Motherhood in Academia :
A Novel Dataset with an Application to Maternity Leave Uptake

Vera E. Troeger, Riccardo Di Leo, Thomas J. Scotto & Mariaelisa Epifanio

(This paper also appears as CAGE Discussion paper 518)

November 2020　　　　　　　　**No: 1312**

Warwick Economics Research Papers

Motherhood in Academia:

A Novel Dataset with an Application to Maternity Leave Uptake

Vera E. Troeger [*]   Riccardo Di Leo [†]   Thomas J. Scotto [‡]

Mariaelisa Epifanio [§]

November 11, 2020

Abstract

Legislation over the past two decades enhanced the availability and quantity of statutory maternity leave in the United Kingdom. In high-skilled sectors, many employers top up this maternity leave in an effort to retain and develop the careers of women. As leave provision became more generous, debates emerged as to the role, if any, these enhanced benefits have in retaining women in high status occupation and facilitating their career growth. Further, individual situations and employment status may prevent women from taking advantage of enhanced benefits. This paper presents findings from a comprehensive survey of thousands of women in the UK Higher Education sector and documents how the lives of academic mothers changed over the past quarter century. Contract status and the partner's participation in parenting has significant effects on the types of maternity leave taken. We reflect on these findings and discuss future research in the area of labour market equity and productivity the availability of this comprehensive quantitative survey of academic women can facilitate.

Keywords: motherhood, gender gap, maternity leaves, academia

[*]Department of Economics, University of Warwick, Coventry, United Kingdom, and Faculty of Economics and Social Sciences, Universität Hamburg, e-mail: v.e.troeger@warwick.ac.uk vera.eva.troeger@uni-hamburg.de

[†]Department of Economics, University of Warwick, Coventry, United Kingdom, e-mail: r.di-leo@warwick.ac.uk

[‡]College of Social Sciences, University of Glasgow, Glasgow, United Kingdom, e-mail: thomas.scotto@glasgow.ac.uk

[§]Department of Politics, University of Liverpool, Liverpool, United Kingdom, e-mail: mariaelisa.epifanio@liverpool.ac.uk

1 Introduction

Rudimentary maternity leave benefits in the United Kingdom date back to 1910, but strong stereotypes and actions taken to dissuade mothers from gainful employment in high status sectors persist. In statute, Equal Pay legislation in 1970 and significant revisions mandating increased maternity leave provision in 1994, 2000, 2003, and 2007 suggest great progress. However, recent evidence suggests that motherhood remains one of the main reasons for the stagnating gender pay gap (e.g. Kleven et al., 2019) and the stunted advancement of women in highly-skilled sectors (Azmat and Ferrer, 2017). There appear to be gains on paper from increasingly progressive laws, but evidence suggests that you cannot legislate away the so-called "motherhood-penalty", which generates biases in the labour market against mothers, and reduces their promotion and earnings capacity (Troeger et al., 2020).

Evaluating the utility of legislation and making concrete recommendations for future policy interventions to improve the working lives of mothers is challenging. Discussions of the role leave provisions have on mothers' career decisions, and of whether women can actually take advantage of the provisions offered, are rarely studied in a comprehensive manner at the sector level. Thus, the various explanations that have been advanced for the differential status of women and mothers in the workplace, such as, *inter alia*, individual characteristics, the choice of less paid career paths, lower working hours and/or career interruptions due to childrearing responsibilities, often derive from anecdotal accounts or small size case studies.

In our opinion, the long road to understanding the mechanisms that generate unequal labour-market outcomes for working mothers must come from comprehensive, sector level studies of changes to their working and family lives over time, and from an analysis of the underlying factors that motivate mothers to take up the maternity leave provisions on offer. We choose to analyze the UK higher education sector: an area where many institutions offer more generous maternity leave provision than the law mandates, but there are widespread disparities between men and women in terms of salary and academic promotion rates. We do so via a unique survey of over 9,000 women in the profession, with questions tailored to measure the choices faced and made by them in terms of career paths, as well as their job satisfaction and the overall support they received. Approximately half of our respondents have children, and we ask mothers questions concerning their experience with maternity leave and the support given to them by family members and line managers.

Initial findings from our data show that experiences with maternity leave changed

considerably since the 1990s, with multivariate analyses suggesting that contractual status at childbirth plays a significant role in whether women can avail themselves fully of the support offered. A finding that generates clear policy implications. We discuss the significance of our results and how the survey could be further leveraged to study policies related to maternity leave in the extended discussion section that concludes the paper.

2 Women, Maternity Leave and Professional Achievements: Motivating Theoretical Arguments and Literature

Our survey design and the data we derive from such instrument are meant to improve our understanding of the challenges that women, in general, and mothers, in particular, face in their professional and personal lives. As such, our work touches upon a host of empirical contributions on women in the working and family environment, which we describe briefly in this section.

One of the key findings in the literature on women in the workplace is the existence of "gender" and "family" gaps. While earning differences between men and women declined over the last decades in most professions (Buchmann and McDaniel, 2016; Erosa et al., 2016; Goldin, 2014), women are still at a disadvantage. A potential driver of gender disparities is the so-called motherhood penalty (Kleven et al., 2019; Bertrand et al., 2010). A large number of women choose not to return to work following childbirth (50% in Germany, according to Ejrnæs and Kunze, 2013), reduce their working hours (Lundberg and Rose, 2000), or switch to less-paid jobs permitting a better work-life balance (Bertrand et al., 2010). The motherhood wage penalty appears to vary by education level. University graduates are more affected due to the higher cost of career breaks in high-skilled professions (England et al., 2016; Anderson et al., 2002) and the requirements to work flexible hours on independent projects to move up the ladder (Bütikofer et al., 2018; Yu and Kuo, 2017). Our dataset, by construction, comprises almost exclusively of these highly-educated respondents. Hence, it is tailored to study how this homogeneous subset of highly autonomous women adapts to new family situations.

Maternity benefits are advanced as one of the main policies to mitigate the motherhood penalty. Longer maternity leave reduces labour force dropout rates following childbirth (Guendelman et al., 2014; Keck and Saraceno, 2013; Gregg et al., 2007). Mothers are able to protect their wages and career opportunities if they do not have to search for a new job when they return to work (Dex et al., 1998; Lalive and Zweimüller, 2009;

Waldfogel, 1998; Zveglich and Rodgers, 2003). Yet, this positive take on maternity benefits is not shared by all researchers. Many scholars document a negative or insignificant effect of better or longer (statutory or occupational) leave on female working hours, wage, and employment (Baum II, 2003; Dahl et al., 2016; Hanratty and Trzcinski, 2009; Hashimoto et al., 2004; Lalive and Zweimüller, 2009; Ondrich et al., 1996, 2003; Klerman and Leibowitz, 1999; Schönberg and Ludsteck, 2014). Even worse, some scholars suggest that long maternity leaves hinder womens' professional careers by depreciating mothers' human capital (Low and Sánchez-Marcos, 2015), reducing the number of working (Dechter, 2014) and training hours (Puhani and Sonderhof, 2011); all factors that might in turn dampen future employment opportunities and wages (Lai and Masters, 2005; Ondrich et al., 2002; Rønsen and Sundström, 2002; Ruhm, 1998). Summarizing this view on maternity benefits, Gutierrez-Domenech (2005) posits that the stark differences in the employment patterns exhibited by women across different countries might depend more on other factors, such as the availability of part-time work and the tax law. Our data allow researchers to investigate the effect of maternity benefits on several outcomes at the individual level, albeit only in a high skilled sector.

We collected this survey data to better understand whether mothers make adjustments that may only indirectly relate to legal entitlements, allowing us to build on existing strands of research on the topic. For example, Lundberg and Rose (2000) document a substantial shift towards more traditional division of labour within the household following childbirth. They find that the average mother's (father's) wage rate declines (rises) due to a reduction in their presence in the workplace. Some argue that this shift is driven by traditional attitudes (Schober, 2014), family peer pressure (Nicoletti et al., 2018) or prior generations' examples (Kleven et al., 2019). We, in turn, show that, even in a high-skilled sector like academia, such return to traditional gender roles can occur. Thus, our analysis of novel survey data challenges some of the narratives on the mediating effect of education on the gender division of household and care tasks.

Why Higher Education? Three specific aspects of academia guide our attention to the sector. First, the higher education sector represents a "litmus test". It is in fact characterized by the presence of high levels of human capital as a PhD and highly specialized educational backgrounds are usually required to be hired as an academic, even at the lowest rank. Also, the career paths of academics are typically well defined and can be measured straightforwardly. In addition, and compared to other highly skilled sectors, the academic environment is often praised for its flexibility and family-friendly working conditions. For all these reasons, documenting disparities between mothers and childless women in the academic context demonstrates how far we are from a truly fair labour

3

market. Second, our focus on academia is driven by our ability to reach every woman working in this sector. Indeed, the email addresses of university employees are publicly available. This allows us to canvas the entire universe of female academics. Finally, the university sector generally provides for occupational (or contractual) maternity benefits on top of the statutory provisions mandated by the government (the statutory maternity pay in the UK guarantees only six weeks at 90 percent of salary for mothers on leave).

Although academia is often looked at as a progressive bastion, some of the previous research we wish to build on documents how this sector is not immune to gender and parental inequalities. Women tend to earn less and be less productive than their male colleagues. They are underrepresented in research-intensive institutions and in top academic positions (Renzulli et al., 2013), and exhibit lower promotion rates (Ginther and Kahn, 2004; Kahn, 1993; Sarsons, 2017). These differences appear to be only weakly correlated with productivity (Marini and Meschitti, 2018). Rather, they seem to emerge due to gender stereotypes and discrimination affecting women employed in male-dominated fields (Mayer and Tikka, 2008). With our survey data, covering women in many disciplines and universities, as we detail below, researchers could offer a better picture of gender inequality across fields and institutions, and better specify the link between productivity and career progression .

Female academics also experience a documented motherhood penalty. Compared to their male colleagues (who are more likely to benefit from family formation and fatherhood), women pay a huge price for having children, in the form of lower promotion rates and higher exit patterns (Bailyn, 2003; Deem, 2003; Probert, 2005). Female academics are more likely to cut their working hours (Abele and Spurk, 2011) and turn down collaboration opportunities (Long, 1990). Our dataset offers a large range of measures to investigate how becoming a mother affects women's careers and potentially to explore why this happens.

Maternity benefits, child care facilities, but also a favorable workplace culture are often regarded as critical factors to help women thrive in academia. For example, female and male academics interviewed by Mason et al. (2013) expressed their fear that utilizing family-friendly policies might be negatively perceived by their supervisors, and that discussing family perspectives with a potential employer would be harmful in securing the job. Female academics seem to be often unaware of the full extent of family-friendly policies offered by their institution (Gunn et al., 2014). Several female academics in the UK, interviewed by Howe-Walsh and Turnbull (2016), complained about the male-dominated workplace culture, exemplified by the reliance on unplanned, informal meetings, which

are particularly hard for mothers to attend. Our survey contains a battery of questions on women's subjective experiences in the academic environment and the perceived support offered by their line managers. These survey items will allow researchers to analyze the tangible and less tangible forms of support academic mothers and women receive in the workplace. The data also allow to investigate the likely factors that account for the differences, if any, between formal policies and firm culture, as it offers the possibility of linking survey respondents to the specific packages offered by their institutions at the time of each childbirth.

3   The Maternity Leave Survey

In 2016 research assistants working for Vera Troeger, Professor at the Centre for Competitive Advantage in the Global Economy (CAGE) at the University of Warwick, developed a working list of 65,099 e-mail addresses with the aim of capturing as many female academics as possible holding ranks from Early Career (post-doctoral) Researcher to Professor. Over the first six months of 2017, the authors distributed a survey probing academic career progression and family lives to these addresses in bi-weekly batches, encompassing between 4,000 and 6,000 respondents. This "broad brush" approach inevitably sent e-mails to those no longer in their post, and movement of women across universities made for duplicates. Of the 65,099 e-mails sent, 59,161 or approximately 91% were valid and unique. About 17% (10,030) of surveys sent to valid e-mail domains were opened and 9,671 of these respondents completed more than 90% of the survey, between the 16th of January and the 12th of September, 2017. Thus, for our purposes, we calculate the response rate as 16.35% (9,671/59,161).[1]

The survey instrument contains detailed questions (more than 115, which vary depending on the respondent's specific circumstances) designed to capture objective and subjective information on education, working history, and family life. The full survey instrument is available in Appendix E, and it ascertains comprehensive information on respondents' graduate degrees, employment histories and the decisions they made concerning having children and taking up maternity leave. The survey - based method em-

---

[1]This response rate might seem low in survey research. However, surveys are usually administered to a pre-defined random sample, drawn from an underlying population. In our case, instead, we administered the survey to the whole population of female academics across UK HEIs, thus a response rate of 16 % is relatively high. The question that needs answering is whether the set of respondents is representative of the underlying population, and, if not, how the empirical results based on the sample can be adjusted. We compare our convenience sample to the population by drawing on aggregate data from the Higher Education Statistics Agency (HESA) in Appendix A and B.

ployed in obtaining the data facilitates our ability to ask women to make subjective judgements about their treatment, currently, and during their early parenting years. Hence, we ask women to assess the attitudes of their line manager concerning their pregnancies, and how fair women with and without children consider their working conditions in comparison to male colleagues.

Specifically, for those who indicate they have one or more children, the survey obtains detailed information concerning partners' employment status at the time of childbirth, childcare arrangements, and what maternity leave and benefits were available beyond the statutory and occupational maternity leave provisions (e.g. extra teaching relief). Although the focus of this paper is on maternity leave uptake during and after the birth of the oldest child, data exist for up to three children per respondent, so future work can delve into whether academic women of multiple children take more or less of the provisions offered when their second and third children are born.

