



Factors influencing gig workers' satisfaction and commitment in the knowledge service providing platforms based on the self-determination theory: The case study in China

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Abstract

With the development of technology, knowledge service providing platforms are growing quickly. There were 1,021 financial investments totaling up to 131.3 billion yuan in knowledge service providing platforms in the past seven years. The gig economy has also been widely discussed in the last decade. However, the previous research studies on the gig economy mostly focused on shared transport and food delivery; thus, there is still a research gap regarding the gig economy in knowledge service providing platforms. This research is based on the self-determination theory (SDT) with the aim to study how social capital, gig workers' intrinsic motivation, and extrinsic motivation influence their work satisfaction and commitment, with this study focus on the gig workers who work in the top six knowledge service providing platforms in China. Online questionnaires were distributed to the respondents to conduct the survey, and a total of 1049 valid respondents were received. The study compared two groups: the gig workers with full-time jobs and the gig workers without a full-time job. Partial Least Squares Structural Equation Modeling (PLS-SEM) was applied to analyze the data and generate the results. It was found that both groups of gig workers, those with full-time jobs and those without have the same direction in which self-determination and social capital are positively associated with intrinsic motivation. Both intrinsic and external motivation have a positive influence on gig workers' job satisfaction and commitment. Finally, the academic and practical contributions are discussed.

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Introduction

The word “gig” comes from the 1920s in the US, when it referred to the performers who provided short-time work in jazz clubs as substitutes for the full-time performers when they were away or when the clubs were short of musicians (Jabagi et al., 2019). The use of the term “gig economy” expanded quickly and became widespread after the 2007–2008 Global Financial Crisis. Independent contract workers, part-time workers, freelancers, and project-based workers are all categorized as being part of the gig economy (Jabagi et al., 2019). Dokko et al. (2015) defined a gig worker as a worker who accepts temporary jobs, typically in the service sector. Moreover, the gig economy is growing rapidly in China. According to Chen (2022), there were 59.57 million users who used online platforms to study in 2012, and this number reached 160 million in 2018.

In the gig economy, the management style, motivation approaches, and organization structures are different from traditional full-time employment. The gig workers' level of work satisfaction and commitment might be different from full-time employees. This research focused on the gig workers who work for the top six knowledge service providing platforms in China, meanwhile comparing the gig workers having full-time jobs with those who do not have a full-time job. Self-determination theory (SDT) consists of three basic psychological needs, which are autonomy, relatedness, and competence (Deci et al., 2017). This research analyses how these basic psychological needs affect the gig worker's intrinsic motivation, and how the intrinsic motivation and extrinsic motivation influence the gig workers' satisfaction and commitment to the knowledge service providing platforms.

The self-determination theory has been applied in many fields, for instance, performance engagement in online communities (Kuem et al., 2020), work engagement in service industries (Azzam, 2018). However, there are limited papers discussing such in the gig economy field. The previous studies discussed the gig economy in the food delivery industry, accommodations, transportation, and IT freelancers (Umer et al., 2020; Wu et al., 2019). This paper fills the research gap for the application of SDT to gig workers who work for knowledge service providing platforms. Motivation, satisfaction, and commitment of gig workers with full-time jobs and those without full-time jobs were compared. From the social capital perspective, this paper discussed the relationship between social capital and the intrinsic motivation of

gig workers, bringing some new ideas to this point of view. Additionally, this research provided managerial suggestions to knowledge service providing platforms as well as gig workers.

Literature Review

Knowledge Providing Service Platform

There are many different types of knowledge-based services offered online, such as Massive Open Online Courses (MOOC), knowledge-sharing platforms, and language learning platforms. The form of knowledge service provision also has different approaches, which include text, audio, video, and comprehensive, such as Tencent Classroom, edX, Himalaya FM, and Dedao, etc.

