

From crafting what you do to building resilience for career commitment in the gig economy

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Abstract

The present study investigates how individual and collaborative job crafting may help digital labourers to build resilience and career commitment in the gig economy. Results based on a time-lagged survey from 334 digital labourers indicate that those who engaged in higher individual job crafting reported subsequently higher resilience at the outset. Moreover, high collaborative job crafting compensated for low individual crafting efforts in reaching higher resilience and subsequently higher career commitment in the gig economy. Theoretical and practical implications for sustainable careers in the gig economy are discussed.

KEYWORDS

career commitment, collaborative job crafting, crowdsourcing, digital labour, gig economy, individual job crafting, resilience

1 | INTRODUCTION

Over the past decade, organisations have increasingly relied on crowdsourcing platforms to outsource work tasks to online labourers through contracting, consulting, project or gig work, to tap into knowledge and manpower that may not reside within the organisations to improve efficiency and effectiveness (Schwartz, 2018). Crowdwork is not a single, unified phenomenon, but in broad strokes it comprises a spectrum (Bukht & Heeks, 2017), on which

Abbreviations: CFA, confirmatory factor analyses; CFI, comparative fit index; H1, hypothesis 1; H2, hypothesis 2; H3, hypothesis 3; HR, human resources; HRM, human resource management; LMIs, labor market intermediaries; MLMV, maximum likelihood mean-variance adjusted; RMSEA, root mean square error of approximation; SWLS, Satisfaction with Life Scale; US, United States

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Practitioner notes**What is currently known**

- While individuals find it hard to develop a proper career in the gig economy, a platform's long-term financial viability critically relies on the retention of a core workforce over time.
- While many individuals find being active in the gig economy appealing, actually working in a platform environment is quickly found to be demotivating due to a comparative lack of interaction with peers.

What this paper adds

- Our findings reveal that individual- and-collaborative-job crafting activities with other individuals in a wider community, on- and off-platform, are positively related to resilience and intention to stay active on a platform.
- High involvement in collaborative crafting efforts may, to a certain degree, help digital labourers with low levels of individual crafting efforts to build resilience.

The implications for practitioners

- Our research sheds light on the importance for platforms to foster supportive community networks that enable individuals to better thrive in the gig economy.
- Digital platforms are recommended to provide training on how digital labourers can proactively craft their work on the platforms.

platforms facilitate work that is performed either online or offline, and is nonetheless digitally mediated via technology (Huws et al., 2018). In this study, we focus on freelancing sites that advertise microwork with various skills, for example, software development or human intelligence tasks, via crowdsourcing platforms such as Upwork, ClickWorker and 99designs (Lehdonvirta et al., 2018).

While online digital labour is praised for its potential to, for instance, leverage previously untapped creativity or talents, scholars have expressed concerns regarding its sustainability and the challenges associated with this new type of employment relationship (Spreitzer et al., 2017). Particularly, from a job design perspective, the extremely virtual environment, with little to no human managerial oversight, little interaction with task providers, and often uncontextualised nature of tasks, make it challenging for digital labourers to see task significance and/or how their work relates to others (Kost et al., 2018). Additionally, digital labourers receive limited to no traditional human resource management (HRM) support, such as promotions, skill training, career development, job security and so forth (Spreitzer et al., 2017).

The role of HR in the management of digital labourers is complicated by several factors. They typically have employment relationships with multiple organisations, but these relationships are often short or sporadic, making continued participation and organisational commitment a challenge (Deng & Joshi, 2016). Furthermore, a digital worker is considered a contractor—not an employee—whose career success relies more heavily on them as a digital labourer than it does on a traditional employee (Connelly & Gallagher, 2006). That is, without HRM support structures, pursuing a successful career in the gig economy requires commitment and resilience (Ashford et al., 2018). Despite its importance to participation in the gig economy, the factors cultivating resilience and career commitment in the gig work environment have received considerably little research attention and have mostly taken an economic and labour relations perspective with a top-down job design approach. In general, this calls for revisiting the HRM literature related to increased worker reliance on technology and new working arrangements

(Colbert et al., 2016). Particularly, we advocate for a bottom-up HR approach, and consider how empowering digital labourers to increase resilience, that is, the capacity to rebound from adversity, hardships or even positive events (Luthans et al., 2006) may subsequently lead to increased career commitment in the gig economy.

In this study, we employ such a bottom-up approach and propose that digital labourers cope with hardships associated with crowdworking by job crafting, which we define as an effort to make changes to their job to better align their work with their values, objectives and likes. These efforts include proactive behaviours directed at changing how digital labourers understand the meaning of their work and their work identity (Leana et al., 2009). For instance, crowdworkers often seek to upskill themselves in order to meet the skill demands of platform clients, thus allowing them to be considered for the types of work tasks they observe to be most frequently offered at higher rates (Lehdonvirta et al., 2018). Moreover, a study by Leana et al. (2009) supports the idea that the benefits of job crafting may be even greater if workers job craft collaboratively. Collaborative job crafting, in which members of a professional community jointly make changes to their work to meet shared objectives, encourages individuals to share their work experiences and enables regular interaction. We refer to collaborative crafting for digital labourers as practices through which digital labourers, together through the use of communication technology, become more literate in negotiating algorithmic workforce management, develop intuitions, experience teamwork on temporary projects and share business and task advice (cf., Grey et al., 2016). However, due to the isolated work nature on platforms, the existence of collaborative initiatives may not seem apparent to some digital labourers. For those who engage in collaborative initiatives, such proactive engagement may signal rather robust crafting endeavours to break out from isolation to take charge of one's work situation (Petriglieri et al., 2019). Considering digital labourers may take advantage of opportunities to craft their job vis-à-vis themselves (i.e., their own activities or perceptions) and others (i.e., interactions), an interesting question then arises regarding whether and to what extent the two types of job crafting, that is, individual and collaborative job crafting, combined, may help digital labourers cope with the hardships of gig work environments and subsequently their commitment to such careers.

By investigating how individual and collaborative job crafting may relate to digital labourers' resilience and their career commitment, the intended contributions of the study are threefold. First, in addition to individual job crafting, we examine collaborative job crafting behaviour in a relatively isolated online work environment. We aim to extend understanding of how individuals in this environment may go beyond their boundaries in shaping their work when crafting their work alone could be difficult. More importantly, we aim to provide managerial implications for how platforms, HR departments and labour activists may foster individual and collaborative job crafting among digital labourers. Second, research on how the combination of individual and collaborative job crafting may influence work outcome is scant (Chen et al., 2014), in particular among digital labourers. Therefore, our study aims to contribute to job crafting theory, so to further understand the potential combined effects of individual and collaborative job crafting efforts. Third, we aim to contribute to career research, of which nontraditional career settings due to technology advancement, are recognised to be largely understudied, yet needed (Sullivan & Baruch, 2009).

2 | THEORY AND HYPOTHESES

2.1 | Gig work—the new nonstandard employment model

Crowdsourcing functions as a marketplace for the mediation of both physical and digital tasks—the latter carried out online from initial instruction to completion and evaluation (Lehdonvirta et al., 2018). The technological foundations of these digital marketplaces can be considered a form of labour market intermediaries (LMIs). Most of these platforms function as spot markets, largely impeding the establishment of substantial, long-term work relationships (Schwartz, 2018). In its current state, from a career research perspective, the body of knowledge on the

digital economy is characterised by definitional ambiguity and a variety of discipline-specific interpretations (cf., Sullivan & Baruch, 2009). Accordingly, there is a growing body of empirical research in adjacent research streams on precarious creative-and-knowledge workers (Petriglieri et al., 2019; Schwartz, 2018) that informs a significant amount of the thinking around digital labour in the gig economy. Moreover, there is much room for exploration regarding HR theories and practices, as established findings and practices are much less applicable to this emerging, dispersed, desynchronised and anonymous workforce (e.g., Dundon & Rafferty, 2018).

