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Job Crafting for Female Contractors in a Male-dominated Profession

Abstract

In this paper we explore the job crafting experiences of women who left permanent employment for contracting positions in Information Technology (IT), a sector widely considered male-dominated with limited career opportunities for women. This qualitative study is based on interviews with 24 female IT contractors. Findings show that through the flexibility and autonomy that comes with contracting, numerous crafting practices are adopted by female IT contractors enabling them to gain empowerment in a male-dominated environment. The study contributes in depth understanding of job crafting theory by showing a reflexive relationship between role and resource crafting for women in alternative forms of employment, especially those with a high degree of autonomy. By engaging directly with the experiences of these women IT contractors, we provide unique insights into what might drive women into IT contracting, and why they often stay with this option owing to the freedom and autonomy offered.

Introduction

Job crafting has been recognised as a promising theory in the field of job design (Tims and Bakker, 2010). However, in empirical studies thus far, it has been associated with full time and

permanent employment. As the nature of work is changing away from the traditional, co-located permanent and full-time workforce (Barley et al, 2017), towards alternative forms, we suggest that this narrow conceptualisation is problematic. There is a growing preference for individual workers to take control of their own learning and career development, undertaking paid work based on their own values and commitments (Kuhn, 2016). Studies also show that alternative forms of employment particularly appeal to women, who may have a stronger need for work-life balance (e.g. Cluley and Hecht, 2019). Also, they may experience job and/or role segregation and limited career development when in full time employment (Segovia-Pérez, Castro et al, 2020). With these considerations in mind, we take the position that job crafting in alternative forms of employment needs to be revisited and extended. In this paper, we pursue this by examining the case of female professionals in highly autonomous, independent careers.

In empirical studies thus far, job crafting, often defined as 'the physical and cognitive changes that individuals make in the task and relational boundaries of their job' (Wrzesniewski and Dutton, 2001, p.139) has, as abovementioned, been associated with full time and permanent employment. With the nature of work changing away from the traditional co-located, permanent and full-time workforce towards alternative forms of employment (Barley et al., 2017), this narrow conceptualisation becomes problematic, as it restricts understanding of work experiences to only those with traditional employment contracts working for a single employer. Physical, cognitive and relational changes not only impact on job design, but also, how one identifies with one's profession and thus, job crafting has a wide range of implications for individuals. Further, while this literature does contain considerations of work life balance (e.g. Sturges, 2016) and gender (Rudolph et al.,2017), no previous study has focused entirely on how women in alternative forms of employment might approach job crafting.

In this paper, we study female contractors in the Information Technology (IT) profession. The choice of this group was made on three grounds: first, they are exemplars of professionals with

alternative forms of employment and who operate in a sector that is strongly inclined towards contracting (Kunda et al., 2002), often due to the rapid changing nature of their skill-set (Holtgrewe, 2014); second, as independent professionals they can exercise high levels of autonomy in their work and career (Pichault and McKeown, 2019); and third, they have an added challenge in their employment, that of working in a male dominated, gendered sector (Armstrong et al., 2018). In particular, the study was driven by an interest to examine women's proactivity in taking control of their own employment and career in a male-dominated sector. Contracting as an independent form of work provides autonomy to reform both work experiences and career development. Hence, it is a suitable choice for the study of job crafting in alternative forms of employment that feature a high degree of autonomy. Accordingly, the questions that drive the study are: "how do female IT contractors engage with job crafting, what are the reasons for doing so and how do they carry this out"?

We make two major contributions to the job crafting literature: one pertaining to job crafting in alternative forms of employment and the other regarding how independent female professionals in a male dominated sector might approach job crafting. Through a series of semi-structured interviews with female IT contractors in the UK, our findings point to the embedded feature of role crafting when embarking on a contracting career. By so doing, we contribute to a richer understanding of job crafting theory by illustrating a reflexive relationship between role and resource crafting as well as a progressive relationship between embedded and emergent features of job crafting for those in independent professions. The focus on female contractors and the choice of a gendered profession place gender at the centre of the study, thus facilitating new insights about the process of job crafting. The study also makes a contribution to the IT profession literature, as it shows that through contracting and the autonomy that comes with it, female IT contractors can navigate their position in the IT sector and gain empowerment in this male dominated environment

In what follows, we review the literature on job crafting, and identify research gaps in this area, especially in relation to alternative forms of employment, such as contracting. Subsequently, we draw on relevant literature to explore the gendered nature of the IT sector. We then present our methodology and describe the analytical approach adopted. Thereafter, we present our findings on how female contractors engage with role and resource crafting , whilst also exploring the relationship between the two. Finally, we integrate our findings with the job crafting literature and discuss the theoretical contributions. In the conclusion, practical implications for employers and male dominated sectors are advanced.

