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The Moderating Effect of Employment Opportunity on the Relationship between Job Satisfaction and Intention to Quit: The Perception of the IT Outsourcing Professionals in China

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Authors' contributions

This work was carried out in collaboration between all authors. Authors CW and CT conceptualized the study and organized the Literature. Author CW performed the statistical analysis. Author AW checked the design of the whole study and statistical analysis and also prepared the manuscript. Author CT read and approved the final manuscript. All authors read and approved the final manuscript.

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ABSTRACT

In China, the employee attrition rate was 8.3% in 2001 and reached 11.3% in 2004 while some firms observed turnover rates as high as 30% [1]. The rate of China's nationwide employee turnover increased every single year over the past decade with the employee turnover rate in 2011 reaching 26.3% [2]. Empirical research supports the notion that employee turnover significantly impacts organizational performance [3]. Since outsourcing has major implications for revenue, personnel stability in IT outsourcing firms has drawn increasing attention from the industry. If the IT outsourcing industry in China wants to maintain its high growth rate, it must not only identify the factors that impact turnover but also determine how they impact it. This will help improve human resource management practices and ultimately improve turnover rates. The majority of international research is on outsourcing decision-making and outsourcing management from the client's

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perspective, with little research conducted in relation to offshore service providers from developing countries [4]. A considerable amount of literature has been published on job retention and resignation decisions of employees. There is a need for IT outsourcing firms and their clients to know the attitude of China's IT professionals towards turnover intent, job satisfaction and employment opportunity. This study surveyed IT outsourcing professionals about turnover factors from their perspective as employees. It examined the moderating effect of employment opportunity on the relationship between job satisfaction and intention to quit. The purpose was to provide insights for decision makers to formulate better employee retention strategies. The study population was limited to IT outsourcing professionals working in China. The study involved randomly inviting 5,000 IT outsourcing professionals from IT outsourcing-related public websites and databases in China to participate in an on-line anonymous questionnaire survey.

Keywords: Employment opportunity, job satisfaction, intention to quit, outsourcing, China.

1. INTRODUCTION

IT outsourcing has become a trend that has been referred to as the next industrial revolution [5]. India has been the preferred international IT location for outsourcing, but China is catching up fast and has been the second most preferred destination since 2003 [6]. The success of outsourcing not only depends on the customer, but also on the capabilities of the outsourcing vendor [7]. Therefore, it is in customers' interest to make sure their vendors perform well [8]. Many IT outsourcing contracts are time and material contracts for steady profits [9], which are sensitive to turnover issues. The extent of outsourcing is subject to transaction attributes such as resource stability [10].

Employees are essential for organizational success and can provide the organization with a sustainable long-term competitive advantage [11-13]. Employee turnover is a major concern for organizations and is considered to be one of their most costly and critical challenges [14,15]. Empirical research suggests that employee turnover significantly impacts organizational performance [3]. The resources invested in an employee that leaves, represents a substantial loss to the organization. [16] estimated the turnover cost to be 50% to 150% of an employee's annual salary. It is therefore not surprising, that most organizations classify employees as one of their most valuable resources. Thus, replacing employees for any reason is not only an operational issue, but is also related to financial loss and might even alter the organizational culture [3,17].

Losing staff is part of doing business; however, high turnover rates are unnecessary and wasteful. There are many factors that contribute to employees' decision to leave their current

organization or occupation. The economic climate, job satisfaction, managers and organization culture are but a few of the factors that may impact employees' decision to stay or leave. Reasons for leaving one's job have generally been classified as either internal (work related) or external (not work related). Employees' external personal reasons for leaving their employment are beyond an organization's control; however, internal or work related issues are within organizational capabilities. Job satisfaction, employment opportunity and turnover intention constructs have been of interest to researchers for many decades. However, none of the published studies collected data from IT outsourcing professionals across the whole of China in order to examine the interaction of these constructs.

Employee turnover theories mention that the job satisfaction of an employee plays a significant role in turnover [18,19]. [20] claimed that overall job satisfaction is negatively linked to turnover, and [21] found that turnover decreases as job satisfaction increases. In the field of job satisfaction, [22] Job Descriptive Index (JDI) is one of the best known instruments [23]. In 1990s, the JDI was revised with the inclusion of the Job in General (JIG) scale to measure how employees feel about their job at a general level [24].

[25] intermediate linkage model presented one of the most comprehensive efforts to model the turnover process. Following on from that, [26] presented a refined model by incorporating the ideas of [27] into [25] intermediate linkage model without much theoretical sacrifice. In [26] model, job satisfaction is placed side-by-side with both preceding intention to quit that interacts with perceived alternative employment, leading to actual turnover. As [26] model appears to present

a path for the future, it was chosen to form the basis of the framework for this study. [28] turnover model recognized that there might be other variables, such as employment opportunity, impacting turnover. Employment opportunity can act independently or together with other variables such as job satisfaction. The model suggests that employment opportunity and job satisfaction interact to induce turnover.

