The Effects of Employment Opportunity on the Impact of Organizational Commitment and Job Satisfaction on Intention to Quit: The Perception of IT Outsourcing Professionals in China

Submitted By
Wong Tak Keung, Chesney
M.B.A. (UOW)

Newcastle Graduate Business School
Faculty of Business and Law
The University of Newcastle, Australia

For the partial requirement of the degree of

Doctor of Business Administration

March 2014
Supervisor Statement

Office of Graduate Studies
Thesis Examination Application
This form must accompany the thesis at submission.

1 - CANDIDATE TO COMPLETE 1, 2, 3 & 4

<table>
<thead>
<tr>
<th>Family Name</th>
<th>Given Names</th>
<th>Student Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>WONG</td>
<td>Tak Keung, Chesney</td>
<td>3164081</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Degree Undertaken</th>
<th>School / Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>DBA - Professional Doctorate</td>
<td>Newcastle Business School (FRJSL)</td>
</tr>
</tbody>
</table>

| Thesis Title | The moderating effects of employment opportunity on the impact of organizational commitment and job satisfaction on intention to quit: the perception of IT outsourcing professionals in China |

If applicable: My exhibition / performance is being held on

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
</tr>
</thead>
</table>

2 - PREVIOUS QUALIFICATIONS (FOR RESEARCH HIGHER DEGREE CANDIDATES ONLY)

Please list previous tertiary qualifications (for graduation purposes):

<table>
<thead>
<tr>
<th>Degree</th>
<th>Institution/University</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBA</td>
<td>University of Wales</td>
</tr>
<tr>
<td>BENG</td>
<td>Hong Kong University of Science and Technology</td>
</tr>
</tbody>
</table>

3 - THESIS COPIES (PLEASE TICK BOTH BOXES)

PLEASE NOTE: EXAMINERS WILL BE INVITED TO RETAIN THEIR COPY OF THE THESIS

☐ I understand that submitted copies of my thesis shall become the property of the University. The copies are subject to any confidentiality agreements entered into by the University, the candidate and any sponsoring body of the research.

☐ I understand that the University will retain the soft bound office copy and any returned examiners' copies of the submitted thesis until such time as the final hard bound / electronic copy is submitted, at which point all soft bound copies will be confidentially destroyed.

4 - COMMITTEE APPROVAL (YOU MUST TICK ONE BOX IN EACH CATEGORY)

HUMAN ETHICS APPROVAL

☐ I confirm that approval was obtained from the University of Newcastle Human Research Ethics Committee (HREC), and any other organisations as required, to undertake the research contained in this thesis. The Approval Number is HREC 2013-5148.

☐ HREC Approval was not required.

AND

ANIMAL ETHICS APPROVAL

☐ I confirm that approval was obtained from the University of Newcastle Animal Care and Ethics Committee (ACEC), and any other organisations as required, to undertake the research contained in this thesis. The Approval Number is ACEC.

☐ ACEC Approval was not required.

AND

OCCUPATIONAL HEALTH AND SAFETY COMMITTEE APPROVAL

☐ I confirm that approval was obtained from the University of Newcastle Health and Safety Unit and, where appropriate, the associated Technical Committee/s (Chemical/Radiation Technical Committee, Institutional Biosafety Committee) to undertake the research in this thesis where hazards have been identified (eg fельowork, home visits, GM0s, biological, chemical, and radiation).

☐ OHS Approval was not required.

Please return to Office of Graduate Studies, East Wing, The Chancellory
Telephone: (02) 4921 8537 Fax: (02) 4921 8908 Email: thesis@newcastle.edu.au
4-B) STATEMENT OF ORIGINALITY (PLEASE TICK)

On submission, your thesis must contain a statement by you (see below), that the contents of the thesis relate to
your own work, taking into account normal candidate-supervisor relations.

☐ This thesis contains no material which has been accepted for the award of any other degree or diploma in any
university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously
published or written by another person, except where due reference has been made in the text. I give consent to
the final version of my thesis being made available worldwide when deposited in the University's Digital
Repository, subject to the provisions of the Copyright Act 1968.

"Unless an Embargo has been approved for a determined period.

4-C) DECLARATIONS (Tick as many statements as are applicable)

ACKNOWLEDGEMENT OF COLLABORATION

If any of your work has been done in collaboration with other researchers, or carried out in other institutions, your
thesis must contain a statement clearly outlining the extent of collaboration, with whom and under what auspices.

☐ I hereby certify that the work embodied in this thesis has been done in collaboration with other researchers,
or carried out in other institutions (delete if not applicable). I have included as part of the thesis a statement clearly
outlining the extent of collaboration, with whom and under what auspices.

ACKNOWLEDGEMENT OF AUTHORSHIP

If the body of the thesis includes a co-authored published paper or co-authored scholarly work, or a substantive
component of a co-authored published paper or co-authored scholarly work, your thesis must contain a
statement, endorsed by your supervisor, attesting to your contribution to the joint publication/scholarly work. A
statement is not required when publications/scholarly work are included as an appendix.

☐ I hereby certify that the work embodied in this thesis contains a published paper/scholarly work of which I am a
joint author. I have included as part of the thesis a written statement, endorsed by your supervisor, attesting to my
contribution to the joint publication/scholarly work.

(FOR RESEARCH HIGHER DEGREE CANDIDATES ONLY)

Thesis by Publication (Refer to Rule 52 of the Rules Governing Research Higher Degrees)

☐ I hereby certify that this thesis is in the form of a series of published papers of which I am a joint author. I have
included as part of the thesis a written statement from each co-author, endorsed by the Faculty Assistant Dean
(Research Training), attesting to my contribution to the joint publications.

Candidate Signature: Chee Yean Chong Date: 5 March 2014

5. PRINCIPAL SUPERVISOR TO COMPLETE EITHER ITEM A OR ITEM B BELOW

I certify that to the best of my knowledge the work for this thesis has been carried out under conditions which comply with
the Degree Rules and also with the University's policy on the supervision of candidates stated in the Code of Practice for
Research Candidates. In particular, I have read the final draft of the thesis before it was bound and, if possible, inspected
the bound thesis before it was submitted. In my opinion:

(a) the candidate has completed the program in the University under the direction of the supervisor(s);
(b) the submitted thesis meets the formal requirements of the University concerning typing and binding;
(c) the thesis is of sufficient merit to warrant its examination;
(d) the minimum requirements for enrolment at this University have been met (refer to Time Requirements in Degree
Rules);
(e) the thesis has been submitted to Turnitin and I have checked the contents of the report (DEDA candidates only);
(f) the Appointment of Examiners form has previously been forwarded to the Office of Graduate Studies.

In making this certification, I endorse all of the statements attached to this form included in the thesis and do not in any
way imply that the thesis is sufficient for the award of the degree.

Supervisor's Name (Please print): Dr. Canon Tong

Signature: Date: 26th March 2014

---

Please return to: Office of Graduate Studies, East Wing, The Chancellery

 Telephone: (32) 4921 6517 Fax: (32) 4921 6906 Email: graduatestudies@monash.edu

---

iii
Declaration

This dissertation contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. I give consent to this copy of my thesis, when deposited in the University Library, being made available for loan and photocopying subject to the provisions of the Copyright Act 1968.

_________________________
Wong Tak Keung, Chesney
Acknowledgments

I wish to acknowledge and express my deep appreciation to all those who have supported and encouraged me throughout my arduous yet fulfilling doctoral journey that is manifest in this thesis.

Firstly, I would like to express sincere gratitude to my supervisor Dr. Canon Tong, Adjunct Associate Professor of Canberra University, for the skillful guidance and wise advice that helped me to overcome many academic and psychological barriers. I would also like to thank Guilherme Pires and Suzanne Ryan, associate professors from the University of Newcastle, Australia, for their teaching and advice on the literature review and research proposal that allowed me to conduct such a meaningful study.

My thanks are also due to Martyn, Man, Pat, Yui and Stanley for assisting me with matter, and to my good friends Ripple, Tissue, Frankie, Benru, Yubin, Howard, and Charles for their constant care and support. I also wish to thank my study group, Pom, Ellen, Helen, Phyllis, Henry, and Philips, for being outstanding doctoral classmates and for sharing so much valuable knowledge through lessons and group projects.

On a very personal note, I would like to take this opportunity to sincerely thank my beloved wife, Iris, for her love, support and trust, and for being my life partner. I also extend my deepest gratitude to my parents, whose sensible nurturing instilled in me the freedom and courage to be myself, and to my brother who has always been there for me. To my two wonderful children, Carmen and Carson, I want to say thank you for your love and to ask you to always remember that attitude toward learning, respect for time and dedication to success are important elements in life. During difficult times when I was tempted to give up, it was adherence to those elements, along with the love and support of family and friends that kept me going.

Undertaking this DBA journey has been one of the biggest projects of my life. It has been a valuable reminder that one needs to be tough, persistent and dedicated to achieve goals. Once determined, the maxim needs to be: don’t give up; don’t ever give up!

Last but not least, it is Jesus Christ who makes all things happen. Thank you for your salvation. Lord, my life is for you! Amen.
# Table of Contents

Supervisor Statement ................................................................. ii  
Declaration .................................................................................... iv  
Acknowledgements ......................................................................... v  
Table of Contents ........................................................................ vi  
List of Tables ................................................................................. x  
List of Figures ................................................................................. xi  
Abstract ......................................................................................... xii  

CHAPTER 1 – Introduction .......................................................... 1  
1.1 Overview ................................................................................. 1  
1.2 Background ............................................................................. 2  
1.3 Problem Statement ............................................................... 3  
1.4 Purpose of this Research ....................................................... 4  
1.5 Research Questions and Hypotheses ....................................... 4  
1.6 Significance of the Study ......................................................... 6  
1.7 Theoretical and Conceptual Framework ................................. 7  
1.8 Research Methodology .......................................................... 9  
1.8.1 Data Collection ................................................................... 10  
1.8.2 Sample and Sampling Design ............................................. 10  
1.8.3 Ethical Issues of the Research Design ................................. 11  
1.8.4 Data Analysis ...................................................................... 12  
1.9 Assumptions and Limitations ............................................... 12  
1.10 Definition of Terms .............................................................. 13  
1.11 Dissertation Structure .......................................................... 14  
1.12 Summary .............................................................................. 15  

CHAPTER 2 – Literature Review ................................................. 16  
2.1 Introduction ............................................................................. 16  
2.2 Information Technology Outsourcing in China ....................... 16  
2.2.1 China as the Rising Dragon in Global IT Outsourcing ........... 17  
2.2.2 Government Support of the IT Outsourcing Industry in China . 17  
2.2.3 Outsourcing Expectations, Extent of Outsourcing and Vendor Capabilities 18  
2.3 Satisfaction and Associated Concepts ..................................... 19  
2.3.1 Content and Process Theories ........................................... 20  
2.3.2 Job Satisfaction Facets, Job Descriptive Index, and Job In General Scale . 21  
2.3.3 Essence of Job Satisfaction in Attracting and Retaining Talents 22  
2.3.4 Job Satisfaction and Turnover ............................................ 23  
2.4 Organizational Commitment ............................................... 23  
2.4.1 Organizational Commitment Core Framework under Western Context ... 23  
2.4.2 Wang’s Five-Component Commitment Model in a Chinese Context ... 25  
2.4.3 Social Exchange Theory and Chinese Culture ........................ 26
5.3.3 Organizational Commitment and Intention to Quit ..................................... 111
5.3.4 Job Satisfaction and Intention to Quit ....................................................... 112
5.3.5 Employment Opportunity and Intention to Quit ........................................ 113
5.3.6 Employment Opportunity Moderates Organizational Commitment and
Intention to Quit ............................................................................................... 114
5.3.7 Employment Opportunity Moderates Job Satisfaction and Intention
to Quit ............................................................................................................. 116
5.4 Contribution of the Study ............................................................................ 117
5.5 Implications of the Study ............................................................................. 118
5.5.1 Academic Implications ........................................................................... 118
5.5.2 Business Implications ............................................................................. 119
5.6 Limitations of the Study ............................................................................. 121
5.7 Directions for Further Research ................................................................. 122
5.8 Conclusion .................................................................................................. 124

References ......................................................................................................... 125

Appendix A - Ethics Application ................................................................. 145
Appendix B - Ethics Application Approval ...................................................... 157
Appendix C - Email Invitation Letter (English) ................................................ 161
Appendix D - Email Invitation Letter (Chinese) .............................................. 163
Appendix E - Information Statement (English) ................................................ 166
Appendix F - Information Statement (Chinese) ................................................ 169
Appendix G - Online Questionnaire ............................................................... 174
Appendix H - Translation Certification ............................................................. 185
List of Tables

Table 3-1: Measurement of Constructs ................................................................. 53
Table 3-2: Survey Questions to Measure Job Satisfaction ................................. 54
Table 3-3: Survey Questions to Measure Organizational Commitment .......... 56
Table 3-4: Survey Questions to Measure Employment Opportunity ............... 57
Table 3-5: Survey Questions to Measure Intention to Quit .............................. 58
Table 3-6: Survey Questions to Measure Demographics Data ......................... 58
Table 3-7: Correlation of Survey Questions to Research Questions and Hypotheses 61
Table 4-1: Demographics Details of Respondents ........................................... 75
Table 4-2: Descriptive Analysis of Organizational Commitment ...................... 79
Table 4-3: Descriptive Analysis of Employment Opportunity ......................... 80
Table 4-4: Descriptive Analysis of ITQ .............................................................. 81
Table 4-5: Response Time Cross Tabulation ....................................................... 81
Table 4-6a: KMO and Bartlett's Test for 5 Dimension of OC ......................... 84
Table 4-6b: KMO and Bartlett's Test for EO and ITQ ....................................... 85
Table 4-7: Factor Loading of OC, ITQ and EO ............................................... 86
Table 4-8: Variance Explained by 5 Dimensions of OC, ITQ and EO ............... 87
Table 4-9: Direct Effects .................................................................................... 88
Table 4-10: Descriptive Analysis of Frequency of Job Satisfaction ................. 89
Table 4-11: Model Fit of Influence of OC, EO on ITQ .................................. 91
Table 4-12: Coefficient Significance of OC, EO and JS ................................ 92
Table 4-13: Model Summary .......................................................................... 94
Table 4-14: Coefficient Significance of Dimensions of OC and EO ............... 96
Table 4-15: Model Fit of Influence of Dimensions OC and EO on ITQ ............ 96
Table 4-16: Coefficient Dimensions of Interactions and ITQ ......................... 97
Table 4-17: Influence of Dimensions OC, Interactions and EO on ITQ ............ 98
Table 4-18: Relationship between ITQ, JS and EO ..................................... 100
Table 4-19: Relationship between ITQ, JS, EO and JSEO ............................ 101
Table 4-20: Summary of Hypotheses Testing ................................................ 101
List of Figures

Figure 2-1: Organizational Commitment Structure of Wang's (2004) Model .......... 26
Figure 2-2: Research Framework (Michaels and Spector, 1982) ....................... 32
Figure 2-3: Conceptual Model of the Study ...................................................... 38
Figure 3-1: Framework Separated by Viable Relationships for Multiple Linear
Regression .......................................................................................................... 67
Figure 4-1: Descriptive Analysis of Job Satisfaction ........................................... 78
Figure 4-2: Measurement Model of Latent Variables ......................................... 88
Figure 4-3: Histogram, P.P Plot and Residual Chart .......................................... 91
Abstract

Although India has dominated the global IT outsourcing market over the past few decades, China has picked up momentum and is rapidly catching up. As China threatens the Indian monopoly on IT outsourcing, the Chinese success in this area is threatened by high employee turnover. To provide insights to the key factors that impact turnover intention, this study examined the moderating effects of employment opportunity on the impact of organizational commitment and job satisfaction on intention to quit of IT outsourcing professionals in China.

A quantitative methodology was employed to collect and analyze data from 292 participants who completed a questionnaire through a self-administrated Internet survey. The questionnaire design comprised job satisfaction items from Ironson et al.’s (1989) Job in General (JIG) scale, organizational commitment items from Wang’s (2004) five-component commitment model, and items for employment opportunity and intention to quit from Peters et al. (1981).

Findings suggest that both job satisfaction and organizational commitment have a negative and significant influence on intention to quit, while employment opportunity has a positive and significant influence on intention to quit. However, the regression analysis results revealed that employment opportunity does not have a significant moderating effect on the impact of job satisfaction and organizational commitment on intention to quit. Other findings are that the JIG scale works well in the context of China, and that Wang’s (2004) five-component commitment model can be successfully extended to China’s IT outsourcing sector where value commitment was found to be the model’s most important component.

The study adds to the existing body of knowledge in the field by providing a greater understanding of the key factors that impact turnover from the perspective of IT
outsourcing professionals in China. However, the sample size relative to China’s huge IT outsourcing population may be considered insufficient to generalize the study’s findings to other jurisdictions. Accordingly, it is recommended that future related research should use a larger sample size to conduct a cross-cultural study. And, since there might be relationships among the variables other than those identified in this study, it is further recommended to develop a more comprehensive turnover model for IT outsourcing professionals in China.
CHAPTER 1 – Introduction

1.1 Overview

Employees are essential for organizational success and can provide the organization with a sustainable long-term competitive advantage (Redshaw, 2001; Porter, 1990,1985). Employee turnover is a major concern for organizations and is considered to be one of their most costly and critical challenges (Griffeth, Hom, & Gaertner, 2000; Maertz & Campion, 1998). Empirical research suggests that employee turnover significantly impacts organizational performance (Shaw, Gupta, & Delery, 2002). The resources invested in an employee that leaves, represents a substantial loss to the organization. Hytter (2007) 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 (Shaw et al., 2002; Satava, 2003).

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, organization culture, and organizational commitment are but a few of the factors that may impact employees’ decision to stay or leave. Few employees leave their job without a good reason. 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, organization commitment, employment opportunity and turnover intention constructs have been of interest to researchers for many decades.
1.2 Background

For the past few decades IT outsourcing has been one of the most popular industries in India and that country has had the lion’s share of the sector’s international market (Budhwar, 2001). However, China’s software services sector is growing rapidly (Kearney, 2011) as the country’s advanced IT infrastructure, competitive cost and large pool of IT talent become increasingly attractive to both domestic and international clients. This growth has been partly fuelled by the many multinational companies that established or increased their presence in China after the country entered the World Trade Organization (Zhang & Wallace, 2008). Nevertheless, the rate of China’s nationwide employee turnover has been increasing every single year over the past decade and the employee turnover rate in 2011 reached 26.3% (AmCham, 2012).

IT outsourcing represents one of the largest hi-tech industries in China. Outsourcing organizations employ different type of employees and they perform different functions with positions such as delivery manager, project manager, technical leader, engineer, tester, and technical supporting staff. These functions may be performed under one organizational umbrella or by the coordination of separate organizational entities. The participants in this research were all IT outsourcing professionals working in IT outsourcing firms in China. They were white-collar workers with most of them located in tier 1 cities of China such as Beijing and Shanghai and tier 2 cities like Dalian and Chengdu (ComputerWorld, 2011). This group of employees has a diverse educational and employment background. Their previous experience and educational background ranged from computer science engineering to general science. According to the report from CNHD (2013), there were about 7 million new graduates in 2013. However, there are no specific colleges or vocational training programs for this field of work. Employees develop the necessary skills to perform their duties in employer-based on-the-job training programs. In this vein, China has an abundant supply of college graduates and their education and skill set levels keep on improving (Gebauer, 2006).
The number of individuals involved in IT Outsourcing in China is not known, however, there were more than 4 million employees working in outsourcing firms by the end of 2012 (MOFOM, 2013). Favourable tax policies and other financial incentives have been created to foster growth and create an average of 0.8 million new jobs in outsourcing between 2008 and 2012 (MOFOM, 2013). Due to the nature of the outsourcing business, an increasing workforce results in increasing revenue. However, the top 100 outsourcing enterprises generated most of the revenue. IT outsourcing is considered as a green industry for sustainable development, in contrast to the manufacturing sector that relies heavily on low cost labour. According to MOFCOM (2013), the growth of service-based outsourcing revenue exceeds 40% on a year-to-year basis. Total contract deals contributed about $16 billion in revenue with more than half coming from overseas markets such as the United States, Europe and Japan (MOFOM, 2013).

1.3 Problem Statement

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% (Economist 2005). 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% (AmCham, 2012). Empirical research supports the notion that employee turnover significantly impacts organizational performance (Shaw et al., 2002). Robbins (1995) suggested that the associated cost of employee turnover is about 1.5 times higher than the employee's annual salary. According to Aubert, Rivard, and Patry (2004), the extent of outsourcing is subject to transaction attributes such as human resource availability. 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 perspective, with little research conducted in relation to offshore service providers from developing countries (Doren & Revti, 2009). A considerable amount of literature has been published on job retention and resignation decisions of employees. Cotton and Tuttle (1986) conducted a meta-analysis on employee turnover and provided a list of impacting factors. Considering the gaps and business drivers, 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, organizational commitment, and employment opportunity.

1.4 Purpose of this Research

This study surveyed IT outsourcing professionals about turnover factors from their perspective as employees. It examined the moderating effects of employment opportunity on the impact of organizational commitment and job satisfaction on intention to quit of IT outsourcing professionals in China. 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 research 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.