Job Crafting

Job crafting has gained popularity over the last two decades, specifically since Wrzesniewski and Dutton's (2001) seminal research, which views employees as crafters of their own job. Unlike other job design approaches, job crafting entails that the job itself, or aspects of it, are modified, shaped or designed (thus crafted) not by the organisation or manager, but rather, by the individual job holder (Niessen et al., 2016). Bruning and Campion (2019) characterised job crafting practices as self-targeted, volitional, significant, noticeable and at least semi-permanent (thus, not temporary) and identifiable changes work, potentially intrinsic and independent of management approval. The general position is that all individuals are potential job crafters (Wrzesniewski and Dutton, 2001). When doing so, they gain renewed meaning in their work and consequently, their personal satisfaction and wellbeing are enhanced. The reasons for job crafting may include employees' need for meaningful work (e.g. Bailey and Madden, 2017; Banihani et al., 2013), the need to maintain flexible work (Gascoigne and Kelliher, 2017), and showing 'presenteeism' during times of personal illness (Giaever, 2019). Some researchers (e.g. Lazazzara et al., 2020) have differentiated between proactive and

reactive motivators, with the latter contributing to so-called avoidance crafting. Others have examined the impact of job crafting on employees' wellbeing and work engagement (Petrou et al., 2017; Tims et al., 2013)); the personality of those individuals who initiate job crafting (Bakker et al., 2012), job performance (Gordon et al., 2018), and collaborative crafting (Leana et al., 2009). Collectively, these studies inform us how widespread job crafting has been across different occupations and sectors as well as the forms that this takes and the possibilities it offers in the workplace.

Existing literature has shown that employees at different organisational levels have different perceptions regarding the opportunities available for job crafting. For example, Berg et al. (2010) found that lower ranked employees, such as customer service personnel and maintenance technicians, show more readiness to overcome challenges and to engage with job crafting than those in the higher ranks of the organisational hierarchy, such as directors and managers, despite the latter having more control and autonomy in the workplace. Similar to Berg et al. (2010), Petrou et a; (2012) find that some individuals engage more actively with job crafting than others. They explain this in terms of the degree of autonomy and resources available to different employees. Thus, the opportunity to decide for oneself along with the resources available are highlighted as prerequisites for job crafting. Further, with their study Petrou and colleagues (2012) extended understanding of it, by showing how job crafting can become part of daily work practices and not just a one-off initiative. Where a job is performed in a dyad relationship, an individual's job crafting behaviour was found to be positively influenced by that of their partner, whilst also exerting positive influence on their own work engagement (Bakker et al., 2016). Moreover, Bizzi (2016) found individuals benefit from their own network contacts through the latter's autonomy and feedback they receive. It follows that because job crafting is an initiative taken by the individual worker proactively and

purposefully, it tends to have positive effects on the individuals involved as well as those around them, including the wider organisation.

Research in this area has been differentiated according to the methodology adopted (Lazazzara et al., 2020). The first stream primarily involves qualitative studies, being influenced by Wrzesniewski and Dutton's (2001) foundational work, which identifies three aspects of a job that may be changed by individual workers depending on their preferences and motives as a way to enhance job meaningfulness and identity. These are *physical* task changes, that is, 'altering the form of number of activities one engages in while doing the job' (p.179); *cognitive* task changes, that is, 'altering how one sees the job' (p.180); and *relational* changes, that is, changing how one interacts with other people while doing the job. These different aspects of job crafting have been used by researchers to show evidence of it across different professions, including, but not limited to hairdressers, nurses and technicians (Wrzesniewski and Dutton, 2001); medical doctors (Giaever, 2019); and microworkers in the gig economy (Deng and Joshi, 2016). In an extension of this theory, Bruning and Campion (2018) have associated this stream of research to 'role crafting', thus giving a role-based perspective to job crafting. According to them, role crafting 'involves changing one's role in terms of what one does and who one interacts with at work to improve intrinsic benefits' (p.501).

The second stream of research in this area is dominated by quantitative studies, such as those of Tims and colleagues (i.e. Tims and Bakker, 2010; Tims et al., 2012). They drew upon the job-demands resources model to design the job crafting scale. According to Tims et al. (2012), job crafting refers to changes employees make when seeking to balance their job resources with the demands of their job, according to their personal abilities and needs. Based on this perspective, their job crafting scale covers four dimensions: increasing structural job resources, increasing social job resources, decreasing hindering job demands, and increasing challenging job demands. In contrast to Wrzesniewski and Dutton's (2001) work, studies such as Tims et

al.'s (2012) present objective and measurable factors that contribute to the operationalisation of job crafting (Lazazzara et al., 2020). Bruning and Campion (2018) have linked this approach to the resource-based perspective, calling it 'resource crafting' to signify the management of resources and reduction of job demands.

Despite growing interest in job crafting, research in this domain has not sufficiently explored the gender dimensions of job crafting. An exception to this is Rudolph et al. (2017), who found a small positive correlation between job crafting and gender, whereby women engage with job crafting to a greater extent than men; the reasons for this difference were not examined in that study. To our knowledge, no qualitative study has taken place examining how women in contracting engage with job crafting, the reasons for their doing so and how they carry it out. Evidence exists (e.g. Wrzesniewski and Dutton (2001) of women initiating changes in the nature of their work, with some linking it directly to job crafting , whilst others did not, because the concept did not exist at the time. For example, a study by Beirne et al. (1998) showed how a group of female data entry administrators improved their daily routine by informally acting as programmers, thereby giving a new meaning to their own work identities as well as improving their organisation's processes and performance. We posit that in male dominated occupations due to social and structural factors women's careers and employment choices may be suppressed (Armstrong et al, 2018). Hence, how women approach job crafting may be qualitatively different in nature given the different circumstances and the challenges they face at work. Also, omission of gender specific studies is a cause for concern in popular theoretical concepts, such as job crafting. The absence of gender in mainstream organisational research can lead to concepts being built on an 'ideal type' of worker, who has no family or caring responsibilities (Martin, 2000).