3.1 Features and Representativeness of the Maternity Leave Survey

This paper presents initial analyses from the data, which focus on a subset of women who hold a PhD and are not *emeriti* or research assistants.[2] This leaves 7,326 respondents who answer the majority of the questionnaire, with some questions more prone to avoidance[3] Since respondents self-select into answering our survey, our sample is not fully representative. However, the Higher Education Statistics Agency (HESA) holds demographic information on the universe of female academics, allowing us to compare the characteristics of our respondents to those of the population of UK women in the higher education sector, in Academic Year 2015/16 (latest data available at the time of writing). Detailed tables for the purposes of comparison appear in Appendix A, but there are a number of statistics that warrant mention.

In terms of age, our modal respondent is 38 years-old, whereas HESA data indicate women to be most likely to fall into their 31-35 years-old category. The average age of respondents is relatively high, 44 years old (with the youngest respondent aged 25 and the oldest 78 years old). Compared to information from the Higher Education Statistical Agency, our survey captures a lower percentage of respondents aged 30 years old or

---

[2]We remove the small number of respondents (n=47) who indicate they adopted at least one of their children, as parental leave provision and its impacts are different for those who adopt.

[3]For this reason, the percentages shown below will be computed (unless "not answered" is indicated) over valid responses only (i.e. among the subset of respondents who replied to the question under scrutiny). Possibly, given the sensitivity of the data and, despite the anonymization of all publicly available data, the respondents realise we know their identity since the survey delivery is via e-mail.

below (4.4% vs. 14.3%). However, women in the 31-35 age category are statistically indistinguishable from the aggregate HESA data (16% of survey respondents vs. 16.3% in the HESA). Similarly, the percentage of survey respondents older than 45 closely matches the aggregate HESA statistics. Over-represented are those aged 36-45 (37.9% vs. 28.3%). This age composition of our survey allows us to focus on a set of women who were prime childrearing during the reforms of maternity leave laws in the UK and the changes in institutional provisions.[4]

The majority of survey respondents work full-time (approximately 85%) and hold contracts that require both teaching and research activities (about 76%). Our pool also contains a significant share of women exclusively devoted to research (slightly more than 16%) or teaching and administrative tasks (approximately 7%). Our survey is skewed in favor of full time and permanent academics (85% and 71%, respectively) compared to HESA data (60% and 64%, respectively). This results, at least partially, from the fact that we exclude from the paper's descriptive and multivariate analyses, research assistants and respondents who do not hold a doctoral degree. As a result, we have an over-representation of full professors (17% survey versus 5% HESA population) and academics on permanent contracts, who are also those more likely to move up the career ladder. This over-representation of women in professorships and secure positions is an advantage, as it ensures adequate sample size for the analyses of how maternity provisions relate to career advancement to the highest levels. Given the composition of our sample, high earners are over-represented; both the median and modal salary range of our survey respondents (£40,001-£45,000) is approximately £10,000 higher than what is reported in the aggregate HESA data (£30,001-£35,000).

In Appendix A, we present a table of the distribution of survey respondents across thirty-six "home departments" (i.e. our proxy for research areas).[5] The survey significantly under-represents academics in medical and clinical fields: Allied Health, Dentistry, Midwifery, Nursing and Pharmacy (about 4% in our survey vs slightly more than 10% in the HESA data); Clinical and Non-Clinical Medicine (approximately 4% vs about 14% in HESA). This might potentially skew our representation of the career path and salary of the female academic population in the UK, but the distribution also accords with the

---

[4]For a sample to be representative of the population balance is important. However, since our survey asks questions retrospectively, the family decisions of women across different sets of maternity provisions are available. More sophisticated statistical analyses of the impact of maternity benefits on career outcomes requires careful adjustment such as weighting of regression results etc. We do so in several companion papers.

[5]In order to ensure comparability, we re-aggregated the more granular classification adopted by HESA into the 36 broader categories defined in our survey. These calculations are available upon request to the authors.

under-representation of part-time academics. Many in the health professions are in fact on part-time teaching contracts, and tend to have permanent positions in, for example, the National Health Service (NHS).[6] Other slightly under-represented disciplines are Education (-2.57%), as well as Art and Design (-2.6%), again disciplines more likely to employ part-time staff. While twenty-two out of thirty-six disciplines are over-represented in our survey, the difference with HESA data is rather low, with the exception of "Psychology, Psychiatry and Neuroscience", where the gap is larger than 3%.

Although there are no comparable HESA data on these dimensions, further demographics from the survey show that a majority of the sample, 71%, are British citizens. Approximately 80% of respondents obtained a PhD in the UK between 1956 and 2016, and 50% got their doctoral degree after 2006.[7] Almost the totality of the academics we interviewed identify themselves as white (92%) and heterosexual (88%).

4   A Portrait of Mothers in Academia

4.1   Characteristics of Mothers

Respondents in our sample are almost neatly divided between mothers or mothers to be at the time of the survey (approximately 51%), and childless women. Among academics with children, small families are the norm. About 49% of mothers in our survey have two children and approximately 39% have one child. Only 2.25% of our respondents have four children or more and 10.13% have three. Most mothers (about 89%) where based in UK universities at the time of their first child, with the rest having their oldest child while employed in a foreign academic institution (approximately 5%). A further 6% of mothers where either unemployed or in another profession. The modal salary of women with children is approximately £10,000 higher than for those without children. This is probably due to the fact that mothers are on average older than childless women (the modal age of mothers and non-mothers is 39 and 33 years old respectively) and, thus, occupy more senior positions. Biological sciences is the modal department for mothers while the modal academic field of non-mothers in our survey is Psychology and Neuroscience.[8]

---

[6]While the significant under-representation of (some) medical professions might be a reason of concern, statistical analysis that include appropriate "departmental" weights can mitigate this problem.

[7]Broadening our focus to Europe, 90.97% of the respondents obtained their PhD in a European higher education institution.

[8]Descriptive statistics on the modal characteristics of mothers and childless women are presented in Appendix C.

Mother's contractual position at the time of their first child is displayed in Table 1. If we exclude responses from mothers who gave birth before 1990 - for which we have only a 70% response rate - we can observe a clear pattern over time. Most women (approximately 50%) tend to have their first child when they reach permanent positions, and a relatively stable percentage (just over 35%) had their oldest child while in fixed-term contract. Interestingly, the percentage of women who had their first child while in probationary contracts is higher for youngest mothers (those who gave birth between 2010 and 2017). This probably reflects the changes in the academic environment, where more and more academics have to pass through longer probation periods.

Table 1: Mother's Contract at First Childbirth.

	Before 1990	1990-1999	2000-2009	2010-2017
Permanent	34.09	47.47	53.82	52.63
Probationary (en route to permanent)	0.00	1.73	4.58	10.62
Fixed-Term	26.19	31.31	34.45	34.39
Other	9.48	5.92	1.24	0.64
Not Answered	30.25	13.56	5.92	1.72
Observations	443	693	1,048	1,102

4.2   Characteristics of Spouses

Survey items on the education and employment of partners and spouses allow tracing a profile of the family situation of academic women at both the time of the survey and the time of their first pregnancy.

The share of mothers having a partner at the time of the first pregnancy is almost 100%. In line with general population statistics, 18% of mothers in our sample report changes in relationship status since their first child. Approximately 7% are divorced or separated. At the time of the survey, 86% of mothers live with a partner (73% married, 13% in other arrangements). We observe an interesting degree of variability in the income of the current partner. Approximately 15% of the 3,351 women who answered this survey item declare the partner is earning less than £20,000 per year (gross). About 40% of the partners are located in the range between £20,000 and £50,000, and slightly more than 24% have salaries between £50,000 and £75,000. About 20% of partners lie above that threshold.

9

Looking at the partner's education over time, we find a strikingly stable picture across the decades (Table 2): more than 85% of them has completed at least a college degree, supporting the idea of assortative matching taking place. We observe a similar pattern in terms of partner's contract at time of childbirth as at least 80% of them are working full-time in each decade covered by our survey. In addition, about 46% of mothers have a partner working in the academic sector. As Table 3 shows, around 17% of the academic partners were lecturers or senior lecturers at the time of first childbirth.

Table 2: Partner Education at First Childbirth %.

	Before 1990	1990-1999	2000-2009	2010-2017
Less than secondary	1.13	0.43	0.19	0.00
Secondary - left w/o qualifications	5.64	2.74	2.00	1.09
Secondary - graduated with GCSE	7.67	7.50	2.29	2.45
Secondary - graduated with A levels	4.29	3.17	2.00	1.91
College/University - left w/o qualifications	7.22	3.75	3.63	3.36
College/University - graduated	31.60	32.90	27.39	26.23
Masters	14.67	14.57	20.52	20.69
Doctorate	14.22	15.44	19.18	19.24
Post Doctorate	10.61	16.16	21.18	23.23
Not Answered	2.93	3.32	1.62	1.81
Observations	443	693	1,048	1,102

Table 3: Partner Academic Role at First Childbirth %.

	Before 1990	1990-1999	2000-2009	2010-2017
Professor	2.93	4.33	5.82	3.81
Associate Professor	0.68	0.72	1.05	1.91
Reader	0.68	1.88	2.86	1.63
Senior Lecturer	5.64	5.05	7.25	6.62
Lecturer	9.71	8.37	8.40	10.53
Early Career Researcher	0.90	2.89	4.10	5.44
Research Assistant	0.68	2.89	1.05	1.18
Other	0.68	0.43	0.29	0.27
Professional Services Staff	0.68	1.15	2.19	4.26
Teaching Fellow	0.00	0.72	0.57	0.36
Principal Teaching Fellow	0.00	0.00	0.00	0.09
Senior Research Fellow	0.00	0.43	0.48	0.54
Senior Admin	0.00	0.14	0.00	0.00
Not in Higher Education	65.24	58.44	56.58	54.90
Not Answered	12.19	12.55	9.35	8.44
Observations	443	693	1,048	1,102

4.3   Childcare and Childrearing Responsibilities

Our survey also allows us to capture the availability or willingness of partners in sharing childcare responsibilities during the first two years of the child's life. Even though about 84% of mothers declared, on average, that their partners did share some of the childcare duties in the two years following their first delivery, they did not perceive the involvement as being substantial. When asked in fact to estimate the share of childcare provided by their partner over the same period on a 0-100 scale, 88% of mothers indicated a number below 50, with a striking 29.71% of partners faring below 25%.

Table 4 delineates the support provided by partners by decade of early child rearing. The percentage of mothers stating they were the primary caretakers declines by approximately 7% between the 1990s and the 2010s. Perhaps unsurprisingly, we find that this change is not driven by a radical reallocation of gender roles (i.e. partners becoming primary caretakers), but rather by a more even allocation of duties (+7.9%) within the couple.

Table 4: Primary Caretaker at First Childbirth.

	Before 1990	1990-1999	2000-2009	2010-2017
No	3.84	5.05	4.68	5.81
Equally split responsibilities	15.35	25.40	26.15	33.30
Yes	76.98	66.52	67.27	59.71
Not Answered	3.84	3.03	1.91	1.18
Observations	443	693	1,048	1,102

Table 5 describes the support provided by the line manager or Head of Department at the time of the first delivery, by child-birth decade. More than 50% of those having a baby in the 2010s report a positive experience. Still, more than 15% of them describe their Head of Department as slightly or very unsupportive upon return from maternity leave.

Table 5: Head of Department or Line Manager Support at First Childbirth.

	Before 1990	1990-1999	2000-2009	2010-2017
Very Unsupportive	3.84	8.37	10.88	8.80
Slightly Unsupportive	3.16	6.49	6.49	7.08
Neither Supportive/Unsupportive	13.77	18.47	22.04	18.69
Slightly Supportive	7.45	12.84	17.46	19.15
Very Supportive	14.22	20.20	28.05	36.57
Not Answered	57.56	33.62	15.08	9.71
Observations	443	693	1,048	1,102

Finally, we ask respondents what best describes the childcare option they relied on in the first two years of their first child's life (Table 6). 7 in 10 mothers used a combination of (paid) nurseries and childminders, while 10% of the respondents relied on their partner or relatives. In terms of hours of childcare available - regardless of the type - we find that, in a typical week, during term time, nearly half of the mothers had access to more than 30 hours of childcare for their oldest child in the two years after returning to work. At the same time, 11% of them declared enjoying less than five weekly hours of childcare during term time.

Table 6: Childcare Options Utilized in Two Years After First Mat. Leave Ended.

Childcare Option	%
Nursery	49.44
Nanny/au pair/childminder	14.25
Nursery + nanny/au pair/childminder	8.13
Partner	5.68
Relative (e.g. grandparent)	5.30
Informal childcare arrangements	3.39
No childcare available / Unemployed	3.26
Other / Other combination	4.43
Nursery/Nanny + Family	4.80
By Myself / Career Break / Left Job	1.32
Observations	3,186

4.4 Academic Activities During Maternity Leave

While on maternity leave, a significant share of mothers not only did not give up on their research interests, but actually prioritized these. We find that about 34% of the respondents declared they were conducting research immediately after their first delivery, approximately 19% that they were attending conferences, and slightly more than 21% that they were involved in journal editing and peer reviews. Furthermore, almost 1 out of 4 women kept mentoring their doctoral students, possibly due to the time flexibility of the task. However, these activities seem to have been carried out in isolation. Indeed, almost all respondents declared that, during leave, they did not keep in touch with academic colleagues for work related purposes (99.85%), and did not undertake any ad-hoc teaching (93.30%) or administrative (91.08%) activities.

Interestingly, the share of women who remained active while on maternity leave increased over time, as shown in Table 7. Compared to women who gave birth in the 1990s, mothers nowadays (2010-17) are twice more likely to devote time to research during the period of leave and three times more likely to attend conferences, engage in professional activities (journal duties) and continue supervising and mentoring students. This could be due to the improvement of maternity policies or technology, which facilitate mothers' engagement with the academic world.

Table 7: Activities Performed During Mat. Leave (First Child) %.

