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# Exploring the meaning of work within the sharing economy: a case of food-delivery workers

#### **Abstract**

This study aims to investigate how the sharing economy has redefined the meaning of work in the food delivery sector. We conducted in-depth interviews with 50 food delivery workers in the sharing economy to identify their work goals and then performed an empirical investigation into the mechanism between the meaning of work, work engagement, and career commitment. Seven work goals were empirically found to fit a bidimensional conceptualization of work goals (i.e., intrinsic and extrinsic orientation). Using an instrument developed via qualitative analysis, we found that the relationship between the meaning of work and career commitment varies across dimensions of the meaning of work. Intrinsic orientation was found to effectively generate work engagement and career commitment. The obligation norm appeared to carry unique meaning in the sharing economy. These findings theoretically expand the current understanding of sharing economy employment and provide practical implications for hospitality businesses and the legal sector.

Keywords: sharing-economy employment, meaning of work, work engagement, career commitment, food delivery

#### 1. Introduction

The phenomenal growth of the sharing economy has created novel forms of employment embedded in new labor practices, effectively redefining the meaning of work (Ahsan, 2020; Tussyadiah, 2016). The workforce in this economic sector is projected to grow substantially; it is anticipated that more than 9.2 million people will be working within the sharing economy by 2021 (Molla, 2017). Although online food delivery services represent one of the fastest-growing economic sectors of the past few years, these services have yet to be examined through the lens of the sharing economy (Frenken, 2017).

The sharing economy is "distinct from typical business entities" that are highly commercialized (Tussyadiah, 2016, p. 71). This relative lack of commercialization may prevent providers from focusing primarily on financial outcomes. Bocker and Meelen (2017) discovered that people who are more willing to work in the sharing economy often attach more environmental and social meaning to their jobs. The dramatic rise of the "just-in-time workforce" implies that work in the sharing economy appears more meaningful than traditional employment (de Stefano, 2016).

However, the sharing economy has also faced criticism regarding its employment format. Despite a general belief that the sharing economy represents the direct sharing of activities between providers and users, this conceptualization overlooks commercial intermediaries who create an unregulated workplace and provide informal job opportunities (Dredge & Gyimothy, 2015; Sundararajan, 2016). Online food delivery platforms such as Uber Eats and Deliveroo serve as intermediaries to connect restaurants and diners by developing a new commerce circuit. These idealized commercial practices may challenge the unique meaning originally ascribed to sharing-economy employment.

Food delivery services, as a type of hospitality service in the sharing economy, require food delivery workers to be the face of encounters among online food delivery platforms, restaurants, and customers. Therefore, customer satisfaction and restaurants' willingness to work with these platforms are closely tied to how well-suited food delivery workers are to their job and how much meaning they attach to their duties (Chen, Yen, & Tsai, 2014). However, as evidenced by a spate of recent lawsuits around labor unrest, many food delivery workers seem to doubt the meaning of their work within a potentially unregulated and unfair marketplace (Todoli-Signes, 2018).

Given such concerns, a systematic academic investigation into the meaning of food delivery work in the sharing economy is urgently needed. In response to the relatively high turnover rate in hospitality sectors of the sharing economy (Kang, Gatling, & Kim, 2015), we employed a mixed-method approach in this study to satisfy two major research objectives: (1) to shed light on food delivery workers' perceptions of the meaning of work in the sharing economy; and (2) to examine the effects of the meaning of food delivery work on employees' overall work engagement and career commitment. To achieve these aims, we first adopted an inductive approach to explore the meaning of food delivery work and next developed a detailed instrument based on our findings. We then used a quantitative design to empirically uncover the mechanism through which the meaning of work influences food delivery workers' work engagement and career commitment.

The findings from this study fill an existing gap within the current accommodation or transportation-skewed discussion on the sharing economy in hospitality by advancing our understanding of the meaning of food delivery work. This study also provides practical contributions to online food delivery platforms to stimulate workers' work engagement and career commitment in the online food delivery sector.

# 2. Literature review

## 2.1 Human resource issues in the sharing economy

Since Guttentag (2015) defined the sharing economy as an innovative disruption, some scholars have suggested that the sharing economy is simply a new commercial activity beautified by self-interested intermediaries to facilitate operations in grey areas, where rules are defined by the intermediaries themselves (Dredge & Gyimothy, 2015). This argument is also reflected in recent lawsuits regarding labor unrest in the sharing economy (Butler, 2017; Cox, 2019; Todoli-Signes, 2018). Irrespective of such criticism, much of the extant literature has focused on the sharing economy ideology of building "a decentralized, equitable and sustainable economy" (Martin, 2016, p. 154). Many researchers thus tend to view this economy optimistically based on customers' perceptions (Frenken, 2017).

The intensive labor relationship inherent to the sharing economy calls for a close examination of relevant human resource issues from workers' points of view; indeed, the ultimate aims of the sharing economy depend on not only customer satisfaction or market demand but also people's willingness to participate (Bocker & Meelen, 2017; Lamberton, 2018; Ravenelle, 2019). Unlike the traditional demand-driven hospitality industry (Masiero, Nicolau, & Law, 2015), the sharing economy involves bilateral service or product exchanges among providers and users who are equivalently positioned (Perren & Kozinets, 2018). This economy is, therefore, simultaneously driven by supply and demand. However, many statistics have indicated a relatively high turnover rate in the sharing economy, for example, 49% in the accommodation sector (Li, Moreno, & Zhang, 2019), 60% in the transportation sector (Iqbal, 2020; Mishel, 2018), and 300% in the food delivery sector (Dailypay, 2020). Peticca-Harris, deGama, and Ravishankar (2018) defined work in the sharing economy is "a just-for-now remedy," referring to a way to earn money quickly. This perspective raises questions about how to effectively retain workers and generate sufficient suppliers continuously. Ravenelle (2019) further noted that workers in the sharing economy exhibit a stronger commitment to their jobs if they attach meaning to their work.

# 2.2 Algorithmic management in the sharing economy

Many businesses in the sharing economy are utilizing algorithmic management to automate human-related duties and functions traditionally performed by human resource managers. As an intermediator linking up three parties in the food delivery process (i.e., restaurants, food delivery workers, and customers), online food delivery platforms manage workers' performance via tracking mechanisms and customer ratings (Schmidt, 2017). It means that the algorithmic managerial system allows online food delivery platforms to place control over workers at the end of the labor process rather than during it (Wood et al., 2019). This practice not only keeps marginal and labor costs relatively low by inviting the service receivers to be the supervisors or managers who traditionally monitored workers' performance (Schmidt, 2017), existing literature have suggested that algorithmic management techniques help workers attach more job meanings by offering high levels of flexibility, autonomy, and task variety (e.g., Wood et al., 2019; Duggan et al., 2020; Schildt, 2017). The algorithmically generated rewards and penalties attached to particular behaviors also help formulate a virtuous competition field within the workplace, forcing workers to compete with other co-workers by engaging in ongoing learning and development (Shapiro, 2018; Kuhn & Maleki, 2017; Lee et al., 2015). In other words, sharing economy businesses utilize the concept of gamification to trigger worker engagement (Rosenblat & Stark, 2016).

However, its positive effect on workers in the sharing economy is debatable, because several scholars have criticized that many unfair policies emerged in the algorithmic management dissatisfy workers. Lee (2016) doubted whether algorithmic management motivates workers to improve their work in the long run, because workers in the sharing economy were found to be indifferent about their performance once their ratings were above a certain threshold of deactivation risk. In the long run, workers are less likely to micromanage their rating, because many of them feel helpless and powerless on many uncontrollable factors that influence customers' ratings beyond their service quality (Cheng & Foley, 2019). Algorithmic management is merciless to treat all rejections as service failure that influence workers' scores and income, while it is not always the case in reality. For example, a female Uber's driver in Lee's (2016) study claimed that the system treats all rejections as service failure, while she sometimes rejects male passengers at night due to safety concerns.