Another criticism of the current literature, is that job crafting researchers have focused primarily on individuals in permanent employment, with few studies showing evidence of it among workers in non-traditional employment, such as microwork (Deng and Joshi, 2016) and the gig economy (Wong et al., 2021). In their study on gig workers, Wong et al. (2021) found that individual and collaborative job crafting practices contribute to increasing workers' resilience and ultimately, their career commitment. With the changing nature of work arrangements (Colbert et al., 2016) research on job crafting needs to be extended to include various forms of employment, including independent careers. Lazazzara et al (2020) have recognised this gap and posited that although some studies exist on self-employed professionals, these were in professions such as accounting, a field based on standardised norms of interaction and established procedures. Calls have been made for job crafting to be explored for those forms of employment where individuals have opportunities for work autonomy (ibid.).

Further, we draw upon Bruning and Campion's (2018) taxonomy, which differentiates between role and resource crafting. This is an integrative perspective as it incorporates an understanding of both streams of literature and focuses on the individual process of job crafting. Bruning and Campion contend that both role and resource crafting can be consciously, proactively and systematically enlarged (*approach crafting*) or reduced (*avoidance crafting*) through an individual's own initiative. As they put it, 'Approach crafting activities are active, effortful, motivated, and directed toward problem-focused and improvement-based goals' (p. 501), whilst avoidance crafting involves 'evading, reducing, or eliminating part of one's work' (p. 502). The taxonomy recognises the simultaneous existence of both role and resource crafting practices, and provides a useful framework for analysing non-standard employment practices. We aim to extend research in this area by studying job crafting among a highly autonomous group of female independent professionals: IT contractors.

Contracting as a form of alternative form of employment

Contractors, also known as independent professionals (Leighton and McKeown, 2015), belong to an increasing number of non-traditional workers with alternative employment such as boundaryless careers (Arthur and Rousseau, 1996; Fenwick, 2008), who have both physical and psychological mobility (Sullivan and Arthur, 2006) that involves moving across different employers. These are self-employed, highly skilled knowledge workers for whom contracting becomes their preferred choice of employment, despite the lack of job security and in-company training. Networking, as well as reputation, have been identified as critical among contractors as this can increase the likelihood of referrals for new contracts (Osnowitz, 2006; Marjoribanks et al. 2021).

Extant literature on contractors has focused on the reasons for undertaking contract work, and the opportunities that this form of employment provides, including improved work-life balance (e.g. Kunda et al., 2002). The ability to exercise temporal control is reinforced by Osnowitz and Henson (2016), who identify this as a key difference between contractors and permanent staff. Evans et al., (2004) found that, whilst contractors do, indeed, experience temporal flexibility, they may not be able to take advantage of it, due to employment demands and market conditions. In their study of technical contractors, Kunda et al. (2002) concluded that contracting is a complex employment situation that should not simply be viewed as a form of temporary employment. They identified significant differences between low-skilled and high-skilled contractors, with the latter enjoying more autonomy over their work despite the precarious and unstable nature of their work. Nevertheless, Anderson and Bidwell (2016), in a study of managerial work and contractors, showed that, whilst contracting managerial workers gain an improved work-life balance, they become worse off career-wise and financially.

O'Mahony and Beckhy (2006) shed some light on this topic by investigating the resources that contractors draw upon in order to achieve career progression. They introduced the concept of stretchwork to signal 'work that largely fits with an individual's previous work experience but introduces a small novel element that extends his or her skills in a new direction' (p.919). In their study of the high tech and film production sectors, they found that people acquire stretchwork in a variety of ways. The varieties included demonstrating and differentiating competencies from those of others, framing and bluffing regarding what they are good at, acquiring and presenting referrals as well as discounting their rates, in order to obtain proficiencies in new technologies or skills so as to make themselves more marketable (O'Mahony and Beckhy, 2006).

Whilst the majority of studies on contracting have not differentiated between men and women, some have specifically focused on female contractors. For instance, Casey and Alachk (2004) suggest that women prefer to work as contract workers in temporary work arrangements, because flexibility and non-committal employment gives them the opportunity to pursue other interests and roles. Whilst childcare and other care work fall within these roles and interests, they are not the only reasons for women's preference for contracting. An interest in travelling, flexibility for holiday dates, and a desire to continue with voluntary work are additional reasons for this preference (Casey and Alachk, 2004). Similarly, Sayah (2013) found that female contractors may have diverse preferences regarding work-life boundaries which consequently affects their contracting experiences.

