



How Much of the Remaining Gender Pay Gap is the Result of Discrimination, and How Much is Due to Individual Choices?

Victoria Thomson

Abstract.

Using secondary data to obtain results which were representative of the UK population, this research identifies the key components of the persisting gender pay gap. It then quantifies them to assess the contribution of each factor to the remaining gender pay gap in the UK, something which few studies have done before.

The research finds that of the factors which explain the gender pay gap, the following make the most significant contribution to the remaining gender pay gap in the UK: part-time work, education, size of the firm a person is employed in and Occupational Segregation. Occupational Segregation is a considerable problem in the UK, with women under-represented in all areas of higher managerial and professional occupations. Women are concentrated in low paid, low grade socio-economic groups, and in particular occupations such as childcare and administration. This segregation is even more noticeable among part-time workers, and persists even among those with Higher Education qualifications suggesting that a Higher Education qualification provides women with little advantage in cracking the glass ceiling.

Although some of the factors might be interrelated for example, Occupational Segregation and part-time work there is a strong possibility that discrimination is embedded not only in the policies, processes and systems of the occupational structure, but also within factors associated in the past with the acquisition of education, training and work experience.

Recommendations are made on how to achieve a further narrowing of the gender pay gap in the future. Unless these problems are dealt with now, the gender pay gap will remain for many years to come.

Introduction.

The year 2005 marked the 30th anniversary since the implementation of the Sex Discrimination and Equal Pay Acts. Whilst the introduction of this legislation initially saw a dramatic fall in the gender pay gap, there has been little change since mid-1990's, despite the fact that more women are now in employment and occupy a

greater number of higher positions in the workplace as well as girls outperforming their male counterparts in the education system (Prosser, 2006).

A significant pay gap still remains, for example; women working full-time earn 18 per cent less than men working full-time, based on mean hourly earnings. To put this into perspective, women earn just 82% of the male mean full-time hourly earnings. This gap significantly increases to 40 per cent less for women who work part-time (New Earnings Survey, 2003). This difference in earnings puts women at a greater risk of falling below the poverty line and inhibits their ability to accumulate adequate savings for their pensions later on in life.

The disadvantage faced by women in employment could also have implications for productivity of the UK labour economy. A recent report by the Women and Work Commission (2006) suggests that removing obstacles to women working in jobs traditionally undertaken by men and increasing the participation of women in the labour market, could increase the productivity of the UK economy between £15 -23 billion or 1.3 -2.0 per cent of GDP. In addition to this, tackling gender inequality could also benefit businesses.

It is evident from the above statistics, that gender inequality within employment remains a significant problem which must be addressed. The next couple of decades will present the possibility to transform inequality within the labour market and enforce change. Increasingly, men are playing a more prominent role in caring for children and other domestic responsibilities and it is possible that in the future employment and care will be shared between men and women in a more egalitarian way (Prosser, 2006).

The purpose of this research is to identify the key components of the persisting gender pay gap, and establish how much of the remaining pay gap can be explained by individual choices and/or discrimination. The intention of this research is to obtain results which are representative of UK population. In order to achieve this, quantitative secondary data will be used.

Previous Research.

The gender pay gap refers to the differences in average hourly earnings between male and female employees. Traditionally, research into the causes of the gender pay gap can be categorized into one of two explanations; Human Capital (choice) or discrimination (constraint). Human Capital consisting of training, education and work experience (Dex et al, 1994) is generally viewed as being determined by an individual, in short, people choose the amount of time to invest in their Human Capital (Polachek, 1981) thus it is deemed a valid cause of earning discrepancies.

Discrimination in contrast, is the systematic disadvantage faced by a group within society and is therefore seen as a valid area for policy intervention. Discrimination perspectives focus on the barriers which constrain women to low paid employment and view the disadvantages faced by women in the labour market as beyond the control of the individual rather than a result of individual choice.

Human Capital Explanations.

Women are typically concentrated in low earnings occupations. For example, sales assistants/check out operators have a female share of 74%, and secretarial/administration roles which have a female share of 93% (Grimshaw and Rubery, 2001). The narrow range of low paid jobs that women are crowded into lead to lower lifetime earnings, putting them at a greater risk of falling below the poverty line and leaving them worse off than men later on in life (Prosser, 2006).

Human Capital explanations such as that of Becker (1985, cited in Hakim, 1996) suggest that rather than a result of discrimination, women are concentrated in low paid jobs through choices they make early on in their life about the type of occupation, sector of employment, education/training investments and their employment status. Human Capital explanations view people as being paid according to their value to their employer; the higher a person's Human Capital, and greater amount of time spent working, the higher their pay. It is argued that women are paid less than men because they invest less in their Human Capital and consequently acquire a smaller number of skills, fewer qualifications and less labour market experience than their counterparts.

This perspective views women's lack of commitment to employment as the cause of the disadvantages they face in the labour market. 'Committed' women (Hakim, 1996) prioritize their role in the labour market and invest more in their careers than their domestic role thus acquiring greater Human Capital (education, training, career development and work experience). 'Uncommitted' women in contrast, invest less in their Human Capital than their male counterparts, instead choosing to invest more into their domestic responsibilities. In essence, Occupational Segregation and subsequently the gender pay gap for Human Capital theorists arises from the individual choices made by "uncommitted" women to give precedence to domestic responsibilities over their career rather than occurring as a result of discrimination. These women tend to seek less demanding jobs (which are often low paid) and actively choose to partake in work not in competition with domestic responsibilities e.g. part-time employment or spend time away from the labour market by taking a career break.

Interruptions to Employment

One focus of Human Capital approaches has been the impact of career breaks on acquiring greater Human Capital and higher pay. Polachek (1981) noted that time out from the labour market has a negative impact on the acquisition of Human Capital. He suggested the greater time a person spends away from the labour market; the less likely they are to enter high paid occupations, e.g. managerial positions. The question raised from this is whether career breaks due to family care have a similar negative effect on wages and the acquisition of Human Capital.

Findings from Budig and England (2001) seem to support this. They identified a possible 'wage penalty for motherhood' whereby long-term earnings decrease for women who take time out of the labour market to have or look after a child. The wage penalty increases with the number of children suggesting the greater time spent away from the labour market, the lower a person's wages. As women are less

likely than men to be in continuous employment at the height of their career, on average they will have less experience of their jobs. This can make it harder for women to be promoted to higher status and better paid jobs, and the snowballing effect of this could explain why the pay gap widens with age.

Part-time Employment

A further consideration is that of part-time employment, which is typically defined as working less than 30 hours a week. Upon return to work after having children, women may choose to undertake part-time work in order to combine employment with domestic responsibilities. In the United Kingdom, nearly half of all women in employment are part-time workers (Grimshaw and Rubery 2001), which could account for the interest in part-time employment by those investigating the causes of the pay differences between men and women.

Whilst some would argue that the high proportions of women in part-time employment is the result of a reluctant choice forced on women by the need to cope with domestic responsibilities, Hakim (1995) sees this argument as a myth created by feminists. She suggests that part-time work is undertaken voluntarily by women who wish to give priority to non-market activities, since domestic responsibilities do not prevent large numbers of others from working full-time. Hakim proposes that although domestic responsibilities might be an influencing factor in choosing part-time employment, they are not necessarily the only one. In support of this, a study by Martin and Roberts (1984, cited in Dex et al 1994) found even among those working full-time, many women prefer part-time work. This suggests the high concentration of women in part-time employment at least for some women, may be a result of individual choices rather than a result of discrimination.

A number of issues arise from the Human Capital explanation of the gender pay gap. It makes the assumption that most, if not all the pay differential is a reflection of the variation in the Human Capital levels and differing investments made by men and women without taking into consideration the role of other factors. By suggesting that women make decisions early on in their lives about whether they wish to invest more in their Human Capital and career and less in their domestic role or vice versa, it could imply that an individual's preferences remain fixed over a long-time. Whilst this may have been the case in the past, this is not necessarily true of contemporary society. Hakim (1996) draws attention to the example of women who have children earlier on in life. She says that they may get bored with motherhood at a young enough age to initiate a late-start career.

The focus by Human Capital explanations on the choices made by women about their domestic role is rejected by Feminists because an emphasis on explaining women's behaviour with reference to family roles is viewed as sexist (Hakim, 1996). Furthermore, whilst interrupted employment may in part account for the pay differences between men and women, it does not explain why even when women work continuously without taking a career break they are often concentrated in low paid occupations.

Human Capital theorists such as Joshi and Newell (1989, cited in Dex et al, 1994) estimate as much as $\frac{3}{4}$ of pay differential can be explained by Human Capital variations. In suggesting that people are paid according to their value to their employer, the Human Capital perspective assumes there is a fair labour market under which everyone is paid consistently. It is more than possible however that the variation in acquisition of Human Capital and the pay gap between men and women is a product of discrimination rather than individual choice. Therefore, when examining the causes of the gender pay gap, the role of discrimination both in individual choices, the acquisition of Human Capital and its contribution to the overall pay differential will need to be investigated before drawing any conclusions about the explanations for the remaining gap in the UK.