The majority of international research is on outsourcing decisions and outsourcing management from the clients' perspective, with very little on offshore service providers from developing countries [4]. This study fills the research gap by investigating how perceived employment opportunities moderates the effect of job satisfaction on the intention to quit for IT outsourcing professionals in China.

2. LITERATURE REVIEW

2.1 Information Technology Outsourcing in China

Information technology (IT) services outsourcing is the movement of IT activities from one corporation to another organization [29]. Companies are increasingly outsourcing IT activities as a viable method for offsetting costs, and it has become a mainstream business practice in all industries.

The success of outsourcing not only depends on the customer, but also on the capabilities of the outsourcing vendor [7]. Therefore, it is the customers' interest to make sure their vendors perform well [8]. The risk associated with software development means that vendors prefer time and material contracts to ensure steady profits [9]. Consequently, employee turnover on the vendors' side is a sensitive issue for outsourcers who may benefit from studying the factors that impact turnover in China's IT outsourcing firms.

2.2 Job Satisfaction

Many studies about job satisfaction in the area of organizational behavior have been conducted [30] due to its significance and association with organizational outcomes [31].

2.2.1 Job satisfaction and associated concepts

Despite thousands of research projects having been conducted in the field of job satisfaction

[32], there is as yet no consensus amongst researchers on its definition [33]. According to [34], it is primarily the researcher's personal value and belief that defines the job satisfaction concept. As such, some scholars claim that the concept of job satisfaction is vague and mythological [35]. While some researchers describe job satisfaction as a steady disposition that resides in employees [36,37], others characterize job satisfaction as a personal attitude towards one's job [37-39]. On the other hand, some theorists argue that job satisfaction is a multi-dimensional concept characterized by personality traits and environmental factors [40]. These discrepancies suggest that further research is required into job satisfaction [35].

Early research on job satisfaction was in the 1950s. At that time, researchers believed that motivation was based on monetary returns [41] and that individuals were either lazy or motivated [42]. People who were lazy could be externally stimulated to work harder or could internally stimulate themselves for the good of work efficiency and socio-economic returns [41]. High levels of job satisfaction result in lower absenteeism, increased motivation, and higher productivity [32]. On the flip side, low levels of job satisfaction introduce tardiness, absenteeism, and high turnover [33]. Researchers have found that job satisfaction is associated with job attitudes, employee behaviour and turnover [43,44].

2.2.2 Essence of job satisfaction in attracting and retaining talents

Job satisfaction attracts and retains talent [32], especially in knowledge-intensive and service-based professional service organizations [30]. The IT outsourcing industry requires a continuous supply of qualified talents to delivery software and IT services, so retention of specialists is key issue. [45] conducted a study with 80 IT sector participants and concluded that job satisfaction predicts intention to quit better for stayers, while organizational commitment predicts intention to quit better for leavers. Stayers refers to those who changed jobs two or less times over the past four years, while leavers refers to those with more than two employers in the past four years.

2.3 Employee Turnover

A plethora of studies have reported on the job satisfaction and turnover relationship. Job

satisfaction continues to be a hot topic for employers due to its important role in employment outcome. Job satisfaction has a positive impact on work efficiency and has a negative impact on absenteeism [46,47]. Conversely, job dissatisfaction results in low productivity and high employee turnover [48,49]. In fact, it has been suggested that there is a direct correlation between job dissatisfaction and increased turnover [14,50]. [21] found that as job satisfaction increases turnover decreases; job satisfaction is inversely correlated to employee turnover. [30] reported that satisfied employees are more dedicated, productive, and stable.

2.3.1 Turnover core framework

Some researchers have contributed immensely to the evolution of turnover studies. For example, [51] work on job satisfaction, [52] model and [25] recognition of intention to leave and alternative opportunities. Although all of the aforementioned played a prominent role in defining contemporary turnover studies, [25] intermediate linkage model presented one of the most comprehensive efforts to model the turnover process. In their model, job satisfaction precedes intention to quit, which interacts with perceived alternative employment, leading to actual turnover. As [26] model appears to present a path for the future, it was chosen to form the basis of the framework for this study.

2.3.2 Retention and Intention to Stay

[53] referred to a PricewaterhouseCoopers report that conducted with more than CEOs from 300 privately held companies who claimed although they considered talents was their biggest expense, yet they still lack of dependable and systematic process to retain key people. Firm success relies on how well organizations retain their talents [54] and that's what they believe the way to realize their investment. The director of accounting group Ernst and Young, has noted that it is cheaper to retain employees than to recruit new ones to take over the post of those that leave [1]. Firms that are unable to keep their high performers are bound to lose their pool of talented workers and become short-staffed, and a poor quality labour force will eventually affect the firm's ability to survive in an increasingly competitive business environment [55].

It will be helpful for managers to understand the essential factors that enhance job satisfaction and intention to stay, in order to maintain a stable and skilled workforce [56]. Not only to

understand the reasons for leaving but also to understand the reasons employees stay in an organization [30,57]. [58] introduced a model that included job satisfaction and other jobs opportunities as factors that influence the decisions of employees not to leave the job. They also included distributive justice as an essential factor and proposed that workforces would be more content if their efforts were recognised. In a number of studies, organizational justice was presented in a broader sense as consisting of equality perceptions correlated to consequences, processes, and interpersonal communications, all of which are connected to the choices of employees to stay in their current job [59].