SDT Theory

Deci et al. (2017) developed the self-determination theory, which is generally applied to human motivation in work, education, health, and sport. The crucial factors of SDT include three essential basic psychological needs: perceived autonomy, perceived competence, and perceived relatedness. The gig economy's digital labor platform works and leverages the workers' autonomy in their jobs. Jabagi et al. (2019) suggested that platforms provide superior feedback and ratings to allow gig workers to feel supported and receive informational feedback rather than control-oriented feedback to increase their motivation. Additionally, Jabagi et al. (2019) found that gig workers' need for relatedness is best supported by other community members or job social support, such as gig workers' online forums, social media chat groups, and the gig workers' online community. Therefore, the following hypothesis is proposed:

Hypothesis 1: Self-determination is positively related to the intrinsic motivation of the gig workers in the knowledge service providing platforms.

Social Capital

Social capital includes the resources that an individual or organization acquires from their social and relational connections, and is deemed as a collective asset that is an assembly of actual or potential resources (Bourdieu, 2011). Shared goals, social trust, and social interactions are crucial factors in social capital. In the study by Hau

et al. (2013), the researchers found that shared goals, social trust, and interactions can respectively explain the various dimensions of social capital, namely, relational, structural, and cognitive. In the context of the gig economy, the digital online platforms provided online communities and forums functioning as social networks that allow the gig workers to exchange information, share experiences, and engage in social interactions (Zhang et al., 2017). People working and interacting online to build virtual relationships with others was also a trend during the pandemic. Therefore, the following hypothesis is proposed.

Hypothesis 2: Social capital is positively related to gig workers' intrinsic motivation in the knowledge service providing platforms.

Role of Intrinsic Motivation with regard to Gig Workers' Satisfaction and Commitment

Intrinsic motivation is defined as that which a person finds interesting and enjoyable, and is self-selected, by engaging in the process of participating in an activity without separate consequences (Deci et al., 2017). Andrew et al. (2019) claimed that intrinsic motivation is related to inner satisfaction. Gig workers have more autonomy to select the work climates, environment, working conditions, and working hours to create their work-life balance. Also, some gig workers choose their gig jobs due to their interests and desire to share their knowledge (Jabagi et al., 2019). Gig workers are intrinsically motivated by some characteristics of the jobs, especially those jobs related to their interests and hobbies. Moreover, researchers also found that enjoyment of work and a flexible employment arrangement are related to the freelancers' commitment to an organization (Süss & Kleiner, 2010). In this study, the focus is on the gig workers who work in the knowledge service providing platforms, in which there are different forms of sharing knowledge, and the gig workers can be flexible and self-decided to choose their tasks as well as the delivery formats. Thus, based on the statements and supporting findings mentioned above, the following hypotheses are proposed:

Hypothesis 3: Intrinsic motivation is positively related to gig workers' work satisfaction in the knowledge service providing platforms.

Hypothesis 4: Intrinsic motivation is positively related to gig workers' commitment to the knowledge service providing platforms.

Role of Extrinsic Motivation with Regard to Gig Workers' Satisfaction and Commitment

Extrinsic motivation in the form of benefits and rewards, such as commissions, bonuses, and praise, can cultivate interest. It includes four regulations, which are external regulation, introjected regulation, identified regulation, and integrated regulation (Deci et al., 2017). However, extrinsic motivation does not only involve rewards, payment, benefits, and compensation. The quality of the work environment, organization policies, management styles, organizational culture, and reputations are also related to employees' satisfaction (Spanuth & Wald, 2017). Seventy percent of gig workers stated that they chose the gig economy due to work-life balance (Montgomery & Baglioni, 2020). Moreover, the gig workers who work for the knowledge service providing platforms to share their knowledge and skills gain more connections. Extrinsic motivation is also a crucial factor in the prediction and measurement of organizational commitment, such as rewards, benefits, intensity, and recognition from the management (Mowday et al., 1979). A good reward system in the gig economy is important for maintaining the gig workers' commitment to the organization (Jabagi et al., 2019). Hence, the following hypotheses are proposed.