Discrimination Explanations

When studying discrimination explanations of the gender pay gap, it is first necessary to distinguish between two types of discrimination outlined by the Sex Discrimination Act 1975. These are direct and indirect. Direct discrimination is defined by the Sex Discrimination Act (1975) as being treated less favourably than someone of the opposite sex in similar circumstances on the grounds of your sex. Indirect Discrimination is harder to measure as it is covert. It is used in reference to employment when a practice, provision or criterion is applied (or would be applied) by an employer to both sexes but which puts one sex to a disadvantage. It is important to consider both types when studying the gender pay gap as each can disadvantage women in different ways.

Discrimination explanations, view the gender pay gap as something which is a consequence of restricted opportunities forced on women and a product of the disadvantage and discrimination that women are faced with in society. Women are constrained to low paid, low status jobs and prevented from advancing along the employment ladder by barriers collectively known as the Glass Ceiling. These explanations typically focus on Occupational Segregation, part-time employment and other factors associated with being female as the primary determinants of the gender pay gap.

The Feminist Perspective

Perhaps at the far end of discrimination explanations is the feminist perspective. Feminists argue men restrict and constrain women's employment opportunities. By forcing women into low paid jobs, Hartmann (1976, cited in Crompton, 1997) argues men retain control over women by ensuring they remain financially dependant on their husbands.

Walby (1986, 1990 cited in Crompton, 1997) develops the constraint approach further. For Walby, patriarchy, (male domination of society) is a key mechanism used to retain control over women. Patriarchy is not a fixed feature of society, but rather its strength and form change over time. She distinguishes between two types, private and public. Private patriarchy is based on production in the home whereby the patriarch of the household controls the woman individually and directly. Private

patriarchy, in the 20th century became mirrored in public as increasing numbers of women entered employment, but not on equal terms with men, a concept Walby calls public patriarchy (Walby, 1990).

Through public patriarchy, men retain dominance over women by limiting their access to well paid jobs. This is done in two ways: exclusion of women from the labour market and Occupational Segregation. Women are excluded from the labour market because the restricted opportunities open to them mean that the wages they are likely to receive are too low for paid employment to be worthwhile. Occupational Segregation is the constraint of women to low paid jobs, and the prevention of women from advancing up the employment ladder (discussed later).

Such explanations are perhaps a little extreme, since they focus solely on the direct constraint of women by men as a means of explaining the disadvantages faced by women in the labour market (and wider society). They ignore that whilst this may be a contributory factor, the impact of individual choices and other factors may play an important role in the gender pay gap. Nevertheless, Feminist explanations provide the foundations which discrimination explanations of the gender pay gap have been built around, and feminist movements have in the past made a number of significant achievements towards the equality of men and women in employment and wider society, by increasing the legal rights of women for example.

Part-time Employment

A considerable number of gender pay gap explanations make the distinction between part-time and full-time employment. A possible reason for this is that although the gender pay gap is still large between full-time women and men (18%), it is greatest for part-time workers at 40% (New Earnings Survey, 2003). In light of this, much of the literature focuses on discrimination against part-time workers rather than women as a homogeneous group.

Grimshaw and Rubery (2001) note that those working part-time are more likely to be found in low paid and low status work and less likely to be in high paid occupations than their full-time counterparts. Part-time workers have fewer prospects of career advancement, restricted access to training and often suffer a loss of work related benefits (Crompton, 1997). This failure to rise up the career ladder and gain entry to better paid jobs is one of the key causes of women's low pay (Hakim, 1996) and each year spent in part-time employment is associated with a further decline in wages (Olsen and Walby, 2004).

In addition, Occupational Segregation is especially prevalent among part-time employees (Olsen and Walby, 2004) with the majority of part-time work being concentrated in a narrow range of predominantly female occupations (Grimshaw and Rubery, 2001 Hakim, 1996). The concentration of women into female dominated occupations is a significant factor in explaining the gender pay gap, as predominantly female occupations tend to have low rates of pay. It should be noted however that Occupational Segregation is not exclusive to part-time workers, and can also be applied to full-time female workers.

Occupational Segregation

Occupational Segregation is an important factor in explaining the gender pay gap and is often seen as one of the dominant mechanisms of discrimination against women within the labour market resulting from either direct or indirect discrimination (Dex et al, 1994). Hakim (1979, cited in Crompton, 1997) points out two types of Occupational Segregation which are found within organisations; horizontal and vertical. Horizontal Segregation is a term used to describe how women and men perform different jobs and tend to be concentrated in different types of occupation. As a result, women are predominantly found in certain occupations and not others. Vertical Segregation is identified by Hakim (1996) as being the key issue in equality. It illustrates how men are typically concentrated in higher grade and subsequently, women in lower grades both within and between occupations (within the same job/occupational structures). The main problem with this is that as pay is usually associated with a hierarchy, women are poorly paid for the work they do.

Occupational Segregation has an impact on women's pay in a number of ways. Men tend to earn more than women in each of the job grades, but their wages are even higher when they work in jobs stereotypically seen as 'men's jobs' (Crompton, 1997). In contrast, Crompton highlights that jobs considered as "women's jobs" are undervalued, so occupations with a greater concentration of women in them are often poorly paid. This view is supported by evidence from Olsen and Walby (2004), who found that for every 10 per cent increase in the number of men in an occupation, there is a 1.3 per cent rise in the wage rate. Also, women employed in a male dominated occupation tend to have higher wages than those employed in an occupation with a greater concentration of women. This is an important factor in explaining the gender pay gap, as recent research by Olsen and Walby (2004) suggests men are more likely to work in an occupation with other men, and women with women.

There are several problems with research into Occupational Segregation. The majority of the studies focus on all men and all women (whether part-time or full-time workers) in occupations as a homogeneous group and do not take into account individual factors which may have an impact on the levels of men and women in a particular occupation (Elliot, 2005). Human Capital explanations such as those mentioned previously could argue that rather than a consequence of discrimination, Occupational Segregation could be a product of gendered expectations relating to combining domestic responsibilities with employment and the choices which result from this. Furthermore, Dex et al (1994) note that there is a major flaw with research into Occupational Segregation as it does not make the distinction between Sex Segregation which is natural and entered into voluntarily and that which is resultant because workers of a particular sex are prohibited from entering certain occupations by subtle, indirect or exclusionary processes.

Other Factors

Olsen and Walby (2004) draw attention to a number of other factors which potentially have an impact on the gender pay gap including firm size and whether a woman is employed within the private or public sector. They found women working in larger

companies i.e. those with 500 or more employees have higher wage rates than those employed in small or medium enterprises. Since Purcell (2002) found that the male share in larger companies was considerably higher than females at 54% compared with 47% it could explain why men typically have higher wage rates.

Research by Leslie and Pu (1996) suggests the changing pay settlements in the UK and in particular the weakened presence of unions in determining wage levels has led to deterioration in wages for low paid workers. Findings by Olsen and Walby (2004) seem to support this as they reported that pay was higher for those employed in the public sector. This could be related to the increased likelihood of union membership within the public domain, as it was also found that there was an increase in wages for those who were employed in unionised organisations.

Summary.

Human Capital explanations argue that differing levels of Human Capital can explain the majority, if not all of the gender pay gap and focus on how individual lifestyle choices, particularly those relating to the time and investment in Human Capital can determine a person's position in the Occupational Structure. This approach is adopted by a number of studies including those by Becker (1985) and Polachek (1981). These studies argue that many women choose to invest less in their Human Capital and career, instead prioritizing domestic responsibilities. As a consequence, they are typically concentrated in low paid, low status, jobs by choosing work which doesn't impair their domestic role. By comparison, men invest more in their employment and Human Capital and are subsequently more likely to be in full-time, higher grade occupations.

Whilst individual choices may explain part of the gender pay gap, they cannot account for the total variation in earnings between men and women. Human Capital explanations ignore the possibility that discriminatory components may be embedded not only in the policies, processes and systems of the occupational structure, but also within the processes by which Human Capital is acquired, forcing women to make particular choices with regards to their Human Capital and career. Thus the role of discrimination in the persisting gender pay gap will not be dismissed in this research.

Many of the studies into discrimination focus on part-time work as nearly half of all women in employment are part-time workers and the gender pay gap is largest for this employment group (as shown by the New Earnings Survey, 2003). Grimshaw and Rubery (2001) have explained that part-time workers are typically concentrated in low paid, low status jobs and have few opportunities for career advancement. This failure to rise up the career ladder to better paid jobs is seen by (Hakim, 1996) as a key cause of women's low pay.

Occupational Segregation is not only common to those employed part-time but all women in employment. It is viewed as one of the primary mechanisms of the pay gap but rather than being a result of individual choice, constraint explanations see it as a product of discrimination, whereby women directly/indirectly discriminated against in the occupational structure. For example, women, especially those who

work part-time are confined to low paid jobs and face a “wage penalty” on return to their careers for taking breaks to have children (Budig and England, 2001). Occupational segregation is particularly important for explaining variations in pay between men and women since as shown by Olsen and Walby (2004), occupations with a greater concentration of women are poorly paid, especially in comparison to occupations with a high concentration of men.