Another criticism on algorithmic management is its pay-for-performance programs that form an extrinsic work-value oriented workplace, in which workers are addicted to extrinsic factors that have been widely accepted not to generate positive job-related outcomes (Pink, 2009; Zhao et al., 2016). The direct link between pay with performance leads to scientific management, also known as Taylorism (McGaughey, 2018). Taylorism has been largely criticized for turning workers into an automaton or machine who fail to find meaning in their work (Tolsby, 2000; Li & Zhou, 2013; Lepisto & Pratt, 2017). Lips-Wiersma and Morris (2009) believed that the strong focus on efficiency, control, and standardization in a Taylorist work environment is a key barrier to meaningful work.

### 2.3 Meaning of work in the sharing economy

The notion of meaning reflects an answer to a fundamental inquiry, representing either (a) a purpose or the significance of something, (b) the intentions one holds, or (c) identification or clarification of the term in context (Lepisto & Pratt, 2017). The meaning of work can only be determined with respect to one's identity (Pratt & Ashforth, 2003) because the term captures the significance, beliefs, definitions, and value that individuals attach to working as a major element of human activity (Harpaz & Fu, 2002). The meaning of work thus varies by demographics, occupation, and time (Harpaz & Fu, 2002; Hsu & Stanworth, 2017; MOW-International Research Team, 1987).

Extensive discussions around the salary system in the hospitality industry (e.g., Huang, Huang, & Chen, 2004) have suggested that people work to make a living (Jung & Yoon, 2016). However, this conceptualization fails to explain why up to 95% of workers have claimed they would continue working even if they won the lottery or inherited a sum of money large enough to support themselves in the future (Harpaz & Fu, 2002). This situation has also been conveyed through theories of job motivation, such as Herzberg's (1971) two-factor theory and Deci and Ryan's (2000) self-determination theory, implying that people tend to work for more than economic reasons (Steger, Dik, & Duffy, 2012).

Job motivations are useful for understanding the meaning of work but tend to overlook the interplay among employment, personal growth, and greater society. Several scholars have attempted to conceptualize the meaning of work as a multi-dimensional construct. However, the multidimensional conceptualization remains underutilized, as many scholars continue to frame the meaning of work as a singular factor (e.g., Akgunduz, Alkan, & Gok, 2018; Tims, Derks, & Bakker, 2016). Rosso, Dekas, and Wrzesniewski (2010) pointed out that our current understanding of the meaning of work remains theoretical; in other words, it fails to identify the areas on which organizations should focus to design more meaningful jobs.

Harpaz, Honig, and Coetsier (2002) conceptualized the meaning of work as a combination of (1) work centrality, (2) the entitlement norm, (3) the obligation norm, (4) extrinsic orientation, and (5) intrinsic orientation. Work centrality refers to the degree to which work plays a central and fundamental role in life. The entitlement norm encompasses the belief that work is an underlying right of individuals and a responsibility of society/organizations to all citizens; the obligation norm takes an opposite stance in recognizing work as the responsibility of every individual to their society/organization. The last two dimensions, extrinsic and intrinsic orientation, refer to various goals and values which are sought or preferred by individuals in their working lives. Investigations on the last two dimensions are voluminous because it is theoretically similar to many work-related concepts, such as job motivation, work values, and work needs (Harpaz et al., 2002). Common work goals including expressive, instrumental, comfort and learning suggest that workers usually look for a job or workplace that is interesting, comfortable, and supports their professional growth (Chen & Choi, 2008).

Although Lips-Wierma and Wright (2012) formulated a seven-factor structure for the meaning of work, namely, (1) unity with others, (2) serving others, (3) expressing full potential, (4) developing and becoming self, (5) reality, (6) inspiration, and (7) balancing tensions, this conceptualization has been underutilized due to the high similarities among each factor (Arnous-Nicolas et al., 2017). Arnous-Nicolas et al. (2017) further proposed the meaning of work as a construct consisting of (1) importance of work, (2) understanding of work, (3) direction of work, and (4) purpose of work. Unlike the five-factor structure proposed by Harpaz, Honig, and Coestsier (2002) that exhibits substantial similarities across different countries, Arnous-Nicolas et al.'s (2017) study, as the authors also agreed, was based on a sample of French workers who was previously proven by MOW-International Research Team (1987) to have different perceptions on the meaning of work with workers in the Eastern cultural background. In addition to its well generalization, Harpaz et al.'s (2002) framework was adopted as a foundation because its recognition of societal norms (i.e., entitlement norm and obligation norm) shows a strong connection with the two main paradigms of workers' behaviors in the sharing economy. The entitlement norm explains why some online food delivery platforms were sued by their workers for their redefined working relationship (Todoli-Signes, 2017; Duggan et al., 2020), whereas the obligation norm supports the romanticism of the sharing economy in which workers engage in the sharing economy to help build a better world (Bocker & Meelen, 2017).

Even so, a multidimensional conceptualization of the meaning of work is not free from controversy when applied to the food delivery sector of the sharing economy, especially regarding extrinsic and intrinsic orientation. These criticisms are rooted in whether sharing-economy employees are intrinsically or extrinsically motivated to work (Bocker & Meelen, 2017; Furunes & Mkono, 2019; Peticca-Harris et al., 2018) and in the vague classification of intrinsic and extrinsic factors. In particular, scholars have failed to replicate findings related to various job factors (e.g., Hirschfeld, 2000; Martins & Proenca, 2012). Such inconsistency implies the absence of a one-size-fits-all theory to standardize job factors; rather, the approach must be tailored to the nuances of a given job (Gleim, Johnson, & Lawson, 2019).

# 3. Research model and hypotheses

#### 3.1. Career commitment as a solution to turnover

The meaning of work has been linked to various positive job outcomes, such as better job performance (Jaramillo, Mulki, & Boles, 2013), lower turnover intention (Milki & Lassk, 2019), and higher job commitment (Ivtzan, Sorensen, & Halonen,

2013). Given that the high turnover rate has long been a critical problem in hospitality, we focused primarily on career commitment, a psychological construct shown to reduce turnover intention (Niu, 2010), in this study.

Commitment describes how an individual is psychologically connected to a particular job position (Ogaard, Marnburg, & Larsen, 2008). In the traditional hospitality industry, every organization is competing for experienced, well-trained employees to win the war for talent. The conceptualization of commitment originated from an organizational perspective (e.g., Jung & Yoon, 2016; Raub & Robert, 2013). Scholars have also applied it at the industrial level, mainly to explore students' willingness to pursue a particular career (e.g., Wan, Wong, & Kong, 2014). This industrial viewpoint is considered particularly insightful in the sharing economy; the reciprocal nature of this economy suggests that stakeholders should collaborate to address employment concerns (Leung, Xue, & Wen, 2019). Coupled with the flexibility that allows food delivery employees to work for several online platforms simultaneously, we focused on career commitment, namely the relative strength of an individual's identification with and involvement in the food delivery sector of the sharing economy.