	Before 1990	1990-1999	2000-2009	2010-2017
Research	12.19	22.80	37.69	47.55
Conferences	5.42	11.26	20.71	28.68
Journal Duties	4.51	11.11	21.95	34.12
Mentoring/Supervision	4.74	12.70	24.62	36.75
Teaching	4.06	4.47	6.01	9.80
Colleagues/Workplace	0.00	0.14	0.19	0.18
Administrative	2.48	5.77	8.68	13.70
Other	4.51	7.07	9.64	15.61
Observations	443	693	1,048	1,102

5 Support for Mothers: Maternity Pay

An important component of whether women thrive in the working environment is the maternity provision they are entitled to. In this section, we describe the status quo of maternity benefits in the UK and the occupational provisions offered by Higher Education Institutions.

In the UK, since 2007, women qualify for statutory maternity pay (SMP) if they have worked for the same employer continuously for at least twenty-six weeks up to the fifteenth week before the expected week of childbirth and they earn on average at least £120 a week. Statutory Maternity Pay (SMP) grants 90% of the average weekly earnings (before tax) for the first six weeks and the lower of £151.20 or 90% of the average weekly earnings (whichever is lower), for the next thirty-three weeks. The final thirteen weeks of maternity leave are unpaid (the overall length of statutory leave is fifty-two weeks).[9]

---

[9]Historically, parental leave benefits have come a long way in the UK. After the second World War, in 1948, the Government introduced a maternity allowance, paid for thirteen weeks, though not job-protected. In 1953, the duration of the paid period was extended to eighteen week. This policy was then amended by the 1975 Employment Protection Act, which introduced the right to return to work up to the 29th week following delivery. This increased the length of job-protected leave to 40 weeks (including up to 11 weeks before child birth). Eighteen weeks were paid, six paid at 90% of the salary, the remaining twelve at a flat rate allowance. Only mothers who had been employed for at least two years full-time (five years part-time) with the same employer at the eleventh week before the expected childbirth week (EWC) were eligible for maternity pay. Eligibility criteria were only softened in 1994, when all employed pregnant women became entitled to 14 weeks of job-protected leave, regardless of length of service. This was extended to 18 weeks in 2000, and then to 26 weeks in 2003. In the same year, job protection for women fulfilling the eligibility criterion based on continuous employment (i.e. at least 26 weeks by the 15th week before childbirth) was

Compared to many European countries, statutory maternity pay in the UK is rather low.[10] As a result, many companies, institutions and firms offer Occupational Maternity Pay (OMP), a discretionary payment employers can grant on top of the SMP in order to attract and retain female employees, particularly in high-skill, high-pay work environments. Higher Education Institutions (HEIs) make no exception, and in most cases provide for additional OMP. We therefore collected data on maternity provisions about 319 different packages, currently and previously offered across 160 different UK HEIs (out of a total of 163 in the HESA population in 2015/16).[11] Thus, our data virtually canvases the entire UK higher education sector.

For each occupational package, we coded all the specific aspects of maternity benefits, including e.g., weeks with full salary replacement, weeks with partial salary replacement, the percentage of salary that is replaced. We also have information on the number of weeks at SMP, and those that are completely unpaid. In addition, we have data on the eligibility criteria set forth by the HEI (i.e. the required length of service), if any.[12] We turn to a detailed description of this data in the following subsection.

5.1 Occupational Maternity Benefits across UK Universities

Higher Education Institutions in the UK differ widely in the OMP packages being offered to their employees, both in their pay rate and in the strictness of the eligibility criteria set forth to access them, which usually depend on continued length of service. For example, the University of Exeter's 2018 policy offers full salary replacement for 26 weeks, SMP for 13 weeks and, finally, 13 unpaid weeks, regardless of the length of service. The 2015 policy offered by the London School of Economics and Political Science granted instead full salary replacement for the first 18 weeks and a statutory payment (at the lowest

---

extended to 52 weeks, with maternity pay at 90 percent for the first 6 weeks and an a flat rate allowance extended to 20 weeks. Finally, in 2007, the flat rate allowance was extended to 33 weeks. This constitutes the current set of arrangements for statutory maternity leave and pay. The only additional policy introduced since then is Shared Parental Leave (SPL), which was launched in 2015 and entitles mothers to transfer up to 50 weeks of maternity leave to their partner. See, *inter alia*, Sargeant and Lewis (2020) and Zabel (2009) for a more extensive review.

[10]See OECD Family Database (https://bit.ly/363d3c2) for a summary of maternity and parental leave provision by country. Only a few OECD countries provide benefits lower than the UK minimum: namely, the US, Australia, Ireland, and the Netherlands.

[11]An initial wave of data was collected in 2015 by Monica Giovanniello, at the time research assistant and PhD student in Economics at the University of Warwick. This information was later verified and expanded by our research team, so that the information collected now covers the maternity policies implemented by the UK HEIs in our sample until 2019. The documents containing maternity policies were downloaded from institutional websites and requested from each HEI's HR department.

[12]All documents are available upon request from Prof. Vera E. Troeger, the Principal Investigator of the project.

rate) for the remaining 21 weeks (leaving the final 13 weeks unpaid), if the academic had been employed for at least twenty-six continuous weeks prior to the 15th week before the expected date of childbirth. A relatively small subset of universities (e.g. University of Durham, 2007) offers different OMP schemes to their employees, that either vary in generosity, depending on the length of service, or that are equivalent in generosity but differ in the combination of length and pay rate, namely, a higher level of salary replacement for a shorter time, or a longer leave, but paid at a lower rate.

We calculated three different proxies to capture the generosity of maternity schemes. The first measure considers the number of weeks during which any salary replacement is granted, either fully or partially. This proxy does not necessarily provide a good measure for generosity, as the percentage of salary replaced might be as low as 50%, but being spread out over a longer period of time. As a result, the monetary value of maternity pay schemes is not automatically correlated with this measure. We therefore calculated a second measure, that is the number of weeks for which full salary replacement is paid. This measure provides for a more adequate assessment of maternity generosity, since it takes into account the number of weeks with full pay. Finally, we calculated the so called Full Weeks' Equivalent (FWE), which is our preferred index and estimates the full monetary value of the maternity benefits being paid, while allowing an easier comparison across benefit schemes.[13]

Table 8 provides a picture of the variation in the generosity of occupational maternity packages across the 160 HEIs in our sample, using the latter index.[14] We see how the FWE ranges between 5.40 and 26 weeks. About 37% of Higher Education Institutions in the UK (59 HEIs) grant between 5.40 to 12 weeks of full pay. Approximately 27% (44 HEIs) provide between thirteen to seventeen weeks of salary replacement while 31 institutions (about 19%) offer eighteen weeks. Anything more generous than this is uncommon with only 26 Higher Education Institutions (approximately 11%) granting between nineteen to twenty-six weeks of full financial compensation. In contrast, 1 university offers no additional salary replacement on top of the statutory maternity benefit.

---

[13]The index is computed as follows. For a package consisting of 6 weeks paid at 100% and 9 at 90%, the measure equals to the sum of the number of each "type" of week, weighted by the salary replacement received (in this case, 1 and 0.90, respectively, leading to a FWE of 6*1+0.90*9=14.10).

[14]Descriptive statistics employing alternative measures of generosity can be found in Appendix D.

Table 8: Full Weeks Equivalent (FWE) by HEI (2019).

Full Weeks Equivalent	N. Universities	%
0.00	1	0.63
5.40	5	3.13
11.40	4	2.50
11.80	33	20.63
12.00	17	10.63
13.00	1	0.63
14.00	1	0.63
15.00	2	1.25
15.80	5	3.13
16.00	28	17.50
17.00	7	4.38
18.00	31	19.38
19.00	3	1.88
19.50	5	3.13
20.00	3	1.88
21.90	1	0.63
22.00	4	2.50
22.50	1	0.63
26.00	8	5.00
Total	160	100.00

Table 9 provides the same information as Table 8 for mothers in our sample, at the time their first child was born. More than half of the mothers in our sample (about 63%) received between 16 to 18 weeks of full pay. Approximately 17% fell below this range, and several mothers (about 19%) were granted more generous provisions, from nineteen to twenty-six weeks of full financial support. Overall, there is large variation in the monetary compensation mothers in our sample received at the time of their first child.

Table 9: Full Weeks Equivalent (FWE) at First Childbirth

Full Weeks Equivalent	N. Respondents	%
5.40	10	0.63
5.80	2	0.13
11.40	3	0.19
11.80	96	6.07
12.00	92	5.82
13.00	2	0.13
13.80	3	0.19
15.00	6	0.38
15.80	5	0.32
16.00	439	27.77
17.00	60	3.80
18.00	553	34.98
19.00	13	0.82
19.50	29	1.83
20.00	15	0.95
21.90	2	0.13
22.00	76	4.81
23.40	14	0.89
26.00	161	10.18
Total	1,581	100.00

6 Uptake of Maternity Leave

In this section, we provide an example of the type of analyses that can be performed using both the survey and the data on occupational maternity benefits across Higher Education Institutions. We are interested in understanding the likely determinants of maternity leave uptake at the time of the first childbirth.

Our survey contains an extensive set of questions asking about the typologies of maternity leave (statutory, unpaid, partial-salary, full-salary) mothers used after giving birth. Table 10 shows the reported uptake of the weeks of leave where salary is corresponded in full (i.e. generally, the first six weeks).

Not surprisingly, a majority of the respondents (almost three out of four in the 2010s) took the maximum offered of this type of leave. In addition, a significant share of women reports not having been offered any full salary replacement. This share exactly matches the number of HEIs that do not offer any additional pay over and above the statutory benefits (see Appendix D). Yet, surprisingly, a small share of women, almost constant in time, chose not to exploit maternity leave that was paid at 100% of their salaries. This pattern runs in fact against rational expectations, as mothers choosing to take this form of leave do not suffer any direct, financial salary sacrifice. An explanation for this sort of behavior could be linked to the non-monetary costs possibly associated to taking time off from work (e.g, a reputational stigma). It might also be that this subset of mothers is constituted by those whose research is highly dependent on being present on campus (e.g., lab-intensive disciplines), or who can afford returning to work early because they receive substantial help from their partner/family.

Table 10: Full-salary Maternity Leave Uptake at First Childbirth.

	Before 1990	1990-1999	2000-2009	2010-2017
Not offered	5.19	5.63	7.73	7.89
Did not take any of this	0.90	1.15	1.62	0.45
Took some of this	4.29	6.64	8.02	6.44
Took max offered	20.09	39.97	55.73	72.96
Not Answered	69.53	46.61	26.91	12.25
Observations	443	693	1,048	1,102

Table 11 shows the evolution over time in the uptake of partial-salary replacement leave. These are weeks that generally follow those with full-salary compensation in occupational packages, in which mothers face a salary sacrifice. We observe, particularly starting from the 2000s, an increase in the proportion of women who take some or the maximum amount of partially-paid leave. This share reaches approximately 42% of mothers who gave birth for the first time in the 2000s, increasing to about 53% in the following decade. Not surprisingly, this share is substantially higher than the one of mothers who did not take the maximum amount of fully-paid leave (27%). Hence, many mothers who took full advantage of the weeks in which they received 100% of their salary still complemented this with some further leave imposing a salary sacrifice.

Table 11: Partial-Salary Maternity Leave Uptake at First Childbirth.

	Before 1990	1990-1999	2000-2009	2010-2017
Not offered	3.84	6.64	8.30	13.61
Did not take any of this	1.58	7.36	10.78	12.89
Took some of this	5.19	7.79	15.17	13.61
Took max offered	7.45	16.74	27.39	39.56
Not Answered	81.94	61.47	38.36	20.33
Observations	443	693	1,048	1,102

Indeed, a cross tabulation of full and partially paid leave uptake reveals that about 50% of mothers who took the maximum amount of fully-paid leave also took (at least some) partially-paid leave (Table 12).

Table 12: Full-Salary and Partial-Salary Leave Uptake at First Childbirth.

		Full-Salary			
		Not offered/taken	Took some	Took max	Total
Partial-Salary	Not Offered/Taken	77.82%	58.18%	50.11%	61.72%
	Took some	6.48%	38.18%	12.37%	11.75%
	Took max	15.70%	3.64%	37.51%	26.54%
	Total	100%	100%	100%	100%

Table 13 shows the uptake of the final, unpaid portion of maternity leave, namely the last 13 of the 52 weeks in which mothers can stay out of work while being entitled to return to their job. In the 2010s, almost half of the women did not take any unpaid leave. However, the share taking some, or even the maximum offered, rose over time. While this can be partially explained by the larger number of respondents in the sample having had children in more recent years, it signals, in our view, the relevance, even today, of this form of leave among academic mothers. The patterns discussed in this section therefore suggest that existing policies are not sufficient to balance professional and personal lives, without bearing financial costs.

Table 13: Unpaid Maternity Leave Uptake at First Childbirth.

	Before 1990	1990-1999	2000-2009	2010-2017
Not offered	1.81	5.63	4.96	3.45
Did not take any of this	2.71	12.27	28.24	45.19
Took some of this	4.74	6.64	7.92	13.25
Took max offered	8.58	6.93	8.68	9.80
Not Answered	82.17	68.54	50.19	28.31
Observations	443	693	1,048	1,102

6.1 Using the Data: Determinants of Maternity Leave Uptake

In this final section of the paper, we present some preliminary analyses using our survey and the data on occupational maternity pay. We focus on the likely factors associated with the uptake of maternity leave uptake after the first childbirth, and in particular on the mother's contractual status at the time. We would like to investigate in fact whether mothers who have reached a stabler stage of their career might have access to more generous leave provisions.