1.5 Research Questions and Hypotheses

This study examined turnover factors from the perspective of China’s IT outsourcing professionals in order to answer the following research question.

To what extent do organizational commitment, job satisfaction and perceived employment opportunity influence intention to quit of IT outsourcing professionals in China?
To help answer the above question, the following five sub-questions were proposed:

1. How does organizational commitment relate to employees' turnover intention in China’s IT outsourcing sector?

2. How does job satisfaction relate to employees' turnover intention in China’s IT outsourcing sector?

3. How does employment opportunity relate to employees' turnover intention in China’s IT outsourcing sector?

4. How does employment opportunity affect the relationship between organizational commitment and employees' turnover intention in China’s IT outsourcing sector?

5. How does employment opportunity affect the relationship between job satisfaction and employees' turnover intention in China’s IT outsourcing sector?

As this study used Wang’s (2004) five-component model for the organizational commitment construct, hypothesis 1 and hypothesis 4 were broken into sub-hypotheses.

Hypothesis 1: Organizational commitment is significantly and negatively correlated to employee turnover intention in China’s IT outsourcing sector.

   Hypothesis 1a: Affective commitment is significantly and negatively correlated to employee turnover intention in China’s IT outsourcing sector.
   Hypothesis 1b: Active continuance commitment is significantly and negatively correlated to employee turnover intention in China’s IT outsourcing sector.
   Hypothesis 1c: Passive continuance commitment is significantly and negatively correlated to employee turnover intention in China’s IT outsourcing sector.
   Hypothesis 1d: Normative commitment is significantly and negatively correlated to employee turnover intention in China’s IT outsourcing sector.
   Hypothesis 1e: Value commitment is significantly and negatively correlated to employee turnover intention in China’s IT outsourcing sector.
Hypothesis 2: Job satisfaction is significantly and negatively correlated to employee turnover intention in China’s IT outsourcing sector.

Hypothesis 3: Employment Opportunity is significantly and positively correlated to employee turnover intention in China’s IT outsourcing sector.

Hypothesis 4: Employment Opportunity moderates the relationship between organizational commitment and employee turnover intention in China’s IT outsourcing sector.
   
   Hypothesis 4a: Employment opportunity moderates the relationship between affective commitment and employee turnover intention in China's IT outsourcing sector.
   
   Hypothesis 4b: Employment opportunity moderates the relationship between active continuance commitment and employee turnover intention in China's IT outsourcing sector.
   
   Hypothesis 4c: Employment opportunity moderates the relationship between passive continuance commitment and employee turnover intention in China's IT outsourcing sector.
   
   Hypothesis 4d: Employment opportunity moderates the relationship between normative commitment and employee turnover intention in China's IT outsourcing sector.
   
   Hypothesis 4e: Employment opportunity moderates the relationship between value commitment and employee turnover intention in China's IT outsourcing sector.

Hypothesis 5: Employment opportunity moderates the relationship between job satisfaction and employee turnover intention in China’s IT outsourcing sector.

1.6 Significance of the Study

The majority of international research has been on outsourcing decisions and outsourcing management from the client’s perspective, with very little research
conducted in relation to offshore service providers from developing countries (Doren & Revti, 2009). This study adds to the existing literature by providing a greater understanding of the key factors impacting turnover from the perspective of IT outsourcing professionals in China. In addition, the study contributes to managerial policy by allowing policy-makers to plan for retention strategies with a more focused approach. As a result of better IT talent retention, the service capability of outsourcing vendors is strengthened and thus the success of outsourcing clients is more likely assured (Feeny Lacity, & Willcocks, 2005). Learning from the findings of this research will help China outsourcing firms to more rapidly catch up with, and ultimately surpass Indian firms to gain the major share of the IT outsourcing market.

1.7 Theoretical and Conceptual Framework

IT outsourcing has become a trend that has been referred to as the next industrial revolution (Blinder, 2006). 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 (Kearney, 2011). The success of outsourcing not only depends on the customer, but also on the capabilities of the outsourcing vendor (Feeny et al., 2005). Therefore, it is in customers’ interest to make sure their vendors perform well (Quinn, 2000). Many IT outsourcing contracts are time and material contracts for steady profits (Gopal et al., 2003), which are sensitive to turnover issues. The extent of outsourcing is subject to transaction attributes such as resource stability (Aubert et al., 2004).

Employee turnover theories mention that the job satisfaction of an employee plays a significant role in turnover (Boswell, Boudreau, & Tichy, 2005; Steel, 2002). Mobley, Steers, and Porter (1979) claimed that overall job satisfaction is negatively linked to turnover, and William, Harris, and Parker (2008) found that turnover decreases as job satisfaction increases. In the field of job satisfaction, Smith, Kendall, and Hulin's Job Descriptive Index (JDI) is one of the best known instruments (O'Connor, Peters, & Gordon, 1978). 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 (Nagy, 2002).

Organizational commitment has been widely studied as part of Western management research (Meyer et al., 2002). The study by Pare’, Tremblay, and Lalonde (2001) suggested that organizational commitment is a key precursor of turnover intent and is negatively correlated to turnover intention. Meyer and Allen (1991) identified three comprehensive and distinctive dimensions of organizational commitment, affective, continuance, and normative, and is now the most widely used multidimensional construct in commitment research. Mowday, Steers, and Porter (1979) used an Organizational Commitment Questionnaire (OCQ) for organizational commitment measurements in a number of studies. Organizational commitment researchers have accepted the conceptualization and measurements proposed by Meyer and Allen (1991) and Mowday, Porter, and Steers (1982). Yousef (2003) performed a comprehensive evaluation of the evidence relevant for validation of the construct through the testing of 1000 cases.

Kim et al. (1996) defined the intention to quit as the degree of employees’ plans to terminate their relationship between themselves and their employers. Research has shown been that actual turnover rate is highly correlated to the intention to quit, which results in absenteeism and low performance (Bowen, 1982). Kammeyer-Mueller et al. (2005) described signs of deviation as organizational withdrawal behaviour, which are antecedents of turnover. Other studies reported that intention to quit is a reliable predictor of turnover (Arnold & Feldman, 1982; Michaels & Spector, 1982; Mobley, 1977; Fishbein & Azjen, 1975).

Perceived employment opportunity is defined as the consideration of career options based upon an individual’s perception of job options that they can obtain (Feldman & Bolino, 1996). Ease of movement is the availability of jobs in organizations and its visibility to the individual (March & Simon, 1958). Trevor (2001) 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 (March & Simon, 1958).

Mobley's (1977) intermediate linkage model presented one of the most comprehensive efforts to model the turnover process. Following on from that, Michaels and Spector (1982) presented a refined model by incorporating the ideas of Porter et al. (1974) on organizational commitment into Mobley's (1977) intermediate linkage model without much theoretical sacrifice. In Michaels and Spector’s (1982) model, job satisfaction and organizational commitment are placed side-by-side with both preceding intention to quit that interacts with perceived alternative employment, leading to actual turnover. As Michaels and Spector’s (1982) model appears to present a path for the future, it was chosen to form the basis of the framework for this research. Price's (1977) 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 and organizational commitment. 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 (Doren & Revti, 2009). This study fills the research gap by investigating how perceived employment opportunities moderates the effect of job satisfaction and organizational commitment on the intention to quit for IT outsourcing professionals in China.

1.8 Research Methodology

This research used a positivist paradigm with a quantitative approach that employed a cross-sectional design using a simple random sampling technique. Due to its
effectiveness in collecting survey data, Internet-based self-administrated questionnaire was used for this study to collect data from IT outsourcing professionals in China. The choice of method was based on the characteristics of the research and the available resources (Malhotra et al., 2004).

1.8.1 Data Collection

A positivism paradigm was considered appropriate for this study as it focuses on investigating the objectivity of reality through scientific methods and measurements (Bryman, 2008; Hirschheim, 1985). With verified hypotheses involving precise, reliable and validated data, researchers are allowed to advance further in the body of knowledge (Gephart, 1999). Based on the large number of IT outsourcing professionals located in different cities in China, an on-line survey was adopted for data collection efficiency and accuracy. Each completed survey was automatically saved in the on-line platform without disclosing the participants’ identity. As Internet technology is developing very fast, there are many secure and reliable on-line survey platforms available to support the data collection process, some with automatic results consolidation that eliminates human errors. Although there are limitations and constraints of online surveys, such as return rate, quality of inputs, Internet access, and technical support, most researchers and academic authorities accept the use of a reputed on-line survey. Furthermore, the researcher is from a strong IT background and has the technical know-how to design the survey and to effectively manage the on-line platform.

1.8.2 Sample and Sampling Design

The potential participants for this research were all IT outsourcing professionals working in IT outsourcing firms in China. The benefit of having a broad coverage of potential participants is to allow the researcher to capture findings more thoroughly. The sample frame of IT outsourcing professionals such as project managers, technical leaders, engineers, testers, and technical support staff were obtained from outsourcing related public websites, social media sites, and members’ directories in China.
Probability sampling was adopted for a better reliability and generalizability (Bryman, 2008). After considering the various methods, simple random sampling was chosen to eliminate possible classification errors (Bryman, 2008; Malhotra et al., 2004) while the other reason was to increase the chances of respondents being picked from different IT outsourcing firms. Lastly, simple random sampling is considered to be relatively quick, less costly, and easier to implement, as well as providing minimal bias and good reliability (Bryman, 2008; Cavana, Delahaye, & Sekaran, 2001).

1.8.3 Ethical Issues of the Research Design

The researcher obtained approval (Approval no. H-2013-0148) from the Human Research Ethics Committee (HREC) of the University of Newcastle who was of the opinion that the research complied with the requirements specified by Australia’s National Statement on Ethical Conduct in Human Research (2013). To ensure voluntary and informed consent, before participants began the on-line survey they were directed to a personal statement informing them of their rights and assuring confidentiality. They were informed that they could withdraw from the on-line survey at any time but once they had submitted a completed questionnaire it would be considered as implied consent and their participation could not be withdrawn.

According to Neuman (2003), ensuring confidentiality significantly improves response rates. The questionnaire did not contain any misleading or sensitive questions that have impacts on participants' personal interests. To ensure confidentiality, only the researcher, his supervisor and the examiners of the dissertation are authorized to access the completed questionnaires, which are stored in the researcher's personal computer. Related computer files are password protected with secured backup procedure. All collected data remain confidential and will be kept securely for five years, and then destroyed completely by WipeDrive software (WhiteCanyon, 2012) to avoid any potential recovery.
1.8.4 Data Analysis

After the researcher collected sufficient questionnaires within a given period, questionnaire results were downloaded from the on-line survey platform and imported to Statistical Package for the Social Science (SPSS 21). The data analysis included descriptive statistics, cronbach alpha, ANOVA, correlation, multiple linear regression and structural equation modelling (SEM). Data analysis methodologies and processes are detailed in Chapter 3.

1.9 Assumptions and Limitations

Three assumptions were made in the development and execution of this research. First, the research was based on the assumption that IT outsourcing professionals acted with integrity during the survey process and answered the survey questions honestly. Second, it was assumed that the data obtained from the survey instrument and the population size of 292 participants was large enough to provide useful data. Third, it was assumed that there is a significant link between intention to quit and turnover.

Three significant limitations are noted. The first limitation was selection bias. There are a variety of outsourcing models such as offshore outsourcing, near-shore outsourcing, team-based outsourcing, and project-based outsourcing. However, this study did not distinguish between the models and may therefore have produced bias in this respect. Also, as the study was limited to only IT outsourcing professionals who could be reached online via social media sites and email, the results may not be generalized to other IT outsourcing employees or indeed to other jurisdictions. Second, the collected data represents a single point-in-time reference and does not provide the benefits of longitudinal study overtime. The third limitation is related to the soundness of the process of self-reporting on survey instruments. Cook and Campbell (1979) pointed out that self-reported data may represent what participants believe researchers expect or want to see and often report what will reflect positively on their own abilities, knowledge, beliefs, or opinions.
1.10 Definition of Terms

Organizational Commitment: the bond between the employee and the organization (Mowday et al., 1982).

Affective commitment: identification with and attachment to the organization (Wang, 2004).

Active continuance commitment: Refers to an employee’s active motivation for working in the organization, such as staying for better on the job training or career advancement opportunities (Wang, 2004).

Passive continuance commitment: Refers to an employee lacking the skills to find job alternatives outside the organisation (Wang, 2004).

Normative commitment: Refers an employee’s moral obligation to stay in the organization (Wang, 2004).

Value commitment: Refers to employees' value congruence and their dedication to the organization in terms of putting in extra effort (Wang, 2004).

Job Satisfaction: Refers to the emotional state resulting from employees’ job experiences, presenting the extent to which employees like their jobs (Spector, 1997).

Turnover: Refers to the termination of a person's employment with an organization; an employee in a fixed position in a company for a certain period would eventually opt to vacate that position (Mobley, 1977).

Voluntary Turnover: Refers to an employee who voluntarily requests to terminate the employer–employee relationship (Wanous, 1979).

Intention to Quit: Refers to the degree of an employee’s plans to terminate the relationship between themselves and their employer (Kim et al., 1996).
Perceived Employment Opportunity: Refers to the consideration of career options based upon an individual’s perception of alternative job opportunities (Feldman & Bolino, 1996).

1.11 Dissertation Structure

This dissertation comprises five chapters. Chapter 1 provides an overview of the study by introducing the research background, identifying the research problem and research questions, outlining the objectives of the study, briefly explaining the contribution of the findings, and acknowledging the research assumptions and limitations.

Chapter 2 provides a comprehensive review of relevant literature and links it to the problem statement, research questions and hypotheses. It includes discussions on job satisfaction, organizational commitment, employment opportunity and intention to quit. As the crux of this study is employee commitment in the context of China’s IT outsourcing industry, the chapter covers the culture of IT outsourcing in China and presents Wang's (2006) five-component model for organizational commitment. To provide a core theoretical framework to support the study, the research hypotheses were developed after discussion of key literature.

Chapter 3 discusses the rationale for the choice of methodological approach and research design. It describes population and sample, instruments, measurements, data collection, data analysis, validity and reliability. Lastly, it addresses the limitations as well as ethical issues involved in this study.

Chapter 4 describes the research findings. It is an evaluative representation and reporting of the data obtained during the research phase that contains tables, figures, and charts of the collected data.

Chapter 5 discusses the research findings by addressing each of the research questions. The contribution and implications of the findings are also discussed, as are the research limitations and directions for further related research.
1.12 Summary

This chapter has presented the research project, provided background information on China’s IT outsourcing industry and briefly reviewed some theories related to job satisfaction, organizational commitment, employment opportunity, and intention to quit. The following chapter provides a comprehensive literature review.
CHAPTER 2 – Literature Review

2.1 Introduction

Chapter one described the background and purpose of the research. This chapter reviews the literature relevant to organisational commitment and employee turnover intention in order to establish a theoretical foundation for the development of the study’s hypotheses and research model. The study examined the moderating effect of employment opportunity on job satisfaction and turnover intention of IT outsourcing professionals in China. The chapter is organized as follows.

Section 2.2 describes the overall IT outsourcing industry landscape in China. Section 2.3 provides an overview of job satisfaction and introduces Smith, Kendall and Hulin's (1969) Job Descriptive Index (JDI) and Ironson et al.’s (1989) Job In General (JIG) scales, as well as Gruneberg’s (1979) content and process classification of job satisfaction theories. Section 2.4 discusses core theories and models related to organizational commitment and identifies Wang’s (2004) five-component commitment model as most appropriate for the Chinese context. Social exchange theory and Chinese cultural norms like ‘boss’ and ‘guanxi’ are also presented. Section 2.5 discusses the changing turnover situation in China, the unique relationship between turnover and intention to quit, as well as the relationships between turnover and other constructs; the section concludes with Michael and Spector’s (1982) refined model that forms the basis of the model for this research. Section 2.6 presents Mobley's (1977) intermediate linkage model and other construct relationships with employment opportunity. Lastly, sections 2.7 to 2.12 identify the research gap, outline the research questions, discuss the study’s conceptual model, explain development of the hypotheses, and summarise the chapter.

2.2 Information Technology Outsourcing in China

Information technology (IT) services outsourcing is the movement of IT activities from
one corporation to another organization (Marshall, 2003). Companies are increasingly outsourcing IT activities as a viable method for offsetting costs, and it has become a mainstream business practice in all industries.

2.2.1 China as the Rising Dragon in Global IT Outsourcing

As a result of the steady disappearance of cross-border trade barriers over the past twenty years, together with the onset of more sophisticated information and communication technologies, global outsourcing has become a common and financially viable business strategy (Blinder, 2006). Work is outsourced to achieve a variety of benefits such as timely access to highly qualified technical talent, reduction of transit time to market, alleviation of cost pressures, speed of innovation, and deployment of existing IT resources to more strategic projects. Consequently, outsourcing services offshore has become a trend that has been referred to as the next industrial revolution (Blinder, 2006). Gartner (2012a) stated that the information technology outsourcing revenue was $228.7 billion in 2010, $246.6 billion in 2011 and $251 billion in 2012. 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 (Kearney, 2011). Providers increased their marketing budgets in 2012, with those in India and China spending much more than those in the U.S. and Europe (Gartner, 2012b).

2.2.2 Government Support of the IT Outsourcing Industry in China

China's emerging IT outsourcing sector has strong credentials and continues to grow, leveraging its strength in infrastructure, talent pool and diversified language skills. China's emergence as a centre for IT outsourcing is mainly due to government initiatives and support. For example, the government's eleventh five-year plan (2006-2010) shifted the emphasis towards information technology services to complement the nation's strong manufacturing base (Rebecca, 2009). Since the early 1980s, in a series of five-year plans, the Chinese government built the foundation for
the success of China’s IT outsourcing market. Another long-term strategy to boost the IT sector through science and home grown innovations has resulted in substantial investments by the Chinese government to strengthen the capabilities of the country’s IT and related services (Rebecca, 2009).

In 2006, the Chinese government announced the 1,000-100-10 Project with funding in excess of US$1 billion with defined objectives (Rebecca, 2009). The first objective was to develop a base of 10 internationally competitive locations for outsourcing services. The second objective was to facilitate a hundred famous global firms to transfer their outsourcing businesses to China. The third objective was to nurture a thousand medium to large outsourcing firms to reach international standards of outsourcing services. Other key areas the government invested in were enhanced infrastructure, such as reliable power supplies and broadband network, and English language training.

2.2.3 Outsourcing Expectations, Extent of Outsourcing and Vendor Capabilities

Kakabadse and Kakabadse (2002) pointed out that among the many possible motivators for IT outsourcing, the key one is cost saving. Beaumont and Costa (2002) identified two important motivators for outsourcing: the difficulty of keeping skilled IT staff, and the comparatively easy acquisition of highly skilled IT staff. However, vendors can also be sources of risk despite being good sources of technological competencies (Quelin & Duhamel, 2003; Jennings, 2002). Aubert et al. (2004) claimed that there are three significant factors that impact the extent of outsourcing in IT firms: asset specificity, uncertainty, and technical skills. For high-asset specificity, most employers tend to subcontract from other places where vendors maintain high standards of stability and a sufficient supply of IT talent. In this regard, turnover is an issue that implies unpredictability and affects the stable supply of qualified talent necessary for quality work; this reduces the extent of outsourcing and impacts outsourcing vendors’ revenue (Aubert et al., 2004).
The success of outsourcing not only depends on the customer, but also on the capabilities of the outsourcing vendor (Feeny et al., 2005). Therefore, it is the customers’ interest to make sure their vendors perform well (Quinn, 2000). The risk associated with software development means that vendors prefer time and material contracts to ensure steady profits (Gopal et al., 2003). 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.

2.3 Job Satisfaction and Associated Concepts

Many studies about job satisfaction in the area of organizational behavior have been conducted (Rad & De Moraes, 2009) due to its significance and association with organizational outcomes (Gu et al., 2010)

Despite thousands of research projects having been conducted in the field of job satisfaction (Rothausen, Gonzales, & Griffin, 2009), there is as yet no consensus amongst researchers on its definition (Wickramasinghe, 2009). According to AI Jenaibi (2010), 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 (Ssesanga & Garrett, 2005). While some researchers describe job satisfaction as a steady disposition that resides in employees (Ahmad et al., 2010; Oplatka & Mimon, 2008), others characterize job satisfaction as a personal attitude towards one’s job (Pepe, 2010; Edwards & Cable, 2009; Oplatka & Mimon, 2008). On the other hand, some theorists argue that job satisfaction is a multi-dimensional concept characterized by personality traits and environmental factors (Tanriverdi, 2008). These discrepancies suggest that further research is required into job satisfaction (Ssesanga & Garrett, 2005).

Early research on job satisfaction was in the 1950s. At that time, researchers believed that motivation was based on monetary returns (Fichter & Cipolla, 2010) and that individuals were either lazy or motivated (Mustata et al., 2011). 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 (Fichter & Cipolla, 2010). High levels of job satisfaction result in lower absenteeism, increased motivation, and higher productivity (Rothausen et al., 2009). On the flip side, low levels of job satisfaction introduce tardiness, absenteeism, and high turnover (Wickramasinghe, 2009). Researchers have found that job satisfaction is associated with job attitudes, employee behaviour, organizational commitment, and turnover (Sinclaire, 2011; Bradford, Crant, & Philips, 2009).

