Male academics took differing standpoints from their female colleagues: for example, some females were unaware of the concept of the glass ceiling and a small minority of males made disapproving references to positive discrimination. Their perceptions of the glass ceiling were so varied that generalisability in relation to the existence of a glass ceiling is not possible. At one end of the spectrum of opinion it was considered to exist

but in a 'more permeable' state and at the other it was perceived as an historical artifact which no longer exists.

It may be concluded that with over 40 years of Equal Opportunities legislation male academics have come to realize that discrimination through such as marginalisation and segregation is simply unacceptable both to managements and to academics in general. This conclusion contradicts the findings of literature sources in which male domination and agentic behaviours were cited (see chapter 3, paras. 3.3,.3.6, 3.7). From the responses of interviewees there was clear recognition that gender blindness is generally absent in the sense of ignoring the presence of or the problems faced by women which are not faced by men. Although some male academics concede that in faculties which are male dominated male norms can unwittingly occur in the processes of selection for promotion where promotion panels consist of a majority of males a minority of whom admitted unconscious selection in 'one's own image' (see chapter 5, para. 3.3,).

Female interviewees appeared to be unaware of bias in the procedures in promotion panels which, although male-dominated, were not criticized in terms of bias or impositions of male norms. For example, a female reader, speaking from a position of success in promotion, believed: 'I think there is gender equality in committees. I've never seen anything to indicate otherwise and I've never been uncomfortable in the processes of any boards in terms of the representation of any boards' (chapter 5, para.3.2).

7.8 Gender Equality Scheme

As discussed in chapter 6 para. 6.15 the perceptions of academics in relation to experiences of discrimination and marginalization with reference to the glass ceiling were investigated through their knowledge and use of their university's 'Gender Equality Scheme.' From the responses of female and male lecturers, (see chapter 5, para. 5.12) some

either imagined that one existed or had no idea of its existence and therefore had never had reason to use it. Senior academics, on the other hand, were familiar with it having undergone training to ensure that the precepts of the scheme are adhered to in the composition of advertisements, during the process of making appointments and in writing research applications in which a statement on equality policy is required. It may therefore be concluded that as far as this element of the glass ceiling is concerned it has no bearing on the career progression of female academics.

7.9 Gender Blindness

A feature of the glass ceiling referred to in literature sources (see chapter 3, para.3.6) is gender blindness which suggests a metaphorical thickening of the glass ceiling. An objective in questioning academics about possible effects of gender blindness was: to ascertain firstly whether or not they were aware of gender blindness.

The majority of academics, were, for the most part, unaware or vaguely aware of the concept of gender blindness. A minority of male academics appeared defensive in their responses in suggesting 'it can go both ways' and that females can be 'blind to the actions of males and are deliberately discriminatory'. Other males interpreted gender blindness as: 'we are expected to be gender blind in making appointments' (see chapter 5, para. 5.13). However, the majority of male academics, mainly senior academics, conceded its deleterious effects on the career progression of women' but recommended: 'if there's to be equality of opportunity it has to be merit based.' Female responses to the question of gender blindness differed from that of males in several respects: most females suggested that male academics fail to see the differences in the attributes which females in comparison to males bring to academic life, that males consider female attributes as less important than male attributes, that females have different attitudes towards students, that

gender blindness can affect the promotion of females and that males have little idea of and make no allowance for the multi-tasking pressures on women in their dual roles as academics and carers at home.

Conclusion - gender blindness may be substantially negated if and when promotion panels comprise of equal numbers of female and male academics. This balance may then bring equality and mutual understanding of female and male attributes in the promotion process. Although there were differences in the way in which gender blindness was interpreted between female and male academics and between lecturers and senior academics it may be concluded that gender blindness is problematic for female lecturers and therefore can be considered to thicken the glass ceiling. However, the responses of interviewees indicated clear disagreement with the finding in literature sources that the female presence in academia is 'at best tolerated and at worst ignored'; this attitude was not evident in the universities involved in this research.

7.10 Discrimination and marginalisation

A feature of the glass ceiling concerned with the effects of discrimination and marginalisation in the working lives of academics is related to male domination and 'prescriptive gender bias' in literature sources (see chapter 3, para. 2.2 and chapter 5, para.4.5). A general impression gained from interviewees was that discrimination and marginalization are regarded as unacceptable behaviour in university environments which may be a consequence of over 40 years of equal opportunities legislation.

The notion of male domination and male norms in relation to discrimination and marginalisation did not arise during interviews. Instead, the responses of female and male interviewees suggested that the presence of female academics in the universities involved in this research, even in predominately male dominated environments, is

respected and accepted on equal terms with men. A minority of senior female academics recalled some incidents of marginalization in their past experience but had succeeded in dismissing it as trivial. All female interviewees experienced no discrimination or marginalization in their work today.

Conclusion- the responses of female academics clearly indicated that discrimination and marginalisation against female academics is a thing of the past and has little or no bearing on the metaphorical thickening of the glass ceiling.

7.11 Female/Male Traits

According to literature sources (chapter 3, para.3.11) female academics take a greater share of teaching, administrative and counselling work than male academics. Assumptions that females are more naturally disposed to become more involved in these activities than males is described in terms of assumed female traits as motherly and caring in contrast to assumed male traits which are described as patriarchal and agentic. The disproportionate sharing of pastoral work borne mainly by female academics is found to favour male academics in terms of their promotion partly because the 'reward system' fails to take into account the so-called female 'traits' in making promotion decisions.