The commitment was commonly framed as a unidimensional construct until Allen and Meyer (1990) highlighted conflicting unidimensional views of this psychological variable and proposed a tri-dimensional variable definition consisting of affective, continuance, and normative components. For our purposes, the affective component refers to food delivery workers' emotional attachment to the industry. The continuance component refers to tangible costs (e.g., money spent to purchase a uniform) and intangible costs (e.g., efforts to find a new job) associated with withdrawing from the industry. The normative component describes the extent to which food delivery workers feel obligated to continue working in this industry. In response to Jung and Yoon's (2016) emphasis on a multi-dimensional view of commitment in the hospitality industry, we conceptualized career commitment as a second-order construct consisting of three factors.

# 3.2. Relationship between the meaning of work and career commitment

Many researchers have acknowledged a positive relationship between the meaning of work and career commitment (e.g., Rosso et al., 2010; Steger et al., 2012), noting that people who attach personal meaning to their jobs tend to be more committed to their occupations. Ravenelle (2019) discovered that food delivery workers perceiving themselves as entrepreneurs have higher job satisfaction and further higher intention to stay. Although this particular finding challenges Peticca-Harris et al.' (2018) belief that working in the sharing economy is "a just-for-now remedy," it implies that workers in the sharing economy may still make commitments to their work if they have a strong entrepreneurial orientation to find their works meaningful (Nemkova, Demirel, & Baines, 2019). Supanti and Butcher's (2019) finding, as also agreed by Jeon, Lee, and Jeong (2020) who investigated transportation-sharing service providers, suggest that meaningful work triggers individual's voluntary commitment within a company, providing evidence to the positive relationship between the meaning of work and career commitment.

The meaning of work can be evaluated as either a primary construct (e.g., Ivtzan et al., 2013; Milki & Lassk, 2019) or a second-order construct (e.g., Jung & Yoon, 2016). However, each approach has limitations: the former is not specific enough to unveil how organizations should strive to foster job meaningfulness (Lips-Wiersma & Wright, 2012), whereas the latter cannot reveal potentially distinct relationships between each component of the meaning of work and job outcomes. The wide variation in each component's importance further suggests that different components may exert distinct effects on job-related outcomes (Harpaz & Fu, 2002; Hsu & Stanworth, 2017; MOW-International Research Team, 1987).

These limitations become more problematic in a sharing-economy context because this economy has redefined the meaning of work (Ahsan, 2020). Until now, there has appeared to be little consensus around the meaning of work in the sharing economy. Some scholars stress egoism in positing that sharing-economy employment is only intended as a way to earn quick money (Peticca-Harris et al., 2018). Others have contended that participants in the sharing economy are passionate about this sector's altruistic values (Abhari, Davidson, & Xiao, 2019). In this study, we take a sample of food delivery workers in the sharing economy as a case in point to unearth potentially unique relationships between the meaning of work and career commitment. Our hypotheses are as follows:

- H1a. Work centrality positively influences career commitment.
- H1b. The entitlement norm positively influences career commitment.
- **H1c.** The obligation norm positively influences career commitment.

- **H1d.** Extrinsic orientation positively influences career commitment.
- H1e. Intrinsic orientation positively influences career commitment.

# 3.3. The role of work engagement

In addition to the direct relationship between the meaning of work and career commitment, Baumeister and Vohs (2002) found that people's work engagement increased when they attached more meaning to their work and thus proposed work engagement as a mediator in the relationship between the meaning of work and career commitment. Morin (2008) indicated that meaningful tasks decrease workers' absenteeism and lateness, resulting in workers spending more time with their organization. Dedication, which is a sense of meaning in works (Schaufeli et al., 2002), was found to have the most predicting power on workers' work engagement and organizational commitment (Yalabik et al., 2015). Works that are meaningful for their career goal achievement lead workers to be more engaged in their work, and in turn, widens their cognitive and behavioral repertoire, encouraging them to build long-term commitment (Son & Kim, 2019).

Jung and Yoon (2016) came to similar conclusions regarding the hospitality industry; they discovered that hospitality employees are more enthusiastic if they perceive their work as meaningful. Peer-to-peer accommodation hosts were also found to demonstrate higher engagement with their organization if their job duties were linked to meaningful and positive outcomes (Lee, Yang, & Koo, 2019). Given the widely accepted positive association between work engagement and organizational commitment (Jung & Yoon, 2016), we have recognized the mediating role of work engagement by developing a proposed model (Figure 1) and presuming the following:

- H2a. Work engagement mediates the relationship between work centrality and career commitment.
- H2b. The entitlement norm mediates the relationship between work centrality and career commitment.
- **H2c.** The obligation norm mediates the relationship between work centrality and career commitment.
- H2d. Extrinsic orientation mediates the relationship between work centrality and career commitment.
- H2e. Intrinsic orientation mediates the relationship between work centrality and career commitment.

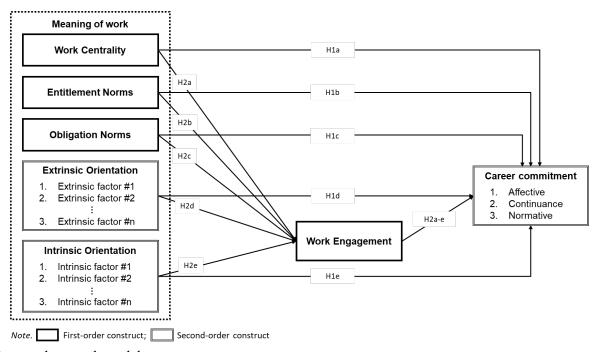


Figure 1. Proposed research model

### 4. Method

The study was conducted in the Chinese context for two main reasons. First, China is the most prominent countries of online food delivery service usage, generating US\$37 billion in revenue in 2017 (Tao, 2017). Second, unlike in other countries, most food delivery workers in China work on a full-time basis instead of a casual basis. The investigation in the Chinese context is, therefore, thought to complement the understanding of full-time works in the sharing economy.

# 4.2. Scale development

In light of the unique nature of food delivery work in the sharing economy, we sought to delineate variations in food delivery employees' work goals by interviewing 50 such workers in this study. A multi-method approach proposed by McMillian and Hwang (2002) was utilized for scale development, with a qualitative intervention followed by a cross-sectional survey. Initially, a snowball and convenience sampling technique was used to conduct in-depth interviews. Each interviewee was reimbursed for their time with a USD20 grocery coupon and was encouraged to refer the interview invitation to their coworkers at the end of the interview. The final sample is considered to be representative of a broader population because the interviewees worked for six different online food delivery platforms in China to avoid organizational differences.

Interview questions were developed on the basis of previous studies on job motivation (Bocker & Meelen, 2017), sharing economy employment (Ravenelle, 2019; Gleim et al., 2019), and the meaning of work (Harpaz et al., 2002; Rosso et al., 2010; Arnous-Nicolas et al., 2017). The interview consisted of three parts. The first part focused on identifying the reasons and goals for interviewees to work as a food delivery person in the sharing economy (e.g., What is your work goal as a food delivery person in the sharing economy? / Have you imagined your working life in the future?). The second part focused on their belief on the meaning of work (e.g., What does work mean to you? / How do you feel if you lose your work?), whereas the last part focused on the job satisfaction (e.g., Are you satisfied with this job?). These questions employed a semi-structured method with flexibility for interviewees to express their opinions in detail.

Each interview was audio-recorded and transcribed verbatim for Braun and Clarke's (2006) six-step thematic analysis on NVivo 11.0. The analysis yielded seven valued work goals applicable to food delivery employees, namely autonomy, belonging, convenience, enjoyment, equity, knowledge, and money (Table 1). Most were consistent with Harpaz et al.'s (2002) findings, except for equity. Equity highlights the sharing economy's pay-for-performance program in which workers are paid precisely for what they have done. A context-specific instrument containing 22 items to examine the seven valued work goals were then developed and evaluated using an online cross-sectional study.