2.3.1 Content and Process Theories

Gruneberg (1979) classified job satisfaction into two types of theory: the content theory, and the process theory. Content theories, such as Maslow’s need theory and Herzberg’s two factor theory, pursue the explanations for the needs, values, or expectations that individuals deem important to be able to determine the degree of their job satisfaction. Herzberg and Maslow were the pioneers in discussing the area of human motivation and were the first to classify job satisfaction factors (Lord, 2002). Process theories, such as Vroom’s expectancy theory, seek to explain how a person’s decision for certain behaviour in return for desired outcomes, could result in job satisfaction or job dissatisfaction. In 1943, Maslow developed his now well-known hierarchy of needs theory that orders different levels of personal needs (physiological, safety, belongingness, esteem, and self-actualization) in a hierarchy that requires fulfilment of lower level needs before progression to higher ones (Maslow, 1954).

Taking a very different approach to Maslow, Herzberg's two-factor theory states that job satisfaction and job dissatisfaction are dependent upon hygiene and motivator factors. Hygiene factors are reasons to leave the job, while motivator factors involve obstacles that people encounter on their jobs and that require to be handled by developing employees’ intrinsic motivation. Kaliprasad (2006) challenged Herzberg's hygiene-motivator theory by claiming that job enrichment is an integral part of job
motivation and job performance and that this is an element employees look for in their work. Schroder (2008) reviewed empirical studies and concluded that there was shift of job satisfaction attitudes due to social, political, economic and technological changes. It was reported that employees pay more attention to extrinsic factors such as work environment, lifestyle and job security as opposed to intrinsic factors (Abayomi, Aniebiet, & Obiajulu, 2011; Ahmad et al., 2010; Schroder, 2008). Some scholars explained this phenomenon using Herzberg's theory that when employees are dissatisfied with their job, they seek extrinsic factors (Na, Amzat, & Abolhaija, 2011). The study from Randolph (2005) explained how intrinsic and extrinsic factors predict job satisfaction and intention to quit. The conclusion was that intrinsic factors more accurately predict job satisfaction and intention to stay.

Vroom's expectancy theory explains that an individual's behaviour is motivated by their personal goals. The three major constructs are expectancy, instrumentality, and valence (Tyagi, 2010). The instrumentality construct is centred on the expectation of certain outcomes when an individual’s performance reaches a defined performance level (Lee, 2007). Instrumentality is the relationship between effort and expected reward, and valence is the value of the outcome to the employee (Lee, 2007). The significance of value depends on an individual's assessment of the importance of expected outcome in conjunction with the associated psychological and material costs (Tyagi, 2010). Workers who are satisfied with or highly attracted to their job have more chance to stay longer in their job (Kim et al., 1996). Therefore, Vroom views job satisfaction as a multidimensional action-outcome concept.

2.3.2 Job Satisfaction Facets, Job Descriptive Index, and Job In General Scale

Ahmadi et al. (2011) pointed out that many researchers only studied job satisfaction from the perspective of organizational or situational predictors and neglected the impact of individual differences. With respect to the lack of a common definition of job satisfaction, many researchers have reached a consensus that job satisfaction consists of
multiple facets (Oplatka & Mimon, 2008; Price, 2001). The approach of using different facets for job satisfaction measurement is different from general job satisfaction measurements (Oplatka & Mimon, 2008; Roelen, Koopmans, & Groothoff, 2008). In such case, employees may report a negative general job satisfaction level but are satisfied with some job aspects (Roelen et al., 2008). Moreover, researchers have not agreed on the elements that characterize the facets of job satisfaction.

The popular Job Descriptive Index (JDI), developed by Smith et al. (1969), includes the following five facets of job satisfaction: colleagues, supervision, promotion, pay, and work itself. However, Spector (1997) identified nine facets of job satisfaction, but each facet should be examined individually as they account for different extents of job satisfaction (Oplatka & Mimon, 2008; Roelen et al., 2008). Since there is no consensus over which facets should be used to measure the concept of job satisfaction, Ironson et al. (1989) employed sound psychometric properties to develop the Job in General (JIG) scale to measure overall job satisfaction (Nagy, 2002). This study therefore used the JIG scale to measure the overall job satisfaction of IT outsourcing professionals in China.

2.3.3 Essence of Job Satisfaction in Attracting and Retaining Talents

Job satisfaction attracts and retains talent (Rothausen et al., 2009), especially in knowledge-intensive and service-based professional service organizations (Rad & De Moraes, 2009). The IT outsourcing industry requires a continuous supply of qualified talents to delivery software and IT services, so retention of specialists is key issue. Shahnawaz and Jafri (2009) 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.
2.3.4 Job Satisfaction and 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 (Altuntas & Baykal, 2010; Arnold & Feldman, 1982). Conversely, job dissatisfaction results in low productivity and high employee turnover (Gifford et al., 2002; Dahlke, 1996). In fact, it has been suggested that there is a direct correlation between job dissatisfaction and increased turnover (Griffeth, Hom, & Gaertner, 2000; Mobley et al., 1979). William et al. (2008) found that as job satisfaction increases turnover decreases; job satisfaction is inversely correlated to employee turnover. Rad and De Moraes (2009) reported that satisfied employees are more dedicated, productive, and stable.

2.4 Organizational Commitment

Organizational commitment has been widely studied as part of Western management research (Meyer et al., 2002) and has been defined as employee's attitude to participate in his or her organization (Mowday, Porter, & Steers, 1982). As a generic definition, organizational commitment is the bond between the employee and the organization (Mowday et al., 1982).

2.4.1 Core Framework of Organizational Commitment in a Western Context

The earliest study of organizational commitment was done by Etzioni (1961), who suggested a typology based on a model of member compliance with organizational directives. Organizations have authority over their employees in three forms of involvement: moral, calculative, and alienative (Etzioni, 1961). Hall, Schneider, and Nygren (1970) described organizational commitment as the process of sharing integrated and congruent goals between individual and organization. Sheldon (1971) conceptualized organizational commitment as the positive assessment of an organization
and employees’ intention to accomplish organization objectives. One of the most commonly used definitions was introduced by Mowday et al. (1982, p.47) who described employee commitment to an organization as an unfolding process of “self-reinforcing cycles of attitudes and behaviours” that strengthen over time, and distinguished job satisfaction from organizational commitment.

Meyer and Allen (1991) identified three comprehensive and distinctive dimensions of organizational commitment, affective, continuance, and normative, and is now the most widely used multidimensional construct in commitment research. Affective commitment is a common and acceptable approach to organizational commitment in which an employee is seen as having an affective emotional and identifiable attachment to and involvement in, the organization (Meyer & Allen, 1991). Continuance commitment is attached to cost considerations when an employee considers leaving the organization, or as the continuation of a line of action as a result of the costs that are associated with termination (Meyer & Allen, 1991). Jaros, Jeremier, and Sincich (1993) explained the difference between affective and continuance commitment: affective commitment implies the possibility of forming an emotional bond, whereas continuance commitment simply reflects a cold calculation of costs and benefits. This continuance dimension was developed from the concepts suggested by March and Simon (1958) and has been attributed to Becker (1960). Normative commitment is defined as a commitment in which an employee’s moral obligation to stay with the organization is grounded in identification with organizational authority norms (Meyer & Allen, 1991). Normative commitment differs from affective commitment in the sense of reflecting social norms and obligations (Jaros et al., 1993).

Mowday, Steers, and Porter (1979) used an Organizational Commitment Questionnaire (OCQ) for organizational commitment measurements in a number of studies. The OCQ is justified by its strong psychometric properties with respected usage in multiple studies (Tremble et al., 2003). Organizational commitment researchers have accepted the conceptualization and measurements proposed by Meyer and Allen (1991) and
Mowday et al. (1982). Yousef (2003) performed a comprehensive evaluation of the evidence relevant for validation of the construct through the testing of 1000 cases.

### 2.4.2 Wang's Five-Component Commitment Model in a Chinese Context

Although Meyer and Allen's (1991) model has a proven structure that can be treated as an appropriate multidimensional conceptualization of commitment (Hackett, Bycio, & Hausdorf., 1994), some researchers (Wang, 2004; Cheng & Stockdale, 2003; Ling, Fang, & Zhang 2002) questioned the generalization of the model in the Chinese context due to cultural differences. According to Wang (2004), commitment models from Western countries may not be appropriate for the full explanation of organizational commitment for employees in China. Wang’s (2004) five-component commitment model shown in Figure 2-1 below was built based on the OCQ and Ling et al.’s (2003) model by considering additional Chinese characteristics.

Wang's commitment model consists of the following five components: affective, active continuance, passive continuance, normative, and value commitment. Affective commitment is identical to the one in Meyer and Allen’s (1991) model, which is about the identification and attachment to the organization. Continuance commitment has two components: active continuance commitment, and passive continuance commitment. Active continuance commitment refers to an employee’s active motivation for working in the organization, such as staying for better on the job training or career advancement opportunities; it is based on Ling et al.’s (2002) ideal commitment. On the other hand, passive continuance commitment refers to the continuance commitment commonly used by other models, whereby an employee lacks the skills to find job alternatives outside the organisation. Normative commitment is identical to the one in Meyer and Allen's (1991) model, which relates to an employee’s moral obligation to stay in the organization, whereas value commitment is not mentioned in their model and represents employees' value congruence with their organization and the willingness to put in extra effort on behalf of the organization (Wang, 2004).
Social exchange theory is commonly used to explain the interaction of behavior among employees and organizations (Loi, Ngo, & Foley, 2006), which is based on the study from Gouldner (1960) and Blau (1964). Social exchange theory captures the complicated interactions between parties covering both social and economic aspect (Cropanzano, Rupp, & Byrne, 2003) that helps to understand turnover (Taylor & Pillemer, 2009). In Taylor's study, he assumed that human interactions and behaviour is about exchanges of benefits among parties (Zafirovski, 2005). Social exchange theory is based on the fundamental premise that human behavior of actor is for the exchange of rewards (Zafirovski, 2005). This implies hidden responsibilities for the other parties (Wayne, Shore, & Linden, 1997; Blau, 1964) that when a party offers some sort of benefits to the other party, he or she is expecting another kind of future return at similar value like job opportunity and salary raise (Gong et al., 2009; Shore et al., 2009; Gouldner, 1960). However, as mutual exchange of benefits cannot be measured by specific form and time frame, a great deal of trust is required among the parties (Shore et al., 2009). Wayne et al. (1997) observed that social exchange theory has a reciprocity norm whereby people help those who helped them before. When a person helps another,
the one that has been helped is indebted and feels obliged to the donor until the help can be paid back in kind at a later date (Gouldner, 1960). However, if such repayment of help does not occur over a period of time, it creates negative consequences (Beniger & Savory, 1981). As such, people keep their social relationships and expect they will help each other for mutual advantages (Zafirovski, 2005).

Yao and Wang’s (2006) study of organizational commitment in China, undertaken from the perspective of the Chinese culture, found that class and the significance of relationships among people are the two main factors that influence organizations in that country. Hwang (1987) observed that in Chinese custom, ‘face’ represents the esteem, egotism and status of a person, which relates to his or her social success. It has been proposed that the cultural perspective is an important factor and that some modifications should be applied to Western managerial principles in order to integrate Chinese circumstances (Lockett, 1988). The influence of traditional Chinese culture, involving such things such as personalism (Redding, 1990) and guanxi (Tsui & Farh, 1997), will undoubtedly produce different result when compared with Western studies on organizational commitment.

A study of Chinese organizations would likely show a high association between organizational commitment and loyalty to the boss. The highly personal nature of Chinese society (Redding, 1990) and the rule of personality, rather than the rule of law, can account for this phenomenon. Chen, Tsui, and Farh (2002) suggested that the leaders of Chinese organizations are seen as the symbol of their organization and that employees have more loyalty to them directly than to the organization. As such, high organizational commitment is associated with loyalty to the boss (Chen et al., 1998). Position is found to be positively associated with organizational commitment among Chinese employees, which is attributable to the important role played by personal relationships in Chinese society. Redding, Norman, and Schlander (1993) noted that individuals in a Chinese context develop personal networks that allow them to be able to function in business and socially.
2.4.4 Organizational Commitment and Turnover

A number of studies confirm the important part that organizational commitment plays in the turnover of IT employees (Igbaria & Greenhaus, 1992). Employees tend to remain in the same organization if their performance is praised, which effectively reduces the organisation’s turnover rate and enhances the effectiveness of its workforce (Porter et al., 1974). Moreover, Mobley et al. (1979) suggested that committed employees are more confident with organizational targets and believe that their strength can be fully utilized. The study by Pare’ et al. (2001) suggested that organizational commitment is a key precursor of turnover intent and is negatively correlated to turnover intention. Joseph and Ang (2003) found that organizational commitment had a moderate, significant, and negative relationship with turnover intention. These studies are congruent with the conclusion from Meyer et al. (2002) and Mathieu and Zajac (1990) that the organizational commitment of employees is positively associated with numerous work consequences. On the other hand, employees will probably leave their jobs if they are not committed to their company (Meyer et al., 2002; Mathieu & Zajac, 1990). The fundamental assumption of the organizational commitment and employee turnover relationship is that the more committed an employee is to the organization, the less chance there is that the employee will leave the organization (Angle & Perry, 1981; Porter et al., 1974).

2.5 Employee Turnover

The construct of employee turnover has been the focus of investigation related to organizational phenomena for many years. Turnover is defined as the termination of a person's employment with an organization. Mobley (1977) believed that an employee in a fixed position in a company for a certain period would eventually opt to vacate that position. Considerable number of studies investigated turnover and associated factors such as turnover intention, intention to leave and intention to search for alternative jobs (Meyer et al., 1989).
2.5.1 China Policy, Economic Reforms and Turnover Situation

The proportion of China’s labour turnover was relatively low at one time, which was due to the system of lifetime employment in some areas known as the iron rice bowl (Warner, 1995). However, with the onset of economic reforms and the open door policy initiated in the late 1970s during Deng Xiaoping’s era, China’s economy gradually became an integral and important part of the global economy. Due to the simultaneous restructuring and expansion of the labour market, high turnover rates have become a real problem for many enterprises. China’s nationwide employee turnover rate increased 3% from 2001 to 2004 (Economist, 2005) and then increased every single year reaching 26.3% in 2011 (AmCham, 2012).

2.5.2 Intention to Quit and Employee Turnover

Kim et al. (1996) defined the intention to quit as the degree of employees’ plans to terminate their relationship between themselves and their employers. Research has shown been that actual turnover rate is highly correlated to the intention to quit, which results in absenteeism and low performance (Bowen, 1982). Kammeyer-Mueller et al. (2005) described signs of deviation as organizational withdrawal behaviour, which are antecedents of turnover. Other studies reported that intention to quit is a reliable predictor of turnover (Arnold & Feldman, 1982; Mobley, 1977; Fishbein & Azjen, 1975; Michaels & Spector, 1982). Turnover intention is a good predictor of turnover because job and organizational attitudes lead to different outcomes when compared intention to quit is more under the control of individuals. According to Bluedorn (1982), turnover is harder to be predicted as more external circumstances could be involved. However, even though an employee starts to show high intention to quit, actual turnover does not necessarily follow to happen (Vandenberg & Nelson, 1999; Mobley et al., 1979) since opportunity may exist to change the person’s work conditions.

Wanous (1979) classified the behaviour of turnover into two types: voluntary turnover and involuntary turnover. The former means an employee who voluntarily requests to
terminate the employer–employee relationship. Voluntary turnover can result in a loss of labour capital and database capital for the company, in addition to the loss of employee expertise. By contrast, involuntary turnover implicates employees who are asked to leave the company of their own volition for a variety of reasons. The turnover figure is calculated by the number of employees replaced divided by the average number of employees during specific timeframe (Iqbal, Kokash, & Al-Oun, 2011). In the following sections, the term "turnover" refers to voluntary turnover.

Turnover of IT employees can be both very expensive and disruptive for an organization (Niederman & Sumner, 2003). Turnover has been tied to failed systems, projects, and inadequate deployment of an organization's IT resources (Igbaria & Guimaraes, 1999; Bartol & Martin, 1982). The impact of turnover is significant and it has been estimated that the cost of voluntary turnover is at least one year and up to two years salary and benefits. Holtom and Inderrieden (2006) calculated that the total cost of employee withdrawal and related behaviour, such as absenteeism and lateness, takes about 17% of an organization’s pre-tax annual income, while Hytter (2007) estimated turnover costs to be 50% to 150% of an employee's annual salary.

However, the actual turnover cost is far beyond what can be observed in the balance sheet. Intangible elements are involved such as disrupted service, and loss of implicit knowledge and skills (Holtom et al., 2008; Ryan & Sagas, 2009; Adidam, 2007; Hytter, 2007) that requires a longer time to recover. According to Aubert et al. (2004), turnover is an issue that reduces the extent of outsourcing to vendors. It is crucial for IT firms to keep a firm hold on the turnover issue. Understanding the predictors of employees' decisions on turnover, including job satisfaction, organizational commitment and employment opportunity, is clearly of value to IT managers.

2.5.3 Job Satisfaction, Organizational Commitment and Turnover Relationships

Bluedorn (1982) found that there is an antecedent link between job satisfaction and organizational commitment (e.g., job performance, withdrawal behavior, and turnover)
with the literature supporting job satisfaction as the affective commitment component. However, Meyer and Allen (1997) noted that the organizational commitment contribution to turnover and turnover intention is independent on that made by other work attitude constructs such as job satisfaction. Curry et al. (1986) contended that there is no support for the hypothesized casual linkages between job satisfaction and organizational commitment. Their analysis did not indicate that satisfaction is a determinant of commitment nor commitment a determinant of satisfaction.

Mowday et al. (1982) concluded that job satisfaction is specific to an employee focusing on the specific task environment, while organizational commitment considers the employee’s attachment to the organization. They found that job satisfaction is a more immediate response to a work environment, whereas commitment attitudes develop more slowly over time. In addition, Shore and Martin (1989) found that job satisfaction is more related to performance, while commitment is more related to turnover. It can be concluded that job satisfaction and organizational commitment together can be used to predict behavior (Wong, Hui, & Law, 1995; Farkas & Tetrick, 1989).

2.5.4 Turnover Core Framework

Some researchers have contributed immensely to the evolution of turnover studies. For example, Maslow’s and Herzberg's work on job satisfaction, March and Simon's (1958) model, the growing school of thought on organizational commitment championed by Porter et al. (1974), and Mobley’s (1977) recognition of intention to leave and alternative opportunities. Although all of the aforementioned played a prominent role in defining contemporary turnover studies, Mobley's (1977) intermediate linkage model presented one of the most comprehensive efforts to model the turnover process. Following on from that, Michaels and Spector (1982) presented a refined model by incorporating the ideas of Porter et al. (1974) on organizational commitment into Mobley's (1977) intermediate linkage model without much theoretical sacrifice. In their
model, job satisfaction and organizational commitment are placed side-by-side with no dichotomous views, which in turn precedes intention to quit, which interacts with perceived alternative employment, leading to actual turnover. As Michaels and Spector’s (1982) model appears to present a path for the future, it was chosen to form the basis of the framework for this research. Michaels and Spector (1982) expanded Mobley’s et al. (1979) model with what were current issues during the 1980s. These issues, articulated into two constructs: pre-employment expectancies and organisational commitment as shown in Figure 2.2 below and Mobley’s et al. (1979) provide a basis for the present research.

![Figure 2-2: Research Framework (Michaels and Spector, 1982)](image)

Michael and Spector’s (1982) findings indicated individual, organisational factors and expectancy lead to satisfaction but expectancy does not lead to organisational commitment.
2.5.5 Retention and Intention to Stay

Tate (2007) 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 (Mayfield & Mayfield, 2007) 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 (Economist, 2005). 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 (Rappaport, Bancroft, & Okum, 2003).

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 (Singh & Loncar, 2010). Not only to understand the reasons for leaving but to understand the reasons why employees stay in an organization (Holtom et al., 2008; Rad & De Moraes, 2009). Price and Mueller (1981) 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 (Aquino et al., 1997).

Effective career planning is another important element in the containment of the turnover problem (Bartol & Martin, 1982; Igbaria & Siegel, 1993). 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 Wilson (2006), 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 (Gebauer, 2006). It comes to the importance of organization's strategies to implement such retention HR program and practices (Hytter, 2007).

2.6 Employment Opportunity

Perceived employment opportunity is defined as the consideration of career options based upon an individual’s perception of job options that they can obtain (Feldman & Bolino, 1996). However, individuals would not be free to act on their options when there are strong external situational constraints (Feldman & Bolino, 2000, 1996).

2.6.1 Ease of Movement and Movement 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 (March & Simon, 1958). 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.
Trevor (2001) 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.