In agreement with literature sources the responses of female and male interviewees indicated general acknowledgement that female academics can suffer the double jeopardy of assumptions that female academics are firstly pre-disposed towards pastoral, mentoring, teaching and administrative work and secondly may require career breaks in taking the bulk of family responsibilities involving care of children and/or elderly relatives. Each effectively reduces and interrupts the time that females can give to their research and publication work with loss of concentration and delays which are disadvantageous to their career progression

because of the prominence given to research and publications in the criteria for promotion.

The responses of almost all interviewees, female and male, indicated that students tend to gravitate towards female rather than male academics for advice and counselling and female academics tended almost instinctively towards counselling work at the expense of their research and publishing. A small minority of female academics believed that student counselling was either shared equally with male academics or that students were allocated to a designated student counsellor, not necessarily female.

Conclusion - the responses of interviewees indicate that most female academics take on more pastoral and administrative work than their male counterparts. Since research and publications are primary criteria for promotion, according to both the testimony of interviewees, particularly that of senior female and male academics referring to the criteria for promotion (see chapter 5, para. 5.2) and from literature sources (see chapter 3, para. 3.11), it follows that opportunities for promotion for women who are more heavily involved in pastoral and administrative work than men have fewer opportunities for promotion.

It was accepted by all interviewees that although pastoral work features low in the list of criteria for career progression (see chapter 5, para. 5.2) it is nevertheless a valued and necessary part of the work of academics of all ranks. It may be concluded therefore that improvement towards gender equality in terms of promotion will become possible when the work involved in pastoral and counselling is shared equally between female and male academics and is given greater recognition in the criteria for promotion.

7.12 Gender Pay Gaps

An investigation into differences in pay between female and male academics appeared at first sight to be unnecessary in the light of equal pay legislation dating from the 1970s, the latest version being the Equal Pay and Equality Act 2010, and the fact that female and male academics are paid on common pay scales. However, according to literature sources (see chapter 3, para.3.14 and appendix 12) the pay gaps in favour of males are evident in every university in Scotland. This prompted further investigation into reasons for these gender differences in pay ranging from 0.3 per cent at best to 23.8 per cent at worst.

Although the majority of interviewees accepted that the pay gaps were a result of the preponderance of males in senior positions, a minority of interviewees when questioned about possible reasons for pay gaps expressed surprise verging on disbelief when shown the published figures obtained from published data relating to their university (UCU, April 2007). They questioned the method of calculation of pay gaps which is published in terms of 'mean average salary' for full-time female and male academics by institution. It was noted that this presentation of pay gaps was a simplistic financial reflection of the university's total salary expenditure for female academic staff in comparison to that of male academic staff. Some male interviewees suggested that a more reliable measure would be obtained from the average pay of females and males within each grade.

It was therefore concluded that pay gaps as published in the literature sources are simply a reflection of the proportion of female to male academic staff with more men in senior grades in comparison to women and are indicative of an equal opportunities gap. This prompted further enquiry with a permanent official of the University College Union who agreed that pay gaps by grade relating to placing on salary scales represented a more realistic picture of pay gaps as exemplified in the case

of St Andrews University which, according to UCU (April, 2007), had the worst pay gap record at 23.8 percent, whereas the pay gap within for example, the lecturer grade in this university was 2 per cent in favour of men (TES, Dec. 2009).

The next phase of enquiry therefore concentrated on possible reasons for disparities in pay between female and male academics. This elicited a range of causes such as: starting pay, loss of increments as a result of career breaks, teaching abroad, consultancy work and the fact that there are more males than females nearer the top of their pay scales.

It was found from the responses of both male and female academics that starting salary differences in favour of males were attributed to: 'men are better at negotiating' and women are more reticent in challenging their starting pay even though, in some instances, their professional experience in the private sector was substantial and equal to that of males. This impression, although expressed mostly by female academics, was substantiated by some male colleagues and would therefore suggest that negotiating skill can determine the level of starting salary.

An attitudinal feature of female thinking, not found in males, was an acceptance of a lower starting salary in comparison to their previous salary in the private sector as a trade off for the benefit of flexible working. Surprisingly, a persisting remnant of the historical inheritance of male domination (see chapter 2, para,2.9) appeared in the responses of a small minority of female and male lecturers – 'that the male is still considered as the breadwinner and that women don't need so much money, ... it's not so important for women' and that 'men are seen as the dominant sex, they are seen as professionals and therefore can command higher salaries.'

The loss of salary increments because of career breaks was a commonly expressed reason for pay gap differences, by both female and male academics. Career breaks were also seen to affect opportunities in gaining bonus payments for exceptionally successful research income. The 'pipeline effect' – the blocking of vacancies for senior positions by older males – added to the preponderance of males higher in the salary scale than females in senior positions which exacerbates the gender pay gap in greater proportions of the university's salary expenditure on men than on women.

Another finding related to professorial appointments in which different criteria from simply placing on a salary scale were involved not only in determining the starting salary but in direct appointments to senior positions which are made on the basis of known high levels of research expertise and published works (EOC, August 2007). Such appointments, a feature of Russell group universities, occur when making appointments from one university to another or straight from the private sector. Furthermore, 'discretionary points' may be awarded in cases where a university wishes to retain the services of a high performing academic or in cases where an academic has been unsuccessful in gaining promotion and the university wishes to retain his or her services (see chapter 5, para. 5.19). Whether or not discretionary points were available to males more than females or vice versa was not clarified in the responses of interviewees.

Conclusion- pay gaps calculated within each grade indicate a less pessimistic picture of the pay gap problem as presented from average salary data by institution which, for the reasons above, is nevertheless problematic. Pay gaps in favour of males may be attributed to: lower starting pay of females in comparison to males; more males in senior positions than females; more males at the top of their salary scales for longer periods than females; greater opportunities for overseas teaching

and consultancy work for males than females; discretionary points more commonly awarded to males than females. However, pay gaps are expected to close in faculties in which the number of female academics approaches the number of males at senior levels and as female academics remain in their senior positions as long as males.