The literature review identifies a number of factors that might relate to the persisting gender pay gap including; Human Capital variations in training, education and work experience (Dex et al, 1994), discrimination and other factors associated with being female, Occupational Segregation, part-time employment, and interruptions to the labour market for family care. This study will recognise all the aforementioned factors as they are widely acknowledged as being determinants of the gender pay gap.

However, it seeks to go beyond the limitations of past studies including the simplistic nature of conventional research which focused on either Human Capital or Discrimination explanations, as although the studies are useful for understanding the gender pay gap, this dualism is over simplistic and somewhat deceptive since the two explanations may be interrelated and not as independent as previous research has implied. In reflection of this the approach adopted in this study will differ from traditional research, as rather than concentrating on one particular explanation it recognises the importance of the contributions that both Human Capital and Discrimination make to the gender pay gap.

Although the review of past research illustrates that there is significant data and theory from past studies to show the extent of the gender pay gap and provide explanations for it, to date there has been little research which attempts to quantify the key explanatory factors, to determine their contributions to it. Thus this study will attempt to do precisely that. It is important to do so as if it is found that a greater portion of the gender pay gap can be attributed to individual choice rather than constraint, it will not only help to explain the persistence of the gender pay gap but also could have an impact on a further narrowing of the gap, particularly as current legislation focuses on discrimination.

The contribution that each of the factors identified by the literature review make to the overall gender pay gap in UK can be measured using information available from the dataset. The dataset will be discussed in further detail in the next section, but first it is important to outline the methods that will be employed in this research.

Quantifying the Gender Pay Gap.

The aim of this research is to identify the key components of the persisting gender pay gap, and establish how much of the remaining pay gap is attributed to individual choices and discrimination. As the research focuses on differences in pay between men and women across the UK, quantitative research methods will be used to allow a data analysis which is representative of the population. Large-scale, representative data on employment trends is regularly compiled through national surveys and will be used to examine the trends between men and women’s earnings. The British

Household Panel Survey (BHPS) will be used to assess the contribution of the explanatory factors to the gender pay gap.

Secondary Analysis.

The quantitative method employed in this research is that of secondary analysis. Secondary analysis is the analysis of data collected by others. There are benefits to using secondary analysis in research. Secondary analysis allows access to high quality, large-scale data sets for a tiny proportion of the time it takes to conduct primary data collection. The data has been collected by experienced researchers, is of a high quality and samples are as near to being representative as possible (Bryman, 2004). Data on employment is widely produced and available from a variety of sources. The production of employment data particularly increased in the 1970's following the implementation of key pieces of employment legislation such as the Equal Pay Act, allowing researchers to carry out longitudinal studies and monitor patterns over time, something which is often not possible with primary data due to time constraints.

The use of secondary analysis in this research is beneficial for a number of reasons. By using a secondary dataset, it is possible for a researcher to gain access to large amounts of sensitive information without facing problems of anonymity and other ethical issues associated with primary data collection and analysis. The data sets used in this research will be British Household Panel Survey (BHPS), and to a lesser extent, the Labour Force Survey (LFS) national surveys which are representative of the UK population. This will allow generalisations to be made about the factors contributing to the gender pay gap on a national rather than local basis that would not be possible given the timeframe, and sample size if using primary data.

Furthermore, although the datasets have been analysed previously, they are large enough to be analysed in many different ways, applying a number of techniques (Bryman, 2004). By analysing the data using an alternative method to those previously employed, there is an opportunity for the secondary researcher to offer a different perspective and produce alternative interpretations to previous research (Hakim, 1982). Thus, it is possible to generate findings as beneficial to the understanding of the topic as primary research.

Limitations of Secondary Analysis.

There are several limitations to the use of secondary analysis identified by Bryman (2004) which need to be addressed. Firstly, unlike primary data, the secondary researcher has no control over the quality of data collected. This problem will be overcome by using the BHPS which is produced by experienced researchers. Linked to this is also the issue of absent variables. As the data is collected by others, key components of the data required by the secondary researcher may not be present in the dataset which could have been accounted for if the data was collected on a primary basis. Hakim (1982) suggests that the secondary researcher may overcome the content limitation of a single survey by combining it with data from a further source, which in this research is the LFS.

Secondly, although BHPS provides a larger data sample than could possibly be achieved in the timeframe through primary data collection, it is still a relatively small sample in national comparison which could challenge the representative nature of the research. This has been overcome by substituting elements of the BHPS data for that of a much larger sample, namely the LFS in areas where it is thought relevant; for example, education.

Finally, as secondary datasets are often collected on a national scale as is the case with the BHPS, they are large and complex providing vast quantities of data. It would be far too time-consuming to analyze all the data. This will be addressed by a period of familiarization with the datasets before data analysis, and only the data relevant to the aims of this research will be extracted.

Reliability and Validity.

Whilst it is important to consider the limitations of a research method, there are two essential measures which are fundamental when conducting any social research, the issues of reliability and validity. Reliability is a term which examines whether or not the findings of a study are repeatable. That is, if repeated, whether the study would show consistent findings. This is also linked to a further matter, that the research must be able to be replicated, which should not be a problem in this research as the data is taken from an ongoing national survey.

Whilst the issue of reliability is significant in evaluating quantitative research, validity is perhaps the most important measure. There are four main types of validity outlined by Bryman (2004) which need to be considered by a researcher, namely measurement, internal, external and ecological validity.

Measurement validity is concerned with whether a study measures what it claims to measure. Measurement validity should not pose too much of a problem for this research as the data collated from a nationally representative sample with controls in place to follow up non-respondents. Also, the data will be decomposed using statistical analysis techniques widely used in social research.

Internal validity is of particular concern to this research, as it focuses on the integrity of a causal relationship between two variables, whether the relationship is genuine or not. In this research, the relationship will be between the explanatory factors and the gender pay gap. In discussing causality, it will be important to remember that if the findings do show a relationship between the variables, correlation does not necessarily imply cause and one should be cautious when drawing conclusions about the relationship.

External validity is also important, as it refers to whether findings of a study are applicable to a population wider than within the individual research context. That is, whether a study is representative. This research can be considered as representative of the UK population as it is based upon national samples, however it would not be valid cross-culturally as it only uses data from one country.

Ecological validity focuses on whether research findings can be applied to everyday situations. As the BHPS is conducted using interviews and a questionnaire, it could be argued that this study lacks ecological validity, because the data collection process is unnatural to everyday social settings. In defence of this claim, it is important to note that all social research has limitations and these do not necessarily reduce the usefulness of a study in providing an understanding of a topic.

The Datasets

Since the strengths and limitations of the methods employed in this research have been addressed, attention can now turn to the data analysis itself. As mentioned previously, the dataset used in this research is the BHPS. BHPS is an ongoing annual survey of over 10,000 individuals and 5,500 households. The survey is nationally representative of UK population providing up-to-date wide ranging data on a number of topics including employment. Data is collected via a face-to-face interview and questionnaire for every person in the household aged 16 years and over. BHPS provides an advantage over other national surveys as it takes its sample from addresses rather than people. Surveys which base their sampling unit on the individual, often base their selection on the electoral register which might under-represent certain groups of the population and depends on self-enrolment (Dale, Arber and Procter, 1988).

LFS is used to a lesser extent in this study to explore the relationship between education and average hourly earnings. LFS is a longitudinal quarterly government survey of over 60,000 UK households. The survey is used to collect information relating to the labour market and consists of a face-to-face interview for every person in the household aged 16 years and over.

BHPS is preferable to other national surveys like the LFS because the data on average hours worked excludes unpaid over-time. This is important as studies which include unpaid over-time in the calculation may not provide an accurate portrayal of reality since men typically work more over-time than women. Since the calculation for the pay gap is based upon differences in hourly wages which is calculated using the average number of hours worked per week, inclusion of unpaid over-time would also distort pay gap.

BHPS is not as well established as other national UK surveys (the earliest available data is 1991), which means it may not be appropriate for longitudinal studies into the gender pay gap. It does however provide a useful variety of information on employment over the last decade, a period which has seen little change in the overall gender pay gap.

Since both datasets are large, it is likely that there will be a number of practical issues involved in analysing the data. The first problem likely to be encountered is the vast quantity of data. Not all the data contained within the datasets is relevant to this research and there will be a considerable length of time involved to prepare the datasets before analysis to remove any data which is not needed.

A further problem is the possibility of missing data, where for example there has been a proxy respondent or the information is not known. By including these in the data analysis it could potentially have an impact on the results and produce anomalies. This issue will be overcome using a function in SPSS which allows the researcher at their discretion, to exclude missing or non-applicable variables from being included in the data analysis.

Data Analysis.

In this research, those aged 15 years and under in full-time education will be omitted from the data analysis. All other full-time students will be included. Retired people aged 65 and over will be omitted, since it is unlikely that they vie with the rest of the population for full-time or part-time employment. Self-employed people will also be omitted from the study, because it is difficult to estimate their wage rates. All others of working age will be incorporated in the data analysis including those who currently report their economic status as unemployed.