Effective career planning is another important element in the containment of the turnover problem [60,61]. For on-going improvements of employee competitiveness in the business world, the only sustainable practice is to keep employees educated and provide training for future challenges. According to [62], learning and development opportunities are the other most frequently mentioned contributors to employee retention. In China, employees often decide whether or not to join an organization based on the opportunities for learning and development, so most companies consider this as the most significant element in attracting workers and ensuring that they remain focused and enthused on the job [63]. It comes to the importance of organization's strategies to implement such retention HR program and practices [16].

[64] concluded that job satisfaction is specific to an employee focusing on the specific task environment. They found that job satisfaction is a more immediate response to a work environment and [65] found that job satisfaction is more related to performance. It can be concluded that job satisfaction can be used to predict employee behaviour [66,67].

2.4 Employment Opportunity

Employment opportunity is the ease of movement of availability of jobs in organizations and its visibility to the individual [52]. [68] suggested that an individual's ease of movement is important in voluntary turnover research and that ease of movement is simultaneously determined by market-level general job availability and an individual's characteristics. Based on the idea of retention, most employees will tend to stay with their job if it fulfils them and

if they think that there are not many other employment opportunities in the market [52].

2.4.1 Ease of movement and movement of capital

Individuals have no control over external situations, such as economic recession or when the profession is saturated, that affects the availability of alternative job opportunities. According to organizational equilibrium theory, there are two key motives in voluntary employee turnover: desirability and ease of movement. Desirability is based on the degree of satisfaction of the employee towards the job, while ease of movement is about job opportunities in the job market. Ease of movement within and outside of the organization is linked to the availability of jobs, which is mainly affected by the most accurate single predictor of labour turnover; the economy. Based on the idea of retention, most employees will tend to stay with their job if it fulfils them and if they think that there are not many other job opportunities in the market [52]. In short, the two most significant elements in an employee's choice to leave or not to leave their current employer are job satisfaction and the availability of other job opportunities.

[68] suggested that an individual's ease of movement is important in voluntary turnover research and that ease of movement is simultaneously determined by market-level general job availability and an individual's characteristics. He termed the characteristics 'movement capital', which includes an individual's education, special experience, cognitive ability, and transferable skills. Trevor further suggested that the effect of general job availability, which is typically negative on turnover, depends on movement capital.

2.4.2 Employment opportunity, job satisfaction and turnover

[28] turnover model recognized that there might be other variables, such as employment opportunity, impacting turnover. Employment opportunity can be acted independently or together with other variables like job satisfaction. The model suggests that employment opportunity and job satisfaction interact to induce turnover. As employment opportunity increases, job satisfaction decreases, and two of them together leads to turnover. Employment opportunity and job satisfaction are viewed as the intervening variables between turnover and

primary determinants of turnover like pay, integration, and centralization. [25] suggested that comparing alternative jobs is correlated to intention to quit. From the foregoing it would seem that alternative employment has an interactive effect on primary predictors of turnover, and that ignoring the labour market as a measure of employment opportunity in turnover studies is no longer a pragmatic approach.

2.5 Hypothesis Development

Based on the research gap identified from the literature reviewed, the research model shown in Fig. 1 was developed to illustrate the relationship among job satisfaction, employment opportunity and intention to quit. The research model describes the key theories and their major components for the ease of understanding the impact of context and process scope on outcomes [69]. The research model consists of three constructs, with one dependent variable named 'intention to quit', one moderating variable named 'employment opportunity', and one independent variable named 'job satisfaction'. The following descriptions provide the development of the three hypotheses.

2.5.1 The direct relationship between job satisfaction and intention to quit

It has been suggested the existence of a direct correlation between job dissatisfaction and increased turnover [14,50]. Job dissatisfaction also resulted to low productivity and employee turnover [48,49,50] claimed that overall job satisfaction is negatively linked to turnover, and [21] found that turnover decreases as job satisfaction increases. As job satisfaction has found to be inversely correlated to employee turnover, it was hypothesized that:

Hypothesis 1: Job satisfaction is Negatively correlated to employee turnover intention in China's IT outsourcing sector.

2.5.2 The direct relationship between employment opportunity and intention to quit

[28] model recognized that there might be other variables such as employment opportunity impacting turnover. [25] model found comparison of alternative jobs as being directly correlated to intention to quit. The rapid growing of the IT outsourcing industry in China provides more opportunity to change jobs and hence the

possible higher intention to quit their current jobs. Therefore, it was hypothesized that:

Hypothesis 2: Employment opportunity is positively correlated to employee turnover intention in China's IT outsourcing sector.