We contend that IT contracting, due to its high degree of autonomy, is a suitable context to study job crafting among those who experience alternatives to permanent and full-time employment. The focus on female contractors also provides the opportunity to examine the proactive and self-initiated behaviour of women in a male dominated profession in their attempt

to gain control over their work and identity in the workplace, with particular reference to the challenges of work life balance outlined above.

In what follows, we discuss the wider context of the sector, with particular attention to its male-dominated and gendered nature. It is within this gendered context of the IT sector, with its low representation of women, low retention rates and limited career opportunities, that we position the empirical study presented in this paper.

The gendered IT sector

IT, a fast growing sector and central to economic growth, with increasing employment opportunities, is one that has remained male dominated, with an ongoing low representation of women and a masculine culture (Adam et al., 2004; Armstrong et al., 2018). Figures show that only 17% of IT specialists in the UK are women, with even lower representation (13%) in technical areas, such as programming and software development (BCS, 2017). Moreover, gender has been found to be the main obstacle for women's career development in the profession (BCS, 2019). Further to the low representation of women, research has drawn attention to gender inequality within the sector. Women in IT have been found in roles that are low in status, power and rewards, whilst as they move up the career hierarchy in IT, their representation shrinks (Kirton and Roberston, 2018). Structural and cultural factors have been identified as barriers to their development in this sector. Structural barriers include factors such as working practices, whilst cultural ones refer to factors imposed by the social environment, such as gender discrimination (Ahuja, 2002). The IT workplace is not gender neutral, with reasons ranging from inflexible work practices to lack of recognition of the value of a gender diverse workforce (Panteli, 2001). This ultimately contributes to women being dissatisfied with monetary reward, career progression and overall employment opportunities in this sector (Kowal and Roztocki, 2016). Consequently, women have been found to use their agency in order to reposition their identity in the IT sector by reasserting both their femininity and

technical skills (Kenny and Donelly, 2020). We extend research in this area by examining the job crafting experiences for women contractors who left permanent employment in this sector.

Research design and methods

The study was qualitative, based on semi-structured interviews with women, who at the time of the data collection, were working as contractors in the IT profession in the UK. Its aim was to examine women's experiences as contractors and in crafting their jobs.

There were 24 participants in total, with the majority (more than 80%) recruited following a call by a national IT professional body in the UK. Additional participants were identified through the snowball technique. This number of interviews was deemed sufficient, as the concomitant analysis of the data collected reached theoretical saturation, where no new themes emerged from the analysis (Urquhart 2013). The interviews were conducted by the first author over the period between November 2016 and January 2017. Due to the geographical dispersion of the participants, the interviews took place using a video-link (i.e. Skype) or telephone, depending on their preference. All interviews were audio recorded and lasted between 35 and 75 minutes, being subsequently transcribed.

The interviews were structured around three topics: firstly, the background of the contractor in terms of job title, experience in IT and qualifications. Secondly, the participants were asked about their contracting experience regarding the circumstances that led them into contracting, the reasons for staying in contracting, the opportunities and challenges they had experienced with contracting, as well as the differences between this type of work and permanent employment. Thirdly, they were asked about the impact of contracting on IT, and women's representation in such work. At the start of the data collection, job crafting was not a focal concept, but it became obvious from the interviews early on in the data collection process that

interviewees were talking about the actions they were taking to be able to shape and redefine their work as well as their role in the IT profession. Consequently, we modified the questions in subsequent interviews, with the researcher prompting interviewees to talk further about how they had developed their skills and learning, relate with managers, permanent staff and other contractors, as well as manage the challenges of their autonomous career. This approach – following an emerging theoretical storyline with overlapping collection and analysis, is inspired by the grounded theory perspective, where researchers start with an 'open mind, rather than an empty head' (Dey 1993, p.63).

Data analysis

We conducted iterative thematic analysis of interview transcripts to identify patterns of meaning related to job crafting among female IT contractors. The authors independently applied open coding and theory-driven categories, following a 'recursive' process to find agreement around final themes (Saldana, 2015, p.37). During our analysis, we applied two types of abduction (Bamberger, 2018), the first being exploitative, where facts are collected and then a framework is sought to explain them. From our perspective, job crafting was the appropriate framework to explain what we were seeing. With this in mind, the analysis sought to identify any job-related changes that were experienced by the participants as a result of their move from permanent employment to contracting. At this stage, we also sought to understand any job-related changes that were experienced as a result of their move from permanent employment to contracting. We progressed from descriptive 'semantic' coding around broad patterns to interpretation of job-related changes to theorise meaning. Theory-based (a priori) coding, following Bruning and Campion's taxonomy (2018), was also used at this stage, providing evidence of role, resource as well as avoidance and approach crafting.

The second type of abduction is exploratory, where the facts are used to come up with plausible explanations. As Bamberger explains, these two types of abduction are intertwined, which is especially true when using inductive coding techniques, because the focus is both on relationships and patterns within the data. However, we felt an absolute obligation to engage those relationships and findings with extant theory (Strauss 1987). The third stage of the analysis contributed to the development of inductively-developed themes. Through dialogical exchange, we agreed on two inductive themes from the dataset: embedded and emergent features of job crafting. In the final iteration of coding, we looked for relationships between role crafting and approach crafting practices, concepts taken from the extant literature. Examining these helped us elaborate upon our theoretical model, especially with respect to the emergent feature of role crafting.