Table 1. Valued work goals among food delivery employees in the sharing economy

# Valued work goals Definition

### 1. Autonomy Carr

Carry out job duties in one's own way

"I want to do whatever I want. It is impossible to refuse my boss's instructions. But I can refuse the tasks here if I want to go shopping, I can even work for different food-delivery platforms at the same time in my own way." (Informant #43, a Deliveroo's worker)

#### 2. Belonging Interact socially with others

"I love meet new people... Many restaurant staff are welcoming possibly because we help them to expand business. I really like chatting with them. We seem like to be a family. This kind of social interactions is important, especially when many people only look for money." (Informant #27, a Deliveroo's worker)

- 3. Convenience Convenient work environment (e.g., flexible working hours; convenient work location)
  - "My full-time work requires me to work in unsocial work hours. I appreciate the work convenience when being a UberEats driver because I can go online anytime without a fixed work schedule." (Informant #49, an UberEats's worker)
- 4. Enjoyment Work on something interesting

"I love car and I love to drive. I got my driving license once I was 18. It was very boring when I was working as a hairstylist. I think the ultimate of working is to combine it with interest. It is very good." (Informant #50, a Foodpanda's worker)

- 5. Equity Be treated fairly (e.g., fair competition with coworkers; fairly paid)
  - "I want to be fairly treated. In conventional companies, people who work the most are usually under-paid. But my salary now is all depended on my efforts, which is much fairer." (Informant #10, an Ele.me's worker)
- 6. Knowledge Learn new things, enrich current knowledge (e.g., map navigation and driving skills)
  - "I want learn new things from my work. When I was waiting in restaurants, I just sat and watched, looked at people, how they are working and how the system is going. It is very interesting because it is also a goal for me to open my own restaurant in the future." (Informant #28, a Foodpanda's worker)

### 7. Money Earn a substantial income

"I was working as a waiter before working as a food-delivery worker. I want to earn more money and the salary here [of a food-delivery worker] is twice as my salary as a waiter before." (Informant #16, a Meituan's worker)

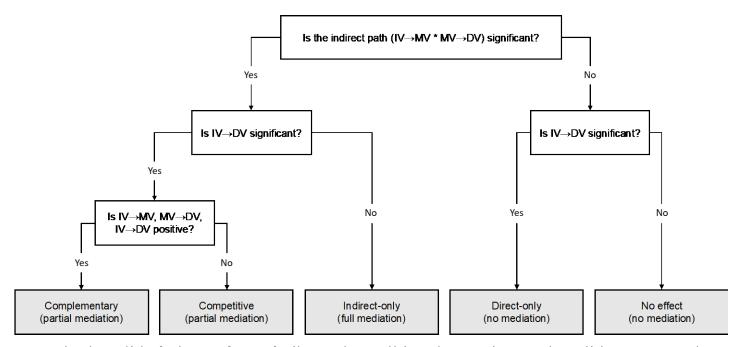
Source: Interview data from 50 food delivery workers in the sharing economy.

# 4.2. Data collection and data analysis

We developed a cross-sectional online survey for data collection, concerning the validation of the seven valued work goals and the mechanism through which the meaning of work can influence food delivery employees' work engagement and career commitment. The sampling frame for the online survey consisted of Chinese food delivery workers who were (a) 18 years or older and (b) currently working with at least one online food delivery platform (e.g., Uber Eats or Deliveroo). After pilot-testing the survey with 20 food delivery workers, 800 valid responses were gathered with assistance from InsightWorks.

The online survey contained 63 questions comprising 4 sections (Appendix A) along with a screening question to ensure that all respondents were eligible to participate. The first 3 sections included items scored on 7-point Likert scales anchored by "strongly disagree" and "strongly agree" and were intended to measure participants' perceived meaning of work, work engagement, and career commitment. The first section included Harpaz and Fu's (2002) multi-item scale to examine work centrality (2 items), the entitlement norm (4 items), and the obligation norm (3 items). A context-specific instrument containing 22 items to examine participants' extrinsic and intrinsic work goals was included in the first section. The second section examined participants' work engagement via Schaufeli, Bakker, and Salanova's (2006) 5-item scale. The third part consisted of Allen and Meyer's (1990) 9-item scale to measure 3 factors associated with career commitment: affective commitment (3 items), continuance commitment (3 items), and normative commitment (3 items). The final section included open- and closed-ended questions to collect respondents' anonymous demographics (gender and age) and job-related information (i.e., work experience, weekly working hours, and salary level). The survey was originally developed in English and translated into Chinese by the first author to generate a larger sample by the first author. The second author then performed back-translation to ensure that all Chinese questions were accurate. Both authors are native speakers of Chinese who are also fluent in English.

An exploratory factor analysis was first conducted to investigate how the seven work goals (i.e., autonomy, belonging, convenience, enjoyment, equity, knowledge, and money) could be categorized across the five dimensions of the meaning of work. Then, we performed second-order confirmatory factor analysis to estimate the effect of career commitment on its three first-order components (i.e., affective, continuance, and normative commitment). We next conducted partial least squares structural equation modeling (PLS-SEM), which has been identified as a suitable methodological alternative to covariance-based SEM (CB-SEM) in tourism and human resource studies (Hair et al., 2011; Ringle et al., 2018), via SmartPLS 3.0 to test the proposed research model. PLS-SEM was deemed more appropriate than CB-SEM in this study because our hypotheses were drawn from existing but not well-established theories and the measurement scales were newly developed based on interview data (Hair et al., 2011). Mediation testing (i.e., H2a–e) was performed based on Zhao, Lynch, and Chen's (2010) approach (Figure 2), whose suitability for PLS-SEM was validated by Hair et al. (2017).



Note. IV = Independent variable (i.e., five dimensions of meaning of work); MV = Mediating variable (i.e., work engagement); DV = Dependent variable (i.e., career commitment)

Figure 2. Mediation testing (Zhao et al., 2010, p. 201)

#### 5. Results

With help from InsightWorks, the online survey attracted 800 valid survey responses. Several criteria were instituted to eliminate invalid surveys: (1) those completed within less than 2 mins; (2) those with a relatively low standard deviation (i.e., less than .25); and (3) those in which respondents failed the validation test (i.e., "If you are reading this statement, please select 'strongly disagree."). A clear gender imbalance, wherein male respondents (90.4%) vastly outnumbered female respondents (9.6%), implies that food delivery is a male-dominated occupation, at least in Chinese context. Respondents ranged from 18 to 63 years old, with the majority between ages 25 and 35 (59.3%). Most respondents (87.0%) worked in food delivery as their sole job, totaling 54.7 working hours per week on average. Most earned between CNY¥4,001 (around GBR£450) and CNY¥8,000 (around GBR£900) monthly (57.7%).

Following Assaf and Tsionas (2019)'s proposed agenda for quantitative research in tourism and hospitality, assumptions for linearity, normality, homoscedasticity and multicollinearity were assessed using IBM SPSS Statistics 25. Specifically, the normal probability plot and the scatterplot supports that the data is linear, normal, and homoscedastic. The VIF values ranging from 1.281 to 1.595 also confirm the absence of multicollinearity. This procedure found no more violation in terms of regression assumptions to conduct SEM analysis.