2.6.2 Employment Opportunity, Turnover Intention and Employee Turnover

Youngblood, Mobley, and Meglino (1983) aligned their view with March and Simon's (1958) model to show that individual, organizational, and labour market conditions affect turnover. The implication of this is that alternative employment, which reflects the labour market, is relevant in turnover models. Mobley's (1977) intermediate linkage model recognized employment opportunity together with intention to leave play a major role in actual turnover. Mobley et al. (1979) claimed that employees are not only concerned with the availability job alternatives but also with the attractiveness of the offers. Bluedorn (1982) further added some thoughts on Mobley's (1977) intermediate linkage model by stating that voluntary separation is a process consisting of thoughts of quitting, evaluations of the utility of a job search, intention to search, search, evaluation of alternatives, and intention to quit or stay.

Price's (1977) 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 and organization commitment. 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. Mobley (1977)
suggested that comparing alternative jobs is correlated to intention to quit. Other researchers added to 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 (Pepe, 2010; Oplatka & Mimon, 2008; Williams et al., 2008). 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.

On the other hand, Lee and Mowday (1987) argued that only organizational commitment has an effect on intention to quit and that there is no interactive effect of availability of job opportunities and intention to quit. They pointed to Arnold and Feldman’s (1982) study as justification for their conclusions. Researchers continued to argue the impact of alternative employment to turnover. At that time, Griffeth and Hom (1988) studied the concept of perceived alternatives by nurses and summarized that alternative employment did not have interaction with intention to quit. It was explained that nurses can quit without having any alternatives due to the fact that there is always a shortage of nurses; alternative employment will be available even after turnover. However, Vandenberg, and Nelson (1999) claimed that some employees who perceived the lack of employment opportunities from the job market were not able to quit even though they have the intention to leave their organizations.

2.7 Research Gap

If IT outsourcing in China is to maintain its high growth pace, it must enhance human resource management practices to improve turnover rates. The majority of international research efforts are on outsourcing decisions and outsourcing management from the client's perspective, with very little research conducted in relation to offshore service providers from developing countries (Doren & Revti, 2009).

A considerable amount of literature has been published on the antecedents of turnover intention. Cotton and Tuttle (1986) conducted a meta-analysis on employee turnover
and provided a list of impacting factors. Job satisfaction and organizational commitment are two key factors for research studies related to turnover, but there has been no such empirical research conducted in China’s IT outsourcing sector. This study fills the research gap by investigating how perceived employment opportunities moderates the effect of job satisfaction and organizational commitment on the intention to quit for IT outsourcing professionals in China.

Ling, Fang, and Zhang (2002) argued that organizational commitment models developed in western countries were not appropriate to be generalized in China. There are research studies showing that Wang's (2004) model is more appropriate for measuring employee commitment in China. However, it appears that no study has been conducted using Wang's five-component model under IT outsourcing industry in China. This study therefore analysed the organizational commitment construct in China using Wang's five-component model.

2.8 Research Questions

To fill the research gap identified above, the following five research questions were developed to examine the turnover factors from the perspective of China’s IT outsourcing professionals.

1. How does organizational commitment relate to employees' turnover intention in China’s IT outsourcing sector?

2. How does job satisfaction relate to employees' turnover intention in China’s IT outsourcing sector?

3. How does employment opportunity relate to employees' turnover intention in China’s IT outsourcing sector?

4. How does employment opportunity affect the relationship between organization commitment and employees' turnover intention in China’s IT outsourcing sector?
5. How does employment opportunity affect the relationship between job satisfaction and employees' turnover intention in China’s IT outsourcing sector?

2.9 Conceptual Model

Based on the research gap identified from the literature reviewed and on the subsequent research questions, the research model shown in Figure 2-3 was developed to illustrate the relationship among job satisfaction, organizational commitment, employment opportunity and intention to quit. Conceptual model describes the key theories and their major components for the ease of understanding the impact of context and process scope on outcomes (Karr, 1991).

The conceptual model consists of four constructs, with one dependent variable named ‘intention to quit’, one moderated variable named ‘employment opportunity’, and two independent variables named ‘job satisfaction’ and ‘organizational commitment’.

![Conceptual Model of the Study](image)

Figure 2-3: Conceptual Model of the Study
The construct of job satisfaction and the measuring items concerned were adapted from Ironson et al.’s (1989) Job In General scale. The construct of organizational commitment and the measuring items concerned were adapted from Wang’s (2004) five-component commitment model. The construct of employment opportunity was adapted from Mobley’s (1977) intermediate linkage model, and the measuring items concerned were adapted from Peters, Jackofsky, and Salter’s (1981) Perceived Job Alternatives. The construct of turnover was adopted from Michaels and Spector’s (1982) model, and the measuring items adapted from Peters et al. (1981). Therefore, the current study concerns these established dimensions of organisational commitment and their relationship with job satisfaction, intention to leave the job with the moderating effect of employment opportunity. The conceptual model of the current study is based on Michael and Spector (2001) model, using Wang’s (2004) 5-dimensions of organisational commitment.

2.10 Hypothesis Development

The following sections discuss theoretical perspectives and provide insights into how employment opportunity moderates the relationship between job satisfaction/organizational commitment and intention to quit. Five hypotheses were developed to address the aforementioned research questions.

2.10.1 The Direct Relationship between Organizational Commitment and Intention to Quit

The study by Pare’ et al. (2001) suggested that organizational commitment is a key precursor of turnover intent and is negatively correlated to turnover intention. Joseph and Ang (2003) also found that organizational commitment has a moderate, significant, and negative relationship with turnover intention. These studies are congruent with the conclusions of Mathieu & Zajac (1990) and Meyer et al. (2002) that the organizational commitment of employees is positively associated with numerous work consequences. On the other hand, employees will probably leave their job if they are not committed to
their company (Meyer et al., 2002; Mathieu & Zajac, 1990); similarly, the more commitment an employee has, the less chance there is that they will quit the job (Angle & Perry, 1981; Porter et al., 1974). Though, the above cited studies advocate organisational commitment negatively relate to intention to quit, there is a possibility that those who have an intention to quit would most likely have less commitment. However, recent studies on human resource practices suggest this relationship does not last long as employees go through performance management systems whereby those who intent to quit have low or no opportunity to display lack of commitment before they actually quit (Biron, Farndale, & Paauwe, 2011; Simmonds & Pedersen, 2006; LaBonte, 2003). Thus, in cross-sectional research designs, it is more rational to study the impact of organisational commitment on intention to quit. Therefore, it was hypothesized that:

Hypothesis 1 - Organization commitment is negatively correlated to employee turnover intention in China’s IT outsourcing sector.

Since this study used Wang’s (2004) five-component model for the organizational commitment construct, hypothesis 1 is further broken down into five sub-hypotheses.

Hypothesis 1a: Affective commitment is significantly and negatively correlated to employee turnover intention in China's IT outsourcing sector.
Hypothesis 1b: Active continuance commitment is significantly and negatively correlated to employee turnover intention in China's IT outsourcing sector.
Hypothesis 1c: Passive continuance commitment is significantly and negatively correlated to employee turnover intention in China's IT outsourcing sector.
Hypothesis 1d: Normative commitment is significantly and negatively correlated to employee turnover intention in China's IT outsourcing sector.
Hypothesis 1e: Value commitment is significantly and negatively correlated to employee turnover intention in China's IT outsourcing sector.
2.10.2 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 (Griffeth, Hom, & Gaertner, 2000; Mobley et al., 1979). Job dissatisfaction also resulted to low productivity and employee turnover (Gifford, et al., 2002; Dahlke, 1996). Mobley et al. (1979) claimed that overall job satisfaction is negatively linked to turnover, and William et al. (2008) 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 2 - Job satisfaction is significantly and negatively correlated to employee turnover intention in China’s IT outsourcing sector.

2.10.3 The Direct Relationship between Employment Opportunity and Intention to Quit

Price's (1977) model recognized that there might be other variables such as employment opportunity impacting turnover. Employment opportunity may be acting independently or in conjunction with core turnover variables such as job satisfaction or organization commitment (Price, 1977). Mobley's (1977) model found comparison of alternative jobs as being directly correlated to intention to quit. Work in the workplace is becoming a faster and more productive endeavour due to the increased use of information technology. Ignoring labour-market conditions, which implies employment opportunities, in turnover studies is no longer a pragmatic approach. Therefore, it was hypothesized that:

Hypothesis 3 - Employment opportunity is significantly and positively correlated to employee turnover intention in China’s IT outsourcing sector.
2.10.4 Employment Opportunity Moderates the Impact of Job Satisfaction and Organizational Commitment on Intention to Quit

Price's (1977) 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 (Pepe, 2010; Oplatka & Mimon, 2008; Williams et al., 2008). In this respect, alternative employment has an interactive effect with primary predictors of turnover.

On the other hand, Lee and Mowday (1987) argued that only organizational commitment has an effect on intention to quit and that there is no interactive effect of availability of job opportunities and intention to quit. They pointed to Arnold and Feldman’s (1982) study as justification for their conclusions. Researchers continued to argue the impact of alternative employment on turnover. At that time, Griffeth and Hom (1988) studied the concept of perceived alternatives by nurses and concluded that alternative employment did not have interaction with intention to quit. It was explained that nurses could quit without having any alternatives due to the fact that there is always a shortage of nurses; alternative employment will be available even after turnover. However, Vandenberg and Nelson (1999) claimed that some employees who perceived the lack of employment opportunities from the job market were not able to quit even though they have the intention to leave their organizations. In view of the foregoing, it was hypothesized that:

Hypothesis 4 - Employment opportunity moderates the relationship between organization commitment and employee turnover intention in China’s IT outsourcing sector.
Since this study used Wang’s (2004) five-component model for the organizational commitment construct, hypothesis 4 is further broken down into five sub-hypotheses.

Hypothesis 4a: Employment opportunity moderates the relationship between affective commitment and employee turnover intention in China’s IT outsourcing sector.

Hypothesis 4b: Employment opportunity moderates the relationship between active continuance commitment and employee turnover intention in China's IT outsourcing sector.

Hypothesis 4c: Employment opportunity moderates the relationship between passive continuance commitment and employee turnover intention in China's IT outsourcing sector.

Hypothesis 4d: Employment opportunity moderates the relationship between normative commitment and employee turnover intention in China's IT outsourcing sector.

Hypothesis 4e: Employment opportunity moderates the relationship between value commitment and employee turnover intention in China's IT outsourcing sector.

Hypothesis 5 - Employment opportunity moderates the relationship between job satisfaction and employee turnover intention in China’s IT outsourcing sector.

2.11 Summary

As support for the study, this chapter presented the theoretical bases of job satisfaction, organizational commitment, employment opportunity, and intention to quit. A review of the literature has revealed that intention to quit is a reliable predictor of turnover (Arnold & Feldman, 1982; Michaels & Spector, 1982; Mobley, 1977; Fishbein & Azjen, 1975), and that turnover IT employees can be both very expensive and disruptive for an organization (Niederman & Sumner, 2003).
The Job In General (JIG) scale developed by Ironson et al. (1989) was chosen for this study to measure general job satisfaction levels. The re-conceptualization of organizational commitment by Wang’s (2004) five-component model for the Chinese context, and its impact on intention to quit, were also discussed. Michaels and Spector’s (1982) refined model formed the basis of the model for this research as it combined Porter et al.’s (1974) organizational commitment model and Mobley's (1977) intermediate linkage model, placing job satisfaction and organizational commitment side-by-side and interacting them with perceived alternative employment preceding intention to quit.
CHAPTER 3 – Methodology

3.1 Introduction

The previous chapter detailed the key literature related to China’s IT outsourcing landscape and the turnover factors, including development of the research model and research questions, leading to the five research hypotheses. This chapter describes the choices and rationale of methodological approach and research design. It also covers population and sample, instrumentation, measures, data collection, data analysis, validity and reliability. Lastly, it addresses the limitations as well as ethical issues involved in this study.

3.2 Research Paradigm

The term paradigm refers to a group of basic beliefs that direct researchers to the type of study to be undertaken by identifying the relationship between appropriate methods and the variables of a particular research. A paradigm acts as a roadmap or guide to show how the research should be conducted and the results interpreted (Bryman, 2008). Paradigms are classified as positivism, interpretivism, constructivism, post-positivism, and critical theory. The two predominant paradigms for social science research are positivism and interpretivism (Bryman, 2008; Denscombe, 2002).

3.2.1 Rationale for the Positivism Paradigm Used in this Study

Positivism is based upon a deductive approach that assumes universal laws and truths drive reality, where researchers can make observations from a single and stable reality and analyses the collected data (Bryman, 2008; Perry & Gummesson, 2004; Levin, 1988). It assumes the analyst is objective and will interpret collected data free of value. Its methodology is highly structured so that other researchers can verify it by repetition (Gill & Johnson, 2002).
On the other hand, interpretivism is based upon an inductive approach and argues that different individuals and situations will produce different results. The basic theory of this paradigm is that instead of something existing objectively in reality, social reality is more subject to individual construction and interpretation (Denscombe, 2002). It advocates the necessary understanding of the differences between humans as social actors and emphasizes conducting studies among people rather than through other means such as postal or online survey.

A positivism paradigm was considered appropriate for this study as it focuses on investigating the objectivity of reality through scientific methods and measurements (Bryman, 2008; Hirschheim, 1985). With verified hypotheses involving precise, reliable and validated data, researchers are allowed to advance further in the body of knowledge (Gephart, 1999). According to Vessey, Ramcsh, & Glass (2002), positivism has been the dominant paradigm used in information technology related research.

3.2.2 Rationale for the Quantitative Methodology Used in this Study

Quantitative research is based on a positivism paradigm. It tests theory composed of variables that are involved with the enquiry of social or human issues (Creswell, 2004). Within a value-free framework, it uses a set of inter-related variables, propositions and definitions to present a systematic view of natural phenomena through mathematical expression and the measurement of causal relationships among specified variables (Bryman, 2008; Creswell, 2003; Kerlinger, 1979). It encourages the measurement and comparison of variables for objective testing (Cavana et al., 2001). Findings generated from quantitative studies are generally considered generalizable to other settings due to its reliability and representativeness (Bryman, 2008; Cavana et al., 2001).

This research tested a research model constructed within a positivism paradigm to investigate the direct and indirect causal relationships on the impacts of organizational commitment, job satisfaction and employment opportunity on intention to quit in the natural social situation of IT outsourcing professionals in China. Surveys often are used
as the primary data collection approach because of their versatility and it has been the most common research design in the information technology field. The research adopted a quantitative research methodology that uses survey questionnaire with statistical methods aimed at covering a large sample size in an objective manner to produce reliable and valid results within a short time frame (Bryman, 2008; Weber, 2004; Cavana et al., 2001). The analytical approach and positivism paradigm provide an objectivist explanation of reality that agrees most closely with this researcher's view of the world.

3.3 Research Design

The research design details the steps taken by the study, including data collection, sampling approach, data analysis and validation (Bryman, 2008; Neuman, 2003; Hussey & Hussey, 2003); it spells out the methods and steps taken to fulfil the research objectives through measurable and valid data (Nardi, 2006) that include development of hypotheses and the operational implications of data collection and analysis to ensure objectivity, validity, reliability, and accuracy (Kumar, 2005; Kerlinger, 1979). According to Bryman (2008), the research design is a structure to test hypotheses and address research questions such that findings will contribute to the body of knowledge in a particular field.

3.3.1 Rationale for the Cross-Sectional Research Design Used in this Study

Cross-sectional research design is where the target group sample shares some characteristics within the same period of time (Thomas, 2010) and is a ‘snapshot’ of that specific time period. Researchers collect data to examine for trends of differences relating to one or more variables, providing a descriptive picture of relationships among these variables (Thomas, 2010; Singh, 2007). It is a popular design in social sciences research for its lower cost advantage and convenience in implementation.

This research uses a cross-sectional research design not only because of its advantage in time and resources, but also because collection of data during one time slot using the
same set of questionnaire provides consistency in comparison (Cavana et al., 2001). Cross-sectional research design also has the advantage of reaching a large population within a short research timeframe with less ethical considerations.

3.4 Population and Samples

The goals of research are to explore, describe, explain, and predict the characteristics of a population. A population refers to the total collection of units or elements clearly defined for research data collection and analyses. Locating an appropriate sample and applying an effective sampling technique allows research findings to be more representable and generalizable (Cavana et al., 2001). Information about the variables in the population is needed to generate statistics about the variables from a sample of people chosen to represent the entire population (Nardi, 2006).

Sample is a term that refers to a smaller subset drawn from the larger population and represents a selected segment to be investigated from the population (Bryman, 2008). Sampling, however, is the procedures involved in selecting samples from the sampling frame as a basis for predicting the prevalence of an unknown situation or outcome (Kumar, 2005). Therefore, generalizability of the results will depend on how well a sample represents the population from which it was drawn and the nature of the representativeness (Punch, 2005).

3.4.1 Population

This study aimed to understand the perception of IT outsourcing professionals in China on how organizational commitment and job satisfaction impact intention to quit, moderated by employment opportunity. The collection of data is about personal experience and impressions that are best described by the IT outsourcing professionals themselves rather than their managers or human resources personnel.
Therefore, all of the potential participants considered for this research were white-collar IT outsourcing professionals such as delivery managers, project managers, technical leaders, engineers, testers, and technical supporting staff, working in IT outsourcing firms in China. Majority of IT firms are located in tier one cities of China, such as Beijing and Shanghai, and tier two cities, such as Dalian and Chengdu (ComputerWorld, 2011). Furthermore, selection from these areas provided the researcher with a bigger probability of receiving voluntary response.

The purpose of having a broad coverage of potential participants was to gather a greater variety of opinions, which would enable the capture of data more thoroughly. The job position of potential participants included delivery manager, project manager, technical leader, engineer, tester, and technical supporting staff. No clerical employees were included in the sample.

3.4.2 Samples

The sample frame of IT outsourcing professionals such as contact details (e.g. name, email, login account) were obtained from IT and outsourcing-related public websites, social media sites, and members’ directories in China. Since the contact information of potential participants was from the public domain, the sample frame was considered to be representative of the population.

3.4.3 Rationale for the Simple Random Sampling Used in this Study

Probability sampling refers to the equal opportunity of each individual being picked as a part of the sample from a population (Bryman, 2008; Kumar, 2005; Cavana et al., 2001). Simple random sampling is the most commonly used method of probability sampling because it is the most basic, easiest and straightforward method for a researcher to use (Kumar, 2005; Cavana et al., 2001). Simple random sampling draws randomly from a complete list of possible units in the population from which to choose a sample.
In this research, probability sampling was adopted for a high degree of reliability and generalizability (Bryman, 2008; Cavana et al., 2001). Simple random sampling was chosen to eliminate the possibility of classification errors since it contains no division of population into sub-populations (Bryman, 2008; Malhotra et al., 2004; Cavana et al., 2001). Lastly, simple random sampling is considered to be relatively quick, less costly, and easier to implement, as well as providing minimal bias and good reliability (Bryman, 2008; Cavana et al., 2001).

3.5 Data Collection Methods

In this research, quantitative methods were adopted for data collection and analyses. The methods used for data collection affect the quality of data, which determine the creditability of the findings (Punch, 2005). There are a number of data collection methods for quantitative research such as self-administered questionnaire, focus group, and non-participative observation, and each of them has strengths and weakness. The choice of method is based on the characteristics of the research and the available resources (Malhotra et al., 2004).

3.5.1 Rationale for Use of an Internet-based Questionnaire Survey

There are a variety of data collection methods for qualitative research. Based on the large amount of participants located in different cities in China, an on-line survey method was adopted for efficiency and accuracy. Each completed survey was automatically saved in the on-line platform without disclosing participants' identity. As Internet technology develops very fast, there are many secure and reliable on-line survey platforms available to support the data collection process, especially the automatic results consolidation function that eliminates human error. There are limitations and constraints of online surveys, such as low return rates, questionable quality of inputs, availability of Internet access and technical support. However, nowadays many people have Internet access and can participate in on-line surveys conveniently, especially IT outsourcing professionals. Many researchers and academic
authorities accept the use of reputed on-line surveys. The researcher is from a strong IT background and has technical know-how to design the survey and manage the on-line platform effectively. In this study, an on-line survey was used for its effectiveness in collecting survey data from IT outsourcing professionals in China.

3.5.2 Data Collection Process

According to MOFOM (2013), there were more than 4 million employees working in outsourcing firms by the end of 2012. However, the top 100 outsourcing enterprises generated most of the revenue. The researcher collected contacts of IT outsourcing professionals from outsourcing/ICT-related public websites, social media sites and members’ directories in China. China Sourcing (2013) identified 50 outsourcing firms for their outstanding creditability and influence in becoming benchmarks of the industry. The researcher visited social media sites, such as LinkedIn, to follow those firms and search for contact details. Using a similar approach, the researcher also searched for contacts from outsourcing providers in the 2012 Global Outsourcing 100 list (IAOP, 2013).