While many digital labourers identify with their work and respective careers (Spreitzer et al., 2017), Deng and Joshi (2016) reported that workers experience gig work as oscillating between two extremes: empowerment and marginalisation. The experience of being marginalised is often exacerbated by a platform's policy to make human workers more invisible and the fostering of transient, task-based and short-lived relationships creates a disconnection between the worker and the outcome of their work (Bukht & Heeks, 2017). These policies are often driven by organisational and specifically, HR-related efforts, to perpetuate their digital labourers' lack of employee treatment to avoid providing things like benefits, salary and paying additional taxes (Connelly & Gallagher, 2006). Conversely, research has shown that tasks that provide meaningful, cognitive benefits and context, allude to social impact and relate to workers' interests are conducive to organisational commitment and quality of work (Wrzesniewski & Dutton, 2001). This said, some researchers such as Dundon and Rafferty (2018) advocate for HR departments to develop policies or guidelines for what tasks are appropriate for digital labourers to take upon in order to make gig work more rewarding.

2.2 | Individual job crafting and resilience

Job crafting is concerned with how workers respond to opportunities to actively alter the task and relational boundaries of their jobs, on either physical or cognitive levels (Wrzesniewski & Dutton, 2001), and is associated with positive outcomes on the individual and the organisational level. On the individual level, job crafting is associated with increased meaningfulness of work, work engagement and adaptivity, job satisfaction and performance (Berg et al., 2008). At the organisational level, job crafting is associated with changes in products, services, markets and job design (Berg et al., 2008). With these organisational outcomes in mind, HR practices are beginning to adapt to the nature of crowdwork to better encourage these outcomes.

In the case of gig work, it is common for digital labourers to work in relative isolation with somewhat limited opportunities to build and/or to collaborate with workers. This commonality may reflect self-initiated preferences and behaviours as well as organisational efforts to keep them removed from the organisation, opposite of generally agreed upon and traditional HR goals (Connelly & Gallagher, 2006). Nonetheless, although limited, there are collective initiatives to collaborate, often via online labour communities. For instance, MTurkers have active online communities, on which they exchange experiences, share information on how to find well paid tasks and how to avoid dubious requesters. Other sectors, such as creative freelance designers, have also created active online occupational communities that support workers facing unclear career trajectories and unpredictable compensation with knowledge sharing and coordinated work (Schwartz, 2018). Not only does this demonstrate how workers craft individually, but also how they organise themselves collectively to reach common goals (Harris et al., 2019). This highlights how some individuals, with lacking HR and organisational support, have taken it upon themselves to develop their own practices of support.

Jobs are traditionally considered positions workers hold to earn resources, such as money, in return. The work involved with a job is not an end in itself, but a means that allows an individual to acquire the resources needed to suit their lifestyle preferences (Wrzesniewski et al., 1997). Commonly, what makes a job good or bad is dependent on its job characteristics, including skill variety, task identity, task significance, autonomy and feedback (Oldham & Hackman, 2005). The precariousness of gig work, involving high job insecurity due to its on-demand nature and the largely parcelled activities performing microtasks is well recognised (Bukht & Heeks, 2017). Based on the job design

perspective, the seemingly insufficient justification conditions, defined by isolation from other workers and alienation from the end product of their work, can be demotivating and difficult for some to cope with (Grant, 2007). Conversely, the precarious work conditions can serve as a source of motivation for job crafting to assert control over one's work, to avoid alienation and to cope with adverse work conditions (Petriglieri et al., 2019). Indeed, research suggests that job crafting can be used to increase one's capacity to cope with adverse and stressful work situations, that is, resilience (Kossek & Perrigino, 2016).

In the positive psychology literature, resilience is described as psychological capital, which is a resource for coping and the ability to recover from adverse situations and stress. Resilience can be built through positive change and adjustments (Luthans et al., 2006) to overcome challenging situations, such as difficult or transient job demands and environments. Resilience has been found related to access to resources (Kossek & Perrigino, 2016), thus becoming particularly relevant to online labourers, whose contextual challenges and lack of HR support have been discussed. In light of the potential for close working relationships being eroded, and lack of training and development opportunities offered by HR (Colbert et al., 2016), it is likely that sustained crowdwork participation involves a degree of resilience. Building resilience thus requires adaptive behaviours, such as job crafting, to foster positive emotions about one's work (Caza, 2009). Individuals can craft their jobs to align job demands with their capacity to manage their workload to conserve resources (Solberg & Wong, 2016). Workers can also engage in cognitive crafting behaviours, that is, altering the way one sees one's job, that is, cognitive boundaries (Wrzesniewski & Dutton, 2001). Job crafting is inherently self-motivated and centres on how an individual perceives their work in alignment—or misalignment—with their preferences (Tims et al., 2012).

Considering that digital labourers have relatively high autonomy and are solely responsible in terms of when and where they work, there can be less hierarchical restrictions that could hinder their job crafting activity. Digital labourers can, for instance, broaden the scope of their work by trying different types of tasks or increase the number of tasks they perform to qualify for better paying jobs. Individuals may build greater coping resources by altering their work demands and/or their work conditions to align more with their own preferences (Kossek & Perrigino, 2016). Thus, employing job crafting as a form of adaptive behaviour makes it likely that digital labourers would develop greater capacity for resilience. Hence, we hypothesise:

H1 *Digital labourers' individual job crafting is positively related to resilience.*

2.3 | Collaborative job crafting as a moderator: A complementary role

Job crafting, although possible to do alone, has shown beneficial results when performed collaboratively (e.g., Bakker et al., 2012; Leana et al., 2009). In the job-crafting literature, individuals can engage with members of work groups who share common events and similar work processes to pursue collaborative activities to alter their task boundaries and work practices (Leana et al., 2009). Adapting this definition, collaborative job crafting for digital labourers would involve engaging in regular communication and sharing knowledge with other workers in the community as an attempt to make changes to work or practices on crowdsourcing platforms better fit their values and preferences. Traditionally, formal and informal interdependence among workers in an organisation fosters collaborative crafting (Leana et al., 2009) via HR efforts, the office setting and teamwork. The adverse conditions and challenges that digital labourers share inherently hinders this, but alternatively, can motivate them to jointly change their common obstacles.

In traditional work settings, collaborative and individual job crafting contribute to different outcomes. Specifically, while individual job crafting efforts serve to help individual work outcomes, collaborative job crafting helps improve team outcomes, especially when task interdependence among team members is high (Tims et al., 2012). However, on crowdsourcing platforms, digital labourers rarely engage in team assignments, as most of the work is meant to be done individually. Therefore, the work and working conditions that digital labourers are likely

concerned with are at the individual level. Accordingly, unlike in traditional work settings, where collaborative job crafting can lead to team benefits in addition to improving individual work outcomes (Tims et al., 2013), the benefits of collaborative job crafting on crowdsourcing platforms are likely to be similar to individual job crafting efforts, with a primary focus on improving individual outcomes. In other words, it would be less likely for digital labourers to enjoy the compound effect of collaborative job crafting efforts on their individual work outcome via team outcome improvements.