2.5.3 Employment opportunity moderates the impact of job satisfaction on intention to quit

[28] turnover model suggests that opportunity and satisfaction interact to induce turnover. The model suggests that as opportunities increase, satisfaction decreases, and both would consequently lead to turnover. Opportunity and satisfaction are viewed as the intervening variables between turnover and primary determinants of turnover like pay, integration, and centralization. Other researchers described that even employees are extremely dissatisfied with their jobs, they may still not leaving the organization except there are attractive job alternatives available to them [21,37,38]. In this respect, alternative employment has an interactive effect with primary predictors of turnover.

Hypothesis 3: Employment opportunity moderates the relationship between job

satisfaction and employee turnover intention in China's IT outsourcing sector.

2.6 Research Model

The research model is shown in Fig. 1 which consists of three constructs, with one dependent variable named 'intention to quit', one independent variable and also a moderating variable named 'employment opportunity', and one independent variable named 'job satisfaction'.

3. METHODOLOGY

This study aimed to understand the perception of IT outsourcing professionals in China on how job satisfaction impacts intention to quit and moderated by employment opportunity. All of the potential participants considered for this study were IT outsourcing professionals working in IT outsourcing firms in China. This group of IT professionals are white-collar workers. Most of them are located in tier one cities of China, such as Beijing and Shanghai, and tier two cities, such as Dalian and Chengdu [70]. This study surveyed IT outsourcing professionals about turnover factors from their perspective.

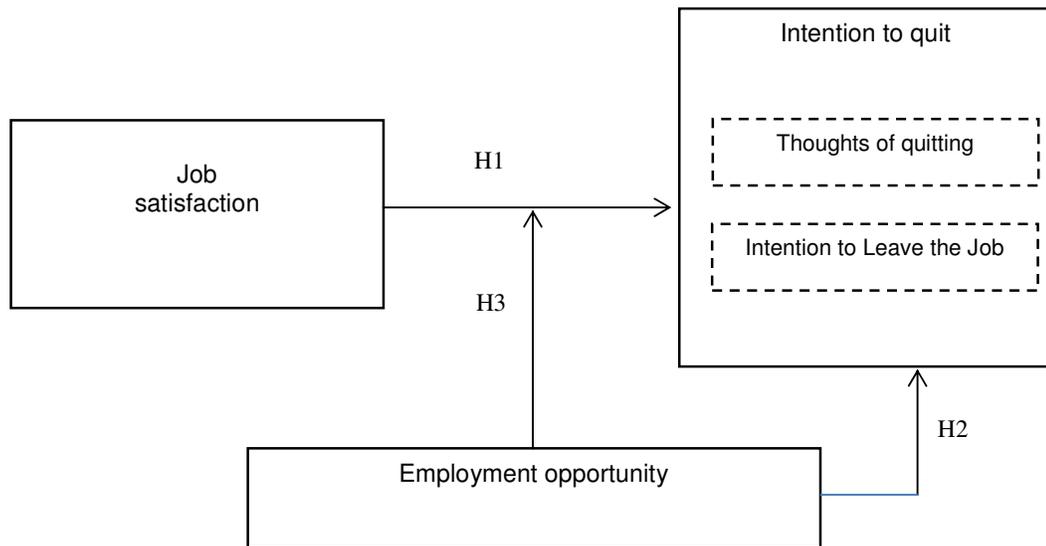


Fig. 1. Research model of the study

3.1 Sample and Data Collection Method

The sample frame consisted of IT outsourcing professionals, including delivery managers, project managers, technical leaders, engineers, testers, and technical supporting staff, who were within the research population and whose contact details (e.g. name, email, login account) were available from IT and outsourcing-related public websites, social media sites, and members' directories in China. Since the contact information of potential participants was obtained from the public domain, the sample frame was considered to be representative of the population. In this study, the largest scale of the questionnaire is 18 and therefore at least 180 participants were required. However, the researcher targeted 300 valid responses in order to gain a better research quality. Since, based on past on-line surveys, the lowest anticipated response rate is 10% [71], three thousand potential participants were drawn from the population in anticipation of receiving around 300 valid responses for statistical analysis, which would be sufficient to ensure validity and reliability of the results. Respondents were informed by email the URL of the on-line questionnaire of this study. They were voluntarily to fill the questionnaire themselves without identity recognised by using their own time.

3.2 Research Instrument

This section describes the instruments to be used to measure the variables. The variables in the questionnaire survey covered employee demographics, job satisfaction, employment opportunities, and intention to quit. There are three constructs in this study and different

measurement scales were adapted from previous studies for measuring each construct as listed in Table 1 below.

Job satisfaction, employment opportunity and intention to quit constitute continuous data and are assessed using scales with strong psychometric characteristics. Demographics are designed to ascertain respondents' age group, gender, job level and longevity within the IT industry and within the current employer. Most employee demographics are non-continuous scales measured by dichotomous items.

3.2.1 Measurement for job satisfaction

[22] job Descriptive Index (JDI) is a well-known instrument in job satisfaction research [23]. In the 1990s, JIG was introduced for the measurement of general job satisfaction levels [72] as a revision of the JDI.