Findings

Participants' Characteristics, Triggers and Motivators

As shown in Table 1, almost all of the participants had a significant amount of experience in the IT sector prior to becoming contractors. Some had been contractors for 20 years, whilst others had been in the role for less than five. Their skillset and roles covered a wide spectrum within the IT profession, ranging from technical to business roles as well as from senior project managers to analysts. At the time of the interview, all were contractors, however, some of them (indicated with an asterisk * in Table 1) had moved in and out of contracting and then back again at several stages during their careers. Also, all but one were in permanent positions prior to becoming contractors.

INSERT TABLE 1 ABOUT HERE

Table 1: Study Participants and Characteristics

All participants agreed that contractors are very important to the IT sector, because they bring important capabilities to the organisation as needed. A commonly shared view was that IT skills were always changing, and companies might not be able to, or need to, recruit a specialist for the longer term: *"It allows companies to do big projects without having the problem of recruiting people in"* (P3).

When asked about the gendered nature of IT work, the majority of the participants said that as permanent employees they had experienced gender segregation and under-representation of women in IT jobs: *"IT is predominantly male. I have experienced sexism many times. I have sat in meetings and the expectation was that I would take the minutes*" (P6). *"I have seen a lot of this situation at meetings, where a woman makes a suggestion and is not being heard and then a man makes the same suggestion and his view is adopted...."* (P4).

The above extracts reinforce existing views on the nature of IT: male-dominated and gender-biased. For these women, the decision to move into contracting was considered a way for taking control of their work experiences as our findings regarding the triggers show.

In the first category, we identify those women who moved into contracting after they achieved financial security, where, among the most cited reasons were financial and career security matched with no caring responsibilities. P9, who had recently started contracting, after 20 years experience in IT, makes this point most clearly:

'I wouldn't have considered contracting before [with young children and a mortgage], because I needed the security of having a job'.

In this category we also position those women, who because of their caring duties, actively sought to move to alternative forms of employment: *"I had my first child and at the time there was no flexibility, it was full time or nothing. So, I started contracting as I was looking for more flexibility"* (P13).

Whilst the above explained reasons appear different, even contradictory, they are similar in that they both refer to childcare and hence, reveal that decisions to move into contracting are often gendered.

In the second category, we place those women who had intentionally looked to become contractors and sought the right opportunity to do so. Reasons cited were financial motives, freedom of movement and a higher degree of autonomy over employment and career. The majority of the participants in the study belonged to this intentional, pull category, within which there were the women who had previously worked with contractors and were familiar with the contracting conditions, including higher pay. The following quote illustrates this intentionality:

"I used to work with lots of big projects, and met lots of contractors, and they had the same skills and they earned three times more than me, and I worked harder than them. So, that was the attraction, if I don't try this out, I would not know. It was a big step as I had never met a woman contractor before" (P10).

Finally, in the third category were those who felt they were pushed into contracting, because they had no other employment option. For example, P1 spent a period of time working overseas and when she returned to the UK, she found it difficult to find permanent employment. Similarly, for P22, contracting was the only employment option available:

"At that time, permanent work was hard to find – [contracting] was not my choice. I had young children and a mortgage at the time and I wanted stability and sought a way back to permanent employment" (P22).

Despite the different circumstances that led women to become contractors, and the fact that several of them did not purposefully set out to do so, none of them, at the time of the interview, had any regrets about making this choice. P3, for example, who had been in permanent employment for 36 years prior to moving into contracting, said: '*no regrets, I should have done it years ago actually'*. Similar views were expressed by others:

"Even though I was forced into contracting following redundancy .... I realised that I actually enjoyed contracting... I like the change. I like the challenge. I like going in and setting things up, the process improvements and using my knowledge and experience to help the company forward" (P12).

Our findings on the triggers for contracting among female IT contractors support existing studies that different preferences may prevail for different individuals in order to achieve work-life balance (e.g. Sayah, 2013), with some referring to child-caring responsibilities, whilst others mentioned travelling and the need to ensure and protect private time. The above findings also show that for the vast majority of participants, who were in permanent employment, job crafting did not begin until they took the decision to move into contracting.

In what follows, we present women's experiences when leaving permanent employment, in particular, how their work was reshaped and crafted as a result of contracting.

Experiences with Job Crafting

Drawing on Bruning and Campion's job crafting taxonomy (2018), we are able to provide evidence of role, resource as well as avoidance and approach crafting. The findings confirm

that job crafting can be experienced by all individuals regardless of their employment status. Participants' experiences reflected both approach and avoidance orientated crafting practices in order to obtain the kind of work they wanted to have as contractors. They expressed how their employment experience had changed, becoming more fulfilling, empowering and meaningful as a result of the opportunities that contracting provided them. In what follows, we present evidence of role and resource crafting among the female IT contractors in our study, as well as explaining the relationship between the two.

Role Crafting

In this section we present evidence on how the participants' role has changed by virtue of moving into contracting in terms of what they do, and who they interact with.