We therefore argue that collaborative job crafting can be a salient alternative way for digital labourers to craft their work, especially when it is, for instance, less viable or less important to engage in individual crafting. In particular, community variables such as social networks are considered protective factors that increase social ties among digital labourers and enable opportunities to seek help, collaboration and/or support (Grey et al., 2016). Indeed, digital labourers employ collective strategies to achieve better communication between the platform provider and workers concerning projects and more reliable pay (Schwartz, 2018), supporting the idea that collaborative crafting efforts may help workers to change the boundaries of their work (Leana et al., 2009). Moreover, by engaging in collaborative crafting, often on online forums, digital labourers may develop a sense of belonging by addressing common challenges and as a result, may feel less isolated. These information-sharing based interactions may help build relational networks and allow them to craft their own work practices. This development of resourceful professional networks would likely foster increased resilience due to an increase in resources as well.

For instance, some of the interactions between digital labourers on these platforms demonstrate collaborative crafting efforts that are directed towards changing work policies and procedures (Grey et al., 2016). Such “communities of practice” involve digital labourers taking joint action to improve their working conditions and agree on standard guidelines (cf. Schwartz, 2018). There are various positive outcomes associated with these communities. Digital labourers, who are actively on forums and exchange experiences, may learn about coping with the work environment (van den Heuvel et al., 2015) and adopting each other's crafting behaviours, thereby increasing their work engagement (Bakker et al., 2012). Accordingly, they can utilise collaborative crafting, which focuses on the exchange of new knowledge, as bottom-up driven cross training. Therefore, we argue that such social learning would be particularly helpful for digital labourers who are not able to or do not know how to craft their work on their own. In other words, collaborative job crafting can supplement low levels of individual job crafting to help digital labourers stay resilient in their work.

Thus, we hypothesise that:

H2 *Digital labourers' collaborative job crafting moderates the positive relationship between individual job crafting and resilience, such that the positive effect of individual job crafting on resilience is stronger for those who experience low levels of collaborative job crafting and weaker for those who experience high levels of collaborative job crafting.*

2.4 | Resilience as psychological capital to nurture digital labourers' career commitment

Career commitment, when differentiated from other related constructs, such as job or organisational commitment, is considered the strength of an individual's commitment to work in their chosen profession (Blau, 1985). Organisational ambiguity, supervisor consideration and control, work role salience, organisational commitment and organisational opportunity have shown to predict career commitment (Aryee & Tan, 1992). These constructs have largely been identified as obstacles more so in crowdworking than in traditional work (Spreitzer et al., 2017). This begs the question of how crowdworking can be improved to increase digital labourers' career commitment. With the adverse conditions of crowdworking in mind, resilience comes into play.

In such an isolated environment, with a lack of traditional, HR-facilitated resources, the more developmental opportunities an individual perceives as available to them in their current position, the more positive the relationship between job and career commitment is (Blau, 1985). Resilience relates to this as it is the ability to cope

with and endure job demands (Kossek & Perrigino, 2016) likely via job crafting practices to foster an alignment of job ideals and realities, to make up for the lack of HR support.

Accordingly, job crafting aimed at better job person fit helps to foster career commitment (Berg et al., 2008). It is important to consider resilience as the underlying mechanism enabling this effect, especially for crowdworking, which is often not regarded as a career. Research suggests that resilience is a protective factor in career development and enhances the ability to adapt to changing environments (Ferrari et al., 2017). Because digital labourers are not categorised as employees, they often experience uncertainty concerning employment relationships and how this type of work will further develop (Spreitzer et al., 2017). Handling flexibility resulting from this nonstandard work is largely dependent on personal resources, as digital labourers often need to take care of their own training and development in light of little organisational support (Vincent, 2016). With stronger resilience, digital labourers are more likely able to and willing to adapt to the uncertainty and flexibility of crowdwork and are more likely to stay committed to crowdworking. Hence, as illustrated in Figure 1, we hypothesise:

H3 *Resilience mediates the moderated relationship between individual- and collaborative-job crafting and career commitment in crowdwork such that digital labourers who experience high individual- or collaborative-job crafting will experience higher resilience and subsequently experience higher career commitment.*

3 | METHODS

3.1 | Samples and procedure

This study is based on a two-wave, time-lagged survey of 334 digital labourers from MTurk. Specifically, we employed a time-lagged design in which the dependent variable (i.e., career commitment) was measured twice with 1 year in between. Research with time-lagged design in the management discipline has primarily chosen time lags varying between 1 month and 1 year. As our study focuses on career commitment, we have chosen a longer time frame as a proxy to filter out individuals who may have engaged in platform work for non-work reasons, such as to kill time. More importantly, we aimed to have a time lag that reduces problems related to common-method bias (Podsakoff et al., 2003) and ensures a reasonable time period in which digital labourers' proactive job crafting may have been integrated with their crowdwork routine. Time-one data were collected in November 2016 with 484 respondents. The Time-two survey was posted in October 2017 to those who had completed the Time-one survey, of which, 334 digital labourers completed both, giving a response rate of 69% for the Time-two data collection. Of the 334 digital labourers, 48.5% were male and 51.5% were female. On average, they were 40 years old and had more than one child. Additionally, on average they had been working on MTurk for 2.2 years, spending 20.9 h weekly there, and had more than one part-time job. A total of 44.7% of the respondents had obtained a 4-year bachelor degree, followed by the respondents who had some college education (31.7%), high school degree (12.3%), master degree (9.2%), doctorate degree (1.4%) and less than high school education (0.7%).

3.2 | Measures

The independent variable (individual job crafting), the moderating variable (collaborative job crafting), and control variables (age, gender, education, platform tenure, number of underage children in the household, number of part time jobs and subjective well-being) were measured with the Time-one survey. The mediating variable (resilience) was measured with the Time-two survey. Lastly, as a time-lagged design, the dependent variable (career commitment) was measured at both Time-one and Time-two.

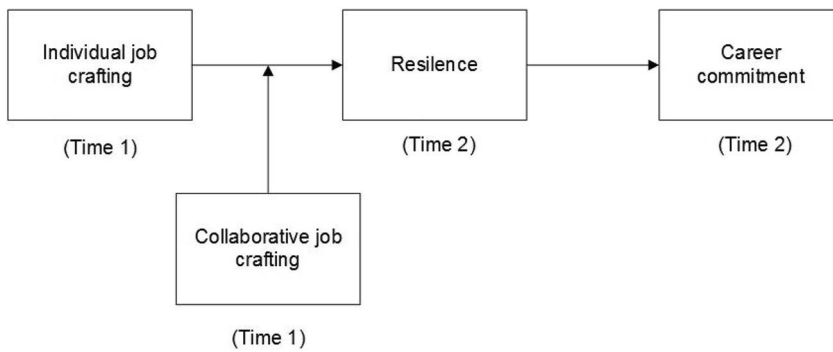


FIGURE 1 Conceptual model

3.2.1 | Individual job crafting (Time 1)

We adapted Leana et al.'s (2009) six-item individual job crafting scale. We asked the participants to indicate the frequency at which they engaged in six job crafting behaviours on their own, such as "I introduce new approaches on my own to improve my work at MTurk", on a five-point Likert scale ranging from one (never) to five (everyday). The items had a Cronbach's α for reliability of 0.84. The coefficient alpha reported in Leana et al.'s (2009) study was 0.79.