This study employed the JIG scale for measuring how China's IT outsourcing professionals generally felt about their job. Table 2 on next page shows these measuring item IDs and questions associated with the job satisfaction construct.

3.2.2 Measurement for employment opportunity

The researcher reviewed a number of previous studies [26,74-78] about employment opportunity, thoughts of quitting and intention to leave the job. It was found that the survey items from [73] best suit this study. The measuring item IDs and questions are shown in Table 3 below.

Table 1. Measurement of constructs

Constructs	Measuring items adopted from	Number of items	Format
Job satisfaction	[72] Job in general scale from the job descriptive Index	18	Yes/No/?
Employment opportunity	[73] Perceived job alternatives	3	Likert scale of 1 (strongly disagree) to 5 (strongly agree)
Intention to quit	[73] Thoughts of quitting and intention to leave the job	6 (3 + 3)	Likert scale of 1 (strongly disagree) to 5 (strongly agree) for Thoughts of Quitting, Likert scale of 1 (Certainly Not) to 5 (Certainly) for Intention to Leave the Job

Table 2. Survey questions to measure job satisfaction

	Questions
JS-01	Pleasant
JS-02	Bad
JS-03	Ideal
JS-04	Waste of time
JS-05	Good
JS-06	Undesirable
JS-07	Worthwhile
JS-08	Worse than most
JS-09	Acceptable
JS-10	Superior
JS-11	Better than most
JS-12	Disagreeable
JS-13	Makes me content
JS-14	Inadequate
JS-15	Excellent
JS-16	Rotten
JS-17	Enjoyable
JS-18	Poor

Source: Adapted from [72] – JIG

Table 3. Survey questions to measure employment opportunity

Item IDs	Questions
EO-01	It is possible for me to find a better job than the one I have now.
EO-02	Acceptable jobs can always be found.
EO-03	There is no doubt in my mind that I can find a job that is at least as good as the one I now have

Source: Adapted from [73] - Perceived Job Alternative

3.2.3 Measurement for intention to quit

The measuring item IDs and questions for intention to quit are shown in Table 4 below.

3.3 Data Analysis

Data collected in the questionnaire survey were downloaded from the on-line platform and imported to SPSS 21 for statistical analysis, such as validity and reliability testing, and multiple linear regression for testing direct relationships and moderating effect. As job satisfaction (JS) was measured using 18 pointers of JDI and nominal scale with 3 groups, the negative

representation of satisfaction such as bad were re-coded. Thus, JS2, JS4, JS6, JS8, JS12, JS14, JS16 and JS18 were reverse coded using “3” for no, “2” for not sure and “1” for “yes”. These provided all positive reflection of satisfaction with job. The 18 values were then summated and averaged. The average of 2 and above were taken as “Yes” while less than 2 was taken as “No”. This provided a dichotomous nominal measurement level for satisfaction, which was used for further analysis.

Table 4. Survey questions to measure intention to quit

Item IDs	Questions
ITOA-01	It is possible for me to find a better job than the one I have
ITOA-02	Acceptable jobs can always be found.
ITOA-03	There is no doubt in my mind that I can find a job that is at least as good as the one I now have.
ITOB-01	I intend to remain on this job.
ITOB-02	I am actively looking for a new job.
ITOB-03	I will quit my job soon.

Source: Adapted from [73] - Thoughts of quitting and intention to leave the job

4. ANALYSIS OF RESULTS

4.1 Characteristics of Sample

Total 292 questionnaires were completed which represents a 5.84% response rate Table 5 on next page shows the characteristics of the sample.

4.2 Descriptive Analysis of Job Satisfaction

As job satisfaction was measured using 18 pointers from JDI, the negative satisfactions were re-coded accordingly prior to averaging them to represent each respondent's response. With this, all values above 2 were assigned as “Yes” while average scores below that were assigned “No”. Table 6 below shows that a majority (76.7%) of respondents are, on average, satisfied with their job. Only a marginal 23.3% are not satisfied. This job satisfaction was represented with a dichotomous, nominal measurement level.

Table 5. Demographics details of respondents

	Frequency	Percentage
Gender of respondents		
Female	92	31.5
Male	200	68.5
Age group of respondents		
18-24	27	9.2
25-34	188	64.4
35-44	70	24.0
45-54	6	2.1
55 or above	1	0.3
Marital status of respondents		
Single	113	38.7
Married	170	58.2
Others	9	3.1
Education level of respondents		
Secondary/High School	7	2.4
Associate	29	9.9
Degree/Higher Diploma		
Bachelor or Prof. Degree	192	65.8
Master Degree / Doctorate	62 / 2	21.2 / 0.7
Job position of respondents		
Manager/Administrative	109	37.3
Service Delivery/Developer/Tester	104	35.6
Others	79	27.1
Industry experience of respondents		
2 or less	58	19.9
2 to 5	86	29.5
6 to 10	95	32.5
11 to 20	51	17.5
More than 20	2	0.7
Tenure of respondents		
2 or less	136	46.6
2 to 5	98	33.6
6 to 10	50	17.1
11 to 20	8	2.7
Company size of respondents		
30 or less	30	10.3
31 to 100	57	19.5
101 to 300	25	8.6
301 to 1000	57	19.5
Over 1000	123	42.1
Monthly income of respondents		
Less than RMB6,000	60	20.5
RMB6,000 to RMB12,000	116	39.7
RMB12,001 to RMB20,000	65	22.3
RMB20,001 to RMB40,000	39	13.4
More than RMB40,001	12	4.1