Since the gender pay gap is calculated by the difference between men and women's hourly wages, the data analysis will analyze the relationship between hourly wages and the explanatory factors identified by the literature review. Hourly wages refer to the basic hourly wage rate and include paid overtime, but exclude unpaid. If not given, hourly pay is calculated by usual pay per week divided by total hours of work per week. Total hours of work per week includes the usual number of hours worked in the current job plus the usual number of hours worked as paid overtime per week.

The data will be decomposed using a statistical technique known as Pearson's Correlation. Pearson's Correlation is beneficial to this research as it allows the researcher to analyze the direction of a relationship between two variables as well as the extent to which a factor influences a particular outcome on an individual basis (Fielding and Gilbert, 2000). The outcome which the analysis is looking to explain is known as the dependent variable because it is dependent on the factors which influence it. In this research, the dependent variable is the hourly earnings of an individual. The factors which influence the dependent variable are known as the independent variables. The independent variables in this analysis are the components of the gender pay gap identified by the literature which explain the variations in the hourly wage rate. The equation which calculates the relationship between the dependent and the independent variables is known as Pearson's Product Moment Correlation Coefficient or Pearson's r .

The second part of data analysis involves those variables which are shown to be statistically significant. For these variables, the co-efficient of determination will then be calculated. This calculation assesses the degree to which the variation of one component is due to another. By using this equation, it is possible to determine the impact that each of the explanatory factors have on the overall gender pay gap, and thus determine how much of the gender pay gap using data from the BHPS is attributed to human capital and discrimination.

Research Findings.

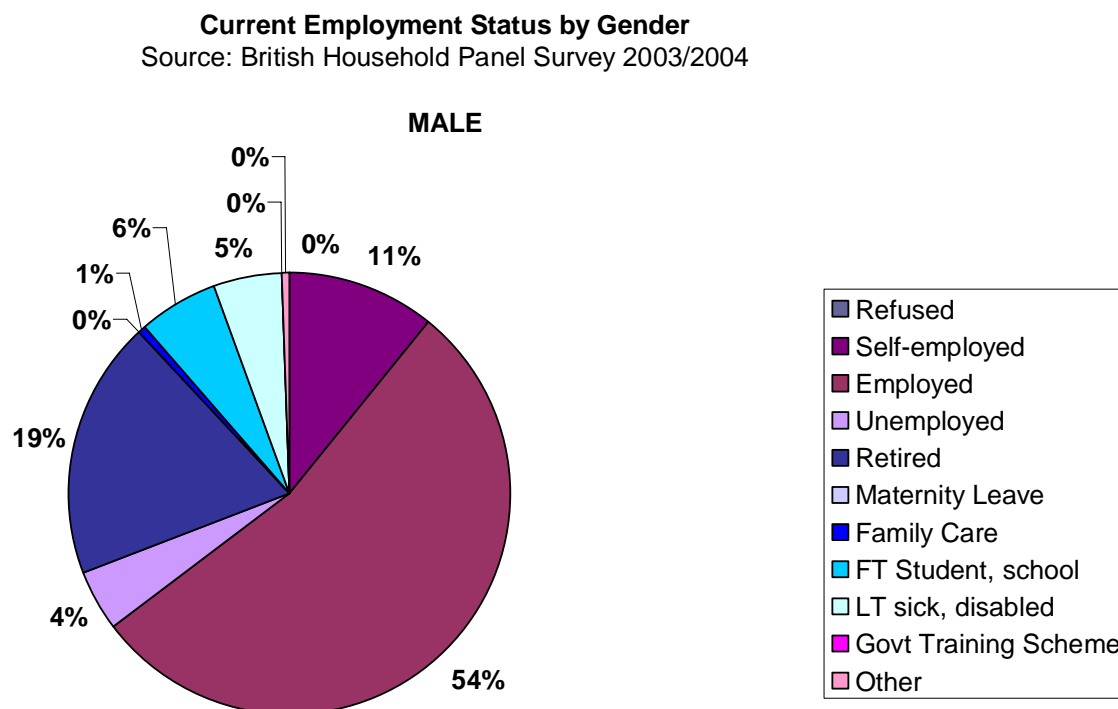
Whilst some of the findings are consistent with those identified by the review of previous research above, the data analysis produced some significant additional findings which differ from previous studies. These may be important for achieving a further narrowing of the remaining pay gap in the future, and also for providing some clarity on the Human Capital vs. Discrimination debate regarding explanations of the gender pay gap.

Main Findings.

Employment Characteristics of Men and Women in UK

Figure 4.1 shows the employment status of men and women for UK in 2004 as a percentage of the total population. 54% of male respondents were employed and 11% self-employed compared to less than half of women. Unsurprisingly, greater numbers of women reported their economic activity as family care (13%) compared with less than 1% of men.

Figure 4.1



Current Employment Status by Gender
 Source: British Household Panel Survey 2003/2004

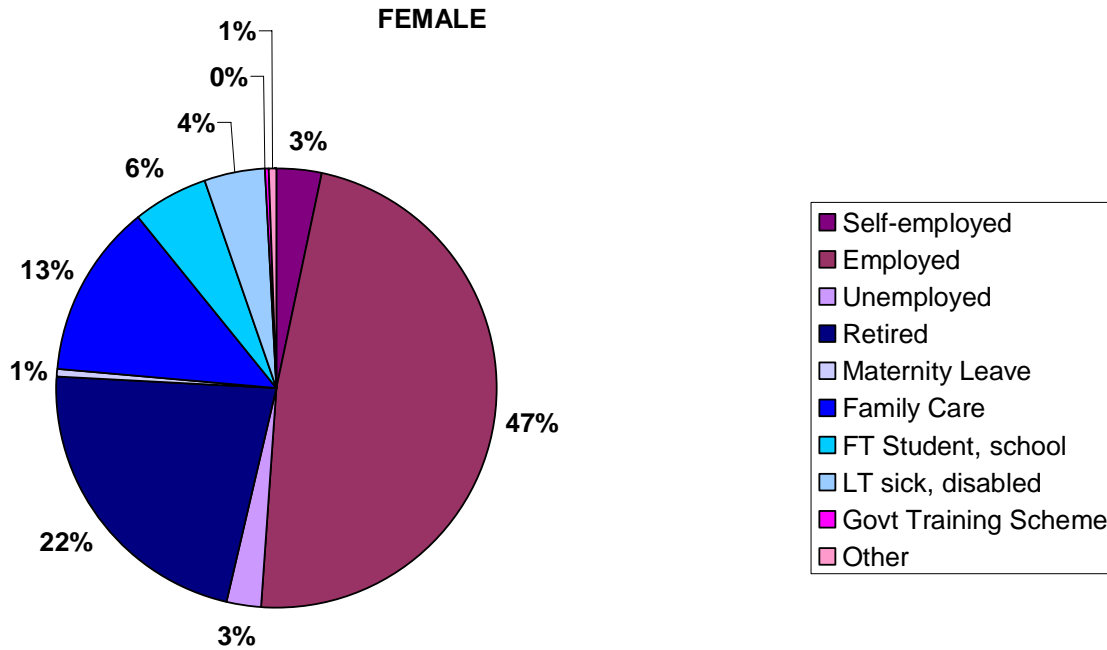


Table 4.1 below shows the average hourly pay for part-time and full-time workers, by gender in 2003/2004 using data from the BHPS. As expected, women are earning substantially less than men at both the full-time and the part-time status. The average hourly earnings for full-time male workers is £10.82, compared with £9.60 for their female counterparts. Based on this data, the gender pay gap in 2003/2004 calculated using the BHPS is 11% for full-time and 32% for part-time workers. Interestingly, even among part-time workers men are earning more than women, with an average hourly wage of £8.14 for male part-time workers compared with £7.38 for female workers. This suggests that regardless of their employment status, women are being paid less than men which could imply there is an element of discrimination involved.

Table 4.1 - Full-Time and Part-Time Hourly Pay (£) by Sex Mean

Sex	PT ¹ or FT Status	Basic pay hourly rate
Male	PT	8.1374
	FT	10.8173
	Total	10.5413
Female	PT	7.3797
	FT	9.6084
	Total	8.5674
Total	PT	7.5034
	FT	10.3318
	Total	9.4943

Notes: ¹ Part-time Status defined as <30 Hours per week
 Source: British Household Panel survey 2003/2004

Table 4.2 shows the employment characteristics of working men and women in UK for 2003/2004. It highlights the different employment experiences of men and women including the closing education and qualifications gap between the sexes and the different features of their place of work.