3.2.2 | Collaborative job crafting (Time 1)

Leana et al.'s (2009) six-item collaborative job crafting scale uses a similar six items for the individual job crafting scale. However, instead of asking the participants to indicate the frequency with which they craft their work on their own, we asked them to indicate the frequency with which they engaged in these activities in collaboration with other digital labourers. A sample item is "I work together with the MTurk community to introduce new approaches to improve my work at MTurk". The participants were asked to indicate one (never) to five (everyday). In this study, the scale had a Cronbach's α of 0.95 and it was 0.89 in Leana et al.'s (2009) study.

3.2.3 | Resilience (Time 2)

We measured resilience using Campbell-Sills and Stein's (2007) 10-item Connor-Davidson resilience scale (CD-RISC), which was modified from the original 25-item CD-RISC scale (Connor & Davidson, 2003). We asked participants to indicate their experiences on items, such as "I can achieve goals despite obstacles" on a five-point Likert scale ranging from one (not at all) to five (extremely). The Cronbach's α coefficient was 0.93 in the current study, and it was 0.85 in Campbell-Sills and Stein's (2007) study.

3.2.4 | Career Commitment (Time 1 and 2)

We adapted the eight-item career commitment scale developed by Gould (1979a) to ascertain the extent to which a digital labourer's career is a central part of their identity. The respondents were asked to indicate their agreement ranging from one (strongly disagree) to five (strongly agree) on items such as "If I could get another job different

from being a digital labourer and paying the same amount, I would probably take it (a reversed item)". One item, which was "I spend a significant amount of personal time reading materials posted at MTurk related forums" was removed because of low reliability. The remaining items had a Cronbach's α of 0.73 at Time 1 and 0.76 at Time 2. The coefficient α found in Gould's (1979b) study was 0.83.

3.2.5 | Control variables (Time 1)

Given that prior research has shown socioeconomic status relates to individual perceptions of life quality (Andrews & Withey, 2012), we controlled for age, gender, education, crowdwork tenure, number of underage children in the household, number of part-time jobs and subjective well-being at Time 1. Age, number of part-time jobs, and number of children in the household were measured in true numbers. For education, we asked the participants to indicate their highest educational attainment ranging from one (less than high school) to seven (doctorate degree). For crowdwork tenure, we asked the participants to indicate the number of years that they had been working for MTurk, namely: 1 (less than 1 year), 2 (1–2 years), 3 (2–3 years), 4 (3–4 years) and 5 (more than 5 years).

3.2.6 | Subjective well-being (Time 1)

We measured digital labourers' subjective well-being as a control variable to consider the potential influence that their well-being may have on their resilience. Diener et al.'s (1985) five-item Satisfaction with Life Scale (SWLS) was used. We asked the participants to respond to, for example, "I am satisfied with my life" (Diener et al., 1985) using a five-point Likert scale ranging from one (strongly disagree) to five (strongly agree). The scale had a Cronbach's α of 0.91. The coefficient alphas found from previous studies using SWLS ranged from 0.79 to 0.89 (Pavot & Diener, 1993).

3.3 | Analytic procedure

To avoid potential multicollinearity between the independent and moderating variables and their interaction term, we centred these two variables using their means (Aiken & West, 1991). Hypothesis 1 posits that digital labourers' individual job crafting behaviours will be positively related to their resilience. The hypothesis is supported if the regression coefficient between individual job crafting behaviour and resilience is positive and significant. Hypothesis 2 posits that digital labourers' collaborative job crafting behaviour will moderate the positive relationship between individual job crafting and resilience such that the positive effect of individual job crafting on resilience is stronger for those who experience low levels of collaborative job crafting and weaker for those who experience high levels of collaborative job crafting. The moderating hypothesis is supported if the interaction term is negative and significant. We applied Dawson's (2014) procedure to examine the simple slopes at high and low levels of digital labourers' collaborative job crafting behaviour.

Hypothesis 3 predicts that resilience will mediate the moderated relationship between individual job crafting, collaborative job crafting and career commitment. We followed Hayes' (2015) recommended procedure using PROCESS analyses and examined the index of moderated mediation and the different conditional indirect effect of individual job crafting on career commitment via resilience across low and high levels of collaborative job crafting. Hypothesis 3 is supported if the index of moderated mediation is negative and significant and the conditional indirect effects between individual job crafting and career commitment via resilience displays differences across low and high levels of collaborative job crafting. In addition to the scales we measured to test our conceptual model, we asked participants open-ended questions to describe the activities they did on their own and/or with others in order to modify their work routines or the ways they interact with others at MTurk.

4 | RESULTS

Descriptive statistics including means, bivariate correlations and Cronbach's alphas for all variables studied are shown in Table 1. The bivariate correlations indicate that female ($r = 0.14, p < 0.05$) digital labourers with higher education ($r = 0.16, p < 0.05$) and with fewer underage children ($r = -0.27, p < 0.01$) reported higher subjective well-being at Time 1. Moreover, digital labourers' age is negatively correlated with collaborative job crafting ($r = -0.19, p < 0.01$) but positively correlated with career commitment ($r = 0.16, p < 0.01$) at Time 1. Female ($r = 0.26, p < 0.01$) digital labourers who had fewer underage children in the household ($r = -0.21, p < 0.01$), as well as digital labourers who experienced higher subjective well-being ($r = 0.28, p < 0.01$), and individual job crafting reported higher career commitment ($r = 0.21, p < 0.01$) at Time 1. On the other hand, digital labourers who had fewer part time jobs at Time 1 reported higher career commitment at Time 2 ($r = -0.12, p < 0.05$). Resilience is positively correlated with digital labourers' individual job crafting behaviour at Time 1 ($r = 0.17, p < 0.05$) and their career commitment at Time 2 ($r = 0.20, p < 0.05$).

4.1 | Confirmatory factor analyses (CFA) results

Next, we conducted CFA with maximum likelihood estimation procedures using AMOS. The expected five-factor solution (individual job crafting, collaborative job crafting, resilience, career commitment and well-being) displayed an adequate fit with the data ($\chi^2 [517] = 940.92$, CFI = 0.87, RMSEA = 0.05). The confidence interval for the RMSEA is between 0.045 (lower limit) and 0.055 (upper limit), with 0.045 being the most optimistic estimate and 0.055 the most pessimistic estimate. Both estimates indicate a good fit.

We tested alternative nested models to examine whether a more parsimonious model achieved an equivalent fit. A four-factor solution forcing resilience and career commitment on the same factor yielded a poorer fit, $\chi^2 [521] = 1195.26$, CFI = 0.79, RMSEA = 0.06. The same applied to the three-factor solution with resilience, career commitment and individual job crafting loading on the same factor, $\chi^2 [524] = 2078.16$, CFI = 0.52, RMSEA = 0.09. The two factor solution with all variables loading on one factor except for well-being also indicated a poor fit $\chi^2 [526] = 2174.94$, CFI = 0.49, RMSEA = 0.09. Lastly, the model with all latent variables loading on the same factor yielded the poorest fit ($\chi^2 [527] = 2677.26$, CFI = 0.34, RMSEA = 0.11). We also consulted the chi-square change (calculated in MPlus with MLMV estimator) (see Table 2).

The results from the χ^2 difference test indicate that the five-factor solution should be adopted since the chi-square change yielded a significant p value (see Table 2), meaning the five-factor solution fits the data better. The CFI change also supports the five-factor solution. Cheung and Rensvold (2002) suggest values of CFI change ≤ -0.01 indicate that the null hypothesis of invariance should not be rejected. Adhering to these criteria, the results support the five-factor solution, the CFI change is larger than -0.01 and yields a higher CFI than the four-factor solution (see Table 2).