4.3 Reliability and Validity Testing

Table 7 below shows the factor loading and Cronbach's alpha of Employment Opportunity (EO) and Intention to Quit (ITQ). All the 6 items of ITQ loaded into a single component and its Cronbach's alpha of 0.870 shows that the internal consistency has been achieved. For measuring EO, item EO2 is removed such that other two items loaded into a single component. The Cronbach's alpha of EO is 0.674 which also shows that its internal consistency meets the required standard for further statistical analysis [79].

Table 6. Descriptive analysis of frequency of job satisfaction

Job satisfaction	Frequency	Percentage
Yes	224	76.7
No	68	23.3
Total	292	100.0

Table 7. Factor loading and cronbach's alpha of EO and ITQ

Items ID	Component		
	EO	ITQ	Cronbach's alpha
EO1	0.830		0.674
EO3	0.864		
ITQ2		0.729	0.870
ITQ3		0.822	
ITQ5		0.787	
ITQ1		0.606	
ITQ6		0.757	
ITQ4		0.707	

4.4 Direct Relationships

Based on the data collected and the measurement levels used to collect the data, the inference analysis to test the hypotheses was conducted by using multiple linear regression. To address H1 and H2, multiple linear regression was used to test the model below by considering JS and EO as the independent variables and ITQ as the dependent variable.

$$ITQ = \beta_0 + \beta_1 (JS) + \beta_2 (EO) + \epsilon$$

The above model shows that β_0 is a constant, β_1 and β_2 are the coefficients for JS and EO respectively, and ϵ is the error of the model.

Table 8. Model Fit of Influence of EO and JS on ITQ

Model	Sum of squares	df	Mean square	F	Sig.
1 Regression	2182.084	7	311.726	31.835	.000
Residual	2780.902	284	9.792		
Total	4962.986	291			

^aDependent Variable: ITQ, b. Predictors: (Constant), JS, EO

Table 8 above shows evidence of model fit as F=31.84, df=7, 284, p-value =0.0001 (p-value<0.05), thus indicating a significant model fit.

4.4.1 Job satisfaction (JS)

Table 9 on next page shows t = -3.48 and p-value = 0.001 (p-value <0.05), hence JS is a significant variable in influencing ITQ. The negative value of standardized β shows the relationship is negative, thus H1 is supported.

4.4.2 Employment Opportunity (EO)

Table 9 on next page shows t = 2.76 and p-value = 0.006 (p-value < 0.05), thus showing that EO is a significant variable influencing ITQ. The positive value of standardized β shows there is a positive relationship between EO and ITQ, therefore H2 is supported.

Hence from Table 9, we can rewrite the model with the β values as shown below.

$$ITQ = 20.889 - 0.200 (JS) + 0.126 (EO) + \epsilon \quad (1)$$

Equation (1) shows a model with relationships between ITQ, JS and EO. When all else remains the same, the value standardized β = -0.200 shows that for every job satisfaction that changes from being satisfied to not satisfied, the ITQ average increases by 0.200 units (in other words, when employees are not satisfied, the likelihood to quit increases) whilst the value standardized β = 0.13 shows that when employment opportunity increases by 1 unit, the intention to quit increases by 0.13 units.

4.5 Moderating Effect of EO on Relationship between JS and ITQ

The moderating effect of EO on the relationship between JS and ITQ is tested by using multiple

linear regression (MLR). The MLR equation with the interacting effect of EO between JS and ITQ is shown as:

$$ITQ = \beta_0 + \beta_1 (JS) + \beta_2 (EO) + \beta_3 (JS*EO) + \epsilon$$

In the above model, β₀ is a constant, β₁ and β₂ are the coefficients for the independent variables JS and EO respectively. β₃ is the coefficient of interactive variable (moderator) whilst ε is the error of the model.

The assessment of the moderating effect relies on the existence of the relationship between JS and ITQ: ITQ = β₀ + β₁ (JS) + β₂ (EO) + ε. As shown in Table 10 on next page.

$$ITQ = 7.040 - 0.501(JS) + 0.089 (EO) + \epsilon \quad (2)$$

The adjusted R² = 0.27 with F = 55.68, df = 2, 289 and p-value = 0.0001, hence model (2) exists significantly.

4.5.1 Job satisfaction

Table 10 shows t = -10.242, p-value = 0.0001 (p-value <0.05), thus JS is a significant variable in this relationship.

4.5.2 Employment opportunity

Table 10 shows t=1.773, p-value = 0.077 (pvalue>0.05) indicating EO is not a significant variable in this relationship.