Table 4.2 - Employment Characteristics of Working Men and Women, UK 2003/2004

Variable	Women	Men
Full-time Employment	54%	89%
Part-time Employment	46%	11%
In Private Sector	39%	61%
In Public Sector	25%	14%
Union or Staff Association in Workplace	48%	42%
Firm size <25 employees	26%	25%
Firm size 25-49 employees	10%	10%
Firm size 50-499 employees	20%	29%
Firm size >500 employees	11%	13%
Years of Full-Time Education	12	11

Source: British Household Panel Survey 2003/2004

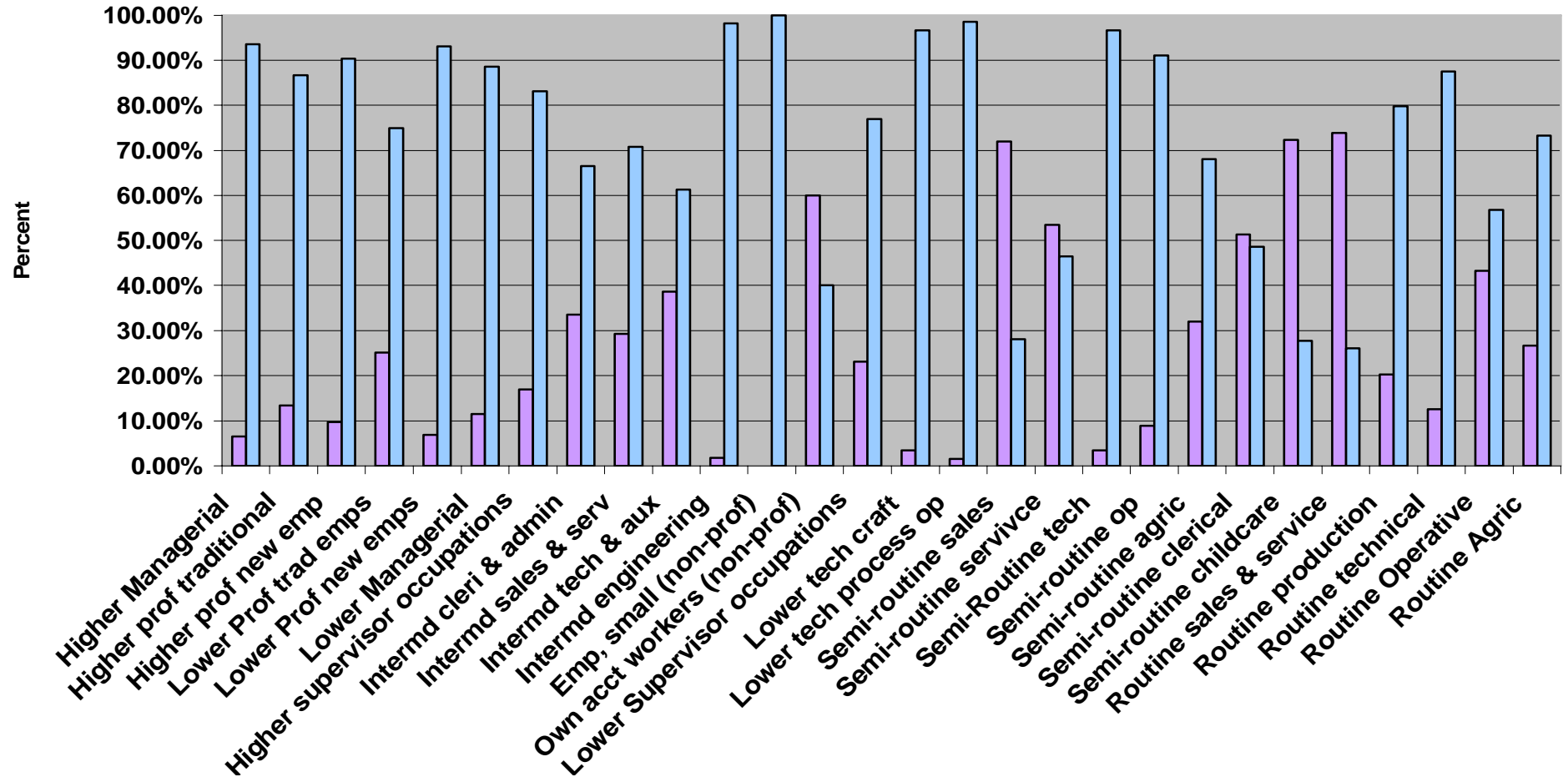
Part-time Employment

Just over half of women work full-time (54%) compared with 89% of men. The number of women working part-time is considerably larger than that of men at 46%. One possibility for this is that in support of Human Capital explanations, many women choose to take up part-time work in order to combine paid employment with domestic responsibilities. Since it has already been established both above and by previous research that the gender pay gap is larger for part-time workers, these figures could explain a considerable proportion of the variation between men and women's earnings.

In addition to the overall differences in earnings between part-time and full-time workers, figure 4.2 shows that there are also considerable differences between the Socio-Economic Groups typically occupied. Consistent with findings by Grimshaw and Rubery (2001), Part-time workers are on average more likely to be concentrated in low paid occupations. In particular, routine sales and services consist of 74% part-time workers compared to just 26% full-time and semi-routine childcare contains 72% part-time workers compared to just 28% full-time. Higher paid occupations have a much lower concentration of part-time workers, higher managerial occupations consist of 94% full-time compared to just 6% part-time workers. Since more women work part-time than men, this may account for a large degree of the variations in pay between men and women, and also explain women's concentration in low grade jobs.

Figure 4.2

Socio-Economic Group by Employment Status



Source: British Household Panel survey 2003/2004

Job Sector.

Table 4.2 shown earlier indicates that women are more likely to work in the public sector than men. This could account for the increased likelihood of union presence in the workplace reported by female workers. 48% of women reported union presence in their place of work compared with 41% of men. The average hourly pay rate, shown by Table 4.3 is higher for those reporting union presence in their workplace at £10.43, compared to £8.77 where there was no union or staff association. As indicated by Table 4.4, average hourly wages were found to be higher for those employed in the public sector, who earned £2.31 more than those employed in a private firm, this could be linked to the above, since union presence is stronger in the public sector.

Table 4.3 - Hourly Pay (£) by Union Presence in Workplace (Mean)

Union or staff association at workplace	Basic pay hourly rate
Don't know	6.1388
Yes	10.4321
No	8.7708
Total	9.4913

Table 4.4 - Mean Hourly Pay (£) by Employing Organisation (Mean)

Job Sector	Basic pay hourly rate
Inapplicable	2.9800
Private Firm/Company	8.8147
Public Sector	11.1173
Nationalised Industry	8.1872
Non-Profit Organisation	9.3198
Armed Forces	11.2450
Other	9.8133
Total	9.4905

Firm Size.

Similar findings to those of Purcell (2002) were found in relation to the number of people employed at a workplace by gender. That is, on average men are more likely than women to work in a large firm. 29% of men work in a firm employing 50-499 employees, compared with 20% of women; and 13% of men are employed in a firm with 500+ employees compared with 12% of women. In addition, women are more likely than men to be employed in small firms with less than 25 employees; 26% of women compared with 25% of men. This has a significant impact on the average hourly earnings of women, since table 4.5 shows wages are typically higher for those employed in large firms (22% higher than small workplaces for those with 50-499 employees and 30% higher for those with 500+ employees.)

Table 4.5 - Mean Hourly Pay (£) by No. of Employees in Workplace (Mean)

No. Employed at Workplace	Basic pay hourly rate
Inapplicable	2.9800
Not Answered	10.9829
<25	8.0310
25-49	9.3901
50-499	10.2731
>500	11.4032
DK/<25	6.0112
DK/>25	7.2328
Total	9.4905

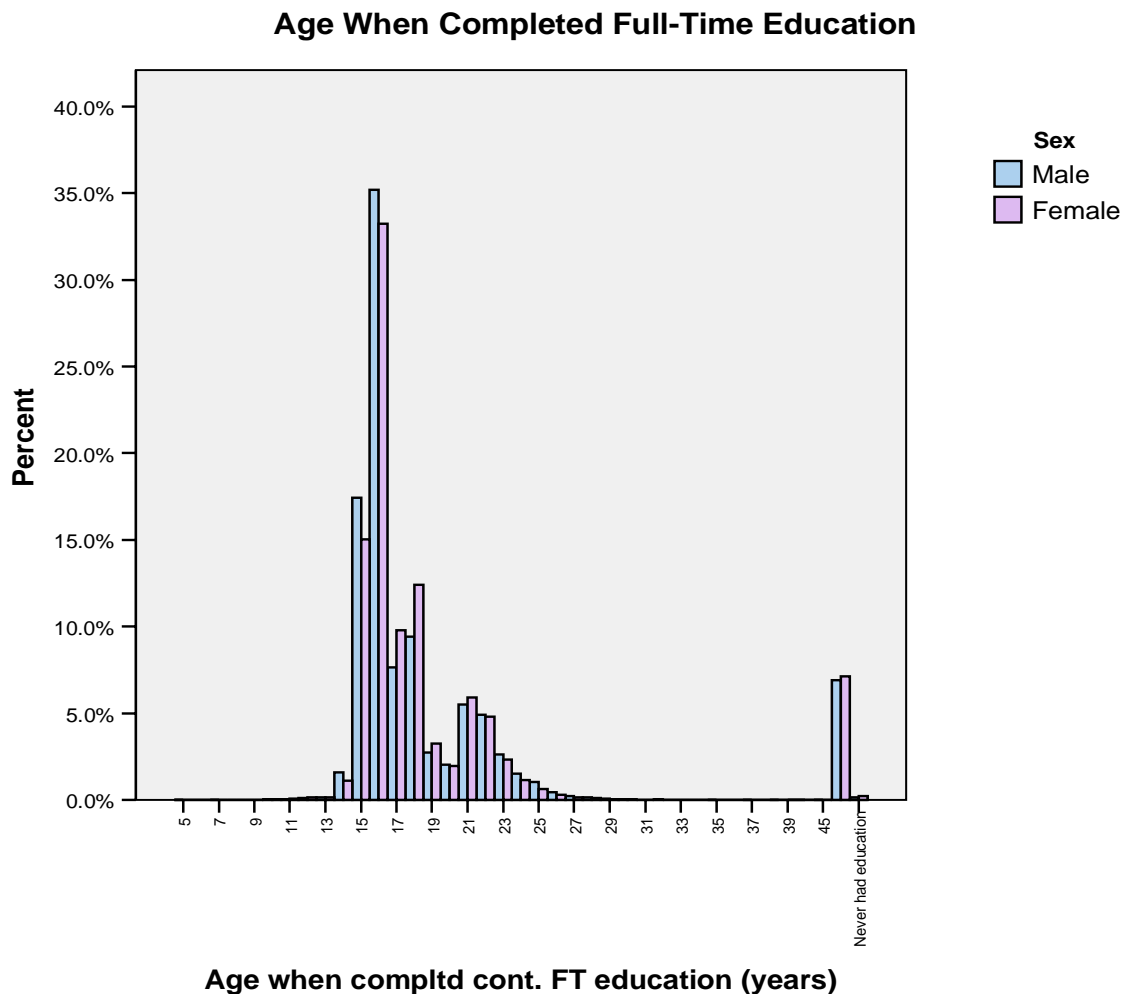
Source: British Household Panel survey 2003/2004