# 5.1. Exploratory factor analysis

An exploratory factor analysis with varimax rotation in SPSS 25.0 was performed to uncover the underlying structure of the meaning of food delivery work in the sharing economy. By adopting a factor loading of .7 as the benchmark (Hair et al., 2011), items EN1 and ON3 were dropped to extract 5 factors that accounted for up to 73.9% of the variance (Table 2). In addition to validating Harpaz et al.'s (2002) multi-dimensional conceptualization, our results advance current understanding of extrinsic and intrinsic orientation by unveiling two types of extrinsic orientation (i.e., money and equity) and five types of intrinsic orientation (i.e., convenience, autonomy, knowledge, belonging, and enjoyment).

Table 2. Exploratory factor analysis for the meaning of work

| Meaning of work                    | 1    | 2    | 3    | 4    | 5    | %<br>variance |
|------------------------------------|------|------|------|------|------|---------------|
| Factor 1: Work centrality (WC)     |      |      |      |      |      | 5.587         |
| WC1: Absolute significance of work | .837 | .109 | .099 | .162 | .057 |               |
| WC2: Relative importance of work   | .862 | .067 | .087 | .004 | .096 |               |

| Factor 2: Entitlement norm (EN)           |      |      |      |      |      | 24.781 |
|---|------|------|------|------|------|--------|
| EN1: Opportunity for retraining (dropped) | -    | -    | -    | -    | -    |        |
| EN2: Ask for employees' suggestions       | .159 | .810 | .174 | .061 | 001  |        |
| EN3: Meaningful work                      | 057  | .616 | .149 | .384 | .048 |        |
| EN4: Entitled to a job                    | .094 | .789 | .233 | .146 | 083  |        |
| Factor 3: Obligation norm (ON)            |      |      |      |      |      | 8.129  |
| ON1: Contribution to society              | .144 | .272 | .841 | .069 | 007  |        |
| ON2: Save for future                      | .072 | .233 | .844 | .197 | 038  |        |
| ON3: Value any work (dropped)             | -    | -    | -    | -    | -    |        |
| Factor 4: Extrinsic orientation (EO)      |      |      |      |      |      | 9.264  |
| EO1: Money                                | .109 | .136 | .105 | .881 | .005 |        |
| EO2: Equity                               | .075 | .224 | .126 | .851 | 012  |        |
| Factor 5: Intrinsic orientation (IO)      |      |      |      |      |      | 26.122 |
| IO1: Convenience                          | .061 | 018  | .010 | .015 | .873 |        |
| IO2: Autonomy                             | .068 | .015 | 024  | .019 | .803 |        |
| IO3: Knowledge                            | .028 | 054  | 040  | 008  | .860 |        |
| IO4: Belonging                            | .043 | .000 | .015 | 025  | .855 |        |
| IO5: Enjoyment                            | .012 | .001 | 017  | .003 | .845 |        |

*Note.* KMO = .831; Chi-square for Bartlett's test of sphericity = 4518.514\*\*\*; Total variance explained: 73.882%; \*\*\*p < .001, \*\*p < .01, \*p < .05.

# 5.2. Second-order confirmatory factor analysis

We followed Allen and Meyer (1990) in framing career commitment as a second-order reflective construct consisting of fondness for the job, costs of changing the job, and social obligations of the job. Apart from Kim's (2010) contention that variation in the level of commitment leads to variation in its first-order constructs, but not vice versa, the algorithmic management in the online food-delivery sector also supports the choice of the reflective scheme for career commitment. Workers' continuance commitment is expected to be highly correlated with their affective and normative commitment because their costs of changing the job will increase if they have fondness or obligations to maintain a good profile of their work accounts. Factor scores for the three first-order factors were taken as items related to career commitment based on second-order confirmatory factor analysis. The weights for affective ( $\beta = .987, p < .001$ ), continuance ( $\beta = .879, p < .001$ ), and normative commitment ( $\beta = .970, p < .001$ ) were all positive and significant (Table 3). Although the differences were not obvious, career commitment was relatively less dominated by food delivery workers' everyday stress (i.e., continuance commitment).

Table 3. Construction of career commitment

|                        | Mean (x̄) | Standard Deviation | Weight (β) | Ranking |
|------------------------|-----------|--------------------|------------|---------|
| Affective commitment   | 4.899     | .776               | .987***    | 1       |
| Continuance commitment | 4.573     | .836               | .879***    | 3       |
| Normative commitment   | 4.393     | .989               | .970***    | 2       |

*Note.* \*\*\*p < .001, \*\*p < .01, \*p < .05, \*\*p > .05.

#### 5.3. Measurement model assessment

As suggested by Fornell and Larcker (1981), the convergent validity of the proposed model was deemed acceptable because (a) all factor loadings exceeded .6, (b) all composite reliability (CR) values were greater than .7, and (c) all average variance extracted (AVE) values were above .5 (Table 4). Cronbach's alpha values also verified the reliability of the measure employed in this exploratory social science study; all alpha values were higher than .6 (Nunnally & Bernstein, 1994). The discriminant validity of all constructs was considered acceptable because the square root of the AVE for each construct was greater than its correlations (*r*) with other constructs (Chin, 1998), and all heterotrait-monotrait ratio (HTMT) values fell below.85 (Kline, 2011); see Table 5.

Table 4. Results of reliability and convergent validity analysis

| Construct            | Sub-construct | Items | Factor loading | CR    | AVE   | CA    | M    | SD    |
|----------------------|---------------|-------|----------------|-------|-------|-------|------|-------|
| Work centrality (WC) |               | WC1   | 0.833          | 0.860 | 0.755 | 0.679 | 5.56 | 0.806 |