Approach-orientated: The participants in our study, whether pulled or pushed into contracting, had to consciously revisit the way they worked and proactively seek contracts on different projects and clients, often for short periods. As contractors, they were in a position to negotiate the time, location and nature of their employment. Approach role crafting in this context entailed aspects related to temporal, spatial and task flexibility.

As IT contractors, the women involved could create the opportunity to change their work in both temporal and spatial terms as well as to choose what kind of roles and assignments to accept. Task flexibility was more limited when they relied on recruitment agencies to find them contracts (e.g. '*The agents put you through for certain jobs that reflect your skills*', P5). The fact that the participants were aware that they could exercise, if they wanted to, this flexibility created a perception that they were in control:

"You are your own boss. You can decide when to work and who you work for. It is the freedom, so much more freedom than working for an employer. You know what you want to do and if you do not like it, you can negotiate. It is such a better life" (P10).

The temporal, spatial and task flexibility that these individuals experienced as contractors are embedded in the very nature of contracting. As a result, they chose the type of client-organisations, projects and roles they wanted to undertake as well as the location and duration of their contract. More broadly, the participants' stories show that contracting gives multiple opportunities for role crafting, and that these are by their very nature embedded in the experience of contracting. Therefore, *embedded* role crafting is a feature of the experience female IT professionals often have when contracting.

Avoidance-orientated: Evidence of avoidance-orientated role crafting is found in the consciously proactive efforts to remove oneself from specific roles, if these are not preferred by the individuals involved. Being a contractor, one can decide when and how to work as well as making choices that would not be possible during permanent employment. For example, in order to achieve the desired work life balance, contractors were found to avoid taking on certain projects, work for organisations in locations that required a long commute, or when the flexibility to work from home was not provided:

' "Flexibility is paramount to me, but not all the companies would allow it. The company that was inflexible I actually left three weeks after renewal: "sorry you did not give me the flexibility that I was expecting"' (P24).

It follows then that contracting allows for negotiating, renewing or even terminating a job, which are enablers of the embedded dimension of role job crafting (both approach and avoidance). Table 2 presents this feature of job crafting with its distinct aspects and exemplary quotes.

INSERT TABLE 2 ABOUT HERE

Table 2: Role Crafting in Contracting: Approach and Avoidance

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Resource Crafting

In this section, we present evidence on how participants have managed their resources and even expanded them in order to improve their work experiences as contractors.   These are summarised in Table 3.

Approach-orientated: Several approach-orientated practices were evident in our data that showed targeted and systematic efforts by participants to enlarge their resources so as to further their employment and career prospects. These included on the job learning, training and stretchwork, interchange between contracting and permanent employment and metacognition. These are presented in Table 3 and are explained below.

The prospect of working for different organisations, getting involved with a diverse set of projects and roles as well as mixing with different people was found by the participants not just a positive characteristic of contracting that contributed to altering their role in the profession, for it also provided developmental opportunities for enhancing their career. Participants actively sought to gain additional skills through training events and on the job learning, as the quote below illustrates:

  "Learning from each other, as well as from different clients are opportunities that come with contracting. If you are stuck with one company, I wouldn't know what else is out there" (P8).

Stretchwork (O'Mahony and Beckhy 2006) was also adopted as a way for achieving resource crafting:

"As a contractor, often you get 'type cast' in a certain role; companies tend to employ you based on your previous successes and experience. The difficulty with changing roles is to find a first contract/company that will employ you for a role you have not done before. It may be difficult, but it is do-able, e.g. by offering a lower rate, payment on delivery, better value for money or support services after the contract has ended" (P19).

It follows, therefore, that by engaging in such practices, either by reducing their pay rates or by taking time off work to learn a new skillset, female contractors are creating opportunities for gaining additional resources and ultimately, advancing their career. This contributes to enabling them to take on more challenging tasks and roles than they have done previously.

A further practice among some participants (indicated with an * on Table 1) was a distinct pattern of interchange between contracting and permanent employment, that is, switching to permanent work and then back to contracting. This has not only given them the opportunity for a secured income at a time of need (e.g. *'...it felt like a safe thing to do at that point, because I was feeling unstable in other parts of my life' P4),* for it was also seen as a positive practice for career development. For example, for P12, who was pushed into contracting following redundancy, moving in and out of contracting was a deliberate strategy in order to take control of her development in the IT profession and a way of getting career advancement:

"Anything for me, was driven through career progression. I went back to a permanent role to progress my career. I reached a regional manager role .... and then I returned to contracting on a higher rate and senior role" (P12).

Despite differing reasons for the interchange practice, the implications were the same: a strong sense of identity both as a contractor and as an IT professional. Bruning and Campion (2018)

have called this metacognition, a resource approach practice, defined as 'the autonomous creation of meaning, sense, identity, responsibility, priorities, and organisation within the crafter's mind' (p.510). *"... initially I was looking for a way back into a permanent role, however, I [after a permanent job] realised I enjoyed contracting. I like the change. I like the challenge. I'm a good at it, I like going in and setting things up. So, looking for process improvement is where I tend to go in and then use my knowledge and experience to try and help move the company forward"* (P12).