We look at three different dependent variables, corresponding to the three different degrees of salary replacement offered by occupational maternity packages: fully-paid, partially-paid and unpaid leave uptake. The three variables are "ranks" from 0 to 2, directly derived from survey responses: "none offered or taken", "some taken", "took the maximum offered". As utilizing one type of leave can have an impact on the uptake of another one, we run three Seemingly Unrelated Regressions (SUR), allowing for correlation between the error terms, in order to capture any potential correlation between unobservables. This permits borrowing strength, rendering estimations more efficient, but assumes that error processes across these three different types of leave uptake are similar, which is fairly safe in this case. Standard errors are always clustered at the level of the university providing the maternity provisions. Our simple estimation regression therefore looks as follows:

$$Y_{ij} = \alpha + \beta_1 X_{ij} + \beta_2 \gamma_j + \delta_i + \epsilon_{ij} \tag{1}$$

Where: i indexes the individual, and j the HEI in which the mother was employed at childbirth. The dependent variable Y_{ij} is a rank variable for the uptake of each type of maternity leave, following the first childbirth. X_{ij} and γ_j are, respectively, a set of

individual and HEI controls, which we describe in full below. δ_i represents individual fixed effects, and ϵ_{ij} is the error term, clustered at the HEI level and potentially correlated across the three regressions we are running, as discussed before.

Each regression includes the same set of independent variables on the right-hand side. We control for the mother's contract at first childbirth: whether she was fixed-term, on probation, on a permanent contract (the omitted category in Table 14), or did not reply to the question. Then, we control for the partner's occupation at childbirth, which is the result of the extensive recording of two separate questions: one concerning the academic role (if in higher education), one the work responsibilities (if not in academia at the time). The resulting set of indicators can be interpreted as follows: (1) *high-rank academic* if Professor, Reader, Principal teaching fellow or above, etc.; (2) *low-rank academic* if Lecturer, Research Assistant, Teaching Fellow etc.; (3) *high-rank non-academic* if Top, Senior Executive or Upper Middle; (4) *low-rank non-academic* if Self-employed/Freelance, Office Manager, Supervisor or Waged Staff. As before, we include a final indicator to account for missing responses. Finally, we include fixed effects for the year in which the child was born, the mother's age at the time, the HEI in which she was employed and, finally, as a proxy for her research area, her current department.

At the university level, we include an indicator variable for whether the institution at childbirth belongs to the Russell Group, and the score it received in the Research Assessment Exercise conducted in 2008, both as proxies for the research intensity of the HEI. We also control for the average salary earned by female employees, and the share of female academics over the total number of employees in the institution, all measured in 2013 by HESA. We also include the maternity entitlements being made available at the time of the first childbirth, measured in "Full Weeks Equivalent".[15] Table 14 presents the results of this empirical analysis.

---

[15]If more than one package is offered by the university, we focus on the first option proposed to mothers-to-be. This assumption does not represent a major concern in the case of alternative packages that are equivalent in their FWE, but vary in the combination of length and generosity. In the few cases where alternative, more (less) generous packages are offered to employees with a longer (shorter) tenure, our assumption implies we are considering only the package with the most lenient eligibility requirement. Furthermore, whenever the childbirth date for one respondent precedes the approval date of the documents in our possession for her university, we impute the oldest policy as being the relevant one for her.

Table 14: Determinants of Leave Uptake at First Childbirth.

	(1) Fully Paid Leave	(2) Partially Paid Leave	(3) Unpaid Leave
Fixed-Term at Childbirth	-0.297***	-0.163***	-0.054
	(0.054)	(0.057)	(0.038)
Probationary at Childbirth	-0.298***	-0.143**	-0.080*
	(0.078)	(0.069)	(0.043)
No Contract Info at Childbirth	-1.499***	-0.854***	-0.165*
	(0.098)	(0.109)	(0.092)
Observations	1,577	1,577	1,577
R-squared	0.154	0.148	0.074
Individual Controls	✓	✓	✓
Chilbirth Year	✓	✓	✓
Current Department	✓	✓	✓
University Controls (2013)	✓	✓	✓
Constant	✓	✓	✓

Clustered standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

This simple set of regressions allows to draw some suggestive, preliminary inference on the determinants of leave uptake. We observe a significant degree of selection in the uptake of fully paid leave (Column 1). Academics with fixed-term contracts or probationary status at time of first childbirth are significantly less likely to take remunerated weeks off, compared to their tenured counterparts. The effect is even stronger for mothers for whom we have no information about their contracts at the time of first childbirth, suggesting that those in this category tended to be in relatively precarious positions. Column 2 shows the determinants of uptake of partially-paid leave. Again, like in Column 1, mothers in permanent positions appear to be more likely to take this form of leave, while respondents in fixed-term and probationary contracts, as well as those for which we have no information on their contractual status, are less willing to enter in partially paid leave. Results (not shown here) also indicate that the uptake of partially-paid leave is possibly a response to the lack of generosity of their institution, with the variable measuring the generosity of provisions being negative and significant (the opposite holds true

when we look at fully-paid leave uptake). We observe similar patterns for the uptake of unpaid leave (Column 3). Once again, mothers in non-permanent positions, and particularly those in probationary positions, are less likely to choose this option. For mothers in fixed-term and non secure contracts the coefficients are consistently negative, though not statistically significant.

7   Concluding Remarks

We introduced an original survey of women working in the UK Higher Education sector. We asked academic women questions related to their professional and personal lives. The information we gathered offers a portrait of the working conditions and the family environment women are embedded in, and gives voice to women's concerns and experiences in a sector characterized by high levels of human capital. In order to shed more light on the possible difficulties women face in conciliating motherhood with working pressures, we focused on academic mothers. Like in many other sectors, especially high-skilled ones, women in academia tend to postpone their decision to have children until the achievement of more stable and secure positions. Like in many families, childrearing and caring tasks are still borne mainly by mothers, even within academic couples.

We also described the types of maternity provisions granted by institutions in the academic sector. Despite employing highly educated female personnel, we show how the academic environment is not homogeneous in the level of financial support offered to women while on maternity leave. There exists, indeed, a large variation in the generosity of maternity entitlements across UK universities. We carried out an empirical analysis of the likely determinants of maternity leave uptake. We showed how mothers' decision to use different forms of maternity leave is significantly influenced by their contractual condition. Fixed-term contracts or probationary status discourage women from taking the entire period of fully-paid leave. As one respondent to our survey put it: *"being on a competitive career and having received a tenure-track position, I could not delay my entry and could not take a longer leave (unfortunately)."*.

These are just suggestive illustrations of how our database can be put to work. There are many other questions that are still left unsettled, and probably many more that remain to be asked. In several follow up-papers we will investigate several of these questions. For example, we analyse the actual motherhood penalty in academia by comparing the career and salary outcomes of mothers and non-mothers (Troeger et al., 2020). We also investigate several causal mechanisms that link maternity generosity to academic careers,

via channels such as research activity and productivity in the months following delivery. These are only some examples of how this individual-level data can help closing some of the gaps in the current literature. We truly hope that colleagues will find this novel data useful for investigating their research questions.

References

Abele, A. E. and D. Spurk (2011). The dual impact of gender and the influence of timing of parenthood on men's and women's career development: Longitudinal findings. *International Journal of Behavioral Development 35*(3), 225–232.

Anderson, D. J., M. Binder, and K. Krause (2002). The motherhood wage penalty: Which mothers pay it and why? *American economic review 92*(2), 354–358.

Azmat, G. and R. Ferrer (2017). Gender gaps in performance: Evidence from young lawyers. *Journal of Political Economy 125*(5), 1306–1355.

Bailyn, L. (2003). Academic careers and gender equity: Lessons learned from mit 1. *Gender, Work & Organization 10*(2), 137–153.

Baum II, C. L. (2003). The effect of state maternity leave legislation and the 1993 family and medical leave act on employment and wages. *Labour Economics 10*(5), 573–596.

Bertrand, M., C. Goldin, and L. F. Katz (2010). Dynamics of the gender gap for young professionals in the financial and corporate sectors. *American economic journal: applied economics 2*(3), 228–55.

Buchmann, C. and A. McDaniel (2016). Motherhood and the wages of women in professional occupations. *RSF: The Russell Sage Foundation Journal of the Social Sciences 2*(4), 128–150.

Bütikofer, A., S. Jensen, and K. G. Salvanes (2018). The role of parenthood on the gender gap among top earners. *European Economic Review 109*, 103–123.

Dahl, G. B., K. V. Løken, M. Mogstad, and K. V. Salvanes (2016). What is the case for paid maternity leave? *Review of Economics and Statistics 98*(4), 655–670.

Dechter, E. K. (2014). Maternity leave, effort allocation, and postmotherhood earnings. *Journal of Human Capital 8*(2), 97–125.

Deem, R. (2003). Gender, organizational cultures and the practices of manager-academics in uk universities. *Gender, Work & Organization 10*(2), 239–259.

Dex, S., H. Joshi, S. Macran, and A. McCulloch (1998). Women's employment transitions around childbearing. *Oxford bulletin of economics and statistics 60*(1), 79–98.

Ejrnæs, M. and A. Kunze (2013). Work and wage dynamics around childbirth. *The Scandinavian Journal of Economics 115*(3), 856–877.

England, P., J. Bearak, M. J. Budig, and M. J. Hodges (2016). Do highly paid, highly skilled women experience the largest motherhood penalty? *American Sociological Review 81*(6), 1161–1189.

Erosa, A., L. Fuster, and D. Restuccia (2016). A quantitative theory of the gender gap in wages. *European Economic Review 85*, 165–187.

Ginther, D. K. and S. Kahn (2004). Women in economics: moving up or falling off the academic career ladder? *Journal of Economic perspectives 18*(3), 193–214.

Goldin, C. (2014). A grand gender convergence: Its last chapter. *American Economic Review 104*(4), 1091–1119.

Gregg, P., M. Gutiérrez-Domènech, and J. Waldfogel (2007). The employment of married mothers in great britain, 1974–2000. *Economica 74*(296), 842–864.

Guendelman, S., J. Goodman, M. Kharrazi, and M. Lahiff (2014). Work–family balance after childbirth: the association between employer-offered leave characteristics and maternity leave duration. *Maternal and child health journal 18*(1), 200–208.

Gunn, C. M., K. M. Freund, S. A. Kaplan, A. Raj, and P. L. Carr (2014). Knowledge and perceptions of family leave policies among female faculty in academic medicine. *Women's Health Issues 24*(2), e205–e210.

Gutierrez-Domenech, M. (2005). Employment after motherhood: a european comparison. *Labour economics 12*(1), 99–123.

Hanratty, M. and E. Trzcinski (2009). Who benefits from paid family leave? impact of expansions in canadian paid family leave on maternal employment and transfer income. *Journal of Population Economics 22*(3), 693–711.

Hashimoto, M., R. Percy, T. Schoellner, and B. A. Weinberg (2004). The long and short of it: maternity leave coverage and women's labor market outcomes.

Howe-Walsh, L. and S. Turnbull (2016). Barriers to women leaders in academia: tales from science and technology. *Studies in Higher Education 41*(3), 415–428.

Kahn, S. (1993). Gender differences in academic career paths of economists. *The American Economic Review 83*(2), 52–56.

Keck, W. and C. Saraceno (2013). The impact of different social-policy frameworks on social inequalities among women in the european union: The labour-market participation of mothers. *Social Politics 20*(3), 297–328.

Klerman, J. A. and A. Leibowitz (1999). Job continuity among new mothers. *Demography 36*(2), 145–155.

Kleven, H., C. Landais, J. Posch, A. Steinhauer, and J. Zweimuller (2019). Child penalties across countries: Evidence and explanations. In *AEA Papers and Proceedings*, Volume 109, pp. 122–26.

Kleven, H., C. Landais, and J. E. Søgaard (2019). Children and gender inequality: Evidence from denmark. *American Economic Journal: Applied Economics 11*(4), 181–209.

Lai, Y.-C. and S. Masters (2005). The effects of mandatory maternity and pregnancy benefits on women's wages and employment in taiwan, 1984–1996. *ILR Review 58*(2), 274–281.

Lalive, R. and J. Zweimüller (2009). How does parental leave affect fertility and return to work? evidence from two natural experiments. *The Quarterly Journal of Economics 124*(3), 1363–1402.

Long, J. S. (1990). The origins of sex differences in science. *Social forces 68*(4), 1297–1316.

Low, H. and V. Sánchez-Marcos (2015). Female labour market outcomes and the impact of maternity leave policies. *IZA Journal of Labor Economics 4*(1), 14.

Lundberg, S. and E. Rose (2000). Parenthood and the earnings of married men and women. *Labour Economics 7*(6), 689–710.

Marini, G. and V. Meschitti (2018). The trench warfare of gender discrimination: evidence from academic promotions to full professor in italy. *Scientometrics 115*(2), 989–1006.

Mason, M. A., N. H. Wolfinger, and M. Goulden (2013). *Do babies matter*.

Mayer, A. L. and P. M. Tikka (2008). Family-friendly policies and gender bias in academia. *Journal of Higher Education Policy and Management 30*(4), 363–374.

Nicoletti, C., K. G. Salvanes, and E. Tominey (2018). The family peer effect on mothers' labor supply. *American Economic Journal: Applied Economics 10*(3), 206–34.

Ondrich, J., C. K. Spiess, and Q. Yang (1996). Barefoot and in a german kitchen: Federal parental leave and benefit policy and the return to work after childbirth in germany. *Journal of Population Economics 9*(3), 247–266.

Ondrich, J., C. K. Spiess, Q. Yang, and G. G. Wagner (2003). The liberalization of maternity leave policy and the return to work after childbirth in germany. *Review of Economics of the Household 1*(1-2), 77–110.

Ondrich, J. I., C. K. Spieß, and Q. Yang (2002). The effect of maternity leave on women's pay in germany 1984-1994. Technical report, DIW Discussion Papers.

Probert, B. (2005). 'i just couldn't fit it in': Gender and unequal outcomes in academic careers. *Gender, Work & Organization 12*(1), 50–72.

Puhani, P. A. and K. Sonderhof (2011). The effects of parental leave extension on training for young women. *Journal of Population Economics 24*(2), 731–760.