4.2 | Hypotheses testing

Hypothesis 1 proposed that individual job crafting is positively associated with digital labourers' resilience. We regressed resilience on individual job crafting together with the control variables. As shown in Table 2, digital labourers' individual job crafting activities reported at Time 1 were positively and significantly related to their resilience reported at Time 2 ($0.18, p < 0.01$). Hypothesis 1 is therefore supported. To exemplify digital labourers' job crafting activities, we selected some of the quotes from the participants from our survey study. For instance, a 34-year-old participant said, "I have created my own MTurk scrapper to assist with finding work and making sure I can pick it up better. This modified my routine to make things more streamlined." In addition, for example,

TABLE 1 Means, standard deviations, correlations and alpha reliabilities among variables

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Age ^a	35.98	10.95	-									
2. Platform tenure ^a	2.24	1.20	0.04	-								
3. Number of children ^a	1.62	0.49	-0.15**	0.03	-							
4. Number of part time jobs ^a	1.21	2.33	-0.05	0.01	0.03	-						
5. Subjective well-being ^a	3.24	1.08	-0.02	0.04	-0.27**	-0.06	(0.91)					
6. Individual job crafting ^a	2.40	0.86	-0.04	0.08	-0.02	-0.00	0.07	(0.84)				
7. Collaborative job crafting ^a	1.54	0.86	-0.19**	0.15**	-0.02	-0.04	0.10 [†]	0.60**	(0.95)			
8. Career commitment ^a	3.55	0.75	0.16**	0.03	-0.21**	-0.07	0.28**	0.21**	0.05	(0.73)		
9. Career commitment ^b	3.15	0.80	0.06	-0.03	-0.03	-0.12*	0.07	0.09	0.07	0.04	(0.76)	
10. Resilience ^b	4.04	0.77	-0.06	-0.08	0.07	0.09	-0.03	0.17**	0.07	-0.05	0.20**	(0.93)

Note: $N = 334$. Alpha coefficients are in parentheses on the diagonal. $†p < 0.10$, $*p < 0.05$, $**p < 0.01$.

^aVariables measured at Time-one.

^bVariables measured at Time-two.

a 59-year-old female participant expressed, "I actively look for work that I enjoy doing and look for work that fits well with my talents. I have become more efficient in finding work and am always looking for new work to qualify for." These illustrate that the more digital labourers consciously craft, in this case their task selection, the more they may alter the perception of their work (Kost et al., 2018), which is aligned with our quantitative results.

Next, we introduced digital labourers' collaborative job crafting activities reported at Time 1 and its interaction with individual job crafting behaviour to the regression model to examine the two-way interaction posited in Hypothesis 2. The results, depicted in Table 2, reveal that collaborative job crafting was positively related to resilience, but the direct relationship was not significant ($0.12, p > 0.10$). However, the interaction between individual- and collaborative-job crafting was significant and negative ($-0.12, p < 0.05$), as expected. We further inspected the two-way interaction pattern by testing the simple slopes at high and low levels of digital labourers' collaborative job crafting (cf., Dawson, 2014). Research scholars on moderation testing has increasingly warned against the use of one standard deviation as a default. This is because one standard deviation above and below the values of the moderator are arbitrary values that may or may not represent the relationships being tested (Dawson, 2014). Rather, method scholars strongly advise to choose meaningful values of the moderator at which to evaluate their effects (Dawson, 2014; Hayes, 2018). For collaborative job crafting, similar to previous research (e.g., Tims et al., 2012), participants in our sample reported lower ranges of collaborative job crafting efforts. This is in fact not uncommon. Despite the rising awareness around the importance of collaborative job crafting, such effort is not yet common among digital labourers. Many digital labourers still work in isolation to craft their career on the platforms. Therefore, we reduced the minimum measure -0.54 as the lower value and correspondingly $+0.54$ as the upper value of collaborative job crafting in testing the moderation (H2) and moderated mediation (H3) to better represent collaborative job crafting as a concept in the crowdsourcing setting.

TABLE 2 Model fit indices, chi-square ($\Delta\chi^2$) and CFI change (ΔCFI) statistics

Model	χ^2	Df	p	$\Delta\chi^2$	Δdf	Δp	CFI	ΔCFI	RMSEA
1 Factor	2677.26	527	0.00				0.34		0.11
2 Factors	2174.94	526	0.00	1458.29	1	0.00	0.49	-0.15	0.09
3 Factors	2078.16	524	0.00	80.6	2	0.00	0.52	-0.03	0.09
4 Factors	1195.26	521	0.00	1421.39	3	0.00	0.79	-0.27	0.06
5 Factors	940.92	517	0.00	559.27	4	0.00	0.87	-0.08	0.05

As shown in Table 3, the simple slope between individual job crafting and resilience was not significant when collaborative job crafting was high (0.11, $p > 0.10$). On the contrary, the simple slope of the individual job crafting – resilience relationship was significantly positive when collaborative crafting was low (0.24, $p < 0.01$), as illustrated in Figure 2. The moderating patterns also matched with our prediction, supporting Hypothesis 2.

Lastly, we regressed career commitment reported at Time 2 on individual job crafting, collaborative job crafting, their interaction term, resilience, and control variables to examine the moderated mediation hypothesis (Hypothesis 3). We assessed the index of moderated mediation and the different conditional indirect effects using bootstrapping with PROCESS analyses (Hayes, 2015). As shown in Table 2, a 95% bootstrap confidence interval for the index of moderated mediation was -0.03 and did not include zero with a lower bound of -0.07 and an upper bound of -0.01 . Moreover, when collaborative job crafting was high (0.54), the indirect effect of individual job crafting on career commitment via resilience was 0.02. However, the confidence interval included zero with a lower bound of -0.02 and an upper bound of 0.07. Thus, the indirect effect was not significant when collaborative job crafting was high. On the contrary, when collaborative job crafting was low (-0.54), the indirect effect was 0.06 with a confidence interval between 0.02 and 0.12, which did not include zero. The indirect effect of individual job crafting on career commitment via resilience was positive and significant, as expected. This indicates that when collaborative job crafting is high, a digital labourer's dependence on individual job crafting in order to foster stronger resilience and subsequently, higher career commitment, decreases. Hypothesis 3 is therefore supported.

5 | DISCUSSION

We examined how digital labourers' engagement in individual job crafting and collaborative job crafting activities may intertwine to strengthen their personal resilience and subsequently, their commitment to their crowdwork career. Specifically, the more digital labourers engaged in job crafting behaviours on their own, the more they felt resilient to respond to adversity (H1). However, with low individual job crafting, digital labourers benefited from collaborating with other digital labourers to craft their work in order to strengthen their resilience (H2). In turn, digital labourers' resilience as a mediator subsequently led to higher career commitment (H3).