Education.

In contrast to previous research by Hakim (1996) and Human Capital Theorists such as Becker (1985), findings show that there has been a considerable decline in the educational differences between men and women in 2003/2004. Table 4.2 shows the average number of years spent in full-time education by women is 12 compared to 11 for men. Figure 4.3 illustrates this in more detail showing the percentage of men and women for the age completed full-time education. More women than men leave education at 21 years old, suggesting greater numbers of women are now continuing on to Higher Education.

These findings provide a useful critique of the Human Capital explanations that women obtain fewer educational qualifications than men, and the suggestion that this accounts for the concentration of women in low paid jobs. Overall, the education leaving age seems to be comparatively even between the sexes, showing relatively small differences on average at most ages, therefore it cannot adequately explain the pay differences between men and women.

Figure 4.3



Despite the closing gap in education, as table 4.6 illustrates just a few years after leaving full-time education, women earn less than men, and this gap rises with age. The findings are similar to those of Purcell's (2002) study. In 2004, the pay gap for full-time workers aged 22-29 was 4%. For those aged 40-49, the pay gap for full-time workers was the largest at 14%. The cumulative impact of time spent away from the labour market for family care, increased likelihood of part-time employment and also the differences in education and qualifications between this group and younger generations could account for the size of the gap in this latter category.

Table 4.6 - Full-time Pay Gap by Age

Age	Full-time pay gap
22-29	4%
30-39	9%
40-49	14%
50-59	10%

Source: British Household Panel survey 2003/2004

Occupational Segregation.

Table 4.7 and Figure 4.4 show the extent of Vertical Segregation in UK in 2003/2004, for managerial and professional occupations. From figure 4.3 it is evident that women are under-represented in all areas of professional occupations with the exception of self-employed professions where proportions of men and women are equal in the lower professional categories. This difference is most significant in higher managerial occupations of which 71% employees are men compared with just 29% women. It could explain a significant proportion of the gender pay gap, since men dominate the high paid managerial and professional occupations, with women dominating the lower occupations.

Furthermore, these differences persist even among those with Higher Education qualifications. In contradiction to Human Capital explanations of the gender pay gap, this suggests a Higher Education qualification provides women with little advantage against cracking the glass ceiling. There could be several reasons for this, including differences in the subjects studied by male and female undergraduates, which could be an area for future research to explore.

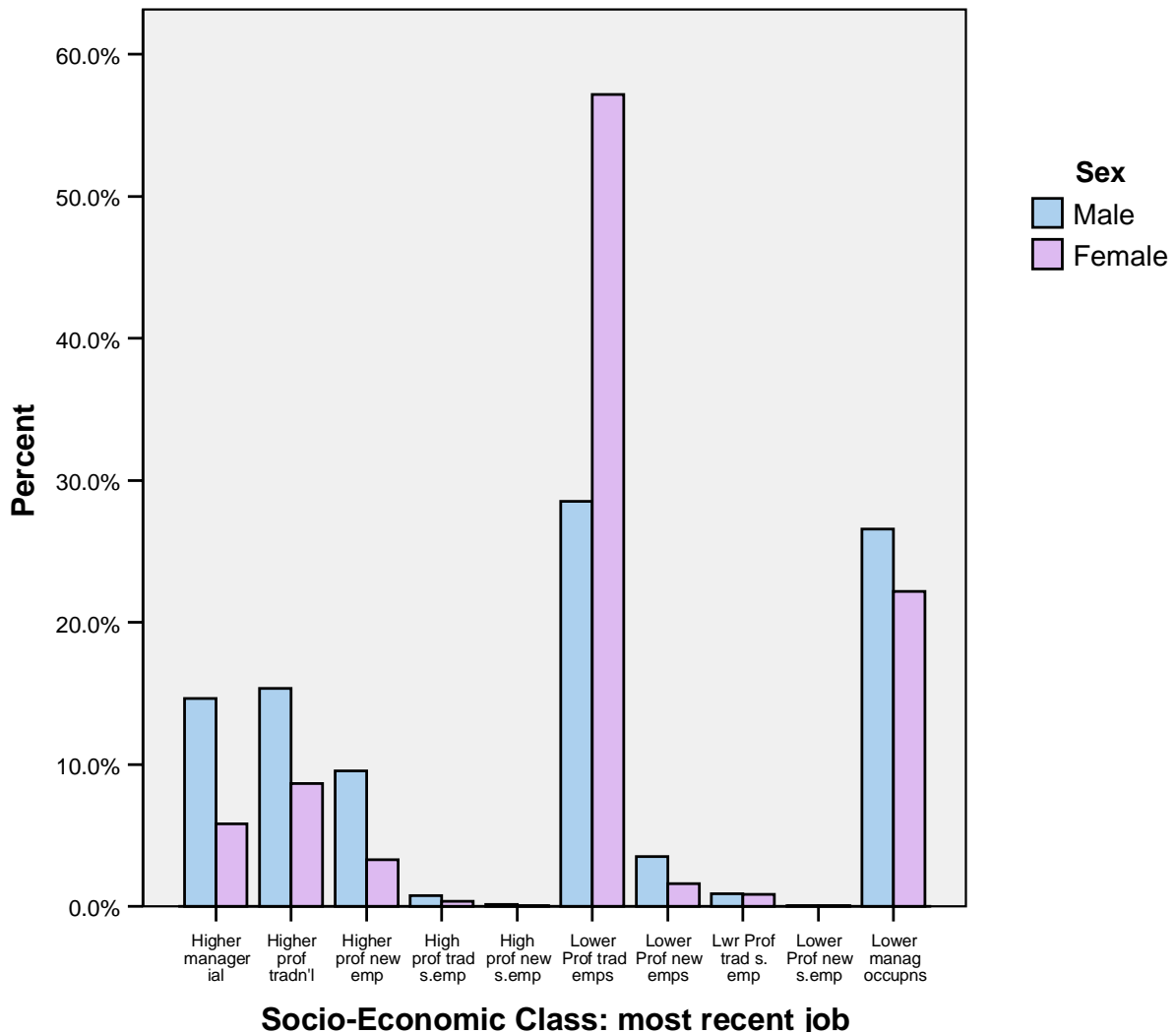
Table 4.7 – Crosstabulation of Socio-Economic Group and Sex, for Managers and Professionals.