4.5.3 Moderating effect of EO

With the significance of the model (2), the moderating effect of EO on the relationship between JS and ITQ is tested as shown in Table 11 on next page.

By adding the coefficients into the moderating model:

$$ITQ = 5.169 - 0.662 (JS) + 0.161 (EO) + 0.172 (JS*EO) + \epsilon \quad (3)$$

The adjusted R² = 0.27 and hence the model (3) is a significant model as F = 37.11, df = 3, 288, p-value = 0.0001 (p-value<0.05).

Table 9. Coefficient significance of EO and JS

Model	Unstandardized coefficients		Standardized coefficients	t	Sig.	Collinearity statistics	
	B	Std. error	Beta			Tolerance	VIF
(Constant)	20.889	2.144		9.741	.000		
EO	.425	.154	.126	2.757	.006	.946	1.057
JS	-1.947	.559	-.200	-3.482	.001	.600	1.665

a. Dependent Variable: ITQ

Table 10. Relationship between ITQ, JS and EO

	Unstandardized coefficients		Standardized coefficients	t	Sig.	df	F	Sig.
	B	Std. Error	Beta					
(Constant)	7.040	1.401		5.024	.000	2	55.680	.000
EO	.300	.169	.089	1.773	.077	289		
JS	-5.007	.489	-.513	-10.242	.000			

Table 11. Relationship between ITQ, JS, EO and JSEO

	Unstandardized coefficients		Standardized coefficients	t	Sig.	df	F	Sig.
	B	Std. Error	Beta					
(Constant)	5.169	3.970		1.302	.194	3	37.109	.000
EO	.543	.511	.161	1.063	.289	288		
JS	-6.461	2.928	-.662	-2.207	.028			
JSEO	.188	.373	.172	.504	.615			

Table 11 above shows that EO is not a significant variable in this relationship, since $t = 1.06$ and $p\text{-value} = 0.29$ ($p\text{-value} > 0.05$). However, JS, where $t = -2.21$ and $p\text{-value} = 0.03$ ($p\text{-value} < 0.05$), is a significant variable in this relationship. Finally, $t = 0.50$ and $p\text{-value} = 0.62$ ($p\text{-value} > 0.05$) shows that the interaction effect is not significant in this relationship. As adjusted R^2 of model (2) and (3) are the same at 0.27, EO does not play the role of a moderator in the relationship between JS and ITQ. Thus, H3 is not supported.

5. DISCUSSION

Previous studies have found that job satisfaction and employment opportunity are strongly correlated to employee turnover [25,26]. From a review of previous literature, it can be concluded that intention to quit is a commonly used as a predictor of actual turnover [80], while turnover leads to organization competitiveness and performance. Based on the literature reviewed for this study, three hypotheses were developed.

5.1 Job Satisfaction and Intention to Quit

It was hypothesized in this study that job satisfaction plays a negative direct variable role

in turnover intention. As predicted, job satisfaction was found to have a negative and significant directly affect (standardized $\beta = -0.20$, $t = -3.48$, $p < 0.05$) on turnover intention. Hence, hypothesis H1 is accepted. The result aligned with previous studies on the relationship between job satisfaction and turnover intention. [21] proposed that as job satisfaction increases turnover decreases; job satisfaction is negatively correlated to employee turnover. Satisfied employees are relatively more dedicated to their jobs and more productive at work [30], which is especially true for servicing industries like IT outsourcing. If employees are satisfied with their jobs, they are more happy and willing to work with clients. According to [81] expectancy theory of motivation, employees will stay longer in their organizations if they are satisfied with their jobs [82]. The more talent that is willing to stay in the organization, the greater the extent of outsourcing and of revenue from clients [10].

On the other hand, if employees are not satisfied with their jobs, they will have a higher intention to quit, which will have an impact on the stability of resources and thus the extent of outsourcing. Clients' outsourcing of repetitive work can lead to the outsourcing professional feeling bored if

required to work in a particular role for a long period of time without job rotation. Under such conditions, there will be a high intention to quit that might eventually translate to turnover, especially for employees with good potential and learning capabilities.

5.2 Employment Opportunity and Intention to Quit

It was hypothesized in this study that employment opportunity has a positive direct role to turnover intention. As predicted, employment opportunity is found to have a positive and significant direct affect (standardized $\beta=0.13$, $t=2.76$, $p<0.05$) on turnover intention. Hence, hypothesis H2 is accepted. [28] believed employment opportunity may act independently or interactively with job satisfaction. The finding is also consistent with [25] who found that a comparison of alternative jobs is correlated to intention to quit. IT outsourcing professionals rely on job promotion or change of company in order to expedite their monetary benefits. In China, most IT outsourcing professionals share job opportunity and salary information between them. Some IT outsourcing professionals in China even update their resumes online and make them searchable, even to the extent of disclosing their personal contact information. This makes it easier for head hunters or companies to approach those professionals and present them with competitive opportunities. It is not surprising to see that when perceived employment opportunity increases, the intention to quit also increases. This eventually leads to increased turnover.