5.1 | Theoretical contributions

The findings of our study contribute to the literature of precarious work and job crafting in three distinct ways. First, whereas collaborative job crafting is advocated in other research, though limited, as an independent means apart from individual job crafting to proactively deal with work situations (e.g., Chen et al., 2014; Leana et al., 2009), we propose that collaborative job crafting complements individual job crafting for digital labourers to build resilience in the isolated platform work environment that often lacks traditional benefits of HR practices. In traditional work settings, individual and collaborative job crafting are conceptualised to drive outcomes at different levels,

TABLE 3 Regression analyses results

Variables	Resilience ^b		Career Commitment ^b
Intercept	3.92 (0.39)**	3.98 (0.39)**	1.90 (0.52)**
Age ^a	-0.00 (0.01)	-0.00 (0.00)	0.00 (0.01)
Female ^a	-0.05 (0.10)	-0.02 (0.10)	-0.05 (0.11)
Male ^a	-	-	-
Education—less than high school ^a	1.14 (0.54)*	1.10 (0.54)*	-0.33 (0.60)
Education—high school ^a	-0.01 (0.14)	-0.01 (0.14)	0.06 (0.16)
Education—some college ^a	-0.01 (0.11)	-0.03 (0.11)	-
Education—bachelor degree ^a	-	-	0.06 (0.12)
Education—professional degree ^a	-0.04 (0.17)	-0.05 (0.17)	0.38 (0.19)*
Education—doctorate ^a	0.49 (0.44)	0.51 (0.44)	0.14 (0.49)
Platform tenure ^a	-0.08 (0.04)*	-0.08 (0.04)*	0.02 (0.04)
Children ^a	0.13 (0.10)	0.12 (0.10)	0.01 (0.11)
Number of part time jobs ^a	0.03 (0.02)	0.03 (0.02)	-0.05 (0.02)*
Subjective well-being ^a	0.00 (0.05)	0.01 (0.05)	0.03 (0.05)
Career commitment ^a	0.03 (0.07)	0.02 (0.07)	-0.02 (0.07)
Individual job crafting (IJC) ^a	0.18 (0.05)**	0.18 (0.07)*	0.02 (0.08)
Collaborative job crafting (CJC) ^a		0.12 (0.09)	0.05 (0.10)
IJC × CJC		-0.12 (0.05)*	0.01 (0.06)
Resilience ^b			0.26 (0.07)**
R	0.08*	0.10*	0.10*
Δ R		0.02*	0.02*
	Two-way interaction slopes tests		Moderated mediation
	High CJC (+0.54)	0.07 (n.s.)	Index: -0.03 (0.02) [-0.07, -0.01]
	Low CJC (-0.54)	0.28**	Conditional indirect effects
			High CJC (+0.54): 0.02 (0.02) [-0.02, 0.07]
			Low CJC (-0.54): 0.06 (0.03) [0.02, 0.12]

Note: $N = 334$; Unstandardised coefficients and their robust standard errors are shown in each equation. For the conditional indirect effects, one standard deviation below the mean is below the minimum observed in the data for collaborative job crafting, so the minimum measurement (-0.54) was used for the conditioning instead. * $p < 0.05$, ** $p < 0.01$.

^aVariables measured at Time-one.

namely individual and team outcomes respectively. However, we argue that such distinction may not apply in crowdwork settings where there is an absence of team work and where task assignments are mostly independent. Hence, the findings of our study extend the application of collaborative job crafting in the literature by supporting its complementary role for digital labourers as an alternative proactive attempt to craft one's work beside individual crafting efforts to build resilience. In particular, our findings support that individual crafting helps digital labourers feel more resilient in dealing with obstacles. The support of our two-way interaction hypothesis indicates that collaborative crafting also helps digital labourers' resilience, especially when the digital labourer's individual

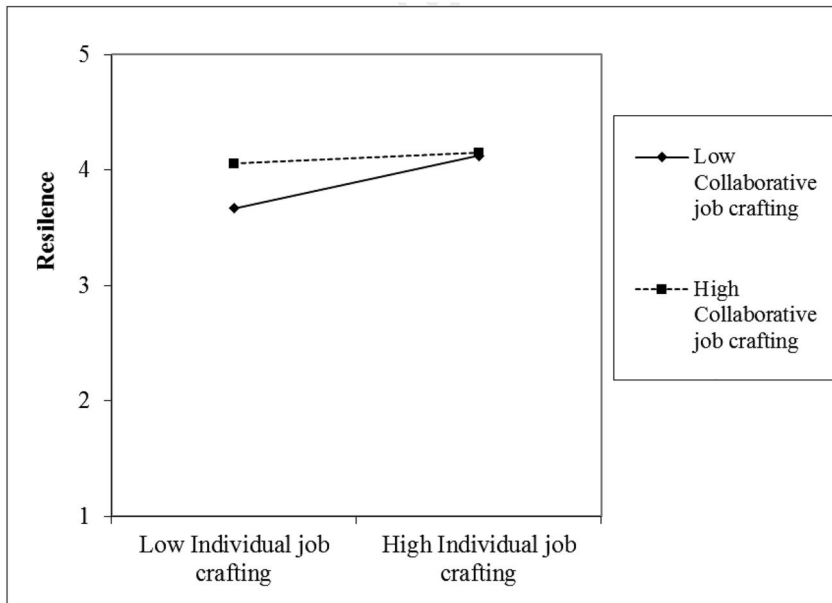


FIGURE 2 Two-way interaction between individual- and collaborative-job crafting in predicting digital labourers' resilience

crafting behaviour is low. This implies that digital labourers who engage less in individually crafting their work would benefit from collaborative crafting with other digital labourers to build resilience.

Indeed, benefits of job crafting as proactive acts for personal and work outcomes, including coping with role overload (Solberg & Wong, 2016), work engagement, performance, and employability (Bakker et al., 2012), are well recognised. However, not all digital labourers are equally proactive in their personality (cf. Bakker et al., 2012), nor do they all have equal resources and motivation to pursue proactive work behaviour (cf. Parker et al., 2010). In the case of crowdwork, there are factors that may hinder individual crafting. First, due to the precarious nature of crowdwork, digital labourers may view and be affected by this type of work negatively (Kost et al., 2018), which tends to be detrimental to proactivity (cf. Parker et al., 2010). Second, due to the isolated work nature (Deng & Joshi, 2016) and its lack of informal social learning and formal HR-facilitated training and development, learning is less accessible for digital labourers. In light of these absences, a degree of creativity is required to master job crafting and online channels have to be tapped. With regard to the socially embedded aspect of job crafting, collaboratively crafting with others can compensate for workers who lack crafting skills, resources, and/or motivation individually.

Accordingly, against the precarious nature of crowdwork, our second contribution is to provide support to the importance of enabling digital labourers to engage in individual and collaborative crafting on digital platforms, as indicated in our findings. Working in isolation, as many digital labourers do, can be detrimental not only to their career commitment, but mental wellness. Our findings point to the importance of investigating individual and social factors that could cultivate individual as well as collaborative job crafting to happen. The digital labour community is known to be resourceful concerning know-how of what to do, what not to do, and where to share their experiences to make work easier and more efficient on platforms (Grey et al., 2016). This social structure that facilitates instrumental action, such as job crafting, is considered an important source of social capital for career success (Seibert et al., 2001). This said, our findings suggest that in mastering job crafting on their own or job crafting together with others in the community, digital labourers benefit from building stronger resilience to the adversity and isolation in the digital labour environment. This in turn enhances career commitment, which explains why

digital labourers engage in the gig economy for long periods of time and may even consider it a career (Ashford et al., 2018). In the long run this may contribute to the sustainability of the gig economy, because digital workers stay committed and gain experience by learning from other gig workers (Schwartz, 2018). For requesters, this means an increase in the quality of work received and continued access to qualified workers. Our findings further suggest that collaborative crafting possibly replaces some functions of HRM, such as facilitating safe work environments and social support. Past research demonstrated that online communities in the gig economy also contribute to training and skill development (Schwartz, 2018). Future research should further investigate how heavily collaborative crafting contributes to training and skill development in the gig economy. Longitudinal research is needed to explore the link between collaborative crafting, skill development, learning, training, and career progress in the gig economy. This would provide more insight into the bottom-up approach of HRM and the role of collaborative crafting as a form of “self-organised” HRM (Kost et al., 2020).