Renzulli, L. A., J. Reynolds, K. Kelly, and L. Grant (2013). Pathways to gender inequality in faculty pay: The impact of institution, academic division, and rank. *Research in Social Stratification and Mobility 34*, 58–72.

Rønsen, M. and M. Sundström (2002). Family policy and after-birth employment among new mothers–a comparison of finland, norway and sweden. *European Journal of Population/Revue europeenne de demographie 18*(2), 121–152.

Ruhm, C. J. (1998). The economic consequences of parental leave mandates: Lessons from europe. *The quarterly journal of economics 113*(1), 285–317.

Sargeant, M. and D. Lewis (2020). Employment law 9e.

Sarsons, H. (2017). Recognition for group work: Gender differences in academia. *American Economic Review 107*(5), 141–45.

Schober, P. S. (2014). Parental leave and domestic work of mothers and fathers: A longitudinal study of two reforms in west germany. *Journal of Social Policy 43*(2), 351.

Schönberg, U. and J. Ludsteck (2014). Expansions in maternity leave coverage and mothers' labor market outcomes after childbirth. *Journal of Labor Economics 32*(3), 469–505.

Troeger, V. E., R. Di Leo, M. Epifanio, and T. J. Scotto (2020). The motherhood penalties: Insights from women in uk academia. Unpublished Manuscript.

Waldfogel, J. (1998). Understanding the" family gap" in pay for women with children. *Journal of economic Perspectives 12*(1), 137–156.

Yu, W.-h. and J. C.-L. Kuo (2017). The motherhood wage penalty by work conditions: How do occupational characteristics hinder or empower mothers? *American Sociological Review 82*(4), 744–769.

Zabel, C. (2009). Eligibility for maternity leave and first birth timing in great britain. *Population research and policy review 28*(3), 251.

Zveglich, Jr, J. E. and Y. v. d. M. Rodgers (2003). The impact of protective measures for female workers. *Journal of Labor Economics 21*(3), 533–555.

Appendix

A   Demographic Characteristics of Survey Respondents

In this section, we present descriptive statistics for our survey respondents and compare them, whenever possible, to the HESA population. Table A.1 provides information on the age range of our respondents vis-a-vis the HESA data, while Table A.2 and A.3 do the same for, respectively, contractual status and gross yearly salary measured at the time of the survey. In Table A.4, we show the characteristics of the modal female academic in our survey and in the 2015/16 HESA population. In Table A.5 we compare the distribution across research areas in our sample and in the population.

Table A.1: Age Ranges of Female Academics in the UK: Survey and HESA.

	Survey %	HESA %	p-value
Under-25	0.02	2.81	0.000
26-30	4.38	11.51	0.000
31-35	15.95	16.33	0.297
36-40	20.17	14.75	0.001
41-45	17.71	13.51	0.002
46-50	15.24	13.42	0.852
51-55	11.17	12.2	0.852
56-60	8.79	8.74	0.583
61-65	4.57	4.72	0.134
Over 66	2.00	1.87	.245
Observations	5,755	91,155	

Table A.2: Hours worked, Academic Role and Tenure: Survey and HESA.

	Survey %	HESA %	p-value
Full-time	84.93	59.72	0.000
Part-time	15.07	40.28	0.000
Observations	7,171	91,155	
Non-professor	81.27	92.38	0.000
Professor	17.2	5.18	0.000
Senior Manager	1.53	2.38	0.007
Observations	7,325	91,155	
Fixed-term	28.59	36.64	0.000
Permanent	71.41	63.36	0.000
Observations	7,298	91,155	

Table A.3: Salary Bands in GBP: Survey and HESA.

	Survey %	HESA %	p-value
Below 17,898	2.98	0.13	0.000
17,898 - 23,879	2.35	1.17	0.007
23,879 - 32,958	13.75	15.59	0.428
32,958 - 44,240	31.72	40.43	0.000
44,240 - 59,400	30.95	31.53	0.502
Above 59,400	18.25	11.10	0.000
Observations	6,602	91,155	

Table A.4: Modal Respondent: Survey and HESA.

	Survey	HESA
Age	38	31-35
Country of Birth	United Kingdom	-
Country of Citizenship	United Kingdom	-
Current Department	Psych. and Neuroscience	Allied Health
Current Contract	Permanent	Permanent
Current FTE	Full-Time	Full-Time
Current Gross Yearly Wage	£40.001-45.000	£30.001-35.000
Observations	7,326	91,155

Table A.5: Current Department: Survey and HESA.

	Survey %	HESA %
Aeronautical/Mech./Chem./Manufact. Engineering	1.13	0.34
Agriculture, Veterinary and Food Science	1.10	1.39
Allied Health, Dentistry, Midwifery, Nursing and Pharmacy	3.57	10.19
Archeology, Anthropology and Development Studies	1.92	0.88
Architecture, Built Environment and Planning	1.36	1.52
Area Studies	0.84	0.20
Art and Design: History, Practice and Theory	2.43	5.00
Biological Sciences	8.29	6.78
Business and Management Studies	5.49	6.97
Chemistry	1.55	1.32
Civil and Construction Engineering	0.60	0.51
Classics	1.11	0.36
Clinical and Non-Clinical Medicine	3.91	14.22
Communication/Cultural/Media Studies, Library/Info Mgmt.	1.83	2.04
Computer Science and Informatics	1.52	1.61
Earth Systems and Environmental Sciences	1.77	1.46
Economics and Econometrics	1.48	0.94
Education	4.89	7.49

Table 5 (cont.d): Current department: Survey and HESA.

	Survey %	HESA %
Electr./Mech./Electron. Engineering, Metallurgy and Materials	0.63	2.01
General and Other Engineering	0.57	0.88
Geography, Environmental Studies and Archaeology	3.56	1.05
History	4.25	1.59
Language and Literature	5.19	3.06
Law	3.67	3.11
Mathematical Sciences	2.04	1.20
Modern Languages and Linguistics	4.40	4.20
Music, Drama, Dance and Performing Arts	2.13	3.59
Philosophy	0.97	0.33
Physics	1.47	1.09
Politics and International Studies	3.32	1.33
Psychology, Psychiatry and Neuroscience	8.48	4.47
Public Health, Health Science, Health Services and Primary Care	5.31	3.11
Social Work and Social Policy	1.88	2.07
Sociology	3.06	1.83
Sport and Exercise Sciences, Leisure and Tourism	1.41	1.57
Theology and Religious Studies	0.75	0.30
Other / NA / Prefer Not To Say	2.09	-
Observations	7,236	91,155

B Demographic characteristics across University Groups

In this section, we check whether the demographic characteristics in our sample are fairly spread across university types. To do so, we separate our data into two groups, according to whether our female employees are most recently employed in Russell group universities or not. We retrieve similar patterns as those described in the main body of the paper for both subsets of institutions, in comparison to HESA data: over-representation of the 36-50 age group (Table B.1), Professors (Table B.2) and of academics at the high end of the salary distribution (Table B.3). Part-time workers are instead under-represented. We retrieve no significant differences in the age distribution by university type, compared to the aggregate picture. If anything, splitting the sample in two groups seems to provide a closer match with the HESA data. Interestingly, survey respondents on fixed vs. permanent contracts align quite closely with the HESA aggregate data for Russell Group universities (61.16% survey vs. 57.45% HESA), while those on permanent contracts in non-Russell Group institutions are significantly over-represented (81.29% vs. 67.15%).

Looking at the characteristics of the modal respondent by university group in Table B.4, we notice how our data captures higher-wage individuals in both Russell and non-Russell HEIs, compared to the HESA population. Furthermore, while age statistics remain almost constant across university groups in our data, the modal academic in non-Russell group universities is significantly older. Finally, the modal department in Russell Group universities is "Biological Sciences", whereas the mot represented research area in non-Russel Group institutions is "Psychology, Psychiatry and Neuroscience".

Table B.1: Age ranges: Survey and HESA (by Russell Group).

	Russell Group			Non Russell Group		
	Survey %	HESA %	p-value	Survey %	HESA %	p-value
Under-25	0.04	3.28	0.000	0.00	2.51	0.000
26-30	4.98	15.99	0.000	3.81	8.64	0.000
31-35	19.13	21.56	0.304	12.91	13,00	0.485
36-40	20.87	17,00	0.047	19.50	13.31	0.000
41-45	18.14	12.70	0.002	17.30	14.03	0.010
46-50	13.55	10.59	0.042	16.85	15.23	0.135
51-55	9.92	8.65	0.250	12.37	14.48	0.264
56-60	7.47	5.84	0.081	10.06	10.59	0.969
61-65	3.91	3.25	0.113	5.20	5.67	0.442
Over 66	1.99	1.12	0.018	2,00	2.35	0.349
Observations	2,812	35,560		2,925	55,595	

Table B.2: H. Worked, Academic Role and Tenure: Survey and HESA (by Russell Group).

	Russell Group			Non Russell Group		
	Survey %	HESA %	p-value	Survey %	HESA %	p-value
Full-time	86.15	70.46	0.035	83.74	52.85	0.000
Part-time	13.85	29.54	0.000	16.26	47.15	0.000
Observations	3,531	35,560		3,622	55,595	
Non-professor	80.54	91.21	0.165	81.98	93.13	0.347
Professor	18.49	7.62	0.000	15.95	3.62	0.000
Senior Manager	0.97	1.11	0.741	2.07	3.19	0.004
Observations	3,602	35,560		3,703	55,595	
Fixed-term	38.84	42.51	0.568	18.71	32.88	0.008
Permanent	61.16	57.45	0.543	81.29	67.15	0.001
Observations	3,586	35,560		3,692	55,595	

Table B.3: Salary bands in GBP: Survey and HESA (by Russell Group).

	Russell Group			Non Russell Group		
	Survey %	HESA %	p-value	Survey %	HESA %	p-value
Below 17,898	2.87	0.10	0.000	3.09	0.15	0.000
17,898 - 23,879	2.07	0.56	0.029	2.62	1.56	0.012
23,879 - 32,958	15.15	19.01	0.216	12.40	13.41	0.887
32,958 - 44,240	31.02	40.68	0.012	32.39	40.27	0.240
44,240 - 59,400	27.50	24.62	0.170	34.27	35.95	0.939
Above 59,400	21.39	14.95	0.017	15.23	8.64	0.000
Observations	3,240	35,560		3,342	55,595	

Table B.4: Modal Respondent: Survey and HESA (by Russell Group).

	Survey	HESA
	Russell Group	
Age	38	31-35
Country of Birth	United Kingdom	-
Country of Citizenship	United Kingdom	-
Current Department	Biological Sciences	Clinical Medicine
Current Contract	Permanent	Permanent
Current FTE	Full-Time	Full-Time
Current Gross Yearly Wage	£35.001-40.000	£30.001-35.000
	Non Russell Group	
Age	39	51-55
Country of Birth	United Kingdom	-
Country of Citizenship	United Kingdom	-
Current Department	Psych. and Neuroscience	Allied Health
Current Contract	Permanent	Permanent
Current FTE	Full-Time	Full-Time
Current Gross Yearly Wage	£40.001-45.000	£35.001-40.000

C Demographic Characteristics of Mothers and Non-Mothers

In this section, we show in more detail the modal characteristics of mothers and non-mothers in our sample (Table C.1), as discussed in the main body of the paper.

Table C.1: Modal Mothers and Non-Mothers: Survey.

	Mothers	Non-Mothers
Age	39	33
Country of Birth	United Kingdom	United Kingdom
Country of Citizenship	United Kingdom	United Kingdom
Current Department	Biological Sciences	Psych. and Neuroscience
Current Title	Senior Lecturer	Lecturer
Current Contract	Permanent	Permanent
Current FTE	Full-Time	Full-Time
Current Gross Yearly Wage	45,001-50,000	35,001-40,000
Observations	3,722	3,604

D Alternative measures of maternity leave generosity

In the main body of the paper, we presented descriptive statistics regarding occupational maternity leave generosity looking at the variation in Full Weeks Equivalent (FWE) across HEIs and indvidual policies/packages. In this section, we replicate this analysis looking at FWE variation by maternity package (Table D.1). The larger n. (319 vs. 160) is due to the fact we have information on several, superseded policies for many universities. We also employ an alternative measure of generosity, the number of weeks in which full salary was being paid, and show how it varies across HEIs (Table D.2) and single policies (Table D.3). Finally, we present data on the distribution of years in which the universities in our sample last reviewed their policies (as of 2019) in Table D.4, as well as descriptive statistics on generosity, both by HEI (Table D.5) and leave package (Table D.6).

Table D.1: Full Weeks Equivalent (FWE) by Occupational Policy.

Full Weeks Equivalent	N. Packages	%
0.00	1	0.31
5.40	9	2.82
5.80	1	0.31
6.00	3	0.94
11.40	8	2.51
11.80	58	18.18
12.00	30	9.40
13.00	1	0.31
13.80	1	0.31
14.00	1	0.31
15.00	2	0.63
15.80	5	1.57
16.00	83	26.02
17.00	8	2.51
18.00	56	17.55
19.00	4	1.25
19.50	10	3.13
20.00	4	1.25
21.40	1	0.31
21.90	1	0.31
22.00	5	1.57
22.50	10	3.13
23.40	1	0.31
26.00	15	4.70
39.00	1	0.31
Total	319	100.00

Table D.2: Full-salary Weeks by HEI.

Full Salary Weeks	N. Universities	%
0	12	7.50
4	38	23.75
6	23	14.38
8	24	15.00
9	3	1.88
10	1	0.63
12	3	1.88
13	7	4.38
14	2	1.25
16	7	4.38
18	30	18.75
19	1	0.63
20	2	1.25
26	7	4.38
Total	160	100.00

Table D.3: Full-salary Weeks by Occupational Package.

Full Salary Weeks	N. Packages	%
0	23	7.21
4	65	20.38
6	49	15.36
8	59	18.50
9	4	1.25
10	1	0.31
12	7	2.19
13	12	3.76
14	2	0.63
16	25	7.84
17	1	0.31
18	52	16.30
19	1	0.31
20	3	0.94
26	15	4.70
Total	319	100.00

Table D.4: Year in which Leave Policies were Last Reviewed by HEI.

