

Tapping into Women's Leadership & Creativity for Constructing Smart Cities

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Abstract

“Women's perspectives are critical to ensuring that smart cities work for everyone” (Women's Forum for the Economy & Society, 2017). Issues around lack of female representation in construction industries worldwide are well-rehearsed. Barriers that women face when they enter the sector, are often magnified upon maternity and motherhood. This condition results in the loss of skilled professionals from the industry at a time when skills shortages, which will become more acute as the drive towards Smart Cities gains pace, are of particular note. This paper is a response to these shortages through an investigation into the experiences of recent post-maternity returners to the sector in the UK.

The nature of the topic, population characteristics and project objectives pointed to a qualitative approach. A sample of recent post-maternity returners in the sector was narratively interviewed in a semi-structured format in order to develop an understanding of the current range of experiences. Narrative data was correlated with background demographic data, obtained using a short survey, to establish potential trends and to provide context. Results and observations were cross-referenced with the most recent literature to establish commonalities and potential recommendations.

Flexibility and work-place culture were found to be significant for the post-maternity experience. The level of ownership and control that the individual had over their experience, directly impacted the perception of a positive or negative post-maternity experience. Results indicated that there were improvements in the sector as an environment for women, but that there is still a long way to go until a truly equitable environment is achieved. Recommendations focused on the cultural changes needed to achieve the conditions required for this to occur. The viewpoints of subjects who chose not to return post-maternity should also be studied to address the potential bias that may be inherent in the current findings.

Keywords: equality, diversity, work-place, maternity

1. Introduction

The aim this study was to explore the factors influencing the post-maternity experience of built environment professionals within the workplace and make subsequent recommendations to overcome any barriers to a smooth transition back into work. It was achieved by identification and investigation of:

- Current experiences of post-maternity returners within the sector;
- Key issues/factors facing built environment professionals upon return to work post-maternity;

- Potential initiatives which could encourage more female returners.

Understanding the broad characteristics of the sector the participants are working within was necessary to provide a background for not only the study but also the position of women within it. High profile reports by the CIB (1996) and EHRC (2011) have sought to define the experience of women and other minorities within the construction sector in order to establish facts and make steps towards a more equitable environment. Results from a recent study of female respondents by the Union of Construction, Allied Trades & Technicians (UCATT, 2014) revealed that more than half (51%) agreed with the statement ‘Are you treated worse at work because of your gender? It is evident in these publications that the very state of womanhood influences the experience of work. Unfortunately, this experience is not always positive.

The literature also confirmed that the consequent state of motherhood and post maternity status can create a significant impact on the work-place experience of professional women. The Equality and Human Rights Commission revealed that 1 in 3 women feel unsupported by their employer when pregnant or returning to work (EHRC, 2011). If this statistic is reflected across the 296,000 women currently employed in the built environment sector (ONS, 2016), this proportion represents a significant number of women affected and therefore represents an important area of study.

The literature indicates that poor treatment of women in construction is not isolated to one type of marginalisation but appears to be more reflective of an institutionalised disregard of women in the sector. Such results are unlikely to encourage intelligent and professional women to enter or remain in an industry which is struggling to attract exactly that calibre of candidate (CIOB, 2013). This lack of female input will inevitably impact the development of smart cities at a time where arguably these voices should be supported to be heard.

2. The cost of motherhood

Becoming a mother is a costly business. It is a stark fact that motherhood is related to lower earnings (Dechter, 2014). The impact of this so-called ‘family gap’ is estimated at between 5 and 10% per child and this impact is specific to women. Conversely, there is evidence that fatherhood actually benefits men financially within the workplace as average earnings of men with children are greater than for those without (Lundberg & Rose, 2000).

On average women in the UK earn 18% less than men, leading to the so-called ‘gender pay gap’. By 12 years after the birth of a first child, this gap widens to a gulf of 33% on average (IFS, 2016). The widening of this wage gap for women can be explained in part by the fact that women often return to work part time post-maternity and that these jobs are often low skilled and lower paid than full time positions by a median rate of £5.63 per hour (ONS, 2015).

This move to part-time work post-maternity is notable in the UK. 40% of female workers with dependent children under 11 work part-time hours, while only 21% work full time (ONS, 2015). This occupational downgrading particularly affects highly skilled professional women due to a culture of resistance to accommodate flexible working and job-sharing for senior level positions (EHRC, 2009).

In addition to the personal cost to the individual, there are notable wider costs to the built environment sector of not accommodating the needs of post-maternity professionals. If the barriers to a post-maternity return are too great, the sector risks a ‘brain drain’ of the skills, experience and institutional knowledge of professional women as they take their knowledge and experience to other sectors which are more prepared to adequately accommodate these women’s needs.

The impact of this ‘brain drain’ effect in post-maternity professionals has been noted in other sectors, particularly the finance industry where businesses have begun to take steps to combat it (Evening Standard, 2014). ‘Returnship programmes’ as initiated by Credit Suisse and Morgan Stanley, provide an internship style programme for industry professionals returning to the sector after an extended

period away. Currently, very few similar schemes exist which accommodate the construction sector, with the recently launched ‘STEM Returners’ organisation being a notable exception (STEM Returners, 2018)

A further wider cost, which is difficult to quantify, is the potential loss to the industry of the pool of talent and innovation that female school leavers and graduates represent every year. Aspirations that are not targeted and captured are a real loss to an industry that is struggling to attract the new talent and fresh ideas, which are essential when designing and building the smart cities of the future.

3. The mommy track

This stalling of a women’s career trajectory once returning to work after having children is referred to in current parlance as the ‘Mommy track’ (Economist, 2012), and has been discussed widely in the mainstream and industry media (Economist, 2012; Guardian, 2015; Telegraph, 2005). This phenomenon is not due directly to motherhood per se but related to the fact that ‘paid work is organised in a way which assumes that people don’t have caring responsibilities’ (EOC, 2005), and the unavoidable fact is that these caring responsibilities are often taken up by the female members of the family.

Women report spending an average of 13 hours a week on housework and 23 hours on caring for family members (NatCen Social Research, 2011). This equates to almost a full week’s work on top of whatever work is being done outside the home. The corresponding average figures for men over a week are 8 hours for housework and 10 hours caring for family members. These figures indicate that on average women are undertaking approximately double the domestic burden than men.

Hoschchild (1989) postulated that for the professional woman working outside the home, her employment is perceived essentially as the ‘second shift’ in addition to their primary responsibility for housework and family care. Surprisingly, and somewhat disappointingly, the relatively recent NatCen Social Research (2011) survey results seem to bear out this theory.

This effect has been discussed widely (Rake, 2000), (Hakim, 2000), (Crompton & Harris, 1998) and a number of different theories proposed. Preference theory (Hakim, 2000), describes three classifications of women and their relative distributions: home-centred (20%), adaptive (60%), and work-centred (20%).

The suggestion is that within a prosperous society women have the option to choose between different types of work e.g. family work (within home) or market work (outside home) and that their choices reflect an innate preference. This preference is dictated by the ‘qualitatively different’ nature of the individual’s attitude towards work outside the home. They are either ‘committed’ or ‘un-committed’ to external work and this commitment is reflected by whether they work full or part time (Hakim, 2000).

It is argued that adaptive women are the majority, and they adapt solely to achieve a balance between work and family life rather than significant success in either. Thus, a woman with children does not achieve as much or to as high a level within the work sphere as a work-centred or ‘committed’ one would. However it is intuited this is her own choice, rather than a reflection of the wider sociological and demographical context that women exist within.

But does a genuine choice exist for most mothers?

4. Is the choice real?

Arguably these categories are too simplistic and don’t take into account the complexity of factors influencing the decision making of women when considering a return to work post-maternity.

Additionally this study was completed almost 20 years ago. There has been considerable societal change in the arena of work including changes to statutory maternity leave and the introduction of shared parental leave since this time.

Crompton & Harris (1998) explored the complexity surrounding such choices and the influence of external factors to this decision making. They argued that female work patterns are determined by decisions made in response to personal circumstances and opportunities and fluctuate according to these influences. It is clear that motherhood is a key life event which, in conjunction with other external influences such as financial and personal requirements, can significantly impact a female work pattern.

Houston & Marks (2003) found that women on lower pre-natal incomes and those who anticipated low levels of support upon their return were less likely to return to work post-maternity despite originally planning to. It would therefore appear that women within higher paid roles and a more supportive environment were more likely to return to work.

It is not unreasonable to suppose that a higher salary and more supportive working environment could be linked to seniority and perhaps a position of influence within a company. Therefore, it is possible that job role or the position within a company is one of the factors that influence the decision whether or not to return to work post-maternity in some cases.

In general the built environment sector is reasonably well paid. The average salary for a graduate entering a recruitment programme across all disciplines within a major firm currently stands at £25,500.00 per annum (Hays, 2017). A built environment professional can expect to receive commensurate increases in salary with increased experience with Associate level roles attracting salaries within the region of £50-70K pa (Hays, 2017)

The participants in this study are employed in a variety of professional roles within the construction sector and therefore it was anticipated that their salary contribution to the family finances will be significant. In addition, the professional nature of these roles implies a certain level of prior commitment and potential levels of seniority which an extended period away from work could negatively impact.

Additionally, consideration needs to be made to the individual's relationship to their work and workplace environment. All of these factors are worth bearing in mind when considering the individual's responses regarding their choice to return to work post-maternity and raises the question if in all cases the return to work is a genuine choice or not.

5. Methodology

The nature of this study required a qualitative approach, progressing along constructivist lines operating within a transformative framework for the exploration of the participant motivations. This qualitative approach adhered to the principles of Grounded Theory which seeks to theorise and develop meaning from the qualitative data collected and create a 'unified theoretical explanation' or theory, upon this review (Corbin and Strauss, 2007).

The very nature of the key questions and the interview process meant predicting outcomes and emergent themes were not desirable until the data had been collected. As the aim of this study was the exploration of experiences and development of recommendations rather than the development of full theories to explain a phenomenon, Grounded Theory principles of summation and determination of commonalities or patterns applied.

The primary form of data gathering was semi-structured interviews with professionals who had

returned to project management positions after maternity leave. They followed a semi structured format, in order to strike a balance between consistency and opportunity for insightful self-expression. Broad topics included pre and post maternity support and planning, expectations and experiences, job roles pre and post maternity, personal viewpoints and recommendations. Questions were open ended in order not to lead the participant in any particular direction. The more in depth questions regarding the participant's view of the overall experience were left till the end of the interview after a high level of trust and rapport had been established. The interviews were recorded, transcribed and analysed. In addition, a simple factual survey of background information for each respondent provided demographic data to be considered in the final analysis.

Participants were selected via snowball sampling, with the criteria that they were a female management professional within construction or its allied professions, e.g. architecture, and had returned to work following maternity leave within the last 5 years. The interviews were carried out either face to face or via video-link, and lasted approximately 1 hour.

Transcribed data was reviewed and coded following data analysis principles as typified by Saldana (2009), Creswell (2007), and Strauss and Corbin (1998). A reflective fieldwork journal was completed at the end of each interview to mitigate potential personal bias and as part of the development of the theories and analysis of the field work. This journal formed an 'Audit trail' as described by Byrne (2001). The analysis of the data was made via an interpretative or constructivist paradigm of 'interpretive understanding' (Mackenzie & Knipe, 2006). Close attention was paid to the precise words of the participants and numerous direct quotations were included within the results and discussion of the study findings.

The obvious potential bias of participants being a cohort of participants who had all returned to work post-maternity was considered. Thus, exploring the viewpoints of subjects who chose not to return post-maternity considered was included among recommendations for future research.

6. Results and Discussion

Personal feelings regarding the impact of motherhood on the participant's relationship with their work and the effect of the maternal experience on the working experience and professional outlook were recurrent themes throughout the study. Flexibility, individual and workplace culture; and the 'ownership' of experience were the key themes.

Putting aside obvious potential issues of subjectivity, the majority of participants reported overall a positive post maternity experience. The background literature indicated the focus would be on the challenges experienced while dealing with the conflicting demands of motherhood and professional working life; and that these would be numerous. However, contributors also described ways in which motherhood had directly or in-directly altered their professional outlook and productivity in positive ways. This contradicts the received perceptions that women returners are somehow less committed or motivated than they are prior to maternity. It also complements studies that demonstrate the positive impact females make to the performance of the teams that they work in.

Without exception all participants were strongly motivated to return to work post maternity. These motivations took various forms. Perhaps unsurprisingly, financial motivations were also mentioned by all of the participants as a primary reason for the return to work. Other core motivating factors were the desire to regain a role outside that newly acquired as a mother, and in association, the maintenance of career progression and status. This indicates once more that these returners are strongly motivated to succeed and develop upon their return to work, exactly the kind of candidate who will add value to the development of Smart Cities, which will work for all of us.

They also displayed creativity and leadership in dealing with issues around return to work and

achieving a work-life balance post maternity. They relied on technology-enabled connectivity, and their problem-solving skills to create conditions that are conducive to their new patterns of work. These are skills that are often cited in the literature on building smart cities. Perhaps more importantly, women such as these returners are needed in diverse teams that have been shown to have higher levels of innovative capacity. Whether we can build truly smart cities that are also human depends on this capacity.

6.1 Flexibility

The significance of flexibility on the post-maternity experience cannot be under-estimated. This was a word, which arose repeatedly from all respondents, although the meaning took a number of different forms. Respondents described the flexibility of employers, their immediate family and indeed themselves as important factors.

The right to request to work flexibly in the UK was ratified within the Employment Act of 2003 and facilitation of such requests was described as ‘easy’ by 59% of respondents to a 2015 survey by the Equality and Human Rights Commission (EHRC, 2015). The primary ways that workplaces in this study had accommodated flexible working was in regard to working hours and locations. Half the respondents had returned to an 80% working week, with a number of different patterns emerging with regard to working times and locations, for example provision of laptops for occasional or scheduled home working.

Flexibility of external support, categorised in this case as the range of support available for the parents to be able to return to work, specifically childcare, was also imperative for a positive return to work. There was a wide range of the providers of this support, encompassing childminders, nurseries, partners, and extended family members and friends. The practical contribution of the participants partner’s to childcare, e.g. the sharing of childcare drop offs and pick ups, varied, with reports of the ease of transition back to work correlating positively with the direct contribution of the other partner.

Confidence in the childcare setting, regardless of type e.g. childminders, nurseries or extended family, was also noted as important to permit full focus at work, thus indicating the value of high quality childcare settings for personal and therefore wider industry success and development. It is interesting that the lack of childcare facilities was noted by the Latham Report in 1996 as a factor in the culture of the construction industry excluding women. Over 25 years later company provided childcare facilities are still very rare. Even within architecture, which has a higher proportion of women than other sectors within the construction industry, only 1% of architectural practices in the UK have on-site facilities (Guardian, 2016).

The need for personal flexibility was evident as, apart from the exception of one case, the primary flexibility required was from the returning mother, with the accommodations to working conditions, hours, etc borne by this partner. The reasons for this were not fully explored but are anticipated to be due to a combination of a number of factors, including practical, i.e. financial, inability of the father’s workplace to accommodate or simply not considering this as an option, or emotional i.e. the mother wishing to take the time off or a father’s reluctance to do so.

It was notable that despite acknowledgment of the challenges that this division of responsibility created, the women concerned had developed a number of innovative strategies to overcome this. For example one respondent had begun to utilise alarms during meetings to ensure all required business was covered within the allotted time frame. In fact some respondents observed that the new constraints had a positive effect with increased focus and productivity. This reflects the outcomes of an experiment by the Swedish Government in 2016 that found productivity and wellbeing benefits to shorter working days (Independent, 2016).

6.2 Culture of the workplace

The culture of the business and the individual appeared to influence the post-maternity outcome. Participants who worked in the public sector generally reported a more straightforward transition into more flexible ways of working and overall feeling of acceptance and accommodation of their revised maternal status. This manifested in more reports of a positive post-maternity experience.

Reasons for this include the high proportion of female workers within the sector, with women comprising of two thirds of the workforce (IFS, 2014). Additionally part-time working is more prevalent than in the private sector at 27% (IFS, 2014). The required compliance with equal opportunity legislation and accountability of government bodies is another factor.

Respondents, particularly those working within the private sector, noted that cultural expectations within construction of long working hours, presenteeism and constant availability were not ideally compatible with family life and therefore presented a clear barrier to those wishing to return post-maternity.

6.3 Ownership of experience

A feature of the Latham report (CIB, 1996) was an acknowledgement that women needed to take some responsibility and ownership of their experiences and position within the construction sector. The results from this study indicate that they are doing just that.

Crompton & Harris (1998) described the importance of pre-maternity planning when anticipating women's return to work after having a child. All of the contributors had returned to work after maternity so it would be expected the pre-planning would have occurred. Results from this study strongly supported this argument, as many of the respondents described taking ownership and control of the pre-maternity planning within their professional role. In some cases this was tasked to them from their superiors, in others the participant asserted control over the process and in others it was undertaken by the participant as the only way to ensure that the requisite provision was made.

This planning took many forms and included:

- Recruitment of maternity cover and associated training
- Preparing and briefing the rest of team to cover
- Resource and planning for the transition
- Delegation of tasks to ensure project progression during the maternity period
- Working to the very end of pregnancy

The opportunity to be able to take ownership in this way, was partly influenced by the seniority and status of the individual. Contributors in more senior positions reported greater ease in negotiating flexible or home working conditions due to established reputations, mutual trust and proven records of working autonomously without impacting productivity. Those able to take ownership and control over their situation associated this with a positive view to the maternity experience.

7. Conclusions & Recommendations

We found that within our sample group, the women didn't demonstrate the clear 'preferences' toward either family or home life as postulated by Hakim (2000). All the women had returned to work either full or part time so reflected an 'adaptive' presentation but all were equally if not more as committed to their roles as they were prior to maternity. A number of participants also indicated that they felt that they performed better as employees and mothers due to the fact they had returned to work post – maternity.

Equality and Human Right Commission (EHRC, 2011) revealed that some progress had been made with regard to conditions for women working within the industry but there was still much to be done. It stated that there was a sound business case for implementing comprehensive equality and diversity practices, including those impacting women, as it would achieve the following benefits:

- Efficiency savings through improved staff retention
- A wider pool of talent available to the Industry from under-represented groups
- A more diverse supply chain with better support for small business
- Improved on-site working relationships based on respect for everyone's differences.

Rather than focusing on the benefit to the individuals for better conditions for women, it may be possible to make a stronger impact by focusing on the cost and benefit of post-maternity returners to the businesses and the industry as a whole. These discussions should be in a language that clearly communicates the efficiency and effectiveness benefits that are borne by the returners who are motivated to make a contribution to delivering habitable and equitable Smart Cities for all.

A primary result was that the all respondents were strongly motivated and focused on making a success of their career and their family life. In this factor they rejected the either / or notion observed by Lingard and Lin (2004). In addition, they counteract the postulation that women are either committed to work or family (Hakim, 2000), by demonstrating the lengths that they have taken in order to make both work simultaneously even at personal cost.

A major barrier to a successful return to work was around the theme of flexibility. Flexibility within the workplace cannot be seen in isolation from the culture of the construction sector and the maintenance of the current culture of long hours, presenteeism, and women as a minority. Creation of the requisite flexibility required for positive post-maternity experience requires the attendant flexibility and shift of the entire workplace culture to a more inclusive and equitable form. There is evidence that this is beginning to happen but progress is slow.

Primary recommendations focus on changing the culture of the construction environment so it becomes a more hospitable environment for a woman. A more hospitable environment will attract more women which it turn will provide those women a louder voice for equity and change. Making the business more attractive to female graduates benefits potential new employees as they therefore benefit from key pool of current knowledge and skills, while bringing potentially fresh viewpoints and satisfying industry quotas. This could be achieved by:

- Positive maternity packages. Providing strong support for a short term need will translate into long term benefits for the business and individual. The evidence shows that these women are strongly motivated and dedicated to their work and therefore exactly the kind of candidate to retain.
- Education. For businesses, emphasising the potential benefits to them providing good maternity support and providing opportunities for flexible working. Builds loyalty, retain institutional knowledge, saves cost of recruitment by not losing existing employees
- Mentors schemes. For women during pregnancy and beyond. Providing guidance on planning and other support. This is a cost free solution and benefits both parties.
- Careers advice at schools, universities and professional bodies around maternity, so managing having a child is something both considered and also understood to be something that needn't negatively impact career progression.

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