| M = 5.469;<br>SD = 0.722   |             | WC2        | 0.903 |       |       |       | 5.37 | 0.853 |
|----------------------------|-------------|------------|-------|-------|-------|-------|------|-------|
| 3D - 0.722                 |             |            |       |       |       |       |      |       |
| Entitlement norm (EN)      |             | EN2        | 0.851 | 0.831 | 0.622 | 0.703 | 5.31 | 1.032 |
| M = 5.564;                 |             | EN3        | 0.740 |       |       |       | 5.82 | 0.992 |
| SD = 0.810                 |             | EN4        | 0.770 |       |       |       | 5.56 | 1.042 |
| Obligation norm (ON)       |             | ON1        | 0.913 | 0.891 | 0.803 | 0.756 | 5.27 | 1.120 |
| M = 5.406;                 |             | ON1        | 0.879 |       |       |       | 5.54 | 1.038 |
| SD = 0.968                 |             | ON2        |       |       |       |       |      |       |
| Extrinsic orientation (EO) | Money       | MO1        | 0.708 | 0.903 | 0.824 | 0.788 | 5.63 | 1.041 |
| M = 5.705;                 |             | MO2        | 0.721 |       |       |       | 5.85 | 1.056 |
| SD = 0.725                 |             | MO3        | 0.649 |       |       |       | 5.56 | 1.039 |
|                            | Equity      | EQ1        | 0.673 |       |       |       | 5.39 | 1.078 |
|                            | 1 ,         | EQ2        | 0.757 |       |       |       | 5.78 | 1.020 |
|                            |             | EQ3        | 0.673 |       |       |       | 6.01 | 1.010 |
| Intrinsic orientation (IO) | Autonomy    | A T T 1    | 0.664 | 0.928 | 0.720 | 0.903 | 5.60 | 1.012 |
| M = 5.330;<br>SD = 0.800   | •           | AU1<br>AU2 | 0.660 |       |       |       | 5.45 | 1.062 |
|                            | Convenience | CO1        | 0.705 |       |       |       | 5.19 | 1.151 |
|                            |             | CO2        | 0.751 |       |       |       | 5.29 | 1.169 |
|                            |             | CO3        | 0.669 |       |       |       | 5.32 | 1.131 |
|                            |             | CO4        | 0.731 |       |       |       | 5.45 | 1.117 |
|                            | Knowledge   | KN1        | 0.750 |       |       |       | 5.42 | 1.068 |
|                            |             | KN2        | 0.685 |       |       |       | 5.62 | 1.030 |
|                            |             | KN3        | 0.722 |       |       |       | 5.56 | 1.115 |
|                            | Belonging   | BE1        | 0.698 |       |       |       | 5.36 | 1.100 |
|                            |             | BE2        | 0.730 |       |       |       | 5.49 | 1.051 |
|                            |             | BE3        | 0.690 |       |       |       | 5.06 | 1.184 |
|                            | Enjoyment   | ENJ1       | 0.732 |       |       |       | 5.15 | 1.251 |
|                            | 3 3         | ENJ2       | 0.703 |       |       |       | 4.72 | 1.342 |
|                            |             | ENJ3       | 0.740 |       |       |       | 5.07 | 1.281 |
| Work engagement (WE)       | -           | WE1        | 0.743 | 0.816 | 0.527 | 0.701 | 5.63 | 0.900 |
| M = 5.369;                 |             | WE2        | 0.794 |       |       |       | 5.46 | 0.973 |
| SD = 0.693                 |             | WE3        | 0.738 |       |       |       | 5.33 | 1.051 |
|                            |             | WE4        | 0.620 |       |       |       | 5.32 | 1.015 |
| Career commitment (CAC)    | Affective   | AC1        | 0.777 | 0.909 | 0.770 | 0.851 | 4.67 | 1.396 |
| M = 4.622;                 |             | AC2        | 0.867 |       |       |       | 4.73 | 1.368 |
| SD = 0.999                 |             | AC3        | 0.851 |       |       |       | 5.30 | 1.176 |
|                            | Continuance | CC1        | 0.772 |       |       |       | 4.31 | 1.453 |
|                            |             | CC2        | 0.618 |       |       |       | 4.11 | 1.473 |
|                            |             | CC3        | 0.881 |       |       |       | 5.24 | 1.143 |
|                            | Normative   | NC1        | 0.909 |       |       |       | 4.60 | 1.414 |
|                            |             | NC2        | 0.802 |       |       |       | 3.84 | 1.553 |
|                            |             | NC3        | 0.868 |       |       |       | 4.74 | 1.364 |

Table 5. Results of discriminant validity analysis

|                 | WC |      |   |      | ON |      | EO |      | Ю |      | WE |      | CAC |      |
|-----------------|----|------|---|------|----|------|----|------|---|------|----|------|-----|------|
|                 | r  | HTMT | r | HTMT | r  | HTMT | r  | HTMT | r | HTMT | r  | HTMT | r   | HTMT |
| Work centrality |    | 869  |   |      |    |      |    |      |   |      |    |      |     |      |

| Entitlement norm      | .228 | .060 | .73  | 89   |      |      |      |      |      |      |      |      |      |
|-----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Obligation norm       | .258 | .044 | .530 | .727 | .89  | 96   |      |      |      |      |      |      |      |
| Extrinsic             | .208 | .757 | .447 | .069 | .327 | .052 | 0    | 08   |      |      |      |      |      |
| orientation           | .208 | ./3/ | .44/ | .009 | .321 | .032 | .9   | VO   |      |      |      |      |      |
| Intrinsic orientation | .132 | .053 | 028  | .562 | 034  | .405 | .000 | .027 | .8   | 49   |      |      |      |
| Work engagement       | .294 | .407 | .212 | .267 | .269 | .321 | .127 | .622 | .459 | .178 | .7   | 26   |      |
| Career commitment     | .143 | .186 | .007 | .060 | .020 | .044 | .026 | .757 | .658 | .053 | .510 | .673 | .877 |

Note. Diagonal elements (in bold) are the square root of constructs' AVE values.

#### 5.4. Structural model assessment

Figure 3 presents our overall SEM results, including the estimated path coefficients and the proportion of variance explained ( $R^2$  value) by independent variables. These findings support the direct effect of intrinsic orientation ( $\beta$  = .537, p < .001), affirming H1e. Following Zhao et al.'s (2010) approach to mediation testing, the effects of work centrality ( $\beta$  = .040, p < .001), the obligation norm ( $\beta$  = .044, p < .001), and intrinsic orientation ( $\beta$  = .132, p < .001) on career commitment were each significantly mediated by work engagement (Table 6). The three significant Sobel's z values indicate the statistical significance of these mediations, validating H2a, H2c, and H2e.

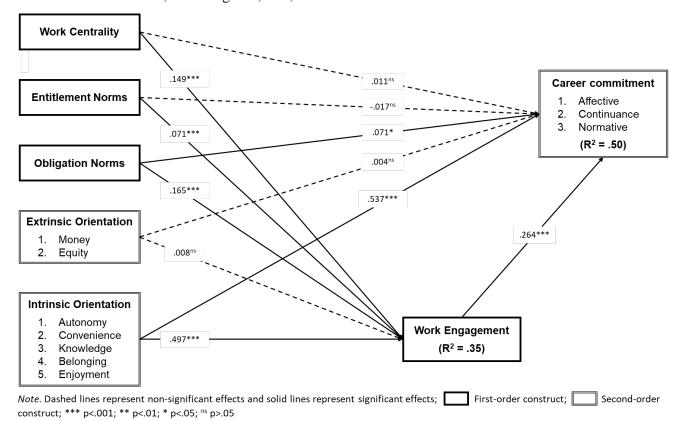


Figure 3. Result of structural equation modeling

Table 6. Results of mediation analysis

| Meaning of work (IV)  | $IV \to DV$        | $IV \rightarrow MV$  | $MV \rightarrow DV$ |                      | Mediating effect                | Sobel's z |
|-----------------------|--------------------|----------------------|---------------------|----------------------|---------------------------------|-----------|
| Work centrality       | .011 <sup>ns</sup> | .149***              | .264***             | .040***              | Full mediation                  | 4.025***  |
| Entitlement norm      | $017^{\rm ns}$     | .071*                | .264***             | $.019^{ns}$          | No mediation                    | -         |
| Obligation norm       | $017^{ns}$         | .165***              | .264***             | .044***              | Competitive partial mediation   | 3.970***  |
| Extrinsic orientation | $.004^{\rm ns}$    | $.008^{\mathrm{ns}}$ | .264***             | $.002^{\mathrm{ns}}$ | No mediation                    | -         |
| Intrinsic orientation | .537***            | .497***              | .264***             | .132***              | Complementary partial mediation | 6.209***  |

*Note.* DV = career commitment; MV = work engagement; \*\*\*p < .001, \*\*p < .01, \*\*p < .05, \*\*p > .05.

### 6. Discussion

# 6.1. Construction of career commitment

We measured career commitment as a second-order construct consisting of affective, continuance, and normative commitment. Similar to other hospitality studies (e.g., Kang et al., 2015; Zopistis, Constanti, & Theocharous, 2014), the affective commitment was identified as the strongest contributor to career commitment ( $\beta$  = .987) because it describes people's self-interest and emotional willingness to become attached to their jobs (Kang et al., 2015). Peticca-Harris et al. (2018) named working in the sharing economy "a just-for-now remedy," implying that workers' career commitment to their jobs is purely due to a relative absence of alternative options. However, we doubted this argument, at least for food delivery workers in the sharing economy; indeed, these employees' normative commitment closely followed affective commitment as the second strongest contributor, surpassing the weakest contributor (continuance commitment) in evaluating career commitment. These findings echo Si et al.'s (2020) suggestion that personal obligation is the most important factor in inspiring sharing-economy transactions.