7.13 Summary of Conclusions

1. Legacies from gender history show the existence of male domination and the influences of male norms in the policy-making and decision-making committees and in promotion processes in some faculties in universities. This is exemplified in instances of gender blindness and a belief by some academics that the male is still the 'breadwinner', the 'professional' and that women 'don't need so much money'.

2. The job of an academic is multifaceted and complex and involves balancing teaching with its associated activities of marking, counselling, administration and paper work with research and publication work requiring the skills of leadership, management and policy-making.

3. The most frequently mentioned features of job satisfaction coincided with those which most interviewees considered to be of greatest importance for tenure and promotion namely: teaching, research and publishing. Flexibility in their conditions of work is greatly valued, especially by female academics with family care responsibilities. All academics describe their job as a vocation in their pleasure in the successes of their students, their research work and publications in 'seeing their names in print.'

4. The main causes of job dissatisfaction are the imposition of what is perceived to be unnecessary bureaucracy and excessive paperwork

5. University managements inculcate the need for research income and publications for the enhancement of the reputation of the university and for improved rating in the Research Assessment Exercise (RAE) each being motivating factors in terms of the career progression of academics.

6. The emphasis on research income and publications was more evident in the pre-1992 university among academics at all levels partly because of the greater emphasis in target-setting in annual performance development reviews (pdr) than in the post-1992 university where there is greater emphasis on teaching but with clear signs of growth in research and publication activities.

7. The main criteria for promotion are income generation from research and publishing work. Other criteria include: the acquisition of a doctoral qualification, career centrality, supervision of post-graduate students, excellence in teaching curriculum and syllabus development, fitting in with the needs of the university and the faculty, leadership in research activities, expertise in pastoral and counseling work, mentoring and networking.

8. Today, female academics who are research active believe that they are as equally involved as their male counterparts in their teaching, research and publications; a perception also believed by male academics

9. Academics who attain impressive records of research income and publications in the best journals with book writing and show acceptance of the long hours culture (career central) are the most likely candidates for promotion regardless of gender. Female candidature is often delayed through the necessity for career breaks and family care.

10. The long-hours culture of career central academics tends to disadvantage female academics because of their need for career breaks

and their dual role as academics and carers at home. Equality of opportunity is therefore less attainable for female than for male academics in the early stages of their careers.

11. The 'glass ceiling' - at one end of the spectrum of opinion it is considered to exist but in a 'more permeable' state (senior female academics) and at the other it is perceived as an historical artifact which no longer exists (young female and male lecturers).

12. Discrimination, marginalization and segregation are unacceptable both to managements and to academics at all levels who can no longer afford to be gender blind in the sense of ignoring the presence of or the problems faced by women which are not faced by men. Evidence of discrimination, marginalization and segregation was not discernible in the universities involved in this research.

13. No interviewee had any reason to refer to or to use their university's Gender Equality Scheme suggesting no unfair treatment, discrimination or marginalization as far as the sample of twenty-four academics is concerned.

14. Most female academics appear to have a predilection towards pastoral and counseling activities and take a greater share of this work than their male counterparts. This interrupts and delays their research and publication outputs which, in effect, allows male academics greater opportunities than females for their research and publications and therefore opportunities for promotion.

15. The loss of salary increments because of career breaks and lower starting pay for females were the most commonly expressed reasons for pay gaps in favour of men by both female and male academics. In addition, female academics have fewer opportunities for networking,

consultancy work, overseas teaching and the generation of research income than their male counterparts, but equal opportunities exist for female academics who have no family commitments or whose family responsibilities have diminished.

7.14 Contribution to knowledge

This research initiates new challenges to the traditional Scottish claims for educational and intellectual democracy with special reference to gender equity and equality in its system of education. The challenges are twofold: firstly, against its claim for educational democracy which is generally based on the upward social mobility of talented working class males but not females. A second challenge related to the concept of intellectual democracy based on 'academic' higher education as the best and only preparation for living in a democratic society and for the training of a male elite for leadership. A third challenge referred to the preference given to 'academic' education tending to dismiss 'vocational' higher education as merely utilitarian which effectively restricted diversity and curricular choice thus limiting educational opportunities in higher education for females and males (see para. 2.11).

New knowledge emanating from the outcomes of the above challenges provides a new relationship between Scottish educational history and gender equity and equality in universities today in identifying historical legacies which relate to the perseverance of male-domination with the continued effects of male norms in the organizational structures of universities and in the perpetuation of horizontal and vertical segregation in the working lives of female academics (see para. 2.19).

A further contribution to new knowledge is gained from the unique identification and use of thematic elements of gender equity and equality in relation to the metaphorical glass ceiling concerned with issues and concerns of academics past and present (see para. 3.5 and fig. 5). The

thematic elements were used to devise new and previously unasked research and interview questions for a unique investigation into gender equity and equality with special reference to career progression and pay gaps in Scottish universities (see paras. 3.9, 5.16 and Appendices 12 and 13). New knowledge was gleaned from comparisons between the perceptions, impressions and ideas of twenty-four female and male academics at all levels in two Scottish universities, one post-1992 and the other pre-1992, noting that the majority of research work generally deals with female perspectives only. This new knowledge contributes towards new suggestions and recommendations for the improvement of gender equality in Scottish higher education (see para. 7.16 below).