5.3 The Moderating Effect of Employment Opportunity on the Relationship between Job Satisfaction and Intention to Quit

The results of this study reveal that employment opportunity does not play a moderating role in the relationship between job satisfaction and intention to quit. The results of this study had opposite finding to [28] turnover model but were consistent with [83]. First, job satisfaction is confirmed by this study to have a significant direct reverse effect on intention to quit, which supports the findings of [21]. The study also confirms that the Job In General scale works well in the context of China, which reinforces the findings of other researchers who examined the applicability of models in the context of China's IT outsourcing sector. In addition, the results of

this study indicate that employment opportunity has a direct impact on intention to quit but does not moderate the impact of job satisfaction on intention to quit. This study contributes to the existing body of knowledge by providing a greater understanding of key factors that impact the turnover of IT outsourcing professionals in China. It also contributes to managerial policy by helping policy-makers to plan for retention strategies with a more focused approach. Retaining IT outsourcing talent strengthens the service capability of outsourcing vendors and thus the satisfaction of outsourcing clients [7]. Understanding and applying the findings from this study will help China's IT outsourcing firms to more rapidly catch up with Indian firms and aggressively seize the lion's share of the market from them.

IT outsourcing is a service-based industry that demands stable and reliable resources to deliver software development and IT services. Findings from [84] research indicate that more than 85% of multinational company employees in China are not satisfied with their career and development opportunities within their own organizations. This introduces opportunities for job agencies and ex-bosses or friends to approach them for better jobs alternatives. Whether organizations provide opportunities to learn and develop their career is a key on-board consideration for employees in China [62]. Outsourcing firms should not only make sure that compensation is competitive for their valued employees but also that ample opportunities are provided for career development and training; they can setup their own training programmes or co-operate with local universities. In terms of overall strategy, IT outsourcing companies should aim at moving up the value chain. Instead of continuing to do low level work, such as reporting and coding, IT outsourcing firms can keep improving their capabilities by taking on challenging projects that involve design and consulting. This would require IT outsourcing professionals to have more on the job training to improve their skill-set and job satisfaction.

6. LIMITATIONS AND FURTHER RESEARCH

This study has a number of limitations. First, employment opportunity was designed to be the direct independent variable as well as the moderating variable for intention to quit. This was specifically to address the lack of previous studies that focused on this construct for the IT

outsourcing industry in China. Second, even though there are a variety of outsourcing models, such as offshore outsourcing, near-shore outsourcing, team-based models, and project-based models, this study did not distinguish between them and therefore the results may be biased in this respect. The study was also limited to IT outsourcing professionals who could be reached online via social media and public websites. Third, this study relied on intention to quit as the only predictor of turnover, even [85] concluded that the relationship between turnover, turnover intention, and its potential determination are still in need of further studies. Also, it cannot be assumed that once an employee begins to express an intention to leave that an actual termination or voluntary turnover will occur [64,86]. This study would be more persuasive if a direct measure of turnover could be applied. Fourth, the study did not address external market elements that may have an impact on perceived employment opportunity, job satisfaction and intention to quit. Although organizations may try very hard to keep talented employees, it is often difficult for them to reject attractive job offers from their friends in an overheated job market. Also, China's IT outsourcing market was in good shape at the time of the study with a growing positive momentum, which may have affected participants' perceptions of what mattered to them. This study faced similar challenges encountered by other cross-sectional studies, that it only measured a snapshot of the phenomenon under investigation [87]. This study could be more persuasive if a longitudinal study could be conducted.

After analysing the results, discussing the findings, and taking account of the limitations of this study, the following further studies are suggested. First, at the time of the study, China's IT outsourcing climate was in good shape with growing momentum, which may have affected participants' perception of what matters to them. This study would be more persuasive if a longitudinal study could be conducted, or the same study could be conducted when the IT outsourcing climate in China is not good and the results compared with this study. Second, in order to further improve the generalizability of this study, it is recommended to extend the same study to employees in other professions and increase the sample size. In addition, it would be helpful to target specific segments, such as offshore outsourcing, so that findings could strategically inform organization structures, constraints and policies. Researchers may find it

interesting and valuable to compare the results between China and India as the two leading countries for global IT outsourcing.

7. CONCLUSION

The study measured the moderating effect of employment opportunity on the relationship between job satisfaction and intention to quit from the perception of the IT outsourcing professionals in China. The conclusions reached for this study are that there is a negative relationship between job satisfaction and intent to quit and employment opportunity has a positive relationship to intention to quit. However, the results reveal that employment opportunity does not have any moderating effect on the relationship between job satisfaction and intention to quit. Potential limitations that might have negatively affected the study are the sample size, selection bias, and over-reliance on a self-completed Internet survey. Respondents were limited to IT outsourcing professionals who could be reached online via social media and public websites. Recommendations for future related research include increasing the sample size, replicating the study in different IT outsourcing segments, such as offshore outsourcing, replicating the study in different industries as well as in other geographical regions such as India, studies involving a qualitative component, the study of intention to stay, and a longitudinal study.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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