Third, our study provides empirical support for the positive outcomes of job crafting, in our case, building resilience and subsequently career commitment. Despite resilience often being discussed in the job crafting literature as an important mechanism to explain how job crafting through resilience may lead to desirable work outcomes (Berg et al., 2008) empirical research on this is scant, with the exception of a doctoral thesis work by Caza (2009). As such, our results support the enquiries on the potential positive long-term effects of job crafting (Wrzesniewski & Dutton, 2001). Some of the discussions around job crafting in the current literature are concerned with the potential short term negative effects on the organisations if the individuals do not align their crafting towards the organisational goals. In the case of crowdwork, platform organisations may not necessarily appreciate the crafting activities, especially when it comes to platform policies and conditions. However, given that retaining digital labourers is a considerable challenge for platforms (Deng & Joshi, 2016), based on our results, we argue that such crafting activities can ultimately help platforms be more sustainable in remaining attractive for digital labourers to participate. In particular, the supported moderated mediation hypothesis in this study indicates that the extent in which digital labourers command a large, tight and supportive social network as a source for collaborative job crafting, determines the likelihood of their being committed to pursuing their freelancing career.

5.2 | Practical implications

The results of this study point to the importance for platforms and labour activists to establish a supportive platform environment so that digital labourers under a relatively constrained environment may go beyond their boundaries in shaping their work. Such a bottom-up job design approach, in which individuals proactively and jointly make changes to their work (cf. Leana et al., 2009), is particularly important for digital labourers, as there is an ill-defined career development path in this precarious work environment (Spreitzer et al., 2017). Given that collaborative crafting would particularly help digital labourers who are laggards on job crafting, it is beneficial for platform organisations, in light of their restricted HR offerings, to invest in building supportive crowdwork communities and to educate digital labourers in utilising such networks to nurture their proactivity and subsequently strengthen their career commitment in the gig economy.

Moreover, while establishing a crowdwork community as a viable infrastructure is important, attention should also be paid to cultivating a knowledge sharing culture. When collaborating with others in the community by sharing one's own experiences and know-how, there is a risk that those listening may become competitors in serving the same pull of potential clients. For some who are satisfied with their ‘market’ position, but in a competitive or high-turnover sector, they may fear losing their good earning position or uninterested in exchanging knowledge. Indeed, research on financial rewards across various professions demonstrates that, in general, individuals at lower occupational levels with lower skill requirement and less interest-value of the work place a greater value on financial factors, as low-level skills can be easily replaced (Centres & Bugental, 1966). Platforms may learn from research on knowledge sharing and cultivate supportive cultures, such as prosocial and mastery climate.

5.3 | Limitations

Several limitations should be considered when interpreting our findings. First, our results could be inflated by common method biases, as all measures were self-reported by the participants. However, research supports that job crafting behaviour could be difficult to be observed by others (Berg et al., 2010). We therefore collected data on digital labourers' job crafting through self-reported measures, in-line with other research investigating this behaviour (Bakker et al., 2012; Solberg & Wong, 2016). Additionally, both resilience and career commitment reflect digital labourers' perceptions, which by nature require self-rated measures. In light of these restrictions, we employed time-lagged design in order to reduce the likelihood of common-method variance among the measures (Podsakoff et al., 2003). However, in this study, while we have measured career commitment both at Time 1 and Time 2, individual and collaborative job crafting were only measured at Time 1 and resilience at Time 2. This implies that our findings did not take into consideration the potential increase/decrease of the two types of job crafting and resilience in our model. Multiple measures of all predictors are recommended for future studies. In addition, our study points to how individual and collaborative job crafting may help digital labourers to cope with the precarious work conditions of crowdwork. While the precariousness of crowdwork is well recognised (Petriglieri et al., 2019), the generalisability of the results should be considered when interpreting the implications of our study. Furthermore, although the MTurk sample is appropriate for our research question, MTurk samples should not be used without caution (Aguinis et al., 2020). In our case, there is alignment between the desired target population (online gig workers) and the MTurk sample of our study, which increases the external validity. As such, we think our findings contribute well to ongoing discussion about this particular subtype of (piecework-like) gig work in particular (e.g. Grey & Suri, 2019), and to a degree to the overall ongoing discussion about platform work in general (e.g. Kellogg, Valentine, & Christin, 2020). Other facets of gig labour, those matched online but performed offline, or more self-contained forms of online freelancing, might differ in their experience in detail and potentially crafting behaviour, and thus remains to be empirically validated, but we think that the core mechanisms described in our research still apply.

Finally, data were obtained from digital labourers in a US based crowdsourcing platform, potentially limiting the generalisability of our findings to other work contexts and national cultures. However, given that most of the previous job crafting studies were conducted among service professionals, such as nurses, teachers, postal service professionals, and hotel service workers, the findings of the present study contribute to the overall generalisability of job crafting research.

6 | CONCLUSION

We hold that the proposed model and findings from this study provide a valuable extension to understanding the complementary role of individual and collaborative job crafting behaviours among other digital labourers. Our study shows that, in a digital environment, digital labourers' resilience benefits from engaging in collaborative job crafting in the digital community. This is especially true for those who do not craft their work on their own. Accordingly, we discuss how platform organisations may encourage and facilitate individual and collaborative job crafting.

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DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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REFERENCES