The researcher also approached major China software parks for a list of outsourcing firms in the corresponding cities. Contacts of IT outsourcing professionals from those firms were collected via public search engines, social media sites and public databases. The following is a list of software parks in China:

1. Anhui Service Outsourcing Park
2. Chengdu Tianfu Software Park Co
3. Dalian Software Park
4. Dalian Ascendas IT Park
5. Hang Zhou East Software Park
6. Huaqiao International Service Business
7. Jiangsu Software Park
8. Ningbo Software and Services Park
The researcher collected 5000 contacts of potential participants and input them to an Excel program that randomly selected 3000 potential participants from the pool. The researcher sent email invitation letters to the 3000 shortlisted potential participants explaining the purpose of the study, providing survey instructions and personal information statement as well as a web link to the SurveyMonkey platform. The researcher offered to share the research results with the participants upon request. As the survey was conducted amongst IT outsourcing professionals in China, the questionnaire was made available in both English and Chinese. At the end of the survey period, the researcher downloaded the survey data from the online platform to a MS Excel file and imported them to SPSS for data analysis.

According to Neuman (2003), ensuring confidentiality significantly improves response rates. The on-line survey is confidential, only the researcher has access to personally identifiable information to ensure anonymity. All collected data remains confidential and will be securely kept for five years, after which it will be destroyed completely by WipeDrive software (WhiteCanyon, 2012) to avoid any possibility of recovery.
3.5.3 Target Sample Size

It has been recommended that the sample size shall be at least 10 times the total items of the biggest scale in the questionnaire (Tassabehji, 2010; Gopal, Bosrom, & Chin, 1992); others have suggested that the minimum sample size should be calculated by multiplying the number of variables by eight and then adding 50 (Garson, 2007). In this research, 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% (Bryman, 2004), 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.

3.6 Questionnaire Design

This section describes the instruments to be used to measure the variables. The variables in the questionnaire survey covered employee demographics, job satisfaction, organizational commitment, employment opportunities, and intention to quit. The expected time to complete the survey’s 54 questions was approximately 10 minutes. There are four constructs in this study and different measurement scales were adapted from previous studies for measuring each construct as listed in Table 3-1 below.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Measuring items adopted from</th>
<th>Number of Items</th>
<th>Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>A) Job satisfaction</td>
<td>Ironson et al.’s (1989) Job in General scale from the Job Descriptive Index</td>
<td>18</td>
<td>Yes/No/?</td>
</tr>
<tr>
<td>B) Organizational Commitment</td>
<td>Wang’s (2004) Five-Component Commitment Model</td>
<td>18</td>
<td>Likert scale of 1 (strongly disagree) to 5 (strongly agree)</td>
</tr>
</tbody>
</table>
C) Employment Opportunity

<table>
<thead>
<tr>
<th></th>
<th>Peters et al.’s (1981) Perceived Job Alternatives</th>
<th>3</th>
<th>Likert scale of 1 (strongly disagree) to 5 (strongly agree)</th>
</tr>
</thead>
</table>

D) Intention to Quit

<table>
<thead>
<tr>
<th></th>
<th>Peters et al.’s (1981) Thoughts of Quitting and Intention to Leave the Job</th>
<th>6 (3 + 3)</th>
<th>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</th>
</tr>
</thead>
</table>

E) Demographics

|          | 9 | |

Job satisfaction, organizational commitment, 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, longevity within the IT industry and within the current employer. Most employee demographics are non-continuous scales measured by dichotomous items.

3.6.1 Job Satisfaction

Smith, Kendall, and Hulin's Job Descriptive Index (JDI) is a well-known instrument in job satisfaction research (O'Connor et al., 1978). In the 1990s, JIG was introduced for the measurement of general job satisfaction levels (Ironson et al., 1989) 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 3-2 below shows these measuring item IDs and questions associated with the job satisfaction construct. The questionnaire items were measured on a 3-item scale: "Yes", "No" and "Not Sure".

### Table 3-2: Survey Questions to Measure Job Satisfaction

Source: Adapted from Ironson et al. (1989) - JIG

<table>
<thead>
<tr>
<th>Item</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>JS-01</td>
<td>Pleasant</td>
</tr>
</tbody>
</table>
3.6.2 Organizational Commitment

Meyer and Allen (1991) used three components to assess organizational commitment: affective, continuance, and normative. Their Organizational Commitment Questionnaire (OCQ) is justified by its strong psychometric properties with respected usage in multiple studies (Tremble et al., 2003). This study used survey items from Wang’s (2004) five-component commitment model to assess organizational commitment: affective, active continuance, passive continuance, normative, and value commitment. Wang’s
(2004) model was built based on the OCQ and Ling et al.’s (2003) model by considering additional Chinese characteristics. Table 3-3 below shows these measuring item IDs and questions associated with the organizational commitment construct. The questionnaire items were measured on a 5-point Likert scale from “strongly disagree”, “disagree”, “neutral”, “agree”, to “strongly agree”.

**Table 3-3: Survey Questions to Measure Organizational Commitment**

Source: Adapted from Wang (2004) - Five-component Commitment Model

<table>
<thead>
<tr>
<th>Item</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>OC-01</td>
<td>I am extremely glad that I chose this company to work for over others I was.</td>
</tr>
<tr>
<td>OC-02</td>
<td>I talk up this company to my friends as a great company to work for.</td>
</tr>
<tr>
<td>OC-03</td>
<td>I am proud to tell others that I am part of this company.</td>
</tr>
<tr>
<td>OC-04</td>
<td>I work for the company because it provides me with many on-the-job training opportunities.</td>
</tr>
<tr>
<td>OC-05</td>
<td>I work for the company because it is a good chance to realize my goals.</td>
</tr>
<tr>
<td>OC-06</td>
<td>I work for the company because I can make full use of what I have learned.</td>
</tr>
<tr>
<td>OC-07</td>
<td>I work for the company because of the challenging job.</td>
</tr>
<tr>
<td>OC-08</td>
<td>I work for the company because there are many opportunities for promotion.</td>
</tr>
<tr>
<td>OC-09</td>
<td>I work for the company because I cannot find a better one.</td>
</tr>
<tr>
<td>OC-10</td>
<td>I cannot quit the job arbitrarily because I have to support my family.</td>
</tr>
<tr>
<td>OC-11</td>
<td>I work for the company because I do not want to lose my fringe benefits.</td>
</tr>
<tr>
<td>OC-12</td>
<td>I consider it my obligation to work for the same company all the while.</td>
</tr>
<tr>
<td>OC-13</td>
<td>I would like lifetime employment if possible.</td>
</tr>
<tr>
<td>OC-14</td>
<td>I would do any job as long as I work here.</td>
</tr>
<tr>
<td>OC-15</td>
<td>I am willing to put in a great deal of effort beyond that normally expected in order to help this company to be successful.</td>
</tr>
<tr>
<td>OC-16</td>
<td>I really care about the fate of this company.</td>
</tr>
</tbody>
</table>
This company really inspires me to do my job to the very best of my abilities.

One should work with utmost efforts for the company.

3.6.3 Employment Opportunity

The researcher reviewed a number of previous studies (Khatri, Fern, & Budhwar, 2001; Hom & Griffeth, 1991; Colarelli, 1984; Mowday, Koberg, & McArthur, 1984; Spencer, Steers, & Mowday, 1983; Michaels & Spector, 1982) about employment opportunity, thoughts of quitting and intention to leave the job. It was found that the survey items from Peters et al. (1981) that measures “perceived job alternative” best suit this study. For employment opportunity, a total of three items from Peters et al. (1981) were used in this study. Table 3-4 below shows these measuring item IDs and questions associated with the job satisfaction construct. The questionnaire items were measured on a 5-point Likert scale from “strongly disagree”, “disagree”, “neutral”, “agree” to “strongly agree”.

Table 3-4: Survey Questions to Measure Employment Opportunity
Source: Adapted from Peters et al. (1981) - Perceived Job Alternative

<table>
<thead>
<tr>
<th>Item</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>EO-01</td>
<td>It is possible for me to find a better job than the one I have now.</td>
</tr>
<tr>
<td>EO-02</td>
<td>Acceptable jobs can always be found.</td>
</tr>
<tr>
<td>EO-03</td>
<td>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.</td>
</tr>
</tbody>
</table>

3.6.4 Intention to Quit

For thoughts of quitting and intention to leave the job, a total of six items from Peters et al. (1981) were used in this study. Table 3-5 shows these measuring item IDs and questions associated with the job satisfaction construct. The questionnaire items were measured on a 5-point Likert scale from “strongly disagree”, “disagree”, “neutral”, “agree”, to “strongly agree”.

57
Table 3-5: Survey Questions to Measure Intention to Quit

Source: Adapted from Peters et al. (1981) - Thoughts of Quitting and Intention to Leave the Job

<table>
<thead>
<tr>
<th>Item IDs</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITOA-01</td>
<td>It is possible for me to find a better job than the one I have now.</td>
</tr>
<tr>
<td>ITOA-02</td>
<td>Acceptable jobs can always be found.</td>
</tr>
<tr>
<td>ITOA-03</td>
<td>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.</td>
</tr>
<tr>
<td>ITOB-01</td>
<td>I intend to remain on this job.</td>
</tr>
<tr>
<td>ITOB-02</td>
<td>I am actively looking for a new job.</td>
</tr>
<tr>
<td>ITOB-03</td>
<td>I will quit my job soon.</td>
</tr>
</tbody>
</table>

3.6.5 Demographic Data

The researcher designed the demographic questions for this study to ascertain respondents’ job position, company size, longevity with the industry, longevity with current employer, gender, age group, marital status, education, and salary level. Since demographic questions capture different respondent profiles, each question has its own set of scale as indicated in Table 3-6. Demographic data was used to determine if the distribution of the sample is normal and if there were any outliers or unusual patterns in the data.

Table 3-6: Survey Questions to Measure Demographics Data

<table>
<thead>
<tr>
<th>Item IDs</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEMO-01</td>
<td>My Position is:</td>
</tr>
<tr>
<td></td>
<td>O Manager/Administrative</td>
</tr>
<tr>
<td></td>
<td>O Service Delivery/Developer/Tester</td>
</tr>
<tr>
<td></td>
<td>O Others</td>
</tr>
</tbody>
</table>
DEMO-02 How many employees in your company?
   O 30 or less
   O 31 to 100
   O 101 to 300
   O 301 to 1000
   O Over 1000

DEMO-03 Years of working experience in the IT Outsourcing field?
   O 2 or less
   O 2 to 5
   O 6 to 10
   O 11 to 20
   O More than 20

DEMO-04 Years working in present company?
   O 2 or less
   O 2 to 5
   O 6 to 10
   O 11 to 20
   O More than 20

DEMO-05 What is your gender?
   O Female
   O Male

DEMO-06 What is your age?
   O 18-24
   O 25-34
   O 35-44
   O 45-54
   O 55 and above

DEMO-07 What is your marital status?
   O Single
   O Married
   O Other intend to remain on this job
DEMO-08 What is your highest level of education?
  O Secondary/High School
  O Associate Degree/Higher Diploma
  O Bachelor or Professional Degree
  O Master Degree
  O Doctorate

DEMO-09 What is your monthly income (RMB)?
  O Less than ¥6,000
  O ¥6000 to ¥12,000
  O ¥12,001 to ¥20,000
  O ¥20,001 to ¥40,000
  O More than ¥40,000

3.6.6 Measurement Scales

Except for the JIG and demographic information, a Likert-type scale was used as the measurement scale in this study. Nunnally and Bernstein (1994) opined that it is difficult for a single item to measure psychological attributes and multi-item scales are easier to be summated for rating scores. Respondents were asked to indicate the extent of turnover related items by Likert-type scale of 1 to 5 with verbal anchors ranging from "strongly disagree" to "strongly agree".

3.6.7 Correlation of Survey Questions to Research Questions and Hypotheses

Table 3-7 below illustrates the correlation of the research questions to the corresponding hypotheses and survey questions.
Table 3-7: Correlation of Survey Questions to Research Questions and Hypotheses

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Hypotheses</th>
<th>Survey Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How does organizational commitment relate to employees' turnover intention in China’s IT outsourcing sector?</td>
<td>$H_{1o}$: Organizational commitment is significantly and negatively correlated to employee turnover intention in China’s IT outsourcing sector.</td>
<td>Section B (Organizational Commitment: Question 1-18) Section D1 (Thoughts of Quitting: Question 1-3) Section D2 (Intention to Leave the Job: Question 1-3)</td>
</tr>
<tr>
<td>2. How does job satisfaction relate to employees' turnover intention in China’s IT outsourcing sector?</td>
<td>$H_{2o}$: Job satisfaction is significantly and negatively correlated to employee turnover intention in China’s IT outsourcing sector.</td>
<td>Section A (Job Satisfaction: Question 1 - 18) Section D1 (Thoughts of Quitting: Question 1-3) Section D2 (Intention to Leave the Job: Question 1-3)</td>
</tr>
<tr>
<td>3. How does employment opportunity relate to employees' turnover intention in China’s IT outsourcing sector?</td>
<td>$H_{3o}$: Employment opportunity is significantly and positively correlated to employee turnover intention in China’s IT outsourcing sector.</td>
<td>Section C (Employment Opportunity: Question 1 - 3) Section D1 (Thoughts of Quitting: Question 1-3) Section D2 (Intention to Leave the Job: Question 1-3)</td>
</tr>
<tr>
<td>4. How does employment opportunity affect the relationship between</td>
<td>$H_{4o}$: Employment opportunity moderates the relationship between</td>
<td>Section B (Organizational Commitment: Question 1 - 18) Section C (Employment Opportunity: Question 1 - 3)</td>
</tr>
</tbody>
</table>
organizational commitment and employees' turnover intention in China’s IT outsourcing sector?

organizational commitment and employee turnover intention in China’s IT outsourcing sector.

Opportunity: Question 1 - 3)
Section D1 (Thoughts of Quitting: Question 1-3)
Section D2 (Intention to Leave the Job: Question 1-3)

5. How does employment opportunity affect the relationship between job satisfaction and employees' turnover intention in China’s IT outsourcing sector?

$H_{5o}$: Employment opportunity moderates the relationship between job satisfaction and employee turnover intention in China’s IT outsourcing sector.

Section A (Job Satisfaction: Question 1 - 18)
Section C (Employment Opportunity: Question 1 - 3)
Section D1 (Thoughts of Quitting: Question 1-3)
Section D2 (Intention to Leave the Job: Question 1-3)

3.7 Common Method Bias and Treatment

If only one single common method is used during the data collection process, it will produce spurious covariance among variables. According to Buckley, Cote, and Comstock (1990), this phenomenon is referred as common method bias and it makes the actual phenomenon difficult to investigate (Hufnagel & Conca, 1994; Avolio & Bass, 1991). As such, common method bias is one of the most common concerns for researchers (Straub, Boudreau, & Gefen, 2004; Woszczynski & Whitman, 2001; Williams & Brown, 1994).

In social sciences (Feldman & Lynch, 1988) and organizational research (Crampton & Wagner, 1994), self-report survey is a very common form of data collection. In the case of this research, a self-administered questionnaire was considered best for investigating opinions and attitudes that are not usually observable and measurable. With a large IT outsourcing population in China, it was considered one of the most efficient research
tools that could be used within a short period of time at a low cost (Nardi, 2006). If an individual fills in items in the same questionnaire at the same point in time, it may introduce common method variance (Lindell & Whitney, 2001; Kemery & Dunlap 1986). However, this research used an online survey platform that has technology enabled to avoid the same person giving multiple responses by applying advanced technology that checks network IP sources.

Even though most researchers agree that common method bias affects the results in a single method study, Crampton and Wagner (1994) reported in their meta-analysis study that self-report methods do have biases in some cases, but that they do not introduce serious consequences. To eliminate the potential common method bias in this research, all measurement items with previous validation were adopted from prior well-known published research.

3.8 Pre-test and Pilot Test

The pre-test was conducted to improve the validity of the study by ensuring that the questionnaire items were appropriate and understandable. The researcher invited 10 participants, chosen through convenience sampling, to complete the survey face-to-face and comment on the wording used. Based on the feedback from these respondents, some minor changes were made to the wording of the questionnaire.

A pilot test was conducted prior to the massive data collection to ensure that the research instrument is workable and understandable. Twenty IT outsourcing professionals in China, known to the researcher through business connections, accepted invitations to participate in the pilot test; this number is within the 15-30 range recommended by Mbarika and Byrd (2009). The pilot test revealed that there were no misunderstandings or ambiguities in the questionnaire and that only a few minor wording corrections were necessary.
3.9 Data Analysis

Data from the questionnaire survey were downloaded from the on-line platform and imported to SPSS 21 following the analysis sequence: a) descriptive analysis, b) non-response bias test, c) measurement assessment, d) significance testing.

3.9.1 Descriptive Analysis

The first step of the analysis was to recode some items of scales in order to maintain consistency with other items. Secondly, the response rate was calculated along with a summary of the sample demographics. Descriptive analysis includes frequency data on job satisfaction and demographics. Mean and standard deviation variables were obtained for latent variables, which include OC, EO and ITQ, to provide an overall picture of the data as well as an overview of the data’s normality.

3.9.2 Non-response Bias Test

For any online survey, it is inevitable that some potential respondents do not respond or do not respond within the required time frame. The logic is that late respondents are similar to non-respondents (Lee & Lings, 2008; Armstrong & Overton, 1977). To estimate non-response bias, the most common technique is to compare the late with the early respondents (Bart & Baetz, 1998). This was conducted by comparing the means of all items in the demographic profile using Pearson Chi square analysis in SPSS’ ‘Crosstab’ function.

3.9.3 Measurement Analysis

Cooper and Schindler (2006, p.720) defined validity as "a characteristic of measurement concerned with the extent that a test measures what the researcher actually wishes to measure". According to Robson (2002), reliability is the stability or consistency with which something is measured. Reliability is not sufficient to ensure validity; instead it is a pre-requisite of validity. The following sections discuss the validity and reliability of
the three latent variables used in this study.

Exploratory factor analysis (EFA) was used to see whether the measuring items within a construct were correlated and homogeneous. Besides this, Confirmatory Factor Analysis (CFA) was also used to ensure the convergent and discriminant validity of the data collected. Whilst EFA is capable of recognising new relationships within the items used to measure the constructs in a specific model, CFA helps to further determine the validity of the data collected for the latent variables as it is run with Structural Equation Model (SEM), thus being robust and theoretically rooted (Hair et al., 2010; Kline, 2005). SEM is further capable of analysing the reliability of the data, thus reducing the possible error in measurement. A measurement model is assessed based on the model fit coefficient as suggested by Kline (2005) and Bryne (2001).

Content validity for this study was undertaken using a vast and in-depth analysis of literature. The pilot test conducted provided additional assurance of content validity (Bryman, 2008; Bryman & Bell, 2011). The Nomological validity of the data collected for this study was taken into account in the discussion chapter whereby the supported hypotheses were used as a basis of recognition of nomological validity of the study (Hair et al., 2010; Bryman, 2008; Cavana et al., 2001).

Prior to running EFA, it was assured that the relevant assumptions were met. These assumptions include:

a) Sampling adequacy that was measured using Kaiser-Meyer-Oklin (KMO). KMO < 0.6 is deemed poor adequacy. Hence in order to enable EFA, KMO ought to be greater than 0.7. KMO more than 0.8 is deemed very good and when KMO is greater than 0.9, the sampling adequacy is said to be excellent.

b) The second assumption measures the inter-correlation matrix of the data. EFA requires the data to be clear of this matrix. This is measured using Bartlett’s chi-square test as follows:

\[ H_0: \text{Identity matrix exists} \]
\[ H_1: \text{identity matrix does not exists} \]
The rule of thumb is that H\(_0\) is rejected when p-value < 0.05, thus indicating identity matrix does not exist amongst the items used to measure the latent variables.

c) The final assumption is to ensure that a sufficient sample size has been considered based on the number of items used to measure the latent variables. Thus n/k > 5 rule of the thumb was used; n: sample size, k: no of items.

With the assumptions met, EFA was carried out on the three constructs, OC with 18 items, EO with 3 items and ITQ with 6 items. The Principal Component Analysis was run with Varimax rotation, as theory does not indicate inter-relationship between the constructs measured (Hair et al., 2010; Pallant, 2005). As the number of completed questionnaire is 292 the factor loading was suppressed at 0.35 based on guidelines provided by Hair et al. (2010).

The EFA was followed by a reliability test which assessed the consistency in responses. The reliability test used Nunnally’s (1978) guidelines on Cronbach’s alpha test. This internal consistency test increases the homogeneity of the sample (Hair et al., 2010; Souiden, Kassim, & Hong, 2006; Pallant, 2005). The Cronbach’s alpha coefficient that is acceptable to qualify the data for further analysis is 0.7 for borrowed and adapted scales, while for newly developed scales it is recommended to use coefficient 0.6 as a cutoff point (Bristow & Mowen, 1998; Nunnally, 1978). Though the reliability and validity of the items may not be 100%, valid and reliable scales influence the final outcome of the significant test.