Hypothesis 5: Extrinsic motivation is positively related to gig workers' work satisfaction in the knowledge service providing platforms.

Hypothesis 6: Extrinsic motivation is positively related to gig workers' commitment to the knowledge service providing platforms.

Gig Workers' Satisfaction and Commitment to the Knowledge Service Providing Platforms

Job satisfaction is an important predictor factor in determining whether to continue to stay or leave an organization (Spanuth & Wald, 2017). Work-life balance, job and life satisfaction, flexible work arrangements, and skill development factors are used for evaluating gig workers' job satisfaction (Keith et al., 2019). Additionally, Sverke et al. (2019) found that positive psychological fulfillment also positively influences gig workers' organizational commitment. For organizations that need high-skilled professional gig workers, it is necessary to consider the needs of gig workers in terms of job satisfaction and to build long-term relationships with gig workers in order to maintain their commitment to the organizations.

Hypothesis 7: Gig workers' work satisfaction is related to their commitment to the knowledge service providing platforms.

Methodology

Sample and Data Collection Procedure

The participants in this research were gig workers who work for the top six knowledge service providing platforms in China that have the most users, are the most popular and have the most daily active users. The platforms are Himalaya FM, Dragonfly FM, Tencent Classroom, Cloud Classroom of Netease, Zhihu Live, and the Dedao application. To collect data from the targeted participants, this study used an online, self-administered questionnaire survey. They were separated into two groups: gig workers who have full-time jobs and those who don't have a full-time job. A snowball sampling method was applied, and the researcher recruited 47 informants who work as gig workers on the targeted platforms. According to the informants, each platform has a community and chat groups to discuss work. Thus, the informants can help to distribute information to their co-workers in their platforms' chat communities. There were 1,113

respondents from 27 different provinces in China. There were 628 responses from gig workers who have a full-time job, with 608 responses indicating that they have a gig job in the knowledge service providing platforms. Thus, for the gig workers who have full-time jobs, valid data yields 96.8 percent, and 3.2 percent of responses are invalid. There were 485 respondents who are gig workers and do not have a full-time job. Four hundred and forty-one respondents indicated that they have a part-time job in knowledge service platforms. Therefore, the valid data occupied 90.9 percent, and the invalid data occupied 9.1 percent. Finally, only 1,049 responses were able to be used in the analysis. The demographics and characteristics of the respondents are summarized in Table 1.

Measures

Self-determination theory questions were developed with the measurement based on Spanuth and Wald (2017). The scale consists of three parts which include perceived autonomy (five items), perceived relatedness (five items), and perceived competence (five items).

Table 1 Descriptive statistics of respondents

Characteristics		With a full-time job		Without a full-time job	
		Frequency	Percentage (%)	Frequency	Percentage (%)
Gender	Male	235	38.7	181	41.0
	Female	373	61.3	260	59.0
Age	Less than 18 years	9	1.5	6	1.4
	18–25 years	159	26.2	116	26.3
	26–35 years	230	37.8	168	38.1
	36–45 years	138	22.7	94	21.3
	46–55 years	55	9.0	43	9.8
	56 years and older	17	2.8	14	3.2
Education level	High school	84	13.8	49	11.1
	College	162	26.6	96	21.8
	Bachelor's degree	295	48.5	224	50.8
	Master's degree	52	8.6	49	11.1
	Ph.D./Doctoral degree	15	2.5	23	5.2
Gig work experience	Less than 6 months	81	13.3	96	21.8
	6 months–1 year	160	26.3	102	23.1
	1–2 years	183	30.1	128	29.0
	3–4 years	153	25.2	90	20.4
	More than 4 years	31	5.1	25	5.7
Gig work income (Monthly)	Less than 10,000 CNY	540	88.8	376	85.3
	10,001–30,000 CNY	55	9.0	49	11.1
	30,001–50,000 CNY	9	1.5	7	1.6
	50,001–100,000 CNY	4	0.7	5	1.1
	More than 100,000 CNY	-	-	4	0.9
Knowledge providing formats	Text	83	13.7	75	17.0
	Audio	144	23.7	114	25.9
	Video	182	29.9	119	27.0
	Comprehensive	199	32.7	133	30.2