Finally, this research brings new knowledge of the change in the state of gender equity and equality in Scottish higher education over the 160-year period under investigation. It has been shown that change, although gradual, has occurred from a state inequity to that of equity in that female academics may be considered to have equal opportunities for promotion and pay as male academics with the proviso that females opportunities are often delayed because of their greater need for family care than is the case for male academics (see para. 3.15). However, as far as gender equality is concerned it is clearly evident that female academics have not reached equality in terms of promotion pay as shown quantitatively in para. 2.18 and Appendices 12 and 13.

7.15 Possible areas of further research

In terms of the National Student Survey, discussions with academics during the semi-structured interviews revealed a few strategies employed by academics in the pursuit of successful teaching and favourable student opinion. This suggested the notion of research into influences and strategies which affect teaching quality and in turn affect student opinion through comparisons between student expectations of teaching and counselling and the perceptions of academics about their expectations of

student performance and the quality and subjectivity or objectivity of student feedback. The outcomes of such research could be of interest to academic staff, the management and student unions.

A commonly expressed source of dissatisfaction among academics was that of excessive bureaucracy and unnecessary paperwork which were considered to encroach on and delay their academic work. An investigation into the nature, purpose and necessity of elements of bureaucracy and paperwork could take account of the requirements of external agencies, the university's Human Resources departments and the committees of universities. Such an investigation could encapsulate the attitudes of female and male academics towards bureaucracy in relation to 'managerialism' in terms of the processes in higher education to manage the performance and practices of academics. An outcome of this research may assist academics to better understand the necessity or otherwise of the paperwork in which they are encumbered and may assist managements to improve efficiency, streamline and avoid duplication if it is found to exist.

A not uncommon interest of academics is that of the promotion procedures employed in their university in relation to the criterion for promotion and the gender composition of promotion panels. Research into the relationship between the most common aspects of criteria for promotion and other attributes of academics which are currently given less recognition but nevertheless contribute towards the educational aims of the university in seeking improved status and finance could be of interest to university managements and the Scottish Funding Council in terms of funding teaching, learning and research. This study could investigate the attitudes of females in comparison to males towards promotion and causes of gender differences in promotion between the success rates of female and male academics.

An investigation into the workloads and aspirations of part-time academics in relation to their hours of work, reasons for acceptance or preference for part-time work and career aspirations and opportunities for promotion may be of interest to university management and to part-time academics themselves.

7.16 Recommendations

1. Promotion – improved recognition of teaching excellence, pastoral and mentoring work and the research involved in the development of new undergraduate, post-graduate and short specialist courses.

It is recommended that the current emphasis given to research income and high quality publications for promotion should be considered equally with exceptional expertise in teaching with the acquisition of senior teaching fellowships, and expertise in mentoring, student counselling and administration currently in second place. Similarly, recognition for promotion for proven track records of academics whose expertise lies in the research work involved in the successful creation of new undergraduate, post-graduate and short courses with the research involved in the continuous up-dating of study modules is recommended.

2. Gender balance in the composition of influential committees

To diminish the prevalence of male domination and the perpetuation of male norms in policy- and decision-making committees the gender composition of committees should be equalized, female:male, rather than mirror gender proportions of academic staff in faculties. To avoid the possibility, as expressed by some academics, that male dominated selection panels for promotion may have a tendency to promote 'in their own image' or to neglect gender equality, it is recommended that promotion panels should consist of an approximately equal number of female and male members. Where this impracticable in, for example in engineering faculties in which there is a scarcity of females, consideration

could be given to 'borrowing' senior female academics from other faculties to participate in the selection procedure.

3. Improvement in equal female/male sharing of pastoral and mentoring work

To assist in the improvement of gender equality in terms of promotion the work involved in pastoral and counselling of students should be shared equally between female and male academics.

4. Pay gaps

The starting pay of academics should not be determined by the negotiating skill of new academic appointees but should be calculated to take account of previous academic service, professional experience and expertise in the private sector.

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APPENDICES

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Appendix One

THEMES FOR DISCUSSION

THEME	DISCUSSION ELEMENTS
Purpose of interview	Explanation of aims and objectives, consent, form, permission to use digital audio recorder; explanation of use of data, emphasis on anonymity
Interviewee background	Sex, faculty, job title, years in university teaching, years in present post, highest qualification
Job satisfaction	Changes which have improved or worsened job satisfaction, what is valued or under-valued in daily work, work preferences, pay etc.
Gender history	Effects of historical legacies of: sex discrimination, male domination and male norms on present day academics, vertical and horizontal segregation, gender mix, main activities of faculty, work considered important, impact of RAE (possible tension between teaching and research), Teaching Quality Assessment (TQA), Performance and Development Review (PDR)
'Glass ceiling'	The reality or myth of the 'glass ceiling'. The effects of male domination and male norms; existence or otherwise of 'gender blindness', gender segregation (horizontal & vertical) and marginalisation, mentoring, role models. Gender pay gaps – possible causes; career centrality, performance related pay, consultancies, experience, effect of career breaks, part-time work, under-representation of females in senior positions etc.
Organisational culture	Gender representation on influential committees (University Court, Academic Council, RAE panels etc.); policy and decision-making processes for promotion, effects of leadership styles and management, family-friendly policy, effects of career breaks on promotion and pay

Appendix Two

Semi-structured Interview Questions

1. INTERVIEWEE PROFILE

Sex, pre- or post 1992 university; titles of posts held; faculty

How long have you been an academic in higher education?

How was your choice of university, subject area and faculty determined?

Are you interested in promotion for yourself/ for others?

2. HISTORICAL BACKGROUND of FEMALE EDUCATION

As a legacy of the long history of sex discrimination, curricular segregation and lack of access to university education, do you think that females are still considered as a minority of newcomers in your faculty of this university?

From a gender point of view, there is a long history of curricular segregation in schools, do you think that affects the subject and faculty choices of females and males today?