Confirmatory Factor Analysis (CFA) was used to confirm the validity of the items used to evaluate the constructs used for this research. A measurement model was drawn using the latent variables CO, EO and ITQ. Following this, the estimates of SEM were evaluated based on guidelines for model fit suggested by Kline (2005). The statistics below were taken into consideration to confirm model fit and measurement, although studies indicate that compliance of any four of these statistics are sufficient to confirm validity of measurements (Chahal & Mehta, 2013; Burgers et al., 2000).
1. Chi-Square ($\chi^2$), p-value > 0.05 indicating no significance, CFA model fit
2. RMSEA: 0.03 < RMSEA < 0.08 model fit
3. CFI: 0 < CFI < 1, the closer CFI > 0.9, the better the fit
4. PCFI: closer PCFI > 0.9, the better the fit
5. GFI \geq 0.9, shows better model fit
6. AGFI \geq 0.9, shows better model fit
7. P CLOSE < 0.05, shows model fit

3.10 Hypotheses Testing using Multiple Linear Regression

The hypotheses posited require the verification of direct relationships and moderated relationships as shown in Figure 3-1 below.

![Figure 3-1: Framework Separated by Viable Relationships for Multiple Linear Regression](image-url)
Quantitative studies that relate to interactive and mediating effects on direct relationships use Structural equation model (SEM) (Chahal & Mehta, 2013; Hair et al., 2010; Burgers et al., 2000). However, the current study employs Multiple Linear Regression by separating the framework into viable relationships. This is primarily due to the measures that have been used to collect data for this study. As established earlier, the moderating construct was measured using a 5-point likert interval scale. Hair et al. (2010) asserted that the interaction using latent variable SEM might not be appropriate. Moreover, SEM is used primarily for main constructs that are measured using interval scales. Thus, the current study embarks on separating the framework and statistical analysis based on individual hypothesis. The direct relationships posited using H1a, H1b, H1c, H1d, H1e, H2 and H3 were analyzed based multiple linear regression, using ITQ as the dependent variable and the five dimensions of OC, EO and JS as the 3 independent variables. As 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 was 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. Job satisfaction was treated as a dummy variable in the multiple linear regression.

3.10.1 Assumptions for Multiple Linear Regression
MLR is a robust statistical analysis and is used in various studies that require rigor in quantitative analyses. However, MLR requires three distinct assumptions. These assumptions include the data to satisfy normality, linearity and heteroscedastic are met. The normality of the dependent variable on the independent variables is tested using histogram, whereby the normal curve on the histogram is observed. Meanwhile, linearity is tested using a P-P probability plot, whereby the “S” curve on the linear line
is observed. Finally, heteroscedasticity of the data collected is measured using the scatter plot of residual.

With the assumptions met, the present study develops MLR models as below:

\[ ITQ = \beta_0 + \beta_1 \text{(affective)} + \beta_2 \text{(active)} + \beta_3 \text{(passive)} + \beta_4 \text{(normative)} + \beta_5 \text{(value)} + \beta_6 \text{(JS)} + \beta_7 \text{(EO)} + \varepsilon \]

Whereby \( \beta_0 \) – constant

\( \beta_1-7 \) – coefficients for the respective independent variables

\( \varepsilon \) - error

The initial analysis uses the coefficient table from MLR output to determine the significance of each independent variable. The hypothesis below used as a guideline while the value of a t-test result and its p-value was used to reject the null hypothesis.

- \( H_0: \beta_{1-7} = 0 \) (reject null hypothesis when p-value < 0.05)
- \( H_a: \beta_{1-7} \neq 0 \)

The rejection of null hypothesis, describes the significance of the independent variable in influencing the dependent variable; the positive or negative value of \( \beta \) shows the positive or negative influence of the independent variable on the dependent variable.

Subsequently, using the ANOVA table, the value of F and its p-value were used to establish the significance of the model above. As such the model fit was tested with following hypothesis and rule of the thumb p-value < 0.05 is used to reject the null hypothesis (\( H_0 \)):

- \( H_0: \text{no model fit} \)
- \( H_a: \text{model fit} \)

Following this, the strength of the above model was determined using Cohen’s (1992) guideline whereby adjusted-R\(^2\) < 0.09 is considered to be poor model. Besides this, the multicollinearity of independent variables were established, as an additional assumption to run MLR. MLR requires the independent variables to be independent of each other in
order to be eligible for MLR test (Hair et al., 2010), thus the guideline Variance Inflation Factor (VIF) < 5, is used to declare the nonexistence of multicollinearity.

3.10.2 Testing Moderator

The hypotheses H4a, H4b, H4c, H4d, H4e and H5 were tested using the comparison between a model without the interactive effect equation and the equation with interaction as below:

Direct relationships without interactions:

\[ ITQ = \beta_0 + \beta_1 \text{(affective)} + \beta_2 \text{(active)} + \beta_3 \text{(passive)} + \beta_4 \text{(normative)} + \beta_2 \text{(EO)} + \varepsilon \] (i)

\[ ITQ = \beta_0 + \beta_1 \text{(JS)} + \beta_2 \text{(EO)} + \varepsilon \] (ii)

H4 testing EO as a moderator in the relationship between OC and ITQ:

\[ ITQ = \beta_0 + \beta_1 \text{(affective)} + \beta_2 \text{(active)} + \beta_3 \text{(passive)} + \beta_4 \text{(normative)} + \beta_5 \text{(value)} + \beta_2 \text{(EO)} + \beta_1 \text{(affective*EO)} + \beta_2 \text{(active*EO)} + \beta_3 \text{(passive*EO)} + \beta_4 \text{(normative*EO)} + \beta_5 \text{(value*EO)} + \varepsilon \] (iii)

H5 testing EO as a moderator in the relationship between JS and ITQ

\[ ITQ = \beta_0 + \beta_1 \text{(JS)} + \beta_2 \text{(EO)} + \beta_3 \text{(JS*EO)} + \varepsilon \] (iv)

Based on Baron and Kenny (1986) and Hair et al., (2010) suggest the significance of the moderator is based on the existence of the relationship without the interaction as in (i) and (ii), the significance of the interaction in (iii) and (iv) \((\beta_3 \neq 0)\) and the strength of adjusted \(R^2\) value of the equation (i) and (ii) differs and is smaller than equation (iii) and (iv) respectively.
3.11 Limitations

In light of the large population of the IT outsourcing industry, the researcher acknowledges that the research sample size was not large enough to apply conclusions to other populations and settings. Although there are a variety of outsourcing models, such as off-shore outsourcing, near-shore outsourcing, team-based model, and project-based models, this study did not distinguish the models and may therefore have a results bias. At the time of the study, the China outsourcing climate was in good shape with growing momentum that may have affected participants’ perceptions of what matters them. Perhaps this study would have been more persuasive had a longitudinal study been conducted.

An on-line survey is convenient but it does have issues and limitations, such as low return rate and questionable quality. This is why the research objectives were emphasised and explained clearly, and why a clear and easy to understand questionnaire was used. Another limitation of the study is that there were some non-random elements of the sampling method, which may have led to a population bias. It is recommended that future related research include a greater degree of random sampling using longitudinal studies.

Previous research has shown that the actual turnover rate is highly correlated to the intention to quit, which results in absenteeism and low performance (Bowen, 1982). This study assumes there is a high link from intention to quit to turnover. For future related studies it is recommended that more resources be made available for a longer study time frame to allow for measurement of the actual turnover with a longitudinal design.

3.12 Ethical Considerations

This study is bounded by the ethics requirements set by the Human Research Ethics Committee (HREC) of the University of Newcastle and Australia’s National Statement
Before participants started to complete the on-line survey, the site displayed a personal information statement to inform participants of their rights and confidentiality to ensure voluntary and informed consent. Potential participants were advised that they could withdraw from the on-line survey at any time before they press the ‘finished’ button in the online survey platform, but that submission of a completed questionnaire would be taken as implied consent to participate and they could not then withdraw.

According to Neuman (2003), ensuring confidentiality significantly improves response rates. The questionnaire did not contain any misleading or sensitive questions that would impact participants’ personal interests. The on-line survey is confidential. Only the researcher, his supervisor and the examiners of the dissertation are authorized to access the completed questionnaires, which are stored in the researcher's personal computer. Related computer files are password protected with secure backup procedure. All collected data remains confidential and will be kept securely for five years and then destroyed completely by WipeDrive software (WhiteCanyon, 2012) to avoid any potential recovery.

3.13 Summary

This study adopted a positivist paradigm approach using quantitative research methodologies to examine the relationships among organizational commitment, job satisfaction, employment opportunity and intention to quit. It was explained that to effectively reach the diversified samples in China, an Internet-based self-administered questionnaire survey was employed to gauge the perceptions of IT outsourcing professionals in China, and that a cross-sectional design along with simple random sampling were considered most appropriate for this research.

The chapter continued by providing an explanation of the statistical tools used by the study to guarantee reliable and valid data. It also described the use of multiple linear
regression analysis to examine the direct impacts of organizational commitment and job satisfaction on intention to quit, and to test the moderating effect of employment opportunity on the relationship between the independent variables (organization commitment and job satisfaction) and the dependent variable (intention to quit). Finally, limitations of the study and the ethical issues involved in it were addressed.
CHAPTER 4 – Data Analysis

4.1 Introduction

This chapter describes the way in which the survey data was analyzed and reports hypotheses test results. Section 4.2 describes the response rate; section 4.3 provides an overview of the demographic profile of the participants; section 4.4 checks for non-response bias; sections 4.5 and 4.6 analyze the validity and reliability tests of the scales used in the questionnaire; section 4.7 analyzes the model fit and reports hypotheses test results for direction relationships (i.e. H1, H2, H3); sections 4.8 and 4.9 report hypotheses test results for the moderator effect of employment opportunity (i.e. H4 and H5); and section 4.10 summarizes the chapter.

4.2 Response Rate

A total of 5,000 email invitations were sent to potential participants in the sample frame from IT outsourcing professionals in China. A total of 335 responses were received, representing a response rate of 6.7%, of which 292 questionnaires were completed representing a valid response rate of 5.84%; this is similar to other online surveys (Lawson et al., 2009; Sambasivan, Loke, & Abidin-Mohamed, 2009; Cavana et al., 2001).

A pre-test was conducted by inviting 10 participants to complete the questionnaire face-to-face and comment on the wording used. Based on their feedback, minor changes were made to the wording of the questionnaire. Twenty IT outsourcing professionals participated in a pilot test, which revealed that there were no misunderstandings or ambiguities in the questionnaire and only minor wording corrections necessary.

4.3 Demographic Profile of Respondents

Demographic data were collected through personal information provided in section E of
The nine demographic variables in the questionnaire were calculated by means of descriptive statistics. The demographic profile of the respondents was analyzed using SPSS version 21 in terms of frequency distribution and percentage composition of the following nine variables: job position, company size, industry experience, tenure, gender, age group, marital status, education level, and monthly income. Sections 4.3.1 - 4.3.9 below are with reference to Table 4-1.

Table 4-1: Demographics Details of Respondents

<table>
<thead>
<tr>
<th>Demographics of Respondents</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Job Position of Respondents</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manager/Administrative</td>
<td>109</td>
<td>37.3</td>
</tr>
<tr>
<td>Service Delivery/Developer/Tester</td>
<td>104</td>
<td>35.6</td>
</tr>
<tr>
<td>Others</td>
<td>79</td>
<td>27.1</td>
</tr>
<tr>
<td><strong>Company Size of Respondents</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 or less</td>
<td>30</td>
<td>10.3</td>
</tr>
<tr>
<td>31 to 100</td>
<td>57</td>
<td>19.5</td>
</tr>
<tr>
<td>101 to 300</td>
<td>25</td>
<td>8.6</td>
</tr>
<tr>
<td>301 to 1000</td>
<td>57</td>
<td>19.5</td>
</tr>
<tr>
<td>Over 1000</td>
<td>123</td>
<td>42.1</td>
</tr>
<tr>
<td><strong>Industry Experience of Respondents</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 or less</td>
<td>58</td>
<td>19.9</td>
</tr>
<tr>
<td>2 to 5</td>
<td>86</td>
<td>29.5</td>
</tr>
<tr>
<td>6 to 10</td>
<td>95</td>
<td>32.5</td>
</tr>
<tr>
<td>11 to 20</td>
<td>51</td>
<td>17.5</td>
</tr>
<tr>
<td>More than 20</td>
<td>2</td>
<td>.7</td>
</tr>
<tr>
<td><strong>Tenure of Respondents</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 or less</td>
<td>136</td>
<td>46.6</td>
</tr>
<tr>
<td>2 to 5</td>
<td>98</td>
<td>33.6</td>
</tr>
<tr>
<td>6 to 10</td>
<td>50</td>
<td>17.1</td>
</tr>
<tr>
<td>11 to 20</td>
<td>8</td>
<td>2.7</td>
</tr>
<tr>
<td><strong>Gender of Respondents</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>92</td>
<td>31.5</td>
</tr>
<tr>
<td>Male</td>
<td>200</td>
<td>68.5</td>
</tr>
<tr>
<td><strong>Age Group of Respondents</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-24</td>
<td>27</td>
<td>9.2</td>
</tr>
<tr>
<td>25-34</td>
<td>188</td>
<td>64.4</td>
</tr>
<tr>
<td>35-44</td>
<td>70</td>
<td>24.0</td>
</tr>
<tr>
<td>45-54</td>
<td>6</td>
<td>2.1</td>
</tr>
<tr>
<td>Marital Status of Respondents</td>
<td>113</td>
<td>38.7</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----</td>
<td>------</td>
</tr>
<tr>
<td>Single</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>170</td>
<td>58.2</td>
</tr>
<tr>
<td>Others</td>
<td>9</td>
<td>3.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education Level of Respondents</th>
<th>7</th>
<th>2.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary/High School</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associate Degree/Higher Diploma</td>
<td>29</td>
<td>9.9</td>
</tr>
<tr>
<td>Bachelor or Prof. Degree</td>
<td>192</td>
<td>65.8</td>
</tr>
<tr>
<td>Master Degree / Doctorate</td>
<td>62 / 2</td>
<td>21.2 / 0.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Monthly Income of Respondents</th>
<th>60</th>
<th>20.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than RMB6,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RMB6,000 to RMB12,000</td>
<td>116</td>
<td>39.7</td>
</tr>
<tr>
<td>RMB12,001 to RMB20,000</td>
<td>65</td>
<td>22.3</td>
</tr>
<tr>
<td>RMB20,001 to RMB40,000</td>
<td>39</td>
<td>13.4</td>
</tr>
<tr>
<td>More than RMB40,001</td>
<td>12</td>
<td>4.1</td>
</tr>
</tbody>
</table>

4.3.1 Job Position of Respondents

The frequency distribution shows that most of the respondents were manager/administrative (37.3% or 109 out of 292) and service delivery/developer/tester (35.6% or 104 out of 293); only 27.1% (79 out of 296) were other positions.

4.3.2 Company Size of Respondents

The frequency distribution shows that most of the respondents were working in companies with “over 1000” employees (42.1% or 123 out of 292). They were followed by those who were working in companies with “31 - 100” employees (19.5% or 57 out of 292) and with “301 - 1000” employees (19.5% or 57 out of 292). A smaller percentage of the respondents were working in companies with “30 or less” employees (10.3% or 30 out of 292) and with “101 - 300” employees (10.3% or 30 out of 292).

4.3.3 Industry Experience of Respondents

The frequency distribution shows most of the respondents with “6 - 10” years (32.5% or 96 out of 292) and with “2 - 5” years (29.5% or 86 out of 292) of IT outsourcing experience. They were followed by those who with less “2 or less” year (19.9% or 58
out of 292) and with “11 - 20” years (17.5% or 51 out of 292). Only 0.7% (2 out of 292) of the respondents had over 20 years experience in the IT outsourcing industry.

4.3.4 Tenure of Respondents
The frequency distribution shows that respondents with “less than 2 years” (46.6% or 136 out of 292) working in their companies comprised the majority. They were followed by those who with “2 - 5” years (33.6% or 98 out of 292) and with “6 - 10” years (17.1% or 50 out of 292). A smaller percentage of the respondents were working in their company “11 - 20” years (2.7% or 8 out of 292). No respondent had over 20 years experience working in his or her company.

4.3.5 Gender of Respondents
The frequency distribution shows that most of the respondents were male (68.5% or 200 out of 292) and that females only made up 31.5% (92 out of 292) of the total.

4.3.6 Age Group of Respondents
The frequency distribution shows that respondents aged between “25 - 34” (64.4% or 188 out of 292) comprised the majority. The “35 - 44” (24% or 70 out of 292) was the second majority. Respondents in the “25 - 34” age group represented 9.2% (27 out of 292). Only 2.1% (6 out of 292) were in the “45 - 54” age group and 0.3% (1 out of 292) were over 55 years old.

4.3.7 Marital Status of Respondents
The frequency distribution shows that most of the respondents were single (58.2% or 170 out of 292). Married respondents made up 38.7% (113 out of 292) of the total. Only a minority of respondents (3.1% or 9 out of 292) selected “others” (i.e. divorced).

4.3.8 Education Level of Respondents
The frequency distribution shows that most of the respondents (65.8%, 192 out of 292)
held an undergraduate degree, followed by those with a master’s degree (21.2% or 62 out of 292) and associate degree/higher diploma (9.9% or 29 out of 292). Respondents with only a secondary education made up 2.4% (7 out of 292) with 0.7% (2 out of 292) of respondents having a doctoral degree.

4.3.9 Monthly Income of Respondents

The frequency distribution shows that most of the respondents were making “¥6000 - ¥12,000” per month (39.7% or 116 out of 292). They were followed firstly by those who were making “¥12001 - ¥20,000” per month (22.3% or 65 out of 292) and secondly by those who were making less than ¥6000 per month (20.5% or 60 out of 292). A smaller percentage of respondents were making “¥20,001 - ¥40,000” per month (13.4% or 39 out of 292). Only 4.1% (12 out of 292) of the respondents were making more than ¥40,000 per month.

Figure 4-1: Descriptive Analysis of Job Satisfaction

Figure 4-1 above indicates that a higher percentage of respondents are satisfied with the various expressions of satisfaction at work that was tested using the job description index described in Chapter 3. The figure shows that most respondents found their job
acceptable. The figure also reflects that respondents do not really dislike their job as all
the negative expressions show a lower percentage of “yes” responses. Using the score of
3 for "yes", 2 for "not sure" and 1 for "no" for job satisfaction items, the average score
is 2.3, indicating generally IT outsourcing professionals in China have a positive
perception of job satisfaction.

Table 4-2: Descriptive Analysis of Organizational Commitment

<table>
<thead>
<tr>
<th>Organizational Commitment</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am extremely glad that I chose this company to work for over others I was considering at the time I joined.</td>
<td>3.48</td>
<td>.801</td>
</tr>
<tr>
<td>I talk up this company to my friends as a great company to work for.</td>
<td>3.18</td>
<td>.881</td>
</tr>
<tr>
<td>I am proud to tell others that I am part of this company.</td>
<td>3.29</td>
<td>.826</td>
</tr>
<tr>
<td><strong>Affective commitment</strong></td>
<td>3.32</td>
<td></td>
</tr>
<tr>
<td>I work for the company because it provides me with many on-the-job training opportunities.</td>
<td>2.87</td>
<td>.946</td>
</tr>
<tr>
<td>I work for the company because it is a good chance to realize my goals.</td>
<td>3.28</td>
<td>.906</td>
</tr>
<tr>
<td>I work for the company because I can make full use of what I have learned here.</td>
<td>3.48</td>
<td>.855</td>
</tr>
<tr>
<td>I work for the company because of the challenging job.</td>
<td>3.42</td>
<td>.860</td>
</tr>
<tr>
<td>I work for the company because there are many opportunities for promotion.</td>
<td>2.89</td>
<td>1.007</td>
</tr>
<tr>
<td><strong>Active continuance commitment</strong></td>
<td>3.19</td>
<td></td>
</tr>
<tr>
<td>I work for the company because I cannot find a better one.</td>
<td>2.83</td>
<td>.986</td>
</tr>
<tr>
<td>I cannot quit the job arbitrarily because I have to support my family.</td>
<td>3.20</td>
<td>1.006</td>
</tr>
<tr>
<td>I work for the company because I do not want to lose my fringe benefits.</td>
<td>2.57</td>
<td>.930</td>
</tr>
<tr>
<td><strong>Passive continuance commitment</strong></td>
<td>2.87</td>
<td></td>
</tr>
<tr>
<td>I consider it my obligation to work for the same company all the while.</td>
<td>2.29</td>
<td>.957</td>
</tr>
<tr>
<td>I would like lifetime employment if possible.</td>
<td>2.49</td>
<td>1.050</td>
</tr>
<tr>
<td>I would do any job as long as I work here.</td>
<td>2.61</td>
<td>1.014</td>
</tr>
<tr>
<td><strong>Normative commitment</strong></td>
<td>2.46</td>
<td></td>
</tr>
</tbody>
</table>
I am willing to put in a great deal of effort beyond that normally expected in order to help this company to be successful.

I really care about the fate of this company.

This company really inspires me to do my job to the very best of my abilities.

One should work with utmost efforts for the company.