			Sex		Total
			Male	Female	
Socio-Economic Class: most recent job	Higher managerial	Count	230	94	324
		% within Socio-Economic Class: most recent job	71.0%	29.0%	100.0%
	Higher prof tradn'l	Count	241	140	381
		% within Socio-Economic Class: most recent job	63.3%	36.7%	100.0%
	Higher prof new emp	Count	150	53	203
		% within Socio-Economic Class: most recent job	73.9%	26.1%	100.0%
	High prof trad s.emp	Count	12	6	18
		% within Socio-Economic Class: most recent job	66.7%	33.3%	100.0%
	High prof new s.emp	Count	2	1	3
		% within Socio-Economic Class: most recent job	66.7%	33.3%	100.0%
	Lower Prof trad emps	Count	448	926	1374
% within Socio-Economic Class: most recent job		32.6%	67.4%	100.0%	
Lower Prof new emps	Count	55	26	81	
	% within Socio-Economic Class: most recent job	67.9%	32.1%	100.0%	
Lwr Prof trad s.emp	Count	14	14	28	
	% within Socio-Economic Class: most recent job	50.0%	50.0%	100.0%	
Lower Prof new s.emp	Count	1	1	2	
	% within Socio-Economic Class: most recent job	50.0%	50.0%	100.0%	
Lower manag occupns	Count	417	359	776	
	% within Socio-Economic Class: most recent job	53.7%	46.3%	100.0%	
Total	Count	1570	1620	3190	
	% within Socio-Economic Class: most recent job	49.2%	50.8%	100.0%	

Source: British Household Panel survey 2003/2004

Figure 4.4

Socio-Economic Group and Gender, for Managers and Professionals



Source: British Household Panel survey 2003/2004

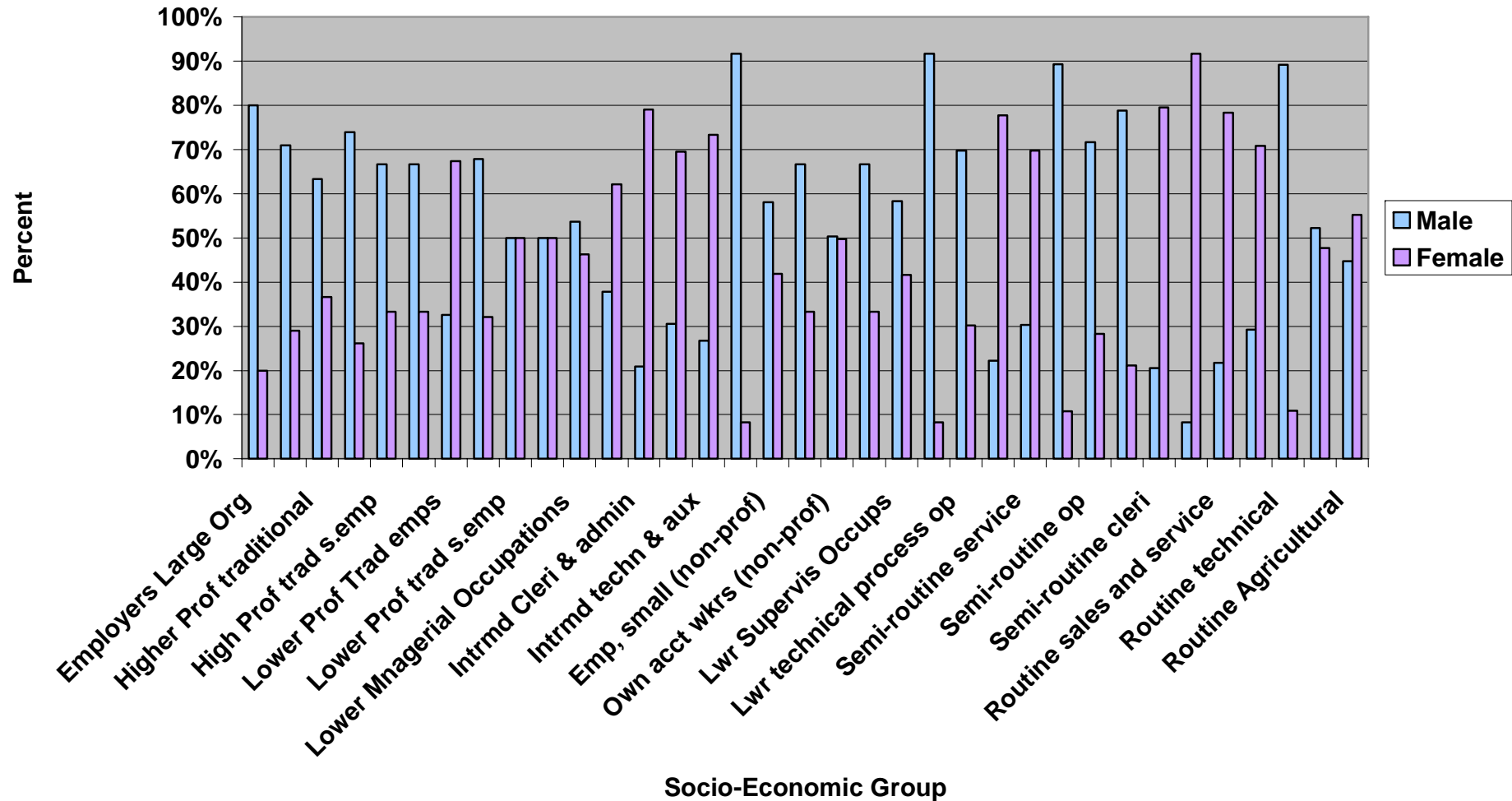
Figure 4.5 shows the extent of Horizontal Segregation in the UK for 2003/2004. Consistent with the findings of Grimshaw and Rubery (2001), women are concentrated in lower socio-economic groups, in particular those of semi-routine childcare (92% female) and clerical/admin (79% female) and as shown above, are less likely than men to be found in higher managerial professions. The occupations women are concentrated in are stereotypical female occupations, which could explain wage variations since as the review of past research identified, occupations with a greater concentration of women in them are often poorly paid (Crompton, 1997). In contrast, men are typically employed in professional or skilled occupations such as higher professional (74% male) or engineering (92% male), occupations which are associated with higher status and higher pay.

These findings show that Occupational Segregation is a problem which is still persistent in the UK, since women are segregated in jobs which are low status and low paid. There must be an element of caution when making statements concerning

Occupational Segregation, since it is hard to distinguish between that which is natural and voluntarily and that which is a result of discrimination (Dex et al 1994). Tackling Occupational Segregation and in particular the glass ceiling, is by no means an easy task since glass ceilings themselves are not considered unlawful unless women receive discriminatory treatment under the 1975 Sex Discrimination Act. Nevertheless, these findings highlight that in order to achieve a further narrowing of the gender pay gap in the future, Occupational Segregation is an issue which must be addressed.

Figure 4.5

Socio-Economic Group and Gender



Source: British Household Panel survey 2003/2004

Quantifying the Gender Pay Gap.

The findings of the previous section show that for many of the explanatory factors of the pay gap there is a relationship/association with gender, confirmed by the differences in proportions/percentages between the sexes. To demonstrate the degree of association between a particular explanatory factor and the overall gender pay gap, the findings of the correlation analysis are presented below (summarized in Table 4.8).

Table 4.8 - Components of the Gender Pay Gap

Variable	Impact on Gender Pay Gap	Value of r^2
Part-time Employment	32%	0.32
Firm size	1%	0.012
Years of Full-Time Education	0.29%	0.0029
Occupational Segregation ¹	15%	0.15
Other Factors associated with being Female	52%	

Source: British Household Panel survey 2003/2004

** Correlation is significant at the 0.01 level (2-tailed).

Notes:

¹Occupational Segregation is measure by Socio-Economic Group

Part-time Employment.

Table 4.8 shows that part-time employment explains a significant part of the remaining gender pay gap in UK (32%). This result is consistent with the earlier findings which showed that part-time employment has a substantial impact on hourly earnings. Since nearly half of all women in paid employment in UK work part-time it is little wonder that this makes a significant contribution to the overall gender pay gap, especially because part-time employment typically consists of low paid, low status work.

Firm Size

Although firm size to some degree determines hourly wage rates (as shown by the difference in earnings between firm sizes earlier), its impact on the gender pay gap overall is less significant, producing an r^2 value of 0.012 in the correlation analysis which describes very weak positive correlation. The coefficient of determination shows that firm size accounts for just 1% of the variation between men and women's hourly earnings. Thus illustrating that although a factor may to some degree influence hourly wages rates, it does not necessarily make a substantial contribution to the overall gender pay gap.

Education

As expected from the findings of the previous section, education has a relatively small impact on hourly earnings because levels of education between men and women have converged. As table 4.8 shows, although statistically significant, the association between years of full-time education and hourly earnings is very weak, producing a correlation co-efficient of 0.054 and an r^2 value of 0.029. Thus, educational differences between men and women account for less than 1% of the persisting gender pay gap.

Occupational Segregation

The association between Occupational Segregation and hourly earnings is weak, producing a co-efficient of 0.387 and an r^2 value of 0.1498. The co-efficient of determination however, shows that Occupational Segregation accounts for a significant proportion of the persisting gender pay gap; 15% which confirms earlier suggestions that Occupational Segregation is a matter that needs to be dealt with.

Other Factors Associated With Being Female

A large degree of the gender pay gap remains unexplained by the other factors associated with the variations in men and women's earnings. This component is referred to as other factors associated with being female and accounts for 52% of the persisting gender pay gap. In previous research such as that carried out by the Women and Work Commission (2006), there has been considerable debate as to what this component contains. However, it is thought that it consists of other disadvantages associated with being female, such as interruptions to employment for childcare, human capital variations and discriminatory elements.

Summary.

Exploration of the 2003/2004 BHPS has revealed that there are key differences remaining in the employment characteristics of men and women in the UK. Consistent with the findings of previous research by Olsen and Walby, (2004) and Purcell (2002), this study has found that women are more likely than men to be employed part-time and less likely to be employed in large firms. This may account for variations in hourly earnings between men and women since the gender pay gap is recognised as being wider for part-time employees. In addition consistent with Olsen and Walby (2004), it is found that women are more likely than men to work in the public sector and also to be employed by an organisation where there is a staff association/union.