Are there historical legacies of disadvantage for women in higher education in comparison to men? If so, how do they affect female in comparison to male academics today?

3. GENDER MIX

What is the gender mix in your faculty - is it mainly male, mainly female, or is there a gender balance?

At senior levels, is your faculty male- or female-dominated or equally balanced?

Why do you think one dominates the other?

4. CAREER PROGRESSION

What do think are the most important criteria for career progression?

Do you think that male domination in the promotion processes is a cause for the scarcity of females in senior positions?

Do you think that the under-representation of women in senior positions is due to a scarcity of suitably qualified females or that they are too reticent to apply or any other reasons?

Are there fewer female applicants for promoted posts?

5. NETWORKING

How important is networking in terms of promotion and research activity?

Do you think that men have more opportunities for networking inside and outside of the university than women or vice versa?

6. RESEARCH ASSESSMENT EXERCISE (RAE) or RESEARCH EXCELLENCE FRAMEWORK (REF)

Is there any tension between the RAE (REF) and teaching?

Are men more involved in research than women or vice versa?

How does the RAE affect women in comparison to men?

Do female academics submit as much as men in the RAE?

Are female and male academics equally represented on RAE Panels?

If not, why not?

*Does horizontal segregation affect the **RAE**, for example in female subject areas are fewer or more women than men put forward for RAE submissions?*

7. ORGANISATIONAL STRUCTURE

Do think that the change from elite to mass higher education has had an effect on the organizational structures and practices in universities [eg, promotion processes, committee structures, systemic barriers to female promotion, more teaching than research]?

How have female in comparison to male academics been affected by the change from elite to mass higher education?[ie more or fewer opportunities for promotion, teaching, research]

Does the organisational culture of this university provide gender equality in terms of the composition of policy- and decision-making committees and promotion processes?

Is the organizational structure of this university flexible and family-friendly?

8. THE GLASS CEILING

Does this university publish a gender equality scheme? If so, have you perused it?

Do you think that the notion of the 'glass ceiling' exists in this university in terms of barriers to promotion for women?

*Are you conscious of **horizontal and vertical segregation**? [horizontal segregation refers to curricular segregation in female/male subject and faculty choices, and vertical segregation refers to the concentration of males in comparison to females (or vice versa) in promoted posts]*

*Referring to **vertical segregation** in relation to the glass ceiling, do you find that women occupy the lower rungs of the promotion ladder? If so, why is this?*

*As a feature of the glass ceiling, what does '**gender blindness**' mean to you? [it is described as male unawareness of the differences in the problems of female academics who may have family responsibilities which affect females harder than males]*

*Do you think that **career breaks** affect the future careers of academics in terms of promotion?*

*Does the need for **work-life balance** affect the promotion of women?*

*Does **gender blindness** affect the promotion prospects of females more than males?*

*Do you think that differences between **female traits and male traits** affect the glass ceiling, for example, are there differences in the roles of academics.*

9. MENTORING

Do you think that mentoring assists in improving job performance and in the promotion process?

*Do females benefit from mentoring more than males or vice versa?
Are you involved or have you been involved in mentoring?*

Do you think that there should be a university system of mentorship rather than individual mentoring?

10. GENDER PAY GAPS

*Why is it that male academics are paid more than female academics?
What are possible causes for differences in pay in a common salary scale?*

Apart from salary scales which apply irrespective of gender what other ways are there to improve the income of academics and are they open equally to females and males?

11. WORK-LIFE BALANCE

How does career centrality in comparison to the need for work-life balance and/or career breaks affect promotion and pay?[Career centrality refers to some academics who have a blind devotion to their work with no apparent other interests; work-life balance refers to those who separate their work and leisure activities; career breaks refer mainly to those who have caring responsibilities at home]

12. JOB SATISFACTION/DISSATISFACTION

In your daily work, what factors affect your sense of job satisfaction and dissatisfaction?

Appendix Three

Information for Interviewees

PhD Thesis entitled: An investigation into gender equity and equality in the academic staffing of Scottish Universities

The principal research aims include investigations into Scottish educational practices and policies, past in comparison to present, in terms of promotion and pay in higher education. This involves a focussed investigation into the perceptions and opinions of female and male academics at all levels (professor, senior lecturer/reader and lecturer) in relation to their university lives and how they are affected by such as the changes in the organisational structures and policies of their universities in Scotland. Perceptions of the so-called 'glass ceiling, promotion processes, job satisfaction, occupational segregation, marginalisation, mentorship, leadership styles, work-life balance and career centrality are of particular interest in investigating possible reasons for gender inequality and remedies to meet modern targets (if they exist) towards gender equity.

The semi-structured interview method is used in this research to encourage interviewees to explore their own experiences in the field of education and interviewees will not be identified by named institution or their own name.

The outcomes of this research will be used in the thesis for the degree of PhD and in future publications emanating from this work.

It is anticipated that each interview will take about one hour. I am most grateful for the time you are giving and for your responses to my discussion themes attached.

Please be assured of complete anonymity.