Value commitment  3.72

<table>
<thead>
<tr>
<th>Responses to statements relating to Organizational Commitment are described in Table 4-2 above. Respondents are agreeable toward affective commitment statement (OC1 - OC3) with a mean of 3.32 and standard deviation around 0.8. Similarly, responses towards active continuance commitment are more agreeable with a mean score of around 3.19. However, response toward passive continuance commitment is more disagreeable as the mean response is around 2.87. Normative commitment scored a mean of 2.46, showing disagreement while value commitment scored a mean response of around 3.72, showing more agreement toward the statements.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Employment Opportunity</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is possible for me to find a better job than the one I have now.</td>
<td>3.75</td>
<td>.665</td>
</tr>
<tr>
<td>Acceptable jobs can always be found</td>
<td>3.03</td>
<td>.781</td>
</tr>
<tr>
<td>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.</td>
<td>3.89</td>
<td>.741</td>
</tr>
<tr>
<td>Employment opportunity</td>
<td>3.56</td>
<td></td>
</tr>
</tbody>
</table>

Table 4-3 above shows the average response to the statements relating to Employment Opportunity, which reflects more agreeable responses with a mean of 3.56. Table 4-4 describes the responses to ITQ statements, whereby the average shows the disagreement of respondents toward the statements posted for ITQ.
Table 4-4: Descriptive Analysis of ITQ

<table>
<thead>
<tr>
<th>Intention to Quit</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I often think about taking a different job.</td>
<td>2.86</td>
<td>.935</td>
</tr>
<tr>
<td>I have frequent thoughts of quitting this job</td>
<td>2.69</td>
<td>.920</td>
</tr>
<tr>
<td>I often think about quitting</td>
<td>2.62</td>
<td>.894</td>
</tr>
<tr>
<td>I intend to remain on this job</td>
<td>2.53</td>
<td>.779</td>
</tr>
<tr>
<td>I am actively looking for a new job.</td>
<td>2.51</td>
<td>.875</td>
</tr>
<tr>
<td>I will quit my job soon.</td>
<td>2.28</td>
<td>.896</td>
</tr>
<tr>
<td><strong>Intention to quit</strong></td>
<td>2.58</td>
<td></td>
</tr>
</tbody>
</table>

4.4 Non-response Bias Test

Non-response bias means there is a significant difference between respondents who have returned their questionnaires and those who have not returned them; this can lead to bias in generalizing results, since those who have returned questionnaires cannot represent those who have not (Wrenn, Stevens, & Loudon, 2007). Non-response bias can therefore have a negative impact on external validity (Siegel, 2011).

To test and minimize non-response bias, Krishnaswamy and Sivakumar (2009) and Wrenn et al. (2007) suggested that researchers should compare early and late responses. If there is a statistically significant difference between early and late responses when comparing respondent demographics, there is response bias (Chomvilailuk & Butcher, 2010; Krishnaswamy & Sivakumar, 2009). Thus, a non-response bias test was conducted using chi-square tests on gender, position, age group, marital status, monthly income, and education level. The results are shown in Table 4-5 below.

Table 4-5: Response Time Cross Tabulation

<table>
<thead>
<tr>
<th></th>
<th>Response Time</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Early Response</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>48</td>
<td>44</td>
</tr>
<tr>
<td>Male</td>
<td>98</td>
<td>102</td>
</tr>
<tr>
<td>Total</td>
<td>146</td>
<td>146</td>
</tr>
</tbody>
</table>
### Chi-Square Tests

<table>
<thead>
<tr>
<th>Response Time</th>
<th>Value</th>
<th>Df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Response</td>
<td>1.525a</td>
<td>2</td>
<td>.466</td>
</tr>
<tr>
<td>Late Response</td>
<td>7.476a</td>
<td>4</td>
<td>.113</td>
</tr>
<tr>
<td>Total</td>
<td>3.608a</td>
<td>2</td>
<td>.165</td>
</tr>
</tbody>
</table>

#### My Position

<table>
<thead>
<tr>
<th>Position</th>
<th>Value</th>
<th>Df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manager/Administrative</td>
<td>.254a</td>
<td>1</td>
<td>.614</td>
</tr>
<tr>
<td>Service Delivery/Developer/Tester</td>
<td>1.525a</td>
<td>2</td>
<td>.466</td>
</tr>
<tr>
<td>Others</td>
<td>3.608a</td>
<td>2</td>
<td>.165</td>
</tr>
<tr>
<td>Total</td>
<td>7.476a</td>
<td>4</td>
<td>.113</td>
</tr>
</tbody>
</table>

#### Age Group

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Value</th>
<th>Df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-24</td>
<td>15</td>
<td>12</td>
<td>27</td>
</tr>
<tr>
<td>25-34</td>
<td>96</td>
<td>92</td>
<td>188</td>
</tr>
<tr>
<td>35-44</td>
<td>34</td>
<td>36</td>
<td>70</td>
</tr>
<tr>
<td>45-54</td>
<td>0</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>55 or above</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>146</td>
<td>146</td>
<td>292</td>
</tr>
</tbody>
</table>

#### Marital Status

<table>
<thead>
<tr>
<th>Status</th>
<th>Value</th>
<th>Df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>64</td>
<td>49</td>
<td>113</td>
</tr>
<tr>
<td>Married</td>
<td>77</td>
<td>93</td>
<td>170</td>
</tr>
<tr>
<td>Others</td>
<td>5</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>146</td>
<td>146</td>
<td>292</td>
</tr>
<tr>
<td>Education Level</td>
<td>Secondary/High School</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>----------------</td>
<td>------------------------</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>Associate Degree/Higher Diploma</td>
<td>16</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Bachelor or Prof. Degree</td>
<td>95</td>
<td>97</td>
</tr>
<tr>
<td></td>
<td>Master Degree</td>
<td>30</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Doctorate</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>146</td>
<td>146</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chi-Square Tests</th>
<th>Value</th>
<th>Df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>2.539&lt;sup&gt;a&lt;/sup&gt;</td>
<td>4</td>
<td>.638</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Response Time</th>
<th>Monthly Income</th>
<th>Early Response</th>
<th>Late Response</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than RMB6,000</td>
<td></td>
<td>36</td>
<td>24</td>
<td>60</td>
</tr>
<tr>
<td>RMB6,000 to RMB12,000</td>
<td></td>
<td>54</td>
<td>62</td>
<td>116</td>
</tr>
<tr>
<td>RMB12,001 to RMB20,000</td>
<td></td>
<td>36</td>
<td>29</td>
<td>65</td>
</tr>
<tr>
<td>RMB20,001 to RMB40,000</td>
<td></td>
<td>17</td>
<td>22</td>
<td>39</td>
</tr>
<tr>
<td>More than RMB40,001</td>
<td></td>
<td>3</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>146</td>
<td>146</td>
<td>292</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chi-Square Tests</th>
<th>Value</th>
<th>Df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>7.347&lt;sup&gt;a&lt;/sup&gt;</td>
<td>4</td>
<td>.119</td>
</tr>
</tbody>
</table>

As all p-values (Sig.) in the above table are greater than 0.05, pearson chi-square values are not significant. This cross tabulation of all demographic measures shows that there is no difference between respondents who responded later and those who responded earlier. Thus, non-response bias is not detected in this study (Chomvilailuk & Butcher, 2010; Krishnaswamy & Sivakumar, 2009; Wrenn et al., 2007).
4.5 Assessment of Measurements using Exploratory Factor Analysis (EFA)

As the constructs are not interrelated, exploratory factor analysis (EFA) using principal component technique with varimax rotation was carried out to assess the validity of the measures used in the questionnaire. Thus the EFA was run for all three constructs, OC, EO, and ITQ that were measured using an interval scale. The factor loading with an eigenvalue above 1 shows the three constructs loading distinctively into three separate columns. Prior to enabling EFA, its assumptions were tested. The outcomes of the tests are shown in Table 4-6a and Tale 4-6b below.

Table 4-6a: KMO and Bartlett's Test for 5 Dimension of OC

<table>
<thead>
<tr>
<th>KMO and Bartlett's Test</th>
<th>KMO and Bartlett's Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin</td>
<td>Measure of Sampling</td>
</tr>
<tr>
<td>Adequacy</td>
<td>.912</td>
</tr>
<tr>
<td>Bartlett's Test of</td>
<td>Approx. Chi-Square</td>
</tr>
<tr>
<td>Sphericity</td>
<td>2145.502</td>
</tr>
<tr>
<td></td>
<td>Df</td>
</tr>
<tr>
<td></td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
</tr>
<tr>
<td></td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 4-6a above shows KMO= 0.91, indicating excellent sampling has been carried out for this research. Chi-square ($\chi^2$) = 2145.5, df = 120, p-value = 0.0001 (p-value < 0.05) shows the null hypothesis below is rejected.

$$H_0: \text{Identity matrix exists}$$
$$H_1: \text{identity matrix does not exist}$$

Therefore, the second assumption for EFA that requires the data set to have no inter-correlated relationship between constructs (no identity matrix) is met. Lastly, it is required for n/k to be greater than 5. The data collected and the remaining items n/k = 292/16 = 18 (> 5), satisfying the assumptions for EFA.
Table 4-6b: KMO and Bartlett’s Test for EO and ITQ

<table>
<thead>
<tr>
<th>KMO and Bartlett's Test</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin</td>
<td>Measure of Sampling</td>
<td>.790</td>
</tr>
<tr>
<td>Adequacy.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bartlett's Test of</td>
<td>Approx. Chi-Square</td>
<td>1043.852</td>
</tr>
<tr>
<td>Sphericity</td>
<td>Df</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 4-6b for EO and ITQ shows that KMO = 0.79, indicating that good sampling has been carried out. Meanwhile, Chi-square ($\chi^2$) = 1043.85, df = 28 and p-value = 0.0001 (p-value < 0.05), shows that identity matrix does not exist amongst the items for EO and ITQ. The final assumption of n/k = 292/8 = 36 >5 is also met.

With the assumptions met, the outcome shown in Table 4-7 below reflects the factor loading of the 18 items for OC, the 3 items for EO and the 6 items for ITQ. Principal component analysis (PCA) was run based on eigen values more than 1 and varimax rotation suppressing factor loadings below 0.5. This produced a clear distinctive loading of 16 items of OC into 5 components. The items OC9 “I work for the company because I cannot find a better one” and OC12 “I consider it my obligation to work for the same company all the while” were removed to allow convergent and discriminant validity. Five items of active commitment loaded highly in component 1, named “Active”, four items of value commitment loaded highly in component 2, named “Value”, and two out of three items of normative commitment loaded highly into component 3, named “Normative”. Out of three items of passive continuance commitment, two loaded highly in component 4, named “Passive” and finally all three items of affective commitment loaded highly into component 5, named “Affective”.

The reliability test using Cronbach’s alpha shows $\alpha = 0.911$ with 16 items, exceeding Nunnally’s (1978) minimum benchmark of 0.7 for internal consistency. As the mean for this item is 51.65 with standard deviation of 8.717, convergent and discriminant validity are met with high reliability allowing the data to be used for further analysis.
All 6 items for ITQ loaded highly in a component that was renamed ITQ. The Cronbach’s alpha of 0.87 for these items shows that internal consistency has been achieved in this research using this questionnaire. The mean for the construct is 15.51 with a standard deviation of 4.13. The items for the construct EO loaded into component 2 with item EO2 “Acceptable jobs can always be found” removed. The component was renamed as EO, with a Cronbach’s alpha of 0.67, a mean of 7.64 and a standard deviation of 1.22. Thus, these two constructs loaded highly, meeting convergent and discriminant validity with internal consistency that meets standards set for applied and academic research (Nunnally, 1978).

Table 4-7: Factor Loading of OC, ITQ and EO

<table>
<thead>
<tr>
<th>Component</th>
<th>ITQ</th>
<th>EO</th>
</tr>
</thead>
<tbody>
<tr>
<td>OC5</td>
<td>.850</td>
<td></td>
</tr>
<tr>
<td>OC6</td>
<td>.793</td>
<td></td>
</tr>
<tr>
<td>OC7</td>
<td>.788</td>
<td></td>
</tr>
<tr>
<td>OC8</td>
<td>.696</td>
<td></td>
</tr>
<tr>
<td>OC4</td>
<td>.614</td>
<td></td>
</tr>
<tr>
<td>OC15</td>
<td>.798</td>
<td></td>
</tr>
<tr>
<td>OC16</td>
<td>.768</td>
<td></td>
</tr>
<tr>
<td>OC18</td>
<td>.763</td>
<td></td>
</tr>
<tr>
<td>OC17</td>
<td>.690</td>
<td></td>
</tr>
<tr>
<td>OC13</td>
<td>.760</td>
<td></td>
</tr>
<tr>
<td>OC14</td>
<td>.698</td>
<td></td>
</tr>
<tr>
<td>OC10</td>
<td>.831</td>
<td></td>
</tr>
<tr>
<td>OC11</td>
<td>.743</td>
<td></td>
</tr>
<tr>
<td>OC1</td>
<td>.668</td>
<td></td>
</tr>
<tr>
<td>OC2</td>
<td>.585</td>
<td></td>
</tr>
<tr>
<td>OC3</td>
<td>.526</td>
<td></td>
</tr>
<tr>
<td>ITQ2</td>
<td>.822</td>
<td></td>
</tr>
<tr>
<td>ITQ3</td>
<td>.787</td>
<td></td>
</tr>
<tr>
<td>ITQ5</td>
<td>.757</td>
<td></td>
</tr>
<tr>
<td>ITQ1</td>
<td>.729</td>
<td></td>
</tr>
</tbody>
</table>
Table 4-8 below indicates that Active commitment explains 41.6% of variances in the responses, 9.88% of variances is explained by Value, 7.95% explained by Normative, 6.85% explained by Passive and 4.31% is explained by Affective. The total explained variance by items representing OC is 70.55%, indicating that 29.45% of variances went unexplained when the 2 items from OC were removed. Furthermore, 46.28% of variances are explained by ITQ and 18.38% is explained by EO. The remaining 35.34% of variances are unexplained, or could have been explained by the deleted item EO2.

Table 4-8: Variance Explained by 5 Dimensions of OC, ITQ and EO

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
</tr>
<tr>
<td>Active</td>
<td>6.651</td>
<td>41.566</td>
</tr>
<tr>
<td>Value</td>
<td>1.580</td>
<td>9.878</td>
</tr>
<tr>
<td>Normative</td>
<td>1.272</td>
<td>7.952</td>
</tr>
<tr>
<td>Affective</td>
<td>0.689</td>
<td>4.306</td>
</tr>
<tr>
<td>ITQ</td>
<td>3.702</td>
<td>46.281</td>
</tr>
<tr>
<td>EO</td>
<td>1.470</td>
<td>18.376</td>
</tr>
</tbody>
</table>

4.6 Assessment of Measurement Model using Confirmatory Factor Analysis (CFA)

The above EFA was verified using a pure measurement model or a CFA model. The removal of 1 item (OC9) from Passive commitment and 1 item (OC12) from Normative commitment, sees a better model fit. Though Chi-square/df > 2, RMSEA < 0.08, CFI >
0.9, GFI > 0.90, AGFI > 0.90 and PCLOSE < 0.05, four measures are met, thus a full measurement model of the exogenous latent variables was drawn and the final model fit was derived as Figure 4-2 below and factor weights were observed as in Table 4-9.

Figure 4-2: Measurement Model of Latent Variables

Table 4-9: Direct Effects (Group Number 1 - Default Model)

<table>
<thead>
<tr>
<th></th>
<th>Value1</th>
<th>Normative1</th>
<th>Passive1</th>
<th>Affective1</th>
<th>Active1</th>
</tr>
</thead>
<tbody>
<tr>
<td>oc_15</td>
<td>1.331</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>oc_16</td>
<td>1.342</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>oc_17</td>
<td>1.363</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>
Based on the measurement assessment conducted above, the summated scores of the remaining items were calculated to represent the respective latent variables. As job satisfaction was measured using 18 pointers from JDI (discussed in Chapter 3), 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 4-10 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 4.10: Descriptive Analysis of Frequency of Job Satisfaction**

<table>
<thead>
<tr>
<th>Job satisfaction</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>224</td>
<td>76.7</td>
</tr>
<tr>
<td>No</td>
<td>68</td>
<td>23.3</td>
</tr>
<tr>
<td>Total</td>
<td>292</td>
<td>100.0</td>
</tr>
</tbody>
</table>

4.7 Inference Analysis of Direct Relationships

Based on the data collected and the measurement levels used to collect the data, the
inference analysis to test the hypotheses posited in Chapter 2 were conducted using Multiple Linear Regression. Prior to running this analysis, the responses for all valid and reliable OCs were summated to represent OC. To address H1, H2 and H3, the model below was tested using multiple linear regression involving ITQ as the dependent variable, and OC and EO as the independent variables, which were measured using interval scales (continuous data). JS, an independent variable measured using nominal scales (discrete data), was added as a dummy variable whereby its effect on ITQ is interpreted using the change in JS from being satisfied to being not satisfied with the job. Satisfied with job is coded as “1” and not satisfied with job is coded as “2”. Therefore the model tested here is:

\[ ITQ = \beta_0 + \beta_1 (\text{affective}) + \beta_2 (\text{active}) + \beta_3 (\text{passive}) + \beta_4 (\text{normative}) + \beta_5 (\text{value}) + \beta_6 (\text{JS}) + \beta_7 (\text{EO}) + \epsilon \]

Whereby

- \( \beta_0 \) – constant
- \( \beta_1 - \beta_7 \) – coefficients for the respective independent variables
- \( \epsilon \) - error

The assumptions necessary to enable multiple linear regression are shown in Figure 4-3 below. The histogram shows that the normality assumption for MLR is satisfied, the p-p plot shows that the linearity assumption is met as there is a marginal S curve around the linear line, and the residual chart shows that the distribution of the errors are scattered thus meeting the heteroscedasticity assumption.
Figure 4-3: Histogram, P-P Plot and Residual Chart

Table 4-11: Model Fit of Influence of OC, EO and JS on ITQ

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>2182.084</td>
<td>7</td>
<td>311.726</td>
<td>31.835</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>2780.902</td>
<td>284</td>
<td>9.792</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4962.986</td>
<td>291</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: ITQ
b. Predictors: (Constant), codedJS, passive, EO, Normative, Active, Value, Affective

H₀: no model fit
H₁: model fit

Testing the model fit hypothesis as shown above, Table 4-11 above shows evidence of model fit as \( F = 31.84, df = 7, \ 284,\ p\text{-value} = 0.0001\) (p-value < 0.05), thus the null hypothesis is rejected indicating a significant model fit.
Following this, the significant influence of the independent variables was determined using the following hypothesis:

\[ H_0: \beta_{1.7} = 0 \]
\[ H_a: \beta_{1.7} \neq 0 \]

**Table 4-12: Coefficient Significance of OC, EO and JS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>(Constant)</td>
<td>20.889</td>
<td>2.144</td>
<td></td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>EO</td>
<td>.425</td>
<td>.154</td>
<td>.126</td>
<td>2.757</td>
<td>.006</td>
</tr>
<tr>
<td>Affective</td>
<td>-.359</td>
<td>.144</td>
<td>-.190</td>
<td>-2.502</td>
<td>.013</td>
</tr>
<tr>
<td>Active</td>
<td>-.032</td>
<td>.080</td>
<td>-.028</td>
<td>-.403</td>
<td>.687</td>
</tr>
<tr>
<td>Passive</td>
<td>.218</td>
<td>.115</td>
<td>.086</td>
<td>1.886</td>
<td>.060</td>
</tr>
<tr>
<td>Normative</td>
<td>-.255</td>
<td>.124</td>
<td>-.108</td>
<td>-2.067</td>
<td>.040</td>
</tr>
<tr>
<td>Value</td>
<td>-.464</td>
<td>.103</td>
<td>-.286</td>
<td>-4.481</td>
<td>.000</td>
</tr>
<tr>
<td>codedJS</td>
<td>-1.947</td>
<td>.559</td>
<td>-.200</td>
<td>-3.482</td>
<td>.001</td>
</tr>
</tbody>
</table>

a. Dependent Variable: ITQ

**Affective Commitment**

Table 4-12 shows \( t = -2.50 \) and \( p\)-value = 0.013 (\( p\)-value < 0.05), thus the null hypothesis is rejected showing evidence that Affective Commitment is a significant variable. The negative value of standardized \( \beta \) shows that the relationship is negative. Therefore, \( H1a \) is supported.

**Active Continuance Commitment**

Table 4-12 shows \( t = -0.403 \) and \( p\)-value = 0.687 (\( p\)-value > 0.05), thus the null hypothesis is not rejected showing evidence that Active Continuance Commitment is not a significant variable. Therefore, \( H1b \) is not supported.

**Passive Continuance Commitment**

Table 4-12 shows \( t = 1.886 \) and \( p\)-value = 0.06 (\( p\)-value > 0.05), thus the null hypothesis
is not rejected showing evidence that Passive Continuance Commitment is not a significant variable. Therefore, H1c is not supported.

**Normative Commitment**
Table 4-12 shows \( t = -2.07 \) and p-value = 0.040 (p-value < 0.05), thus the null hypothesis is rejected showing evidence that Normative Commitment is a significant variable. As the value of standardized \( \beta \) is negative, the relationship is negative. Therefore, H1d is supported.

**Value Commitment**
Table 4-12 shows \( t = -4.48 \) and p-value = 0.0001 (p-value < 0.05), thus the null hypothesis is rejected showing evidence that Value Commitment is a significant variable. As the value of standardized \( \beta \) is negative, the relationship is negative. Therefore, H1e is supported.