Intrinsic motivation measurement was developed based on Altindis (2011), which included four items. Extrinsic motivation measurement was developed based on Haivas et al. (2012), which included external regulation (three items), introjected regulation (two items), identified regulation (three items), and integrated regulation (three items). The social capital measurement scale was developed based on Wing and Sheung (2008), including social interaction (three items), social trust (three items), and shared goals (three items). Gig workers' satisfaction has five items and the measurement scale was adopted from Cammann et al. (1979). Gig workers' commitment has five measurement practices adopted from Mowday et al. (1979).

All of the items were measured using a five-point Likert scale that ranged from 1 (Strongly Disagree) to 5 (Strongly Agree). The control variables that might also be associated with the gig workers' satisfaction and commitment, include age, gender, education, experience in the gig economy, gig work income, and knowledge providing formats.

Data Analysis

This research applied SPSS version 19 to analyze the descriptive statistics and partial least squares structural equation modeling (PLS-SEM) regression was used to conduct the data analysis. SmartPLS 3.0 was applied to examine the normality test, validity test, reliability test, and multicollinearity test before conducting the structural regression model analysis. Because the study used latent variables to measure the models, a convergent validity test and a discriminant validity test were performed to process the validity analysis (Hair et al., 2013). Reliability analysis used Cronbach's alpha coefficients and composited reliability to test the reliability of the measurement items in the questionnaire (Cronbach, 1951). Moreover, this study also applied a full collinearity test to evaluate the latent variables' multicollinearity problem in the model (Kock & Lynn, 2012).

Results

The normality distribution test was examined before data analysis. According to Hair et al. (2013), the normal distribution in statistics has skewness and kurtosis values that are between -1 and +1. In the gig workers who have a full-time job group, the skewness and kurtosis values ranged from -0.234 to -0.849; whereas in the gig workers who don't have a full-time job group,

the skewness and kurtosis values ranged from -0.155 to -0.773. All univariate and multivariate variables' values of skewness and kurtosis range between -1 and +1, which means the two groups of response data are normally distributed. The Kaiser-Meyer-Olkin (KMO) measured the sampling adequacy, which is equal to 0.905 and 0.903 for gig workers who have a full-time job and gig workers who don't have a full-time job, respectively. Moreover, the *P* value of the significance level of Bartlett's test is less than .001. According to Cooper et al. (2006), a KMO value greater than 0.7 and a Bartlett's test *p*-value less than 0.05 mean that the validity of the confirmatory factor analysis (CFA) is established. Confirming the suitability level of the latent variables' validity and reliability is necessary. There are two criteria for testing validity: the convergent validity test and the discriminant validity test. According to the suggestion of Hair et al. (2013), to match the requirements of satisfactory convergent validity, the multi-indicator constructs' value should be above 0.5. As shown in [Tables 2 and 3](#), all factor loading values were above 0.5, which satisfied the convergent validity test. Meanwhile, discriminant validity assesses the level at which one latent variable is different from other latent variables (Farrell, 2010). Based on the recommendation of (Fornell & Bookstein, 1982), each latent variable's average variance extracted (AVE) should be higher than the other latent variables' squared correlations. The results indicate that the discriminate validity test was satisfied. Internal consistency reliability and Cronbach's alpha coefficients are essential indicators for examining the reliability test. Kock and Lynn (2012) suggested that Cronbach's alpha should not be below 0.70. Fornell and Bookstein (1982) recommended that the composite reliability coefficient value should greater than 0.70. As shown in [Tables 2 and 3](#), the Cronbach's alpha and composite reliability coefficients were all greater than 0.70, which satisfied the reliability test.