David Dick, Matriculation No. 07018272 (Edinburgh Napier University)

Appendix Four

Consent Form

PhD Thesis entitled:

A Socio-educational investigation into gender equity and equality in the academic staffing of Scottish Universities

Researcher: David Dick, 3rd year PhD student, Edinburgh Napier University, Matriculation No, 07018272

Please initial box

1. I confirm that I have read the Information sheet for the above research project and that I have had the opportunity to ask questions
2. I understand that my participation is voluntary and that I may withdraw at any time without giving a reason
3. I agree to participate in the interview process
4. I agree to the interview being audio recorded
5. I agree to the use of anonymised quotes in publications
6. I agree to my demographic details being used in this research (gender, grade, job title, type of institution, length of service)

Name of participant

Signature Date

David Dick, signature..... Date

Appendix Five

The 'Research and Knowledge Transfer, Ethics and Governance Committee' of Edinburgh Napier University - answers of the researcher

Section 1 - Research details

Name/s of researcher/s *DAVID DICK*

Staff/Student? (Matriculation number/s)

Student Matriculation No. 07018272

Title of project

An investigation into gender equity and equality in the academic staffing of Scottish universities

Aim of Research

To investigate gender equity and equality and causes and effects of the promotion and pay differences between female and male academics in Scottish universities

Details of the research methods to be used, please consider all of the following in your response:

How the data will be collected (please outline all methods e.g. questionnaires/focus groups/internet searches/literature searches/interviews/observation).....

*Firstly, by means of my literature review of primary and secondary sources – published books, journal articles, internet searches, media and archival sources, Higher educational Statistics Agency, Scottish Funding Council, University HR Departments, etc.
Secondly through semi-structured interviews with about 40 academic staff at all levels in four Scottish universities*

Data collection tools to be used (e.g. SurveyMonkey).....

Google, ABI/INFORM Global, aka Proquest, National Library of Scotland, Scottish National Archives, university libraries and personal interviews

Where the data will be gathered (e.g. in the classroom/on the street/telephone/on-line).....

in the private offices of interviewees or other interview room where privacy can be guaranteed

Who will undertake the data collection if not the lead researcher detailed in section 1 (list all involved)

Data collection by researcher only

How the data sample will be selected (e.g. random/cluster/sequential/network sampling)

The selection of interviewees will be stratified randomly and will be contacted firstly by obtaining permission from the Principal or Dean of faculty of each university included in the sample. The interviewees will be employed in different faculties; some have already agreed to participate having made contact during Edinburgh Napier Annual Research Conferences, 2009 and 2010 and during the 27th International Labour Conference, April 2009

The criterion for an entity to be included in the sample.....

The main criterion is that subjects must be members of the academic staff of Scottish universities - female and male professors, readers, senior lecturers and lecturers of two universities; approximately 12 from each university as a representative sample of academic staff.

How research subjects will be invited to take part (e.g. letter/email/asked in lecture)

By appointment using telephone and/or e-mail, after initial contact and ethical approval from each university

How the validity and reliability of the findings will be tested.....

The findings will be subjected to internal validity and reliability analysis, each interviewee being asked to discuss similar themes the responses to which will be analysed and compared for their commonality or dissimilarity. Statements by interviewees will be recorded and transcribed from audio recording by the researcher only.

If applicable, please attach a copy of the questionnaire/interview questions (for student researchers, please include notification of approval of the questionnaire from your supervisor)

Discussion themes attached

Who/what will be the research subjects in the research?

(Staff/Students of Edinburgh Napier University - please give details).....

Female and male academic staff of one pre-1992 and one post-1992 university

Other vulnerable individuals (please give details e.g. school children, elderly, disabled)

None

All other research subjects (please give details)

None

Section 2 – research Subject details

Will participants be free NOT to take part if they choose?

Yes

Explain how informed consent will be achieved.....

Permission from each university will be requested firstly by telephone followed by a letter shown to the Dean of faculty with a letter from my Director of Studies to confirm that bona fide research is being undertaken. Each interviewee will be asked for his/her permission to be interviewed and to sign a consent form accompanied by an information sheet. The consent form will contain (i) the title of the research project, (ii) name of researcher, (iii) agreement that information sheet has been read with opportunity to question, (iv) participation is voluntary and can withdraw at any stage, (v) agreement to take part in the study, (vi) agreement to be audio recorded, (vi) agreement to use anonymised quotes.

Will any individual be identifiable in the findings?

NO, if a university principal or vice principal is interviewed he or she will be not be identified except as a professor along with other professors, but no names will be revealed. Although reference will be made to a faculty using generic names, eg technology, science or business (full titles will not be used). No university will be identifiable and will be shown as 'university A,B,C or D, pre-1992 or post-1992'

How will the findings be disseminated?

Disseminated in the final PhD thesis and to supervising team; a summary of the findings will be available on request to the relevant university faculties.

Appendix Six

Female/ Male Student Enrolments in Scottish Higher Education, 1893- 2011

Year	Male	Female	Total	%age	
				Female	Male
1893*	1886	168	2054	8.2	91.8
1896**	4256	448	4704	9.5	90.5
1900	5346	908	6254	14.5	85.5
1905	5633	1304	6937	18.8	81.2
1910	5985	1814	7699	23.6	76.4
1913	6043	1755	7798	22.5	77.5
1920	8716	3030	11746	25.8	74.2
1930	7614	3536	11150	31.7	68.3
1940	5602	2881	8483	34.0	66.0
1949	20653	5955	26608	22.4	77.6
1960	23452	8572	32024	26.8	73.2
1970	34508	23006	57515	40.0	60.0
1980	41747	31494	73242	43.0	57.0
1990	57554	46114	103668	44.5	55.5
1995	77905	76518	154423	49.6	50.4
1996	77314	85802	163116	52.6	47.4
2000	78245	192055	180305	56.6	43.4
2003	87400	117760	205155	57.4	42.6
2004	88540	122055	210600	58.0	42.0
2005	90495	125335	215830	58.1	41.9
2006	95708	119851	215560	55.6	44.4
2009	92781	128129	220910	58.0	42.0

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* Glasgow only (no female students in Aberdeen, Edinburgh or St Andrews)

** Edinburgh and Glasgow only (no female students in Aberdeen or St Andrews)

Sources:

Anderson (1983, pp. 352-56); Paterson (2003, p.167); UGC (1920-50); SHFC (1970-93), Scottish Government (2008, Table 2); HESA (1995/06-2009/10);

APPENDIX SEVEN

Male/Female Student Enrolments (All Post-Graduates, UK) in Scottish Higher Education, 1995/96 to 2006/07

Year	Total	Female	Male	%age female	%age male
1995/96	27165	13241	13924	48.7	51.3
1996/97	28956	14317	14639	49.4	50.6
1997/98	28101	14351	13750	51.1	48.9
1998/99	29298	15438	13860	52.7	47.3
1999/00	28790	15340	13450	53.3	46.7
2000/01	31385	17025	14360	54.2	45.8
2001/02	33965	18800	15165	55.2	44.6
2002/03	33095	18230	14865	55.0	45.0
2003/04	34175	19495	14680	57.0	43.0
2004/05	33915	19355	14565	57.1	42.9
2005/06	36430	21310	15115	58.5	41.5
2006/07	38380	22535	15840	58.7	41.3

Source: HESA (1995 -2006, Tables Oa)

APPENDIX EIGHT

Female/Male (Fe/M) First Degree Qualifications obtained by students (UK domiciled) 1994-95 to 2010-11; Scotland 2009/10 - 2010/11

Year	First Degree							
	Total 1 st class	1 st Class			Total 2/1	2/1		
		Female	Male	% Fe/M		Female	Male	% Fe/M
1994/95	13790	6284	7506	45.5/54.5	83518	47149	36369	56.4/43.6
1995/96	14242	6616	7626	46.4/53.6	89440	50930	38510	56.9/43.1
1996/97	14648	7087	7561	48.3/51.7	90042	51749	38293	57.5/42.5
1997/98	15195	7491	7705	49.3/50.7	91330	53407	37923	58.5/41.5
1998/99	16044	8104	7940	50.5/49.5	93757	55873	37884	59.6/40.4
1999/00	17170	8830	8340	51.2/49.8	95810	57370	38440	59.9/40.1
2000/01	19071	10096	8975	52.9/47.1	98940	59875	39065	60.5/39.5
2001/02	20880	11175	9705	53.5/46.5	101385	61500	39885	60.7/39.3
2002/03	22600	12180	10420	53.8/46.2	102780	62715	40065	61.0/39.0
2003/04	23980	13140	10840	54.8/45.2	106810	64705	42105	64.7/35.3
2004/05	25750	13995	11755	54.3/45.7	110685	67150	43535	60.7/39.3
2005/06	27270	15050	12220	55.2/44.8	112990	68520	44470	60.6/39.4
2006/07	28585	15805	12780	55.3/44.7	114125	68915	45210	60.4/39.6
2007/08	32430	17945	14485	55.3/44.7	122090	73840	48250	60.5/39.5
2008/09	33845	18525	15320	54.7/45.3	121165	72525	48640	60.0/40
2009/10	30445	16755	13690	55.0/45.0	107205	63845	43360	59.5/40.5
	2945*	1590*	1355*	54.0/46.0	9350*	5575*	3775*	59.6/40.4*
2010/11	34550	19160	15390	55.4/44.6	113255	67420	45835	59.5/40.5
	3245*	1795*	1540*	55.3/44.7*	9845*	5945*	3900*	60.4/39.6*

* Scotland
(HESA, 1994/05 to 2010/11)

APPENDIX NINE

Female/Male Higher Degree Qualifications obtained by students (UK domiciled) 1994-95 to 2010-11; Scotland 2009/10 - 2010/11

Year	Total	Higher Degrees UK & Scotland*			
		Female	Male	% Female	% Male
1994/95	8698	3299	5390	37.9	62.1
1995/96	11164	4447	6717	39.8	60.2
1996/97	12263	5327	6936	43.4	56.6
1997/98	13568	6028	7540	44.4	55.6
1998/99	14796	6764	8032	45.7	54.3
1999/00	15980	7570	8410	47.4	52.6
2000/01	27985	12985	15000	46.4	53.6
2001/02	28030	13305	14725	47.5	52.5
2002/03	29830	14450	15385	48.4	51.6
2003/04	31660	15445	16215	48.8	51.2
2004/05	32370	15830	16540	48.9	51.1
2005/06	33470	16610	16860	49.6	50.4
2006/07	34600	17656	17035	50.8	49.2
2007/08	34835	17585	17240	50.5	49.5
2008/09	37090	18845	18245	50.8	49.2
2009/10	40200	20300	19900	50.5	49.5
2010/11	47095	23545	23550	49.9	50.1
	4500*	2170*	2330*	48.2	51.8

Sources: HESA (2012) Table 17

APPENDIX TEN

Female/Male (UK) Doctoral Qualifications obtained by students 1994-95 to 2010-11, Scotland 2009/2010 & 2010/11

Year	Total	Doctorate		UK & Scotland*	
		Female	Male	% Female	% Male
1994/95	800	243	557	30.3	69.7
1995/96	1159	416	743	35.9	64.1
1996/97	1177	450	727	38.2	61.8
1997/98	1159	459	700	39.6	60.4
1998/99	1490	642	852	43.0	57.0
1999/00	1490	680	810	45.6	54.4
2000/01	6400	2665	3735	41.6	58.4
2001/02	6460	2855	3605	44.2	55.8
2002/03	6670	2985	3685	44.7	55.3
2003/04	6915	3180	3735	46.0	54.0
2004/05	6875	3145	3730	45.7	54.3
2005/06	7215	3355	3865	46.5	53.5
2006/07	7520	3485	4035	46.3	54.7
2007/08	7045	3335	3705	47.3	52.7
2008/09	7360	3530	3830	48.0	52.0
2009/10	6445	3100	3345	48.1	51.9
	845*	440*	405*	52.1*	47.9*
2010/11	6735	3240	3495	48.1	51.9
	880*	445*	435*	50.5*	49.5*