# 6.2. Relationship between the meaning of work, work engagement, and career commitment

A straightforward relationship seems to exist in that employees who perceived their work as meaningful demonstrated higher work engagement and commitment to their jobs (Chen, Zhang, & Vogel, 2011; Jung & Yoon, 2016). However, our work advances the current understanding of this relationship by revealing that the effects of the meaning of work on career commitment vary widely by component. Intrinsic orientation appeared to be the most influential factor triggering work engagement and career commitment given a complementary partial mediating relationship between intrinsic orientation and career commitment. In addition to substantiating the fundamental idea in many job motivational theories that only intrinsic factors can lead to positive job outcomes (e.g., Herzberg, 1971), this particular finding is consistent with that of Newman and Sheikh (2012), who urged organizations to enhance workers' commitment by providing intrinsic rewards (e.g., autonomy and belonging).

We also uncovered a partial mediating relationship between the obligation norm and career commitment, while work engagement was found to serve as a suppressor variable that changed the sign of this relationship. The obligation norm exerted a direct negative influence on career commitment but a positive indirect influence when work engagement was included as a mediator. This pattern also explains why the total effect of the obligation norm on career commitment was insignificant; specifically, the positive indirect effect neutralized the negative direct effect (Zhao et al., 2010). The negative effect of the obligation norm seems illogical because people's moral obligation is generally recognized as the primary catalyst of sharing behavior in the sharing economy (Si et al., 2020). Rather than challenging normative commitment as the second strongest predictor, this pattern is more likely to reaffirm food delivery workers' unclear role structure in the sharing economy (Furunes & Mkono, 2019; Sundararajan, 2016). The prevailing pay-for-performance approach in the food delivery sector of the sharing economy may compel food delivery employees to engage in illegal tasks (e.g., running red lights or parking contraventions) (Pink, 2009). Participants' second highest mean score on the obligation norm ( $\bar{x} = 5.56$ ) could imply that food delivery workers are partially motivated by an idealistic belief to build a better world (Bocker & Meelen, 2017); however, skepticism could reduce their career commitment, especially when they are forced to violate laws. We identified a full mediation in the relationship between work centrality and career commitment, suggesting an insignificant direct effect of work centrality on career commitment but a significant indirect effect via work engagement. The significant indirect effect of work centrality on career commitment is consistent with Jung and Yoon (2016) in that workers who consider working the most important aspect of their lives are more likely to devote more time to their jobs (Bal & Kooij, 2011). While the insignificant direct effect found in this study contradicts much of the literature (Chen et al., 2011; Jung & Yoon, 2016), its indirect effect was relatively weak ( $\beta = .040$ ), possibly calling into question the well-documented relationship between work centrality and career commitment. A potential explanation for this trend is the doubtful future of the sharing economy that hinders food delivery workers from treating their work as a lifelong job. Workers who consider working the most important domain of their lives are less likely to risk their employment. One of the five major obstacles facing the future development of the sharing economy (Lamberton, 2018) is that this economy seems to profit from worker exploitation. The universal positive effect of work centrality on career commitment may, therefore, be neutralized by unclear revenue mechanisms in this economy (Kannisto, 2017).

No mediation relationship was observed for the respective effects of the entitlement norm and extrinsic orientation on career commitment. The insignificant role of the entitlement norm aligns with Harvey and Harris (2010), who suggested that this norm diminishes workers' willingness to invest effort in and remain loyal to their job because they often expect more than

they receive (Fisk, 2010). Furunes and Mkono (2019) discovered that many food delivery workers in the sharing economy do actually earn less than they were promised, as their salary and flexibility are tempered by company policies they had not previously considered (e.g., self-financing operating costs and limited options for working hours). Conversely, the insignificant role of extrinsic orientation identified in this study supports Herzberg's (1971) two-factor theory, indicating that extrinsic job factors can generate negative job outcomes but not positive ones.

# 7. Implications and conclusion

#### 7.1. Conclusion

The current study unearths new data about the meaning of work in the sharing economy from the perspectives of foo delivery workers by examining the mechanism through which the meaning of work influences workers' career commitment. Based on the findings from 50 in-depth interviews and 800 online surveys with food delivery workers in the sharing economy, this study validated seven valued work goals (i.e., autonomy, belonging, convenience, enjoyment, equity, knowledge, money) to fit with Harpaz et al's (2002) bi-dimensional conceptualization (i.e., extrinsic orientation and intrinsic orientation). The effects of the meaning of work on food delivery workers' work engagement and career commitment varied widely across five different dimensions (i.e., work centrality, entitlement norm, obligation norm, extrinsic orientation, and intrinsic orientation), challenging the social norm that the only meaning of works in the sharing economy is high pay.

#### 7.2. Theoretical contributions

This study makes three key contributions to the knowledge base around the meaning of work and sharing-economy employment. First, we have advanced the global unidimensional conceptualization of job meaningfulness by proposing a model to compare the effects of each component of the meaning of work on sharing-economy employees' work engagement and career commitment. Although meaningful work is generally thought to induce more robust work engagement and career commitment, the abstract term "meaningful" limits organizations from designing truly meaningful tasks (Rosso et al., 2010). Only the multidimensional conceptualization can identify such distinct relationships among different components of the meaning of work. Thus, scholars should be aware of the confounding effects induced by specific components of the meaning of work.

Second, this study represents a pioneering attempt to introduce the meaning of work into the sharing economy. Given the one-sided discussion from the demand side of the sharing economy, the investigation from suppliers' perspectives is limited but important to foster the sharing economy's ongoing development. In particular, we extended Harpaz and Fu's (2002) framework regarding the meaning of work to develop and empirically validated a context-specific instrument with 22 items measuring 2 controversial components of the meaning of work (i.e., extrinsic and intrinsic orientation). Unlike earlier studies, this instrument considers the unique nature of sharing-economy employment and thus has implications for scholars researching other sharing-economy services.

Last, we reaffirm the romanticism of the sharing economy to build a better world from workers' perspective. This perspective is important not only because it complements the labor view on the sharing economy, but also because the sharing economy is simultaneously driven by supply and demand. Although the highest mean score on extrinsic orientation ( $\bar{x} = 5.71$ ) potentially supports many scholars' supposition that working in the sharing economy is for earning quick money, it is often their obligation norm rather than the monetary benefits which determine their career commitment. This finding could point toward strategies to reduce the relatively high turnover rate in the sharing economy.

## 7.3. Practical contributions

Our findings are also of practical value for online food delivery platforms, traditional hospitality businesses, and governments. First, online platforms could use the context-specific instrument developed in this study to select new food delivery employees with strong work engagement and career commitment. The bar to entry for working in food delivery is relatively low because online platforms often use a pay-for-performance program to link workers' salary directly with performance (i.e., number of completed orders). In other words, companies can earn profits through an ideal balance of supply and demand. However, this low entry-level leads to a highly competitive workplace in which food delivery workers must be extrinsically oriented, which may hinder them from deriving additional meaning from their work (Pink, 2009). As

the obligation norm and intrinsic orientation were found to have significant positive effects on work engagement and career commitment, online platforms should consider providing mentoring programs to help experienced workers develop a sense of obligation and achievement while assisting newcomers to surmount challenges to find meaning in their work.