- Aguinis, H., Villamor, I., & Ramani, R. S. (2020). MTurk research: Review and recommendations. *Journal of Management*. <https://doi.org/10.1177/0149206320969787>.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Sage.
- Andrews, F. M., & Withey, S. B. (2012). *Social indicators of well-being: Americans' perceptions of life quality*. Plenum Press.
- Aryee, S., & Tan, T. (1992). Antecedents and outcomes of career commitment. *Journal of Vocational Behaviour*, 40(3), 288–305.
- Ashford, S. J., Caza, B. B., & Reid, E. M. (2018). From surviving to thriving in the gig economy: A research agenda for individuals in the new world of work. *Research in Organizational Behaviour*, 38, 23–41.
- Bakker, A. B., Tims, M., & Derks, D. (2012). Proactive personality and job performance: The role of job crafting and work engagement. *Human Relations*, 65(10), 1359–1378. <https://doi.org/10.1177/0018726712453471>.
- Berg, J. M., Dutton, J. E., & Wrzesniewski, A. (2008). *What is job crafting and why does it matter?* <https://positiveorgs.bus.umich.edu/wp-content/uploads/What-is-Job-Crafting-and-Why-Does-it-Matter1.pdf>
- Berg, J. M., Wrzesniewski, A., & Dutton, J. E. (2010). Perceiving and responding to challenges in job crafting at different ranks: When proactivity requires adaptivity. *Journal of Organizational Behaviour*, 31(2/3), 158–186.
- Blau, G. (1985). The measurement and prediction of career commitment. *Journal of Occupational Psychology*, 58(4), 277–288.
- Bukht, R., & Heeks, R. (2017). *Defining, conceptualizing and measuring the digital economy*. Development Informatics Working Paper no. 68.
- Campbell-Sills, L., & Stein, M. B. (2007). Psychometric analysis and refinement of the Connor-Davidson resilience scale (CD-RISC): Validation of a 10-item measure of resilience. *Journal of Traumatic Stress*, 20(6), 1019–1028.
- Caza, B. B. (2009). *Experiences of adversity at work: Toward an identity-based theory of resilience* (Unpublished doctoral dissertation). Ann Arbor, MI: University of Michigan.
- Centres, R., & Bugental, D. E. (1966). Intrinsic and extrinsic job motivations among different segments of the working population. *Journal of Applied Psychology*, 50(3), 193–197.
- Chen, C.-Y., Yen, C.-H., & Tsai, F. C. (2014). Job crafting and job engagement: The mediating role of person-job fit. *International Journal of Hospitality Management*, 37, 21–28.
- Cheung, G. W., & Rensvold, R. B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modeling: A Multidisciplinary Journal*, 9(2), 233–255.
- Colbert, A., Yee, N., & George, G. (2016). The digital workforce and the workplace of the future. *Academy of Management Journal*, 59(3), 731–739.
- Connelly, C. E., & Gallagher, D. G. (2006). Independent and dependent contracting: Meaning and implications. *Human Resource Management Review*, 16(2), 95–106.
- Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: The Connor-Davidson resilience scale (CD-RISC). *Depression and Anxiety*, 18, 76–82.
- Dawson, J. F. (2014). Moderation in management research: What, why, when, and how. *Journal of Business and Psychology*, 29(1), 1–19.
- Deng, X. N., & Joshi, K. D. (2016). Why individuals participate in micro-task crowdsourcing work environment: Revealing crowdworkers' perceptions. *Journal of the Association for Information Systems*, 17(10), 648–673.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffen, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71–75.
- Dundon, T., & Rafferty, A. (2018). The (potential) demise of HRM? *Human Resource Management Journal*, 28(3), 377–391.
- Ferrari, L., Sgaramella, T. M., Santilli, S., & Di Maggio, I. (2017). Career adaptability and career resilience: The roadmap to work inclusion for individuals experiencing disability. In K. Maree (Ed.), *Psychology of career adaptability, employability and resilience* (pp. 415–431). Springer International Publishing.
- Gould, S. (1979a). An equity-exchange model of organizational involvement. *Academy of Management Review*, 4(1), 53–62.
- Gould, S. (1979b). Characteristics of career planners in upwardly mobile occupations. *Academy of Management Journal*, 22(3), 539–550.
- Grant, A. M. (2007). Relational job design and the motivation to make a prosocial difference. *Academy of Management Review*, 32(2), 393–417.
- Grey, M. L., Suri, S., Ali, S. S., & Kulkarni, D. (2016). The crowd is a collaborative network. *Paper presented at the 19th ACM Conference on Computer-Supported Cooperative Work & Social Computing*. San Francisco.
- Grey, M. L., & Suri, S. (2019). *Ghost work: How to stop Silicon Valley from building a new global underclass*. Eamon Dolan Books.
- Harris, C. M., Wright, P. M., McMahan, G. C. (2019). The emergence of human capital: Roles of social capital and coordination that drive unit performance. *Human Resource Management Journal*. 29(2): 162–180.
- Hayes, A. F. (2015). An index and test of linear moderated mediation. *Multivariate Behavioral Research*, 50(1), 1–22.

- Hayes, A. F. (2018). Partial, conditional, and moderated mediation: Quantification, inference, and interpretation. *Communication Monographs*, 85(1), 4–40.
- Huws, U., Spencer, N. H., & Syrdal, D. S. (2018). Online, on call: The spread of digitally organised just-in-time working and its implications for standard employment models. *New Technology, Work and Employment*, 33(2), 113–129.
- Kellogg, K. C., Valentine, M. A., & Christin, A. (2020). Algorithms at work: The new contested terrain of control. *Academy of Management Annals*, 14(1), 366–410.
- Kossek, E. E., & Perrigino, M. B. (2016). Resilience: A review using grounded integrated occupational approach. *The Academy of Management Annals*, 10(1), 729–797.
- Kost, D., Fieseler, C., & Wong, S. I. (2018). Finding meaning in a hopeless place? The construction of meaningfulness in digital microwork. *Computers in Human Behaviour*, 82, 101–110.
- Kost, D., Fieseler, C., & Wong, S. I. (2020). Boundaryless careers in the gig economy: An oxymoron? *Human Resource Management Journal*, 30(1), 100–113.
- Leana, C., Appelbaum, E., & Shevchuk, I. (2009). Work process and quality of care in early childhood education: The role of job crafting. *Academy of Management Journal*, 52(6), 1169–1192.
- Lehdonvirta, V., Kässi, O., Hjorth, I., Barnard, H., & Graham, M. (2018). The global platform economy: A new offshoring institution enabling emerging-economy microproviders. *Journal of Management*, 45(2), 567–599.
- Luthans, F., Avey, J. B., Avolio, B. J., Norman, S. M., & Combs, G. M. (2006). Psychological capital development: Toward a micro-intervention. *Journal of Organizational Behaviour*, 27(3), 387–393.
- Oldham, G. R., & Hackman, J. R. (2005). How job characteristics theory happened. In K. G. Smith, & M. A. Hitt (Eds.), *The Oxford handbook of management theory: The process of theory development* (pp. 151–170). Oxford University Press.
- Parker, S. K., Bindl, U. K., & Strauss, K. (2010). Making things happen: A model of proactive motivation. *Journal of Management*, 36(4), 139–154.
- Pavot, W., & Diener, E. (1993). The affective and cognitive context of self-reported measures of subjective well-being. *Social Indicators Research*, 28, 1–20.
- Petriglieri, G., Ashford, S. J., & Wrzesniewski, A. (2019). Agony and ecstasy in the gig economy: Cultivating holding environments for precarious and personalized work identities. *Administrative Science Quarterly*, 64(1), 124–170.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903.
- Schwartz, D. (2018). Embedded in the crowd: Creative freelancers, crowdsourced work, and occupational community. *Work and Occupations*, 45(3), 247–282.
- Seibert S. E., Kraimer M. L., & Liden R. C. (2001). A social capital theory of career success. *Academy of Management Journal*, 44(2), 219–237.
- Solberg, E., & Wong, S. I. (2016). Crafting one's job to take charge of role overload: When proactivity requires adaptivity across levels. *The Leadership Quarterly*, 27(5), 713–725.
- Spreitzer, G., Cameron, L., & Garrett, L. (2017). Alternative work arrangements: Two images of the new world of work. *Annual Review of Psychology and Organizational Behaviour*, 4, 473–499.
- Sullivan, S. E., & Baruch, Y. (2009). Advances in career theory and research: A critical review and agenda for future exploration. *Journal of Management*, 35(6), 1542–1571.
- Tims, M., Bakker, A. B., & Derks, D. (2012). Development and validation of the job crafting scale. *Journal of Vocational Behaviour*, 80(1), 173–186.
- Tims, M., Bakker, A. B., & Derks, D. (2013). The impact of job crafting on job demands, job resources, and well-being. *Journal of Occupational Health Psychology*, 18(2), 230–240. <https://doi.org/10.1037/a0032141>
- van den Heuvel, M., Demerouti, E., & Peeters, M. C. W. (2015). The job crafting intervention: Effects on job resources, self efficacy, and affective well-being. *Journal of Occupational and Organizational Psychology*, 88(3), 511–532.
- Vincent, S. (2016). Bourdieu and the gendered social structure of working time: A study of self-employed human resources professionals. *Human Relations*, 69(5), 1163–1184.
- Wrzesniewski, A., & Dutton, J. E. (2001). Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review*, 26(2), 179–201.
- Wrzesniewski, A., McCauley, C., Rozin, P., & Schwartz, B. (1997). Jobs, careers, and callings: People's relations to their work. *Journal of Research in Personality*, 31(1), 21–33.

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