Last Occupational Reform	N. Universities.	%
n.a.	2	1.25
2003	1	0.63
2004	1	0.63
2007	6	3.75
2008	5	3.13
2009	7	4.38
2010	5	3.13
2011	17	10.63
2012	10	6.25
2013	12	7.50
2014	20	12.50
2015	55	34.38
2016	2	1.25
2017	7	4.38
2018	9	5.63
2019	1	0.63
Total	160	100.00

Table D.5: Descriptive Statistics for Leave Generosity Measures (by HEI).

	N.	Mean	SD	Min.	Max.
Salary Replacement Weeks	160	20.24	5.569	0	39
Full Salary Weeks	160	9.79	6.813	0	26
Full Weeks Equivalent (FWE)	160	15.51	4.360	0	26

Table D.6: Descriptive Statistics for Leave Generosity (by Package).

	N.	Mean	SD	Min.	Max.
Salary Replacement Weeks	319	20.35	6.672	0	52
Full Salary Weeks	319	9.91	6.712	0	26
Full Weeks Equivalent (FWE)	319	15.71	4.536	0	39

E Survey

In this final section of the paper, we report in full the questionnaire upon which our survey data was constructed.

E.1 Introduction

Studies of female academics highlight gender disparities in senior ranks. This study asks whether differential types of provisions and benefits across UK higher education institutions exacerbate differentials in the career paths and job satisfaction of female academics. Systematic empirical research on how changes in policies affect career outcomes in the sector is lacking. This study seeks to fill this gap by providing reliable empirical results that allow a judgement to be made as to the degree to which differential benefits affect female academics.

The following survey seeks to obtain information that will allow the principal and co-investigators to better understand the career progression of female academics in the United Kingdom. As stated in the introductory letter, your participation is totally voluntary and you are not compelled to answer any questions contained in the survey. If at any time, you feel uncomfortable, you may discontinue taking the survey by closing your browser. *Please note that the link you just clicked or pasted to begin the survey is specific to your e-mail address. Please do not forward the introductory e-mail. The survey distribution time is randomised, so your colleagues may receive similar requests on different dates.*

The data collection methods were approved by the Humanities and Social Sciences Research Ethics Committee at Warwick, and all information that identifies respondents as individuals will not be made publicly available. Great care will be taken to either aggregate up or coarsely categorize potential identifying information. Datasets with identifying information only will be maintained in secure, password protected servers. If you have any concerns about data confidentiality or the motivation behind the need to collect data via this survey please contact PI Professor Vera Troeger.

Any complaint about the way you have been dealt with during the study or any possible harm you might have suffered will be addressed. Please address your complaint to the person below, who is a senior University of Warwick official entirely independent of this study:

Head of Research Governance
Research & Impact Services
University House
University of Warwick
Coventry CV4 8UW

Do you wish to proceed and take the survey?

1. Yes

2. No (If selected–skip to end of survey)

Gender Screen What is your gender?

1. Female

2. Male (If Selected–skip to end of survey)

3. Other (Text Box Given) (If selected–skip to end of survey)

4. Prefer not to say (If selected–skip to end of survey)

E.2   University Employment History

- What is your current place of employment?

    - Respondents provided with a drop-down box with all possible Universities

- Which of the following do you consider your "home" department?

    - Respondents provided with long list of departments with an "other" option

- (If "other" selected above) In your own words, please name the unit you consider your "home" Department

    - Text Box Given

- What is your current title or role?

    1. Emeritus/Emerita/Retired

    2. Professor

    3. Associate Professor

4. Reader

5. Senior Lecturer

6. Lecturer

7. Early Career Researcher

8. Research Assistant

9. Other (Text Box Given)

- Which best describes the responsibilities set by your current employment contract?

    1. Teaching and Research

    2. Teaching Only

    3. Research Only

    4. Other (Text Box Given)

    5. Don't Know

- Which best describes your current employment contract?

    1. Permanent

    2. Probationary (with a defined route to Permanency)

    3. Fixed-Term

    4. Other (Text Box Given)

- Do you currently work full or part time?

    1. Full-Time

    2. Part-Time

- (If "Part-Time" is selected above) Employees who work less than full time often have contracts specified as a fraction of "Full Time Equivalent" or FTE. Do you happen to know your FTE?

    1. Yes, it is (Text Box)

    2. No

- When were you appointed to this role?

- Month and Year of Appointment: (Respondents provided with Month and Year drop-down boxes–year begins with "Before 1970" before listing specific years until present)

- Can you name the (up to) six most recent positions you held prior to your current role? Please include previous positions at your current institution and then posts you held prior to becoming employed by (respondents' current university). (Note that there is an option under "position held" for career break)

  - Respondents given drop down menus recording the following information for up to six previous jobs.

    1. Position
    2. Start Month
    3. Start Year (Drop-down menu lists "Before 2000" and then lists specific year options for 2001 and beyond)
    4. Contract Type

  - For each of the previous six jobs, respondents were asked to type in their place of employment in an open text box.

Doctorate Details

- When and where did you receive your doctorate? (Year drop-down from "before 1955" and then annually until the present year. Respondents also were given the option to state that they did not possess a doctorate)

  - After a row heading of "Year and Institution" respondents were given drop down boxes for the following:

    1. Year
    2. Country (of PhD. institution)

  - Respondents were asked to name their PhD. institution in an open text box.

E.3   Marital Status

- Which best describes you current relationship status:

  1. Single (never married)
  2. Married and living with a husband/wife

3. A civil partner in a legally recognized Civil Partnership

4. Living with a partner but not married or in a legally recognized partnership

5. Married and separated from your husband/wife

6. Divorced

7. Widowed

8. Other (Text Box Given)

9. Prefer not to say

- (Ask if the following choices were selected above: Married and living with a husband/wife; A civil partner in a legally recognized Civil Partnership; Living with a partner but not married or in a legally recognized partnership; Married and separated from your husband/wife): When did you get Married, enter into a Civil Partnership, or, if your marriage/partnership is not legally recognized, begin living with your partner?

  – Under the row heading "Anniversary", respondents were provided with drop-down menus to list month and year of partnership

- (Ask if "Married and Separated" or "Divorced" is selected in response to the "current relationship" question above): When did you and your spouse or partner separate or divorce?

  – Under the row heading "Date of Separation," respondents were provided with drop-down menus to list month and year of separation

- (Ask if "Widowed" is selected in response to the "current relationship" question above): When did you and your spouse or partner separate or divorce?

  – Under the row heading "Date of partner's death," respondents were provided with drop-down menus to list month and year of separation

E.4 Child or Not

- Do you have any children?

  1. Yes

  2. Yes, and I am currently pregnant

  3. No

4. No, but I am currently pregnant

- (If choices 1,2, or 4 are selected above): Are these children twins/multiples?

    1. Yes

    2. No

- (If "yes" to the above question): Thank you very much for your interest. The nature of this survey on maternity leave currently is geared towards parents who do not have twins/multiples. However, the role of mothering multiples in academia is very important to us. We hope to contact you early in the next academic year with a survey specific to mothers of twins/multiples. In the meantime, please do not hesitate to contact us with any questions or comments at economics.maternity@warwick.ac.uk. To avoid unnecessary reminders and additional e-mails, please click "End the Survey" to exit.

    – *End the survey*

E.5 Adoption

- Are any of these children adopted?

    1. Yes–all of them

    2. Yes–at least one but not all of them

    3. No

- (If "Yes–all of them" or "Yes–at least one but not all of them" is selected): In your own words, please describe adoptive leave and benefit provisions made available to you in the lead-up and following the adoption of your child/children. Please also describe whether you took all of the available provision and, if you took less than the maximum benefits allowed, please feel free to discuss why you made this decision. Please feel free to comment on any shortcomings of such provisions and how you believe the University sector could better support academics who wish to adopt.

    – Text box given

MAJOR BRANCHING OF THE SURVEY DEPENDING ON CHILD SITUATION

- **Rules for Branching**

1. **If Respondent has no children or all children are adopted, skip to Section: Job Satisfaction Preview**

2. **If Respondent is pregnant with first child, or currently has children and is pregnant skip to Section: Due Date**

3. **If Respondent currently has children, skip to Section: Child History**

E.6   Due Date

- (Ask if respondent is pregnant with first child or currently has children and is pregnant) When is your due date?

  - Under the row heading "Due date", respondents were provided with drop-down menus to list month and year of expected date of birth

E.7   Child History

- (Ask if respondent has children or has children and is pregnant) How many children do you have?

  1. 1
  2. 2
  3. 3
  4. 4
  5. 5
  6. 6+

- (If children number is greater than 3, respondent sees the following statement): To keep the survey of manageable length, we will ask specific questions only about your three youngest children.

THE FOLLOWING IS ASKED OF ALL RESPONDENTS WITH CHILDREN

E.8   Birth Date Youngest Child

- Can you list the date of birth for your youngest child?

  - Under the row heading "Youngest Child D.O.B.," respondents were provided with drop-down menus to list day, month and year of childbirth.

E.9 Other Parent's Education

- When your youngest child was born, can you recall the level of education of the father or other parent?

    1. Less than Secondary Education

    2. Secondary education - but left without qualifications

    3. Secondary education - graduated with GCSE or Equivalent

    4. Secondary education - graduated with A levels or Equivalent

    5. Uncompleted further education College or University

    6. Graduate of any further education College or University

    7. Masters

    8. Doctorate

    9. Post Doctorate

    10. Other

    11. Not Applicable/Prefer Not to Say

    12. Don't Know

- When your youngest child was born, can you recall the father or other parent of this child's work status?

    1. Working full time (more than 30 hours a week)

    2. Working part-time (8-30 hours a week)

    3. Carer (of home, family, etc.) (full time)

    4. Student (full-time)

    5. Temporarily unemployed (but actively seeking work)

    6. Retired

    7. Other permanently unemployed (e.g. chronically sick, independent means)

    8. Not Applicable/Prefer Not to Say

    9. Don't Know

- (If working part or full-time is selected): When your youngest child was born, was the father or other parent of this child employed in the higher education sector?

1. Yes

2. No

- (If partner working in higher education selected): What was their title or role?

    1. Professor

    2. Associate Professor

    3. Reader

    4. Senior Lecturer

    5. Lecturer

    6. Early Career Researcher

    7. Research Assistant

    8. Professional Services Staff

    9. Other (Text Box Provided)

- (If partner not working in higher education sector selected): What degree of responsibility did the child's father or other parent have at work when your youngest child was born?

    1. Top (Chief Executive, Chairperson, President)

    2. Senior Executive (Departmental Head, Managing Director, Director, Vice President, Board Level, Professionals)

    3. Upper Middle (Departmental Executives, Factory Managers, Senior Professional Staff)

    4. Middle (Office Managers, Professional Staff, Mid-Level Administrators)

    5. First Level (Forepersons, Supervisors)

    6. Waged Staff (Machine Operators, Clerical/Secretarial and Support Staff, Technicians)

    7. Other or Above Classifications Not Appropriate for the Sector–Describe Role Below (Text Box Provided)

E.10   Maternity Leave

Section Introduction: The next set of questions concerns your work during the time(s) of your pregnancy/pregnancies and any subsequent maternity leave you may have taken.

We realise that time may have passed, but we would be grateful if you answered the questions as best as you can recall.

E.11   Maternity Leave Youngest

- Did you take (are you taking) maternity leave after the birth of your youngest child?

    1. Yes

    2. No (If selected, skip to question beginning "If you are taking less than...")

    3. Don't Know (If selected, skip to question beginning "What type of contract...")

- Below is a list of maternity leave benefits that may or may not have been available to you following the birth of your youngest child. To the best of your ability, please check the boxes that most closely describe the type(s) and levels of maternity leave you took. (If you currently are on maternity leave, please indicate which benefits you intend to utilize).

- Respondents received a grid asking them about the following types of benefits in rows:

    1. Leave with FULL Salary replacement

    2. Leave with PARTIAL Salary replacement

    3. Statutory Maternity Pay

    4. Unpaid Leave

    - Choices across columns were as follows:

        1. Took Maximum Amount Offered

        2. Took Some of this Type of Leave

        3. Did not Take Any of this Type of Leave

        4. This Type of Leave Was Not Offered to Me

        5. Don't Know or Don't Remember

- (Asked if respondent did not answer "Took Maximum Amount Offered" to all forms of maternity leave above): If you took or are taking less than the maximum level of maternity leave benefits offered to you, can you explain why in 100 words or less? (Text box was offered)

- Did you formally reduce your number of contracted hours following the birth of your youngest child?

    1. Yes

    2. No

    3. Don't Remember

- (Display if "yes" to above): Was the reduction in official contracted hours temporary or permanent?

    1. Temporary

    2. Permanent

    3. Don't Remember

- (Display if "yes" to question on reducing contracted hours was answered) What was the reduction in FTE?

    – Respondents were given a grid with one row titled "Change in FTE" and to blanks to fill in: "FTE Before Maternity Leave" and "FTE After Maternity Leave"

- When you returned to work following the birth of your youngest child, were you offered any of the following (tick all that apply): (If you currently are on maternity leave, please list any benefits you believe you will be offered):

    1. Teaching Relief (fewer hours, grading assistance, reduction of the number of modules, etc.)

    2. Administrative Service Relief

    3. Reduction in Expected Research Outputs

    4. Sabbatical

    5. Other (Text Box Provided)

    6. None of the Above

    7. Not Applicable–I was not in Academia

    8. Don't Know

- What type of contract did (do) you have when your youngest child was born?

    1. Permanent

2. Probationary

3. Fixed–Term Contract

4. Other (Text Box Provided)

5. Don't Remember

- (Question asked for respondents answering "Probationary" above): Was (Will) the length of your probationary contract (be) extended as a result of your pregnancy with your youngest child?