**Job Satisfaction (JS)**
Table 4-12 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 \( \beta \) shows the relationship is negative, thus H2 is supported.

**Employment Opportunity (EO)**
Table 4-12 above shows \( t = 2.76 \) and p-value = 0.006 (p-value < 0.05), thus null hypothesis is rejected showing that EO is a significant variable influencing ITQ. The positive value of standardized \( \beta \) shows there is a positive relationship between EO and ITQ, therefore H3 is supported.

Table 4-12 further shows:

\[
ITQ = \beta_0 + \beta_1 \text{(affective)} + \beta_2 \text{(active)} + \beta_3 \text{(passive)} + \beta_4 \text{(normative)} + \beta_5 \text{(value)} + \beta_6 \text{(JS)} + \beta_7 \text{(EO)} + \varepsilon
\]

\[
ITQ = 20.89 - 0.19 \text{ (Affective)} - 0.03 \text{ (Active)} + 0.09 \text{ (Passive)} - 0.11 \text{(Normative)} - 0.29 \text{ (Value)} - 0.20 \text{ (JS)} + 0.13 \text{ (EO)} + \varepsilon
\]
ITQ = 20.89 – 0.19 (Affective) - 0.11 (Normative) – 0.29 (Value) - 0.20 (JS) + 0.13 (EO) + ε……………………………………………………………………………… (i)

Equation (i) shows a model with relationships between ITQ, 3 dimensions of OC, JS and EO. When all else remains the same:

The value standardized β = - 0.19 shows that when affective organizational commitment increases by 1 unit, the intention to quit decreases by 0.19 units.

The value standardized β = - 0.11 shows that when normative organizational commitment increases by 1 unit, the intention to quit decreases by 0.11 units.

The value standardized β = - 0.29 shows that when value organizational commitment increases by 1 unit, the intention to quit decreases by 0.29 units.

The value standardized β = -0.20 shows that for every job satisfaction that changes from being satisfied to not satisfied, the ITQ average increases by 0.20 units (in other words, when employees are not satisfied, the likelihood to quit increases).

The value standardized β = 0.13 shows that when employment opportunity increases by 1 unit, the intention to quit increases by 0.13 units.

Table 4-13: Model Summary

<table>
<thead>
<tr>
<th>Mode</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.663a</td>
<td>.440</td>
<td>.426</td>
<td>3.12920</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), codedJS, passive, EO, Normative, Active, Value, Affective

b. Dependent Variable: ITQ

As the model involves several variables, a multicollinearity test was used to ensure there is no correlation within the independent variables (Hair et al., 2010). As a rule of thumb, VIF < 5 is considered as no multicollinearity amongst the independent variables. Table 4-12 shows that VIF ≈ 1, hence it is confirmed that the independent variables are not correlated with each other. Meanwhile the strength of the relationship in this model
was tested using adjusted $R^2$ value. Cohen (1992) recommended the strength of the model to be strong if adjusted-$R^2 \geq 0.25$, it is medium strength when $0.09 \geq \text{adjusted-}R^2 > 0.25$ and poor when adjusted-$R^2 < 0.09$. The value in Table 4-13 above shows adjusted-$R^2 = 0.426$, therefore the relationship in the above model is strong, showing evidence of 42.6% of change in ITQ when there are changes in Affective, Normative and Value commitment, JS and EO. Therefore 57.4% could be due to other factors that have not been taken into account in this research.

4.8 Testing of Moderating Influence of EO on Relationship between OC and ITQ

As the posited moderator (employment opportunity) is a latent variable and the independent variable of job satisfaction is measured using nominal level, the unsuitability of SEM is argued by several researchers (Hair, et al., 2010; Kline, 2005; Bryne, 2001). SEM could however been used by changing the moderator from metric into nonmetric. As EO theoretically plays an important role in its direct relationship with ITQ, this conversion could alter the independent variables explanatory power. Moreover, the conversion must make some logical sense (Hair et al., 2010; Field, 2009). Hence, multiple linear regression was used to evaluate the moderating effect by comparing the interaction effect with non-interaction effect.

The moderating effect of EO on the relationship between Affective, Active, Passive, Normative and Value OC and ITQ was conducted using multiple linear regression with an interaction effect between dimensions of OC and EO displayed in the equation below:

$$ITQ = \beta_0 + \beta_1(\text{affective}) + \beta_2(\text{active}) + \beta_3(\text{passive}) + \beta_4(\text{normative}) + \beta_5(\text{value}) + \beta_6(\text{EO}) + \beta_7(\text{affective*EO}) + \beta_8(\text{active*EO}) + \beta_9(\text{passive*EO}) + \beta_{10}(\text{normative*EO}) + \beta_{11}(\text{value*EO}) + \varepsilon$$

In order for the moderation to be assessed, the equation without moderation must exist and the adjusted-$R^2$ is observed (Hair et al., 2010, Field, 2009, Baron & Kenny, 1986).
Table 4-14: Coefficient Significance of Dimensions of OC and EO

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>25.608</td>
<td>1.694</td>
<td>15.120</td>
<td>.000</td>
</tr>
<tr>
<td>Affective</td>
<td>-.470</td>
<td>.143</td>
<td>-.248</td>
<td>-3.293</td>
</tr>
<tr>
<td>CC_Active</td>
<td>-.068</td>
<td>.080</td>
<td>-.059</td>
<td>-.845</td>
</tr>
<tr>
<td>CC_passive</td>
<td>.250</td>
<td>.117</td>
<td>.099</td>
<td>2.133</td>
</tr>
<tr>
<td>Normative_C</td>
<td>-.304</td>
<td>.125</td>
<td>-.128</td>
<td>-2.429</td>
</tr>
<tr>
<td>Value_C</td>
<td>-.528</td>
<td>.104</td>
<td>-.326</td>
<td>-5.092</td>
</tr>
<tr>
<td>EO</td>
<td>.475</td>
<td>.157</td>
<td>.141</td>
<td>3.033</td>
</tr>
</tbody>
</table>

a. Dependent Variable: ITQ

ITQ = 25.61 – 0.25 (affective) – 0.06 (active) + 0.10 (passive) - 0.13 (normative) – 0.33 (value) + 0.14 (EO) + \( \varepsilon \)……………………………………...(ii)

As shown in Table 4-14 above, \( t = -3.29 \) and p-value = 0.001 (p-value < 0.05), thus Affective commitment is a negatively significant variable in this relationship. As \( t = -0.85 \) and p-value = 0.399 (p-value > 0.05), Active continuance commitment is not a significant variable in this relationship. Meanwhile as \( t = 2.13 \) and p-value = 0.034 (p-value < 0.05), Passive continuance commitment is a significant variable in this relationship. However, \( t = -2.43 \) and p-value = 0.016 (p-value < 0.05), indicates that Normative commitment is a significant variable in this relationship. Finally, \( t = -5.09 \) and p-value = 0.0001 (p-value < 0.05) shows that Value commitment is a significant variable in this relationship.

Table 4-15: Model Fit of Influence of Dimensions OC and EO on ITQ

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>2063.379</td>
<td>6</td>
<td>343.897</td>
<td>33.801</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>2899.607</td>
<td>285</td>
<td>10.174</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4962.986</td>
<td>291</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
a. Dependent Variable: ITQ  
b. Predictors: (Constant), EO, CC_Active, CC_passive, Normative_C, Value_C, Affective

Table 4-15 above shows F = 33.80, df = 6, 285, p-value = 0.0001 (P-value < 0.05), indicating the model (ii) is a significant model with an adjusted $R^2 = 0.40$.

Table 4-16: Coefficient Dimensions of Interactions and ITQ

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>19.857</td>
<td>5.717</td>
<td>3.473</td>
</tr>
<tr>
<td></td>
<td>AffectiveOE</td>
<td>-.078</td>
<td>.112</td>
<td>-.379</td>
</tr>
<tr>
<td></td>
<td>activeOE</td>
<td>-.037</td>
<td>.068</td>
<td>-.301</td>
</tr>
<tr>
<td></td>
<td>passiveOE</td>
<td>-.036</td>
<td>.095</td>
<td>-.125</td>
</tr>
<tr>
<td></td>
<td>normativeOE</td>
<td>.071</td>
<td>.097</td>
<td>.249</td>
</tr>
<tr>
<td></td>
<td>valueOE</td>
<td>.027</td>
<td>.075</td>
<td>.180</td>
</tr>
<tr>
<td></td>
<td>Affective</td>
<td>.129</td>
<td>.879</td>
<td>.068</td>
</tr>
<tr>
<td></td>
<td>CC_Active</td>
<td>.226</td>
<td>.542</td>
<td>.197</td>
</tr>
<tr>
<td></td>
<td>CC_passive</td>
<td>.527</td>
<td>.756</td>
<td>.208</td>
</tr>
<tr>
<td></td>
<td>Normative_C</td>
<td>-.874</td>
<td>.774</td>
<td>-.369</td>
</tr>
<tr>
<td></td>
<td>Value_C</td>
<td>-.751</td>
<td>.592</td>
<td>-.463</td>
</tr>
<tr>
<td></td>
<td>EO</td>
<td>1.244</td>
<td>.733</td>
<td>.368</td>
</tr>
</tbody>
</table>

a. Dependent Variable: ITQ

ITQ = 19.86 + 0.07 (affective) + 0.20 (active) + 0.21 (passive) – 0.37 (normative) - 0.46 (value) + 0.37 (EO) – 0.38 (affective*EO) – 0.30 (active*EO) – 0.13 (passive*EO) + 0.25 (normative*EO) + 0.18 (value*EO) + ε……………………………………..(iii)

Dimensions of OC

Affective commitment is not significant in this relationship since $t = 0.15$ and p-value = 0.883 (p-value > 0.05). Similarly, $t = 0.42$ and p-value = 0.677 (p-value > 0.05) shows that Active continuance commitment is also not significant in this relationship. Passive continuance commitment is also not significant because $t = 0.70$ and p-value = 0.486
(p-value > 0.05). Normative commitment is not significant as t = - 1.13 and p-value = 0.26 (p-value > 0.05). Value commitment is also not significant as t = - 1.27 and p-value = 0.205 (p-value > 0.05).

**Employment opportunity (moderator)**

The value t = 1.70 and p-value = 0.09 (p-value > 0.05) shows that EO is not significant.

**Interactions (Affective*EO, Active*EO, Passive*EO, Normative*EO, Value*EO)**

The value of t = - 0.698 and p-value = 0.49 (p-value > 0.05) indicates that Affective*EO is insignificant in the interaction. Similarly, t = - 0.543 and p-value = 0.59 (p-value > 0.05) means that Active*EO is also not significant. Passive*EO is not significant since t = - 0.379 and p-value = 0.71 (p-value > 0.05). The value t = 0.738 and p-value = 0.461 (p-value > 0.05) indicates that Normative*EO is not significant. Finally, interaction Value*EO is not significant since t = 0.36 and p-value = 0.718 (p-value > 0.05).

The above shows that none of the interactive variables are significant.

**Table 4-17: Influence of Dimensions OC, Interactions and EO on ITQ**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regression</td>
<td>2094.069</td>
<td>11</td>
<td>190.370</td>
<td>18.580</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>2868.918</td>
<td>280</td>
<td>10.246</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4962.986</td>
<td>291</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: ITQ
b. Predictors: (Constant), EO, CC_Active, CC_passive, Normative_C, Value_C, Affective, affectiveOE, passiveOE, normativeOE, valueOE, activeOE

Table 4-17 above shows F = 18.58, df = 11, 280, p-value = 0.0001 (P-value < 0.05), indicating that model (iii) is a significant model with an adjusted $R^2 = 0.40$.

ITQ = 25.61 – 0.25 (affective) – 0.06 (active) + 0.10 (passive) - 0.13 (normative) – 0.33 (value) + 0.14 (EO) + e…………………………………………………………(ii)
ITQ = 19.86 + 0.07 (affective) + 0.20 (active) + 0.21 (passive) – 0.37 (normative) - 0.46 (value) + 0.37 (EO) – 0.38 (affective*EO) – 0.30 (active*EO) – 1.25 (passive*EO) + 0.25 (normative*EO) + 0.18 (value*EO) + \( \varepsilon \)………………………………………………………………………………………………(iii)

There is no significant change in adjusted \( R^2 \) between model (ii) and model (iii). As such, employment opportunity does not play the role of moderator in the relationship between dimensions of OC and ITQ. Thus H4a, H4b, H4c, H4d and H4e are not supported.

4.9 Testing of Moderating Influence of EO on Relationship between JS and ITQ

The interacting effect of EO on the relationship between JS and ITQ. The MLR equation with the interaction effect between JS and EO is shown as:

\[
\text{ITQ} = \beta_0 + \beta_1 (JS) + \beta_2 (EO) + \beta_3 (JS*EO) + \varepsilon
\]

Whereby \( \beta_0 \) – constant/intercept

\( \beta_1, \beta_2 \) – coefficients for the respective independent variables

\( \beta_3 \) – coefficient of interactive variable (moderator)

\( \varepsilon \) - error

The moderation assessment relies on the existence of the relationship between JS and ITQ: ITQ = \( \beta_0 + \beta_1 (JS) + \beta_2 (EO) + \varepsilon \). As shown in Table 4-18 below:

\[
\text{ITQ} = 7.04 - 0.51 (JS) + 0.09 (EO) + \varepsilon \ldots(iv)
\]

adjusted \( R^2 = 0.27 \)

With F = 55.68, df = 2, 289 and p-value = 0.0001, model (iv) exists significantly.
Table 4-18: Relationship between ITQ, JS and EO

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>7.040</td>
<td>1.401</td>
<td>5.024</td>
<td>.000</td>
<td>2</td>
<td>55.680</td>
<td>.000</td>
</tr>
<tr>
<td>EO</td>
<td>.300</td>
<td>.169</td>
<td>.089</td>
<td>1.773</td>
<td>.077</td>
<td>289</td>
<td></td>
</tr>
<tr>
<td>JS</td>
<td>-5.007</td>
<td>.489</td>
<td>-.513</td>
<td>-10.24</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Job satisfaction

Table 4-18 shows $t = -10.24$, p-value = 0.0001 (p-value < 0.05), thus JS is a significant variable in this relationship.

Employment Opportunity

Table 4.18 shows $t = 1.77$, p-value = 0.08 (p-value > 0.05) indicating EO is not a significant variable in this relationship. However, EO may significantly influence job satisfaction at 10% level of significance as it is noted that p-value = 0.08. The significance of this relationship may be identified by eliminating a myriad of error including sample selection and non-physical error.

With the significance of this model, the moderating effect of EO on the relationship between JS and ITQ is tested as shown in Table 4.19 below.

\[
ITQ = \beta_0 + \beta_1 (JS) + \beta_2 (EO) + \beta_3 (JS*EO) + \varepsilon.
\]

\[
ITQ = 5.17 - 0.66 (JS) + 0.16 (EO) + 0.17 (JS*EO) + \varepsilon...(v)
\]

Adjusted $R^2 = 0.27$

Model (v) is a significant model as $F = 37.11$, df = 3, 288, p-value = 0.0001(P-value < 0.05).
Table 4-19: Relationship between ITQ, JS, EO and JSEO

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>5.169</td>
<td>3.970</td>
<td>1.302</td>
<td>.194</td>
<td>3</td>
<td>37.109</td>
<td>.000</td>
</tr>
<tr>
<td>EO</td>
<td>.543</td>
<td>.511</td>
<td>.161</td>
<td>1.063</td>
<td>.289</td>
<td>288</td>
<td></td>
</tr>
<tr>
<td>JS</td>
<td>-6.461</td>
<td>2.928</td>
<td>-.662</td>
<td>-2.207</td>
<td>.028</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JSEO</td>
<td>.188</td>
<td>.373</td>
<td>.172</td>
<td>.504</td>
<td>.615</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4-19 above shows that EO is not a significant variable in this relationship, since t = 1.06 and p-value = 0.29 (p-value > 0.05). However, JS, where t = -2.21 and p-value = 0.03 (p-value < 0.05), is a significant variable in this relationship. Finally, t = 0.50 and p-value = 0.62 (p-value > 0.05) shows that the interaction effect is not significant in this relationship. As adjusted R² of model (iv) and (v) are the same at 0.27, EO does not play the role of a moderator in the relationship between JS and ITQ. Thus, H5 is not supported.

Table 4-20: Summary of Hypotheses Testing

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Statement of Hypothesis</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1:</td>
<td>Organizational commitment is significantly and negatively correlated to employee turnover intention in China’s IT outsourcing sector.</td>
<td>Supported</td>
</tr>
<tr>
<td>H1a</td>
<td>Affective commitment is significantly and negatively correlated to employee turnover intention in China’s IT outsourcing sector.</td>
<td>Supported</td>
</tr>
<tr>
<td>H1b</td>
<td>Active continuance commitment is significantly and negatively correlated to employee turnover intention in China’s IT outsourcing sector.</td>
<td>Not supported</td>
</tr>
<tr>
<td>H1c</td>
<td>Passive continuance commitment is significantly and negatively correlated to employee turnover intention in China’s IT outsourcing sector.</td>
<td>Not supported</td>
</tr>
<tr>
<td>H1d</td>
<td>Normative commitment is significantly and negatively correlated to employee turnover intention in China’s IT outsourcing sector.</td>
<td>Supported</td>
</tr>
<tr>
<td>-----</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>H1e</td>
<td>Value commitment is significantly and negatively correlated to employee turnover intention in China’s IT outsourcing sector.</td>
<td>Supported</td>
</tr>
<tr>
<td>H2</td>
<td>Job satisfaction is significantly and negatively correlated to employee turnover intention in China’s IT outsourcing sector.</td>
<td>Supported</td>
</tr>
<tr>
<td>H3</td>
<td>Employment opportunity is significantly and positively correlated to employee turnover intention in China’s IT outsourcing sector.</td>
<td>Supported</td>
</tr>
<tr>
<td>H4</td>
<td>Employment opportunity moderates the relationship between organizational commitment and employee turnover intention in China’s IT outsourcing sector.</td>
<td>Not supported</td>
</tr>
<tr>
<td>H4a</td>
<td>Employment opportunity moderates the relationship between affective commitment and employee turnover intention in China’s IT outsourcing sector.</td>
<td>Not supported</td>
</tr>
<tr>
<td>H4b</td>
<td>Employment opportunity moderates the relationship between active continuance commitment and employee turnover intention in China’s IT outsourcing sector.</td>
<td>Not supported</td>
</tr>
<tr>
<td>H4c</td>
<td>Employment opportunity moderates the relationship between passive continuance commitment and employee turnover intention in China’s IT outsourcing sector.</td>
<td>Not supported</td>
</tr>
<tr>
<td>H4d</td>
<td>Employment opportunity moderates the relationship between normative commitment and employee turnover intention in China’s IT outsourcing sector.</td>
<td>Not supported</td>
</tr>
<tr>
<td>H4e</td>
<td>Employment opportunity moderates the relationship between value commitment and employee turnover intention in China’s IT outsourcing sector.</td>
<td>Not supported</td>
</tr>
<tr>
<td>H5</td>
<td>Employment opportunity moderates the relationship between job satisfaction and employee turnover intention in China’s IT outsourcing sector.</td>
<td>Not supported</td>
</tr>
</tbody>
</table>
4.10 Summary

The data analysis for this study consisted of four stages. The first stage gave an overview of the survey data including response rate, demographic profile and non-response bias testing. The second stage examined the quality of the collected data by checking validity and reliability. The third stage computed the underlying variables based on factor analysis results and provided descriptive statistics. The last stage tested the five hypotheses.

Linear regression analysis was conducted on the first three hypotheses (H1, H2 and H3) to examine their direct impact on intention to quit. The results indicated that both job satisfaction and organizational commitment have a negative and significant influence on intention to quit and hence H1 and H2 are supported. Employment opportunity has a positive and significant influence on intention to quit and hence H3 is supported.

The Baron and Kenny (1986) multiple regression approach was used to test the two moderating effects proposed in this study. The regression analysis results revealed that employment opportunity does not have a significant moderating effect on job satisfaction and organizational to intention to quit and hence H4 and H5 are rejected.
CHAPTER 5 – Discussion and Conclusion

5.1 Introduction

The aim of this research was to assess how employment opportunity moderates the impacts of job satisfaction and organizational commitment on intention to quit. This chapter has the following three major focuses: the components that the turnover model is composed of, the impact of job satisfaction and organizational commitment to turnover intention, and the moderating effect of the perceived employment opportunity on this relationship. The chapter begins by reviewing the framework, and then goes on to discuss the research findings by addressing each of the research questions. The contribution and implications of the findings are also discussed, as are the limitations of the research. The final part of the chapter recommends directions for further related research and provides a conclusion to the study.

5.2 Framework Review

After valuating the ontology, epistemology, axiology, and methodology in relation to the research topic and questions, a positivist paradigm with a quantitative approach was chosen and a cross-sectional design using a simple random sampling technique was employed. Validity and reliability items were adopted from previous studies for research model measurement and a five-point Likert scale was used to measure all items except for the job satisfaction questions.

In order to collect data, a research survey was conducted among a sample of 5,000 IT outsourcing professionals randomly