Second, our results provide insights for traditional hospitality businesses. We noticed that obligation norm appeared to effectively predict food delivery workers' career commitment, because food delivery worker in the sharing economy, likely as an individual entrepreneurship, can easily recognize how their works contribute to the society. High turnover rates and low job satisfaction in the hospitality industry have been recognized as consequences of several negative job factors, such as long work hours, high stress, and low pay (Jung & Yoon, 2014). The new employment form that has emerged through the sharing economy offers valuable information for traditional hospitality businesses to find ways to overcome deeply rooted challenges in hospitality employment. In addition to focusing on intrinsic factors (e.g., autonomy, belonging, and knowledge) through team-building and training activities, traditional hospitality businesses should also emphasize the meaning of work in orientation sessions. These firms should particularly focus on work-related obligations (e.g., how work can make life meaningful; encouraging mutual support among coworkers, for business operations, and society).

Last, the insignificant effect of work centrality on career commitment may reflect food delivery workers' concerns about the sharing economy's future development. Its future may appear doubtful in light of lawsuits regarding labor unrest, suggesting worker exploitation in this job market (Lamberton, 2018). Food delivery employees with a stronger sense of work centrality were found to exhibit lower career commitment, possibly because they found it risky to work for platforms that "define the rules, guaranties and regulatory framework, and allocate liabilities and risks" (Dredge & Gyimothy, 2015, p. 295) rather than the government. As such, legal professionals should carefully examine this new form of employment and develop regulations to protect stakeholders throughout the sharing economy.

### 7.4. Limitations and future research directions

First, our study results are limited to a sample of food delivery employees currently working in China, which has a more formal employment setting as reflected by the large proportion of full-time food delivery workers in the country; as such, our results should be generalized with caution to broader contexts. Additionally, the meaning of work may vary across labor policies and workers' cultural backgrounds, neither of which was considered here. These variables could, therefore, be incorporated into subsequent empirical validation of the proposed framework. Second, work goals specific to food delivery employees in the sharing economy were identified via qualitative data analysis to eliminate error related to the nature of sharing-economy work. However, our analysis involves subjectivity, which can be mitigated in the future by using semantic analysis software to validate these work goals objectively. Last, we conceptualized the meaning of work outside of a trait-like, individualized context when proposing managerial strategies; when, how, and which strategies can best enhance job meaningfulness in the sharing economy require further research to promote better-informed decisions.

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# **APPENDICES**

# Appendix A. Scale development

| Variables              | Scale-items  | Adopted                                     |  |
|------------------------|--|---|--|
| Meaning of work        |  |   |  |
| Work centrality        | WC1: It is about the absolute importance of work.  | Harpaz et al. (2002);                       |  |
| •                      | WC2: It is about the relative importance of work in relation to other life area.           | Jung & Yoon (2016)                          |  |
| Entitlement norm       | EN1: It is about retraining responsibility.  | - ,   |  |
|                        | EN2: It is about the opportunity to make suggestions at work.                              | Harpaz et al. (2002);                       |  |
|                        | EN3: It is a right to meaningful work.   | Jung & Yoon (2016)                          |  |
|                        | EN4: It is an entitlement to a job.  |   |  |
| Obligation norm        | ONI: It is my responsibility to save the future.   | Harmar et al. (2002).                       |  |
|                        | ON2: It is my contribution to society.   | Harpaz et al. (2002);<br>Jung & Yoon (2016) |  |
|                        | ON3: I value any work even if boring or unskilled.   | Jung & 10011 (2010)                         |  |
| Extrinsic/Intrinsic    |  |   |  |
| orientation            |  |   |  |
| 1. Money (MO)          | MO1: I am strongly motivated by the money I can earn.                                      |   |  |
|                        | MO2: I am concerned about exactly what I am paid.  | Amabile et al. (1994)                       |  |
|                        | MO3: I am keenly aware of the income goals I have for myself.                              |   |  |
| 2. Convenience (CO)    | CO1: Company policies and the way in which they are administrated are convenient.          |   |  |
|                        | CO2: I am strongly motivated by the convenience of the working condition.                  | Interview data;                             |  |
|                        | CO3: It is convenient to understand company policies.                                      | Weiss et al. (1967)                         |  |
|                        | CO4*: I am strongly motivated by the convenient working hour.                              | Weiss et al. (1707)                         |  |
|                        | CO5*: It is easy to work as a food-delivery person for the online food-delivery platform.  |   |  |
| 3. Autonomy (AU)       | AU1: I am aware of the opportunity for independence and individual initiative.             | Llopis & Foss                               |  |
|                        | AU2: I always seek freedom to carry out my job the way I want to.                          | (2016); Weiss et al.                        |  |
|                        | AU3: I always seek freedom to use my own judgement.  | (1967)                                      |  |
| 4. Equity (EQ)         | <i>EQ1*</i> : I care about the amount of pay for the work I do.                            |   |  |
|                        | EQ2*: I always compare my pay with that of other workers.                                  | Interview data                              |  |
|                        | EQ3*: I always seek balance between my pay and the amount of work I do.                    | interview data                              |  |
|                        | EQ4*: It is my belief that working more gets more pay, and working less gets less pay.     |   |  |
| 5. Belonging (BE)      | BE1: I seek the chance to develop close relationship with others (e.g., co-workers,        |   |  |
|                        | restaurant staff, customers).  |   |  |
|                        | BE2: I am appreciated with the spirit of cooperation among others (e.g., co-workers,       | Weiss et al. (1967)                         |  |
|                        | restaurant staff, customers).  |   |  |
|                        | BE3: It is about the friendship of others (e.g., co-workers, restaurant staff, customers). |   |  |
| 6. Enjoyment (ENJ)     | ENJ1: What matters most to me is enjoying what I do.                                       | Amabile et al.                              |  |
|                        | ENJ2: It is what I most enjoy.   | (1994); Kuvaas                              |  |
|                        | ENJ3: My job is so interesting that it is a motivation in itself.                          | (2006)                                      |  |
| 7. Knowledge (KN)      | <i>KN1</i> : I give me pleasure to know more about my job.                                 |   |  |
|                        | KN2: I feel pleasure while learning new things in my job.                                  | Vallerand (1997)                            |  |
|                        | KN3: It is my pleasure of developing new skills in my job.                                 |   |  |
| Work engagement        | WE1: I really "throw" myself into my job.  |   |  |
|                        | WE2: At my work, I feel bursting with energy.  | Schaufell et al.                            |  |
|                        | WE3: I am pound on the work that I do.   | (2006)                                      |  |
|                        | WE4: I get carried away when I am working.   | (2000)                                      |  |
|                        | WE5: I am highly engaged in this job.  |   |  |
| Career commitment      |  |   |  |
| Affective commitment   | AC1: I really feel as if this industry's problems are my own.                              | Allon & Morron                              |  |
|                        | AC2: I feel a strong sense of belonging to this industry.                                  | Allen & Meyer                               |  |
|                        | AC3: I feel like part of the family at this industry.                                      | (1990)                                      |  |
| Continuance commitment | CC1: Too much of my life would be disrupted if I decided I wanted to leave this industry   |   |  |
|                        | now.   | Allen & Meyer                               |  |
|                        | CC2: I feel that I have too few options to consider leaving this industry.                 | (1990)                                      |  |
|                        | CC3: Right now, staying this industry is a matter of necessity as much as the desire.      |   |  |
| Normative commitment   | NC1: I would not leave this industry because I have a sense of obligation to it.           | A11am 0- M                                  |  |
|                        | NC2: I would feel guilty if I left this industry.  | Allen & Meyer                               |  |
|                        | NC3: I have no intention to leave this industry.   | (1990)                                      |  |

Note. \* represents newly developed items based on interview data.