The multicollinearity test was measured by the Variance Inflation Factor (VIF). According to Hair et al. (2013), if the value of VIF is over 5, it indicates that the construct might have a potential collinearity problem. For the group of gig workers with a full-time job, the VIF among the latent variables ranged from 2.237 to 4.391, whereas for the group of gig workers without a full-time job, the VIF ranged from 2.462 to 4.658. Due to the fact that self-determination, intrinsic motivation, extrinsic motivation, and social capital are highly correlated, it makes the VIF almost as close to threshold 5 as suggested. This indicates that there were no problems with collinearity in this study.

Table 2 Correlation among variables and square root of average variance extracted (With a full-time job)

Variables	SD	IM	EM	SC	SAT	COM	AGE	GED	ED	EP	INC	KPF	Cronbach's Alpha	Composite Reliability
SD	(0.947)	0.923** (0.942)	0.946**	0.807**	0.928**	0.923**	0.220	0.003	0.047	-0.047	0.046	-0.010	0.962	0.965
IM			0.933** (0.967)	0.815**	0.918**	0.920**	0.220	-0.001	0.072	-0.034	0.062	-0.021	0.925	0.946
EM				0.759**	0.945**	0.941**	0.005	0.023	0.050	-0.036	0.053	-0.014	0.968	0.972
SC				(0.949)	0.791** (0.939)	0.944**	0.005	0.019	0.046	-0.026	0.071	-0.013	0.967	0.971
SAT						0.799** (0.805)	-0.011	0.021	0.055	-0.049	0.081*	-0.017	0.937	0.952
COM							-0.001 (1.000)	0.003	0.050	-0.054	0.065	-0.003	0.939	0.954
AGE								-0.006 (1.000)	0.020	-0.036	0.053	-0.500	n/a	n/a
GED									0.001 (1.000)	0.014	0.038	-0.019	n/a	n/a
ED										-0.118 (1.000)	0.114	-0.033	n/a	n/a
EP											0.000 (1.000)	0.138	n/a	n/a
INC												0.016 (1.000)	n/a	n/a
KPF													n/a (1.000)	n/a

Notes: SD = Self-determination, IM = Intrinsic motivation, EM = Extrinsic motivation, SC = Social capital, SAT = Satisfaction, COM = Commitment, GED = Gender, ED = Education, EP = Experience in gig economy, INC = Average income of gig work per month, KPF = Knowledge providing performance
Square roots of average variance extracted of the latent variables are displayed in parentheses.
*** $p < .01$, ** $p < .05$.

Table 3 Correlation among variables and square root of average variance extracted (Without a full-time job)

Variables	SD	IM	EM	SC	SAT	COM	AGE	GED	ED	EP	INC	KPF	Cronbach's Alpha	Composite Reliability
SD	(0.942)	0.912** (0.929)	0.678**	0.937**	0.923**	0.923**	0.072	-0.037	0.137*	0.030	0.098*	0.109*	0.966	0.969
IM			0.833** (0.955)	0.915**	0.908**	0.905**	0.086	-0.058	0.173**	0.029	0.116*	0.059	0.933	0.952
EM				0.764**	0.937**	0.939**	0.057	-0.018	0.131**	0.024	0.091	0.069	0.969	0.973
SC				(0.939)	0.937** (0.914)	0.806**	0.061	0.000	0.123*	0.017	0.109*	0.057	0.97	0.974
SAT						0.819** (0.821)	0.044	-0.031	0.143*	-0.010	0.103*	0.072	0.945	0.958
COM							0.06 (1.000)	-0.034	0.149*	-0.022	0.090	0.060	0.945	0.958
AGE								-0.070 (1.000)	0.033	-0.013	0.051	-0.039	n/a	n/a
GED									-0.022 (1.00)	0.007	-0.011	0.018	n/a	n/a
ED										-0.128** (1.000)	0.173**	-0.010	n/a	n/a
EP											0.090	0.104*	n/a	n/a
INC												0.055 (1.000)	n/a	n/a
KPF													n/a (1.000)	n/a

Notes: SD = Self-determination, IM = Intrinsic motivation, EM = Extrinsic motivation, SC = Social capital, SAT = Satisfaction, COM = Commitment, GED = Gender, ED = Education, EP = Experience in gig economy, INC = Average income of gig work per month, KPF = Knowledge providing performance
Square roots of average variance extracted of the latent variables are displayed in parentheses.
*** $p < .01$, ** $p < .05$.