    1. Yes

    2. No

    3. Don't Remember

- (Questioned asked to respondents answering "yes" to contract extension question above): For how long was (will) your probationary period (be) extended as a result of your pregnancy with your youngest child?

    1. Less Than 6 Months

    2. Between 6 Months and 1 Year

    3. Between 1 and 2 Years

    4. More Than 2 Years

    5. Don't Know or Don't Remember

- (If respondent answered "Fixed–Term Contract" above, they received this question): Was (Will) the length of your fixed-term contract (be) extended as a result of your pregnancy with your youngest child?

    1. Yes

    2. No

    3. Don't Know or Don't Remember

- (If respondent answered "Yes" to above question and was on a "Fixed–Term Contract): For how long was (will) your fixed-term contract (be) extended as a result of your pregnancy with your youngest child?

    1. Less Than 6 Months

    2. Between 6 Months and 1 Year

3. Between 1 and 2 Years

4. More Than 2 Years

5. Don't Know or Don't Remember

- (If the respondent indicated they took any form of maternity leave after the birth of their youngest child): During your maternity leave for your youngest child, which, if any, of the following academic activities did you undertake (are you undertaking)? (Tick All that Apply)

    1. Keeping in touch with academic colleagues for work related purposes

    2. Mentoring and working with post-doctoral and/or doctoral students

    3. Attending academic conferences

    4. Conducting research

    5. Teaching classes on an ad hoc basis

    6. Undertaking administrative duties at the University

    7. Undertaking administrative duties associated with your field or discipline (e.g. edited a journal, submitting a peer review)

    8. Other

    9. Not Applicable–I was not in Academia

    10. Don't Know/Don't Remember

- Still referring to the period around the birth of your youngest child, how supportive was (is) your Head of Department or Line Manager during each of the following events:

    – Respondents were given a grid with the following rows:

        1. Pregnancy

        2. Returning from Maternity Leave (if applicable)

        3. During the Child's First Two Years (if applicable)

    – Respondents could select the following for each of the above row options

        1. Very Supportive

        2. Slightly Supportive

        3. Neither Supportive nor Unsupportive

        4. Slightly Unsupportive

5. Very Unsupportive

6. Not Applicable

– After returning to work from childbirth and/or maternity leave following the birth of your youngest child, did you feel excluded from important Departmental or Work Related activities that could be considered vital to career enhancement?

1. Yes, definitely

2. Yes, somewhat

3. Only occasionally

4. Not at all

5. No applicable or Don't Know

E.12 Childcare Youngest

- What best describes the childcare option you utilized (plan to utilize) for your youngest child for the first two years after you returned (return) to work from maternity leave?

1. Nursery

2. Nanny or au pair

3. Combination of nursery and nanny or au pair

4. My partner

5. A relative (e.g. grandparent)

6. Informal childcare arrangements

7. No childcare available (If selected, skip to question beginning...during the youngest child's first two...)

8. Other (text box provided)

9. Don't remember (If selected, skip to question beginning...during the youngest child's first two...)

- In a typical week, during term time, how many hours of childcare was (is or will be) available to you for your youngest child for the two years after you returned to work from maternity leave?

1. Less than 5

2. Between 6 and 10

3. Between 11 and 20

4. Between 21 and 30

5. Between 31 and 40

6. More than 40

7. Don't Know or Don't Remember

- During the youngest child's first two years of life, did you consider yourself (or will you be) the child's primary caregiver?

    1. Yes

    2. No

    3. Not Applicable or Prefer Not to Say

    4. Don't Know or Don't remember

- (Display if answer to the above question was yes) Approximately what percentage of childcare responsibilities were (are or will be) handled by your partner or spouse in the two years following your youngest child's birth?

    1. Less than 10%

    2. Between 11 and 25%

    3. Between 26% and 50%

    4. Between 51% and 75%

    5. Between 76% and 100%

    6. Don't Know or Don't remember

- Which of the following childcare benefits, if any, did (will) your university make available to you following the birth of your first child? (Check all that apply)

    1. Childcare vouchers

    2. A salary sacrifice scheme to pay for childcare

    3. Priority placements at a day care centre

    4. Reduced tuition at a day care centre

    5. Other (text box given)

6. Don't Know or Don't remember

NOTE: IF RESPONDENT HAS TWO OR MORE CHILDREN, THE FOLLOWING OCCURS WITH SECTION ORDERING

1. Birth Date: Youngest Child (as above)

2. Birth Date: Second Youngest Child (new section below)

3. Other Parent's Education (as above)

4. Other Parent's Education–Second Youngest Child (new section below)

5. Maternity Leave (as above)

6. Maternity Leave Youngest (as above) (new section below)

7. Childcare Youngest (as above)

8. Maternity Leave Second Youngest (new section below)

9. Childcare Second Youngest (new section below)

NOTE: IF RESPONDENT HAS THREE OR MORE CHILDREN, THE FOLLOWING OCCURS WITH SECTION ORDERING

1. Birth Date: Youngest Child (as above)

2. Birth Date: Second Youngest Child (new section below)

3. Birth Date: Third Youngest Child (new section below)

4. Other Parent's Education (as above)

5. Other Parent's Education–Second Youngest Child (new section below)

6. Other Parent's Education–Third Youngest Child (new section below)

7. Maternity Leave (as above)

8. Maternity Leave Youngest (as above)

9. Childcare Youngest (as above)

10. Maternity Leave Second Youngest (new section below)

11. Childcare Second Youngest (new section below)

12. Maternity Leave Third Youngest (new section below)

13. Childcare Third Youngest (new section below)

Birth Date: Second Youngest Child

- Can you list the date of birth for your second youngest child?

    – Under the row heading "2nd Youngest D.O.B.," respondents were provided with drop-down menus to list day, month and year of childbirth.

E.13   Birth Date: Third Youngest Child

- Can you list the date of birth for your third youngest child?

    – Under the row heading "3rd Youngest D.O.B.," respondents were provided with drop-down menus to list day, month and year of childbirth.

E.14   Other Parent's Education–Second Youngest Child

- Did the father or other parent of your second youngest child have the same educational and occupational levels as the father had at the time of birth of your youngest child?

    1. Yes (If selected, skip to next section)

    2. No

    3. Not Applicable or Prefer Not to Say (If selected, skip to next section)

- When your second youngest child was born, can you recall the level of education of the father or other parent?

    1. Less than Secondary Education

    2. Secondary education - but left without qualifications

    3. Secondary education - graduated with GCSE or Equivalent

    4. Secondary education - graduated with A levels or Equivalent

    5. Uncompleted further education College or University

    6. Graduate of any further education College or University

7. Masters

8. Doctorate

9. Post Doctorate

10. Other

11. Not Applicable/Prefer Not to Say

12. Don't Know

- When your second youngest child was born, can you recall the father or other parent of this child's work status?

  1. Working full time (more than 30 hours a week)

  2. Working part-time (8-30 hours a week)

  3. Carer (of home, family, etc.) (full time)

  4. Student (full-time)

  5. Temporarily unemployed (but actively seeking work)

  6. Retired

  7. Other permanently unemployed (e.g. chronically sick, independent means)

  8. Not Applicable/Prefer Not to Say

  9. Don't Know

- (If working part or full-time is selected): When your second youngest child was born, was the father or other parent of this child employed in the higher education sector?

  1. Yes

  2. No

- (If partner working in higher education selected): What was their title or role?

  1. Professor

  2. Associate Professor

  3. Reader

  4. Senior Lecturer

  5. Lecturer

6. Early Career Researcher

7. Research Assistant

8. Professional Services Staff

9. Other (Text Box Provided)

- (If partner not working in higher education sector selected): What degree of responsibility did the child's father or other parent have at work when your second youngest child was born?

    1. Top (Chief Executive, Chairperson, President)

    2. Senior Executive (Departmental Head, Managing Director, Director, Vice President, Board Level, Professionals)

    3. Upper Middle (Departmental Executives, Factory Managers, Senior Professional Staff)

    4. Middle (Office Managers, Professional Staff, Mid-Level Administrators)

    5. First Level (Forepersons, Supervisors)

    6. Waged Staff (Machine Operators, Clerical/Secretarial and Support Staff, Technicians)

    7. Other or Above Classifications Not Appropriate for the Sector–Describe Role Below (Text Box Provided)

E.15 Other Parent's Education–Third Youngest Child

- Did the father or other parent of your third youngest child have the same educational and occupational levels as the father had at the time of birth of your youngest child?

    1. Yes (If selected, skip to next section)

    2. No

    3. Not Applicable or Prefer Not to Say (If selected, skip to next section)

- When your third youngest child was born, can you recall the level of education of the father or other parent?

    1. Less than Secondary Education

    2. Secondary education - but left without qualifications

3. Secondary education - graduated with GCSE or Equivalent

4. Secondary education - graduated with A levels or Equivalent

5. Uncompleted further education College or University

6. Graduate of any further education College or University

7. Masters

8. Doctorate

9. Post Doctorate

10. Other

11. Not Applicable/Prefer Not to Say

12. Don't Know

- When your third youngest child was born, can you recall the father or other parent of this child's work status?

  1. Working full time (more than 30 hours a week)

  2. Working part-time (8-30 hours a week)

  3. Carer (of home, family, etc.) (full time)

  4. Student (full-time)

  5. Temporarily unemployed (but actively seeking work)

  6. Retired

  7. Other permanently unemployed (e.g. chronically sick, independent means)

  8. Not Applicable/Prefer Not to Say

  9. Don't Know

- (If working part or full-time is selected): When your third youngest child was born, was the father or other parent of this child employed in the higher education sector?

  1. Yes

  2. No

- (If partner working in higher education selected): What was their title or role?

  1. Professor

  2. Associate Professor

3. Reader

4. Senior Lecturer

5. Lecturer

6. Early Career Researcher

7. Research Assistant

8. Professional Services Staff

9. Other (Text Box Provided)

- (If partner not working in higher education sector selected): What degree of responsibility did the child's father or other parent have at work when your third youngest child was born?

    1. Top (Chief Executive, Chairperson, President)

    2. Senior Executive (Departmental Head, Managing Director, Director, Vice President, Board Level, Professionals)

    3. Upper Middle (Departmental Executives, Factory Managers, Senior Professional Staff)

    4. Middle (Office Managers, Professional Staff, Mid-Level Administrators)

    5. First Level (Forepersons, Supervisors)

    6. Waged Staff (Machine Operators, Clerical/Secretarial and Support Staff, Technicians)

    7. Other or Above Classifications Not Appropriate for the Sector–Describe Role Below (Text Box Provided)

E.16   Maternity Leave Second Youngest

- Did you take maternity leave after the birth of your second youngest child?

    1. Yes

    2. No (If selected, skip to question beginning "If you are taking less than...")

    3. Don't Know (If selected, skip to question beginning "What type of contract...")

- Below is a list of maternity leave benefits that may or may not have been available to you following the birth of your second youngest child. To the best of your ability, please check the boxes that most closely describe the type(s) and levels of maternity leave you took.

- Respondents received a grid asking them about the following types of benefits in rows:

    1. Leave with FULL Salary replacement
    2. Leave with PARTIAL Salary replacement
    3. Statutory Maternity Pay
    4. Unpaid Leave

    – Choices across columns were as follows:
        1. Took Maximum Amount Offered
        2. Took Some of this Type of Leave
        3. Did not Take Any of this Type of Leave
        4. This Type of Leave Was Not Offered to Me
        5. Don't Know or Don't Remember

- (Asked if respondent did not answer "Took Maximum Amount Offered" to all forms of maternity leave above): If you took less than the maximum level of maternity leave benefits offered to you, can you explain why in 100 words or less? (Text box was offered)

- Did you formally reduce your number of contracted hours following the birth of your second youngest child?

    1. Yes
    2. No
    3. Don't Remember

- (Display if "yes" to above): Was the reduction in official contracted hours temporary or permanent?

    1. Temporary
    2. Permanent
    3. Don't Remember

- (Display if "yes" to question on reducing contracted hours was answered) What was the reduction in FTE?

– Respondents were given a grid with one row titled "Change in FTE" and to blanks to fill in: "FTE Before Maternity Leave" and "FTE After Maternity Leave"

- When you returned to work following the birth of your second youngest child, were you offered any of the following (tick all that apply):

  1. Teaching Relief (fewer hours, grading assistance, reduction of the number of modules, etc.)
  2. Administrative Service Relief
  3. Reduction in Expected Research Outputs
  4. Sabbatical
  5. Other (Text Box Provided)
  6. None of the Above
  7. Not Applicable–I was not in Academia
  8. Don't Know

- What type of contract did you have when your second youngest child was born?

  1. Permanent
  2. Probationary
  3. Fixed–Term Contract
  4. Other (Text Box Provided)
  5. Don't Remember

- (Question asked for respondents answering "Probationary" above): Was the length of your probationary contract extended as a result of your pregnancy with your second youngest child?

  1. Yes
  2. No
  3. Don't Remember

- (Questioned asked to respondents answering "yes" to contract extension question above): For how long was your probationary period extended as a result of your pregnancy with your second youngest child?

  1. Less Than 6 Months

2. Between 6 Months and 1 Year

3. Between 1 and 2 Years

4. More Than 2 Years

5. Don't Know or Don't Remember

- (If respondent answered "Fixed–Term Contract" above, they received this question): Was the length of your fixed-term contract extended as a result of your pregnancy with your second youngest child?

  1. Yes

  2. No

  3. Don't Know or Don't Remember

- (If respondent answered "Yes" to above question and was on a "Fixed–Term Contract): For how long was your fixed-term contract extended as a result of your pregnancy with your second youngest child?