Occupational Segregation is a considerable problem in UK and remains a key factor in explaining pay differences between men and women. Figures 4.4 and 4.5 have illustrated that women are more likely to be concentrated in a "job ghetto" of low paid, low grade work (Hakim, 1996) and less likely to be in higher status Socio-economic groups. This is regardless of whether or not they have a higher education

qualification, implying that this may be more than the result of individual choices made about Human Capital investment. Furthermore, Occupational Segregation is even more noticeable among those who are employed part-time, with part-time workers accounting for just 6% of those employed in Higher Managerial occupations. Whilst this may in part be the result of choosing to prioritize other responsibilities, one cannot rule out the possibility that there may be an element of discrimination embedded not only in Occupational Segregation but also in individual choices. It is clear that Occupational Segregation remains a considerable problem within the UK, and whether or not discrimination is the main cause of this, it is an issue which needs attention if the gender pay gap is to narrow further.

One must be careful not to stipulate or assume that correlation implies cause in data analysis. Nevertheless, the data analysis indicates that the explanatory factors of the gender pay gap (identified by the literature review) make the following contribution to the remaining gender pay gap in the UK using the BHPS; 32% for part-time employment, 1% for firm size, 0.29% for education, and 15% for Occupational Segregation.

A considerable proportion of the gender pay gap remains unexplained (52%) due to factors which cannot be accounted for using employment data. There are a number of possibilities as to what these factors may be, but as suggested by the Women and Work Commission (2006), they are likely to contain unlawful discriminatory treatment of women whether it is direct or indirect under the Sex Discrimination and Equal Pay Acts.

These findings are important as they illustrate that although a factor may explain variation in wage levels overall, it is not necessarily significant in determining the gender pay gap, e.g. the size of the firm a person is employed in. Whilst the initial data analysis showed there to be considerable wage variations between the different firm sizes, a closer analysis of the data when quantifying the gender pay gap produced a very weak correlation between firm size and the overall pay gap.

The most significant findings produced by the data analysis are regarding women's investment in education, (for example, Becker, 1985 and Hakim, 1996). The data analysis shows that the differences in education levels between men and women have merged so that education has little impact on pay levels and subsequently the overall gender pay gap. This could be because most of the Human Capital explanations identified in the literature review such as those of Polachek (1981) and Becker (1985) are now outdated, since they were offered at a time when there were marked differences between men and women's education levels. Hence, it is important to carry out a data analysis like the one used in this research which differs from past techniques, in order to offer an insight into the causes of the remaining gender pay gap that is applicable to contemporary society.

The Human Capital-Discrimination debate is somewhat hard to provide a definitive answer on. It is difficult to determine from labour market data whether or not the different employment experiences and the resultant pay differential between men and women is a product of individual choice or discrimination, since it can only be interpreted and does not show the meaning behind the data. In order to shed further light on this, an in depth qualitative study would be needed following the decisions

made by both men and women from education through employment. Nevertheless, the findings from this research provide a useful insight into this debate.

For example, the suggestion made by Human Capital theorists such as Becker (1985), is that by investing more in their education, a person can improve their Human Capital, increasing their value to their employer and subsequently their earnings. This approach argues that women invest less in Human Capital than men, which results in their concentration into low grade, low paid occupations. However, the findings in this research imply that this may not be applicable to education anymore, since there is little difference in educational achievements between the sexes.

Additionally, it was found that even with a Higher Education qualification, women were still less likely to work in higher status and higher paid occupations than men. These findings are supported by those of Purcell (2002) who found that just three years after graduating from Higher Education, female graduates (who would essentially be classed as “committed” women by Hakim, 1996) earn 15% less than their male counterparts. This implies that the differences in earnings between men and women are not solely a product of individual choice.

Although individual choices may account for part of the gender pay gap and should not be overlooked, it seems unlikely that they can explain the entire 18% remaining in the UK. As argued when reviewing previous research, the distinction made in the past between Human Capital and Discrimination is oversimplistic since some of the factors of the gender pay gap might be interrelated, for example Occupational Segregation and part-time work.

Furthermore, the findings from this research indicate that discrimination could be embedded not only in the policies, processes and systems of the occupational structure, but also within factors associated in the past with the acquisition of education, training and work experience. It is therefore possible that the remaining gender pay gap in the UK is largely due to discrimination and to a lesser degree, Human Capital choices.

Conclusions.

The contributory factors to the gender pay gap have often been divided into two categories, Human Capital consisting of training, education and work experience, is seen as something determined by an individual with people choosing the amount to invest in their Human Capital. Thus it is viewed as a valid cause of earning discrepancies. Discrimination in contrast, is the systematic disadvantage faced by a group within society and is seen as beyond the control of an individual. It is therefore the focus for policy intervention.

This view is oversimplistic since the two explanations may be interrelated and not as independent as previous research has implied. Using data from the BHPS, the aim of this research was to identify the key explanatory factors of the persisting gender pay gap and establish how much of the remaining pay gap is attributed to individual choices and discrimination. Since the intention of this research was to obtain results

which were representative of the UK population, the benefits from the reliability and representative nature of this study outweigh the disadvantages which may arise from the lack of validity.

The results show that of the factors identified by previous research as having an impact on the gender pay gap, the following make the most significant contribution to the remaining pay gap in the UK; 32% for part-time employment, 1% for firm size, 0.29% for education, and 15% for Occupational Segregation. These are important, because they illustrate that although a factor like firm size for example, may to some degree influence hourly wage rates; it is not necessarily a strong contributor to the remaining gender pay gap in the UK.

A significant proportion of the gender pay gap remained inexplicable (using employment data) once the above factors had been taken into consideration by the data analysis (52%). Whilst in part this may be explained by the limitations of using employment data and Human Capital factors, it is likely that a large degree of this is due to discriminatory treatment and the disadvantage women face in the labour market. In the past, a clear distinction has been made between Human Capital attainment and discrimination. The findings of this research challenge such an approach by suggesting that discrimination may be embedded not only in the pay differences between men and women but also in the acquisition of Human Capital.

A good example of this is education. The suggestion made by Human Capital theories is that by investing more in their education, a person is able to enhance their Human Capital, increasing their value to their employer and thus their earnings. This approach argues that women invest less in Human Capital than men, which results in their concentration into low grade, low paid occupations. However, the findings from the data analysis show that not only have education achievements converged between the sexes, but Occupational Segregation persists even among those with Higher Education qualifications. This suggests that rather than a result of choice, there may be a discriminatory dimension behind Occupational Segregation.

The problem of Occupational Segregation is even more apparent in women employed part-time, with part-time workers consisting of only 6% of those in higher managerial occupations. This could explain why the gender pay gap is larger for part-time workers. Furthermore, whilst some women may choose to work part-time in order to combine employment with domestic responsibilities, it is possible that many women do so as a result of constrained choices.

Based on the findings of this research, it is probable that a large portion of the 18% gender pay gap remaining in the UK for full-time workers and the 40% remaining for part-time workers is a product of discrimination rather than Human Capital factors. The unequal earnings between men and women, puts women at a greater risk of poverty and jeopardizes their opportunity to build up adequate pension savings (Prosser, 2006). Recent research by the Women and Work Commission (2006) also suggests that the unequal earnings distribution has implications for the productivity of the UK labour economy. It is therefore in the interest of all parties involved to resolve the differences between men and women's earnings.

Discrimination has in the past, been tackled by employment legislation. Although legislation such as the Equal Pay and Sex Discrimination Acts successfully reduced the gender pay gap from 31% following their implementation, there has been little change in the past decade which suggests that legislation is only part of the answer. A number of suggestions are made to encourage a further narrowing of the gender pay gap in the future, on the outcomes of this study.

Firstly, changes to the Equal Pay legislation are needed. Equal Pay reviews are currently not compulsory. Many employers are reluctant to carry them out since to undertake them is costly and the law requires employers to act on the results, which is expensive. There can be little or no progress in closing the gender pay gap unless employers are required to carry out regular equal pay reviews and act upon their findings.

Secondly, childcare has an influence on a number of the factors of the gender pay gap, for example career breaks and in part the decision to undertake part-time employment. By making childcare more accessible, it would reduce the need for long career breaks and ease the transition back into the workplace. Attached to this is a greater support of work-life balance initiatives and flexible working practices allowing parents to manage their time between employment and domestic responsibilities more efficiently.

Finally, Occupational Segregation is not an easy issue to tackle, but a simple initiative such as better career support could in part correct this. Employers should offer support to women's long term career goals and encourage them to enter management and higher occupations. Training courses as well as mentoring/buddy schemes and network groups could help with this. In addition, better education and career guidance at a young age is needed to help young women enter occupations which are typically male dominated, to break the mould of "men's jobs" and "women's jobs".

There are a vast number of other recommendations which have been made by previous research undertaken by the Equal Opportunities Commission and Women and Equality Unit. Unless these recommendations are taken seriously and action is taken in the near future, the gender pay gap is likely to remain for many generations to come.

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