*Scotland
(HESA, 1994/05 to 2010/11)

APPENDIX ELEVEN

University Court Membership by Gender (2009)

University/college	Female	Male	Total	%age Female
Queen Margaret	10	11	21	48
Edinburgh Napier	8	17	25	32
West of Scotland	6	15	21	29
Stirling	4	17	21	20
Robert Gordon	6	12	18	33
Glasgow Caledonian	6	12	18	33
Abertay	3	16	19	16
Strathclyde	3	23	26	12
Scottish Agric College	1	13	14	7
Dundee	5	18	23	22
Edinburgh	8	14	22	36
Heriot-Watt	4	9	23	17
Glasgow	4	21	25	16
Aberdeen	4	21	25	16
St Andrews	9	15	24	38

Sources: websites of each university

APPENDIX TWELVE

Gender Pay Gaps in Scottish HEIs Academic Staff (full-time (Average £/annum) - 2005/06

University/college	Female Average £	Male Average £	Total Average £	Pay Gap* %
Queen Margaret	38,444	38,568	38,488	0.3
Napier	37,533	38,987	38,471	3.7
Bell College	34,575	36,239	35,463	4.6
Paisley	36,692	39,322	38,335	6.7
Stirling	37,084	40,615	39,218	8.7
Robert Gordon's	35,726	39,212	37,752	8.9
Glasgow Caledonian	37,000	41,237	39,378	10.3
Abertay	33,378	37,773	36,220	11.6
Strathclyde	35,600	40,517	39,031	12.1
Scottish Agric College	30,915	35,549	34,130	13.0
Dundee	34,796	42,178	39,343	17.5
Edinburgh	34,366	41,989	39,428	18.2
Heriot-Watt	33,270	40,912	39,418	18.7
Glasgow	34,878	43,610	40,558	20.0
Aberdeen	35,885	45,018	41,582	20.3
St Andrews	31,403	41,189	38,503	23.8

* 0% means zero pay gap; Pay Gaps in favour of males
Source: UCU, May 2007 & March 2009.

APPENDIX THIRTEEN

Academic Staff in Scottish Universities (full-time) by Grade

Year	Profs.	Snr. Lecturers & Readers	Lecturers	Researchers	Other	Totals
1994/05	1195	2570	4193	3396	720	12,074
1995/06	1356	2605	4465	3823	1083	13,287
1996/07	1392	2610	4442	3830	1262	13,536
1997/08	1437	2632	4531	3801	1080	13,481
1998/09	1568	2790	4648	4177	1027	14,210
1999/00	1810	2770	4440	4260	600	13,880
2000/01	1895	2700	4445	4360	645	14045
2001/02	1920	2765	4315	4570	760	14330
2002/03	1925	2840	4205	4640	980	14590
2003/04	1630	2505	3730	3615	1140	12620
2004/05	1750	2565	3540	3455	1230	12540
2005/06	1880	2610	3545	3400	1210	12645
2006/07	1935	2445	3935	3610	855	12780
2007/08		data unavailable from HESA				16570
2008/09						16740
2009/10						16855
2010/11	2185		14835			17020

Sources: HESA (1994/95 – 2006/07, Tables Ob)
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Appendix 14

Summary of Analysis: qualitative data analysis; data reduction, summary and analysis process

Data reduction

- (i) Over 400 literature sources were reviewed and reduced to 214 to be analysed after their selection for relevance in chapters 2 and 3,
- (ii) the field work involved over 900 responses of 24 academics plus one external UCU researcher in answer to interview questions plus additional exploratory questions. The selection of approximately one quarter of the total of the 900+ responses was made for their relevance to each thematic element and to comply with the limitation of the word-count. In addition, selected responses were allocated to reflect the experiences of (i) female and male academics and (ii) lecturers and senior academics for comparative and analytical purposes.

Management of data

The original 900 responses were transcribed word-for-word from a digital recorder to the researcher's personal computer accessible only by using a password known only to the researcher. The data was made manageable by codifying as follows:

- (a) the 214 literature sources selected above [para.(i)] were used to identify the main thematic elements and to create new research and interview questions.
- (b) 214 interview responses were allocated to each thematic element (see para. 4.7, Figure 6) to provide the structure for the literature reviews of chapters 2 and 3 (see para 4.3)
- (c) the responses were allocated to each academic grade: lecturer, senior lecturer/reader and professor in one pre-1992 university and one post-1992 university (see para. 4.4, Table 2).

Data Analysis

The process of data analysis involved three triangulations (see para. 4.9. figures 7, 8 and 9) to make comparisons between:

- (a) thematic elements, literature sources and responses from semi-structured Interviews,
- (b) thematic elements, responses of female and male academics,
- (c) thematic elements, responses of lecturers and senior academics in one pre-1992 university and one post-1992 university.

The process of **summary and analysis** involved the selection of interviewee responses into approximately equal groups of responses into female/male and lecturer/senior academic in each thematic element. The analyses involved comparisons in each thematic element between: (i) the relevant findings in literature sources with those of the responses of interviewees; (ii) differences and commonalities between female and male responses; (iii) differences and commonalities between lecturers and senior academics; (iv) differences and commonalities between the responses of each grade of interviewee in the pre-1992 and post-1992 universities. The outcomes of the above comparisons, were discussed and analysed in chapter 6 and used to address each research question (para.7.1) and finally to draw the conclusions which are summarised in para. 7.13 with a statement of the contribution to knowledge (para.7.14)