The results of the hypotheses testing for the group of gig workers who have full-time jobs and those who don't have a full-time job are displayed in Figures 1 and 2, respectively. For the gig workers with a full-time job, from Hypothesis 1 to Hypothesis 7, all beta values are positive, and the p value of each hypothesis is less than .001, which indicates that Hypotheses 1 to 7 are supported. For the gig workers without a full-time job, in Hypotheses 1 to 7, beta values are also positive, and the p value is less than .001, except Hypothesis 4 with a p value below .05. This indicates that Hypotheses 1 to 7 regarding the group without a full-time job are also supported. The adjusted R square is displayed in Figures 1 and Figure 2. Although from the control variables perspective, there was no indication that in the full-time group any control variable influenced the satisfaction and commitment of the gig workers. In the gig workers group without a full-time job, the education level is positively related to their satisfaction and commitment. This means that when the gig workers who do not have a full-time job hold a higher-level education degree, their gig work satisfaction and commitment to the knowledge service providing platforms are greater.

Discussion and Conclusion

General Discussion and Contributions

The main objectives of this research were to study the motivation, satisfaction, and commitment to the organizations of gig workers who work in the knowledge service providing platforms based on the self-determination theory. This study provided additional contributions to the expansion of the literature on SDT as well as filling the research gap in the study of the gig economy in knowledge service providing platforms. Moreover, the study separated the sample into the gig workers who have full-time jobs group and the gig workers who don't have a full-time job group in order to conduct a comparison. The results provide evidence that gig workers' self-determination is associated with their intrinsic motivation, and the results are applicable to both gig workers who have full-time jobs and those who don't have a full-time job group. This means it doesn't matter whether the gig workers

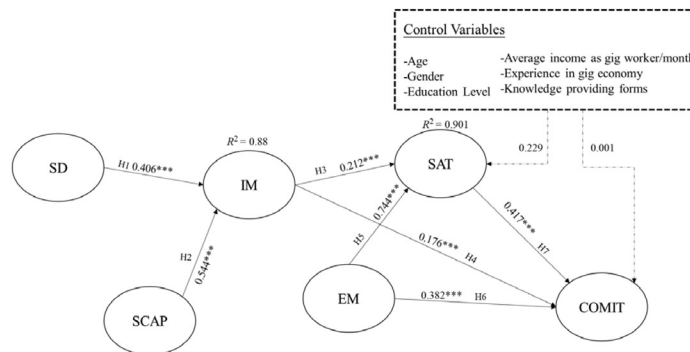


Figure 1 PLS results (With a full-time job)

Note: * $p < .05$, *** $p < .001$.

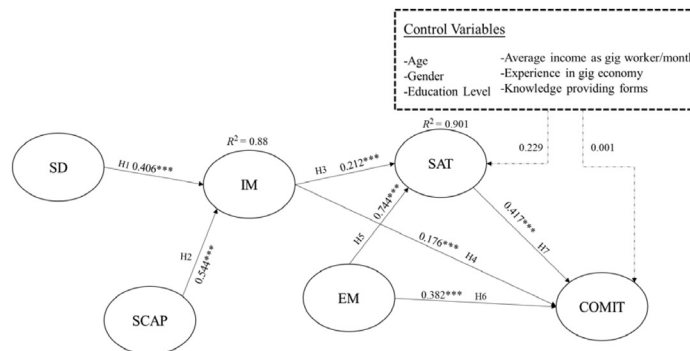


Figure 2 PLS results (Without a full-time job)

Note: * $p < .05$, *** $p < .001$.

are with or without a full-time job, when their self-determination perception is fulfilled or strengthened, the level of their intrinsic motivation perception will increase. The result is congruent with Alamri et al. (2020)'s research, where the scholars found that in online higher education, when learners' self-determination especially their basic psychological needs (feelings of autonomy, relatedness, and competence) are fulfilled and boosted, their intrinsic learning motivation is increased.