  1. Less Than 6 Months

  2. Between 6 Months and 1 Year

  3. Between 1 and 2 Years

  4. More Than 2 Years

  5. Don't Know or Don't Remember

- (If the respondent indicated they took any form of maternity leave after the birth of their second youngest child): During your maternity leave for your second youngest child, which, if any, of the following academic activities did you undertake? (Tick All that Apply)

  1. Keeping in touch with academic colleagues for work related purposes

  2. Mentoring and working with post-doctoral and/or doctoral students

  3. Attending academic conferences

  4. Conducting research

  5. Teaching classes on an ad hoc basis

  6. Undertaking administrative duties at the University

7. Undertaking administrative duties associated with your field or discipline (e.g. edited a journal, submitting a peer review)

8. Other

9. Not Applicable–I was not in Academia

10. Don't Know/Don't Remember

- Still referring to the period around the birth of your second youngest child, how supportive was (is) your Head of Department or Line Manager during each of the following events:

    – Respondents were given a grid with the following rows:

        1. Pregnancy
        2. Returning from Maternity Leave (if applicable)
        3. During the Child's First Two Years (if applicable)

    – Respondents could select the following for each of the above row options

        1. Very Supportive
        2. Slightly Supportive
        3. Neither Supportive nor Unsupportive
        4. Slightly Unsupportive
        5. Very Unsupportive
        6. Not Applicable

    – After returning to work from childbirth and/or maternity leave following the birth of your second youngest child, did you feel excluded from important Departmental or Work Related activities that could be considered vital to career enhancement?

        1. Yes, definitely
        2. Yes, somewhat
        3. Only occasionally
        4. Not at all
        5. No applicable or Don't Know

Childcare Second Youngest

- What best describes the childcare option you utilized (plan to utilize) for your second youngest child for the first two years after you returned (return) to work from maternity leave?

1. Nursery

2. Nanny or au pair

3. Combination of nursery and nanny or au pair

4. My partner

5. A relative (e.g. grandparent)

6. Informal childcare arrangements

7. No childcare available (If selected, skip to question beginning...during the youngest child's first two...)

8. Other (text box provided)

9. Don't remember (If selected, skip to question beginning...during the youngest child's first two...)

- In a typical week, during term time, how many hours of childcare was (is or will be) available to you for your second youngest child for the two years after you returned to work from maternity leave?

   1. Less than 5

   2. Between 6 and 10

   3. Between 11 and 20

   4. Between 21 and 30

   5. Between 31 and 40

   6. More than 40

   7. Don't Know or Don't Remember

- During the second youngest child's first two years of life, did you consider yourself (or will you be) the child's primary caregiver?

   1. Yes

   2. No

   3. Not Applicable or Prefer Not to Say

   4. Don't Know or Don't remember

- (Display if answer to the above question was yes) Approximately what percentage of childcare responsibilities were (are or will be) handled by your partner or spouse in the two years following your second youngest child's birth?

1. Less than 10%

2. Between 11 and 25%

3. Between 26% and 50%

4. Between 51% and 75%

5. Between 76% and 100%

6. Don't Know or Don't remember

- Which of the following childcare benefits, if any, did (will) your university make available to you following the birth of your second child? (Check all that apply)

  1. Childcare vouchers

  2. A salary sacrifice scheme to pay for childcare

  3. Priority placements at a day care centre

  4. Reduced tuition at a day care centre

  5. Other (text box given)

  6. Don't Know or Don't remember

E.17 Maternity Leave Third Youngest

- Did you take maternity leave after the birth of your third youngest child?

  1. Yes

  2. No (If selected, skip to question beginning "If you are taking less than...")

  3. Don't Know (If selected, skip to question beginning "What type of contract...")

- Below is a list of maternity leave benefits that may or may not have been available to you following the birth of your third youngest child. To the best of your ability, please check the boxes that most closely describe the type(s) and levels of maternity leave you took.

- Respondents received a grid asking them about the following types of benefits in rows:

  1. Leave with FULL Salary replacement

  2. Leave with PARTIAL Salary replacement

  3. Statutory Maternity Pay

4. Unpaid Leave

- Choices across columns were as follows:

    1. Took Maximum Amount Offered
    2. Took Some of this Type of Leave
    3. Did not Take Any of this Type of Leave
    4. This Type of Leave Was Not Offered to Me
    5. Don't Know or Don't Remember

- (Asked if respondent did not answer "Took Maximum Amount Offered" to all forms of maternity leave above): If you took less than the maximum level of maternity leave benefits offered to you, can you explain why in 100 words or less? (Text box was offered)

- Did you formally reduce your number of contracted hours following the birth of your third youngest child?

    1. Yes
    2. No
    3. Don't Remember

- (Display if "yes" to above): Was the reduction in official contracted hours temporary or permanent?

    1. Temporary
    2. Permanent
    3. Don't Remember

- (Display if "yes" to question on reducing contracted hours was answered) What was the reduction in FTE?

    - Respondents were given a grid with one row titled "Change in FTE" and to blanks to fill in: "FTE Before Maternity Leave" and "FTE After Maternity Leave"

- When you returned to work following the birth of your third youngest child, were you offered any of the following (tick all that apply):

    1. Teaching Relief (fewer hours, grading assistance, reduction of the number of modules, etc.)

2. Administrative Service Relief

3. Reduction in Expected Research Outputs

4. Sabbatical

5. Other (Text Box Provided)

6. None of the Above

7. Not Applicable–I was not in Academia

8. Don't Know

- What type of contract did you have when your third youngest child was born?

    1. Permanent

    2. Probationary

    3. Fixed–Term Contract

    4. Other (Text Box Provided)

    5. Don't Remember

- (Question asked for respondents answering "Probationary" above): Was the length of your probationary contract extended as a result of your pregnancy with your third youngest child?

    1. Yes

    2. No

    3. Don't Remember

- (Questioned asked to respondents answering "yes" to contract extension question above): For how long was your probationary period extended as a result of your pregnancy with your third youngest child?

    1. Less Than 6 Months

    2. Between 6 Months and 1 Year

    3. Between 1 and 2 Years

    4. More Than 2 Years

    5. Don't Know or Don't Remember

- (If respondent answered "Fixed–Term Contract" above, they received this question): Was the length of your fixed-term contract extended as a result of your pregnancy with your third youngest child?

    1. Yes

    2. No

    3. Don't Know or Don't Remember

- (If respondent answered "Yes" to above question and was on a "Fixed–Term Contract): For how long was your fixed-term contract extended as a result of your pregnancy with your third youngest child?

    1. Less Than 6 Months

    2. Between 6 Months and 1 Year

    3. Between 1 and 2 Years

    4. More Than 2 Years

    5. Don't Know or Don't Remember

- (If the respondent indicated they took any form of maternity leave after the birth of their third youngest child): During your maternity leave for your third youngest child, which, if any, of the following academic activities did you undertake? (Tick All that Apply)

    1. Keeping in touch with academic colleagues for work related purposes

    2. Mentoring and working with post-doctoral and/or doctoral students

    3. Attending academic conferences

    4. Conducting research

    5. Teaching classes on an ad hoc basis

    6. Undertaking administrative duties at the University

    7. Undertaking administrative duties associated with your field or discipline (e.g. edited a journal, submitting a peer review)

    8. Other

    9. Not Applicable–I was not in Academia

    10. Don't Know/Don't Remember

- Still referring to the period around the birth of your third youngest child, how supportive was (is) your Head of Department or Line Manager during each of the following events:

    - Respondents were given a grid with the following rows:

        1. Pregnancy
        2. Returning from Maternity Leave (if applicable)
        3. During the Child's First Two Years (if applicable)

    - Respondents could select the following for each of the above row options

        1. Very Supportive
        2. Slightly Supportive
        3. Neither Supportive nor Unsupportive
        4. Slightly Unsupportive
        5. Very Unsupportive
        6. Not Applicable

    - After returning to work from childbirth and/or maternity leave following the birth of your third youngest child, did you feel excluded from important Departmental or Work Related activities that could be considered vital to career enhancement?

        1. Yes, definitely
        2. Yes, somewhat
        3. Only occasionally
        4. Not at all
        5. No applicable or Don't Know

E.18   Childcare Third Youngest

- What best describes the childcare option you utilized (plan to utilize) for your third youngest child for the first two years after you returned (return) to work from maternity leave?

    1. Nursery
    2. Nanny or au pair
    3. Combination of nursery and nanny or au pair

4. My partner

5. A relative (e.g. grandparent)

6. Informal childcare arrangements

7. No childcare available (If selected, skip to question beginning...during the youngest child's first two...)

8. Other (text box provided)

9. Don't remember (If selected, skip to question beginning...during the youngest child's first two...)

- In a typical week, during term time, how many hours of childcare was (is or will be) available to you for your third youngest child for the two years after you returned to work from maternity leave?

  1. Less than 5

  2. Between 6 and 10

  3. Between 11 and 20

  4. Between 21 and 30

  5. Between 31 and 40

  6. More than 40

  7. Don't Know or Don't Remember

- During the third youngest child's first two years of life, did you consider yourself (or will you be) the child's primary caregiver?

  1. Yes

  2. No

  3. Not Applicable or Prefer Not to Say

  4. Don't Know or Don't remember

- (Display if answer to the above question was yes) Approximately what percentage of childcare responsibilities were (are or will be) handled by your partner or spouse in the two years following your third youngest child's birth?

  1. Less than 10%

  2. Between 11 and 25%

3. Between 26% and 50%

4. Between 51% and 75%

5. Between 76% and 100%

6. Don't Know or Don't remember

- Which of the following childcare benefits, if any, did (will) your university make available to you following the birth of your third child? (Check all that apply)

  1. Childcare vouchers

  2. A salary sacrifice scheme to pay for childcare

  3. Priority placements at a day care centre

  4. Reduced tuition at a day care centre

  5. Other (text box given)

  6. Don't Know or Don't remember

E.19   Job Satisfaction

Note: all respondents, with and without children received the remaining sections. Section preamble: "Now we would like to ask you a series of questions about your career.

- Do you think the teaching and administrative responsibilities you are asked to undertake are fair in comparison to the tasks assigned to your male colleagues of equal rank?

  1. Definitely Yes

  2. Probably Yes

  3. Probably Not

  4. Probably Not

  5. Don't Know

- Do you believe that, in comparison to your male colleagues, your salary is fair?

  1. Definitely Yes

  2. Probably Yes

  3. Probably Not

4. Probably Not

5. Don't Know

- In your own mind, how proactive have you been in seeking promotion and salary increases from your current institution?

  1. Very Proactive

  2. Somewhat Proactive

  3. A Little Proactive

  4. Not At All Proactive

  5. Don't Know

- Have you ever sought offers from other higher education institutions for the purposes of CAREER AND/OR SALARY ADVANCEMENT?

  1. Yes

  2. No

  3. Don't Know

- Have you ever sought offers from non-academic employers for the purposes of CAREER AND/OR SALARY ADVANCEMENT?

  1. Yes

  2. No

  3. Don't Know

- Have you ever sought offers from other higher education institutions for the purposes of obtaining a BETTER "WORK-LIFE" BALANCE?

  1. Yes

  2. No

  3. Don't Know

- Have you ever sought offers from non-academic employers for the purposes of obtaining a BETTER "WORK-LIFE" BALANCE?

  1. Yes

  2. No

3. Don't Know

- Please evaluate the level of satisfaction you have with your current job:

    1. Very Satisfied

    2. Satisfied

    3. Somewhat Satisfied

    4. Neutral

    5. Somewhat Dissatisfied

    6. Dissatisfied

    7. Very Dissatisfied

E.20 Commute to work

- Approximately how long does it take you to commute from your home to the University?

    – Respondents were provided with a drop-down menue where they could select options ranging from "under 15 minutes" to "More than two hours." A "don't know" option was provided.

E.21 Age and Ethnicity

- What year were you born?

    – Respondents received a drop down menu with a range from 1925–1995. A "Prefer Not to Say" option was available.

- What is the Month and Day of your Birth?

    – Respondents received a grid and under the row heading "Birthday" they had drop–down menus for "Month" and "Day".

- (Asked if respondent answered "Prefer Not to Say" to question asking year of birth): Would you prefer telling us your age range?

    1. Under 25

    2. 26-35

    3. 36-45

4. 46-55

5. 56-65

6. Over 65

7. Prefer not to say

- What ethnic group do you belong to?

  – This was presented to respondent as a drop–down menu with the following choices: White British, Any other white background, White and Black Caribbean, White and Black African, White and Asian, Any other mixed background, Indian, Pakistani, Bangladeshi, Any other Asian background, Black Caribbean, Black African, Any other black background, Chinese, Other ethnic group, Prefer not to say

- Are you a British citizen?

  1. Yes and I always have been

  2. Yes, I am a naturalised citizen

  3. No

  4. Prefer not to say

- (Asked if respondent was a naturalised citizen): Which country did you hold citizenship in before becoming naturalized? (List primary country of citizenship)

  – Respondents were provided with a drop–down list of all nations in the world to choose from

- (Asked if respondent indicated they were not a British citizen) Of what country are you a citizen? (List primary country of citizenship)

  – Respondents were provided with a drop–down list of all nations in the world to choose from

E.22 Income

- What is your gross annual salary?

  – Respondents were provided with a drop-down menu where they could select options in increments of £5,000 ranging from under £20,000 to over £100,000. Respondents were also allowed to choose "Prefer not to say" or "Don't know"

- (Asked if respondent was married or partnered) What is the current gross annual salary of your current partner/spouse?

    – Respondents were provided with a drop-down menu where they could select options in increments of £5,000 ranging from under £20,000 to over £100,000. Respondents were also allowed to choose "Prefer not to say" or "Don't know"

E.23 Sexuality

- And lastly, do you consider yourself to be:

    1. Heterosexual or Straight
    2. Lesbian or Gay
    3. Bisexual
    4. Other (Text Box Available)
    5. Prefer not to say

E.24 Thank You

We thank you very much for taking this survey. To sign up to receive progress reports and up to date findings from this project, please send an e-mail to economics.maternity@warwick.ac.uk. We welcome any feedback you may have–please use the text box below or include the feedback in your request for progress reports.