The return to permanent employment following contracting developed in these female contractors a deeper appreciation of the opportunities contracting provides, especially the increased autonomy in how and on what they work and impact that one can make on the profession and more broadly. P14, who mentors contractors as part of her portfolio of activities, described contractors as *"... adventurous people; they are people who do not just want to pay the mortgage; they want to make a difference"*.

P1, who also went back to permanent employment for a short while, but then returned to contracting, identified the difference between contracting and permanent employment as being that of visibility and making an impact: *"...by becoming a permanent employee I merged into the background. While as a contractor I was heard more, as permanent staff, my voice lessened slightly"* (P1).

Avoidance-orientated: An advantage of contracting that many participants identified was that of having distance from organisational politics as well as from gender bias that hindered their internal promotion and career development:

"I was fed up with internal politics. I mean you used to get patted at internal appraisal and the person [male] who got rewarded was the one who delivered less"(P24).

As a contractor, however, there was the view that there is no time or will to get involved in any politics:

"You go into a client organisation, you hear others complaining about not getting promoted or a pay rise, as a contractor you smile at this, but it does not affect you" (P5).

Such conscious removal of oneself mentally, as well as physically, from problematic, for them, organisational practices, was considered by the participants as an opportunity enabled by this alternative form of employment.

INSERT TABLE 3 ABOUT HERE

Table 3: Resource Crafting in Contracting: Approach and Avoidance
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Role and Resource Crafting: A reflexive relationship

Further analysis of the data showed that, on the one hand, role crafting provided opportunities for restructuring and gaining resources, which led to resource crafting. On the other hand, resource crafting provided opportunities for furthering one's development and ultimately, enlarging the roles played in the profession, i.e. leading to role crafting. Hence, we suggest that a symbiotic relationship exists between role and resource crafting. There was the sense that with contracting, there were more opportunities for making a bigger impact on the organisation than if one remained a permanent employee: "C*ontractors get respected because of their knowledge and expertise. People would not bring you in unless you had the right experience; you cannot be a passenger when you are a contractor. You have to contribute straightaway, because the client has gone to a lot of trouble finding you and is paying you a lot of money"* (P5).

Our findings point to a reflexive and dynamic process between role and resource crafting for women in IT contracting, with both embedded and emergent features. Whilst as employees in gendered organisations, female IT contractors were disadvantaged in terms of financial remunerations, roles and responsibilities, when they became contractors, the same individuals gained a sense of control as they could choose when, where and what to work on. We argue that for contractors this exercising of choice is an embedded job crafting feature role. With this feature, women in gendered professions, such as IT, can take advantage of the autonomy of contracting to shape their work as best suits them. Further to the embedded feature, the findings point to an emergent feature of role crafting, which was particularly linked to the adoption of several resource and avoidance orientated practices. This emergent feature was not directly linked to the decision to move into contracting, but rather, practices linked to this feature were found to grow over time. These have both developmental and impactful potential on one's contracting experiences and career development.

We found a progressive relationship between the embedded and emergent features, where the latter follow from the former. Despite all the participants benefitting from the embedded job crafting feature, only some were exhibiting the emergent features. On the one hand, contracting involves negotiating, renewing and even terminating a job, which are enablers of job crafting, both being embedded and emergent. On the other hand, the drive for learning and development has significantly contributed to furthering opportunities for job crafting and subsequently, changing attitudes towards work and career. The prospect of working for different organisations, getting involved with a diverse set of projects and roles as well as mixing with different people was found by the participants to be a positive characteristic of contracting:

"Learning from each other as well as from different clients are opportunities that come with contracting. If you are stuck with one company, I wouldn't know what else is out there" (P8).

Accordingly, whilst both embedded and emergent features have enriching effects on individual contractors, we take the position that it is the emergent feature of job crafting that has the greatest and lasting impact on female IT contractors. It increases women's visibility among senior management, and gives them the opportunity to exert influence on IT decision making in the organisation and the profession, in general. For a sector that has traditionally been gendered and male dominated to achieve such a highly respected position in the organisation, where one's voice is heard and views are sought after, is a great personal and professional achievement.

Discussion

The aim of this paper is to extend understanding of job crafting in alternative forms of employment, especially those with high degrees of autonomy. To this end, female IT contractors were selected, a sector that is well recognised as being male-dominated. We found that the women in our study proactively engaged in both role and resource job crafting, taking advantage of the possibilities of contracting for exerting control over their work and career. Elements of role crafting were embedded in contracting, as by its very nature, it necessitates a degree of choice, proactivity and control in organising work. Our findings have pointed to numerous resource crafting practices, both approach and avoidance orientated, enabled by the autonomy gained by switching to a contracting career.

Figure 1 distinguishes between embedded and emergent role crafting, with the former implying job crafting opportunities that derive directly from the contracting role, whilst the latter develops from it. In particular, it is found that contracting itself not only supports, but necessitates role crafting. Over time, women in their new roles as contractors, using the autonomy derived from their independent career, are able to experience resource crafting

through numerous resource and avoidance practices, which make them feel empowered. Consequently, they enhance their role and engage with numerous practices to support that enhancement, which contributes to the emergent features of role crafting. The findings point to a reflexive relationship between role and resource crafting, and thus despite the precarious nature of contracting, participants in our study benefited from further learning, development and ultimately empowerment.