This research also found social capital was positively associated with the intrinsic motivation of gig workers who work for knowledge service providing platforms. The previous study also tested and confirmed the same result. Hsin and Chuang (2011) conducted research on social capital and motivation in knowledge sharing intentions and discovered that shared goals, frequent effective interactives and communications, and frequent effective interactives and communications were positively related to intrinsic connection.

Moreover, this study found that extrinsic motivation influences gig workers' satisfaction; the beta values are the highest in this research, namely, 0.744 and 0.687 for gig workers who have full-time jobs and gig workers who don't have a full-time job, respectively. This provides additional evidence of the importance of motivation toward work satisfaction and commitment to an organization (Jabagi et al., 2019). It is important that the knowledge service providing platforms develop incentive systems, recognize and value the gig workers' knowledge and work, make the gig workers feel they are important to the company, and provide feedback in time to increase the gig workers' work satisfaction.

Gig workers who have full-time jobs group and those who don't have a full-time job group have the same direction. However, the two groups showed differences in the control variable's education levels. The research found that the education level of gig workers who don't have a full-time job is positively correlated to their satisfaction and commitment. The previous studies also found that when holding a higher-level educational degree, the employees' satisfaction and commitment is higher (Bakan et al., 2011). However, Iqbal (2010) came to opposite conclusion in the knitwear industry. It is assumed that this is because the knitwear industry foundation workers basically provide physical labor to produce knitwear products. Employees with a higher level of education might be able to easily switch to other companies and industries that match their expectations. This indicates that a higher education level does not necessarily mean a high degree of commitment to the

organization, as the employees' expectations and other factors also need to be considered.

This research also provided some practical contributions. Based on the findings, the knowledge service providing platforms should provide appropriate autonomy to the gig workers, such as allowing them to choose their working hours, and what kind of tasks that they would like to focus on. Knowledge-service platforms can provide positive feedback quickly and demonstrate that their organizations value gig workers. The platforms should also offer some training opportunities to gig workers. If the gig workers want to, the platforms should also provide opportunities for them to try different job functions in the organizations to fulfill their needs for perceived competence. Moreover, platforms that provide knowledge services must devise an effective method of rewarding and recognizing performance. Furthermore, the platforms could provide communication channels, online events, and on-site activities to engage the gig workers, and to encourage them to interact with each other more often and build solid connections. Additionally, it provides suggestions for how to become a gig worker on the knowledge providing platforms; people have to choose a field that they are really interested in and very good at. It's not necessary to have a professional certificate, but they should have enough knowledge to share, such as about beauty and makeup, fitness, storage, and so on. Meanwhile, people also need to check the platforms' value. Try to join the platforms' forums to communicate with other gig workers who share the same interests and collect more information before joining the organization.

Limitations and Recommendations

This research has several limitations. First, the measurement scale of this research applied the self-reported methods, and as a result, the respondents might have had some social desirability bias occurring that could impact the results (Mondal & Mondal, 2018). Second, this research examined a broadly general range of data and information concerned with the knowledge service providing platforms. Hence, it cannot explain some specific categories of knowledge or specific areas of gig workers' motivation, satisfaction, and commitment.

This research also leads to several recommendations for further research. First, this research focused on a single case study in China, and further research

can retest and investigate the model in different countries. Second, future studies can categorize various types of knowledge and compare different groups of gig workers who work with a number of specific kinds of knowledge, such as language education, general education, soft skills training, hard skills training, investment courses, and career development.

Conflict of Interest

The authors declare that there is no conflict of interest.

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