INSERT FIGURE 1 ABOUT HERE

Figure 1: Contractors' embedded, emergent and symbiotic crafting

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Our study makes three contributions to the literature. First, whilst extant literature has studied job crafting in permanent and full-time employment with a traditional employee-employer relationship, with this study we add to the literature by examining alternative forms of employment, in particular that of contracting. In doing so, we not only show the embedded feature of role crafting for those who move from permanent employment to contracting positions, but also, the numerous resource crafting practices that contractors adopt in order to expand their role in their profession. Specifically, embedded and emergent role crafting are seen to be vital features for contractors as they develop their career. By its nature, contracting necessitates changes to work, both cognitive and physical, as well as relational arrangements as it puts the individuals involved in a negotiating position. Participants in the study were found to negotiate their hourly or daily rates, the number of hours or days they were expected to work during the week, the location of their work, as well as their role in the client's project. As such, role crafting has become a practice that forms part of the contractors' daily routine, thus

supporting Petrou et al.'s (2012) view on job crafting as being a daily practice, not just a one-off encounter.

Second, we extend theoretical understanding of the job crafting process. The findings collectively point to the reflexive nature of the job crafting process and the inter-relationship between role and resource crafting, extending in this way Bruning and Campion's taxonomy (2018). We have shown that in addition to the embedded feature of job crafting, contractors also experience a higher degree of the practice, identified in our study as an emergent feature. This is enabled by the autonomy gained through contracting as well as the resource crafting practices: on the job learning, training, stretchwork, interchange and meta-cognition. These practices, both individually and collectively, have developmental and impactful characteristics that consequently contribute to empowerment as well as emergent role crafting.

The third, but equally important contribution of the study, relates to female professionals in the IT sector. In this sector, opportunities for women to have career development and advancement have generally been limited (Adam et al., 2004; Kirton and Robertson, 2018). This was also supported by the participants' experiences as permanent employees. Whilst research has highlighted the temporal autonomy associated with contracting (Evans et al, 2004), our study, with its focus on female IT contractors, shows how women cope with the masculine culture of the IT workplace by repositioning themselves in the profession. It supports earlier research, which argued that women themselves should take control of their own IT careers and break the status-quo (von Hellens et al., 2004). In particular, it has emerged that through contracting, women in IT become responsible for their own work environment and develop their career in a way that best suits them, according to their own individual needs and preferences. Despite the recognition that career development is more challenging when one is a contractor, participants proved that this is not impossible. The career path as a contractor may not be as linear as when one is in a permanent employment, but is a possible path which is designed and

managed by women themselves. In this study, it has been shown how female IT contractors are effectively crafting their job in a male dominated sector through the opportunities that contracting provides them, notably, learning, flexibility and freedom to make work-related choices. The high level of flexibility that can be negotiated through contracting enables them to choose the type of client-organisations, projects and roles they want to undertake as well as the location and duration of their contract. Our findings have wider implications for women in male-dominated sectors, by showing how they use the different forms of flexibility that contracting fosters to craft fulfilling careers in the IT sector so that they feel useful, empowered and respected.

Conclusions and Implications

In this study, we have explored the job crafting experiences of women contractors in the IT sector, one described as male-dominated and masculine orientated. Findings pointed to the embedded feature of role crafting when embarking on a contracting career. We have posited that there is an emergent feature of such crafting linked to the numerous resource crafting practices adopted, including on the job learning, training, stretchwork, interchange and metacognition as well as avoidance practices. The study contributes to a more enriched understanding of job crafting theory in alternative forms of employment, especially for those workers with a high degree of autonomy. It extends Bruning and Campion's taxonomy (2018) of role and resource crafting in alternative forms of employment, whilst illustrating a reflexive relationship between the two.

A limitation of the current study is that it did not include male IT contractors. Hence, research examining whether and how contracting changes the gender balance of the IT workplace has yet to be carried out. Such research should include interviews with both male and female IT staff with permanent and contracting positions. Future studies could also examine job crafting

in different types of boundaryless careers, investigating how men and women within the same profession and employment arrangement (e.g. contractors) engage in job crafting and identifying differences in their approach but also investigate the extent of empowerment for female independent professionals who may opt for different types of precarious forms of work. We would also posit that the nature of professional identity, and how it interacts with job crafting, is a fertile area for exploration. Further, research is required to assess job crafting at times of economic crisis (e.g. post Covid-19). In such periods, where unemployment is expected to be high, job crafting may be encouraged in some types of professions or discouraged for fear of people losing their jobs.

There are also implications for practitioners in IT organisations from our study. Directors of IT departments and HR managers could consider the gender specific issues that emerged from the study, and respond by adding flexibility, variety and empowerment to the jobs that women in IT undertake as well as providing suitable financial motives in order to increase their retention in the sector. As the findings have shown, female IT professionals do not just look for a job, but rather, they look for opportunities to craft their job in a way that suits their skills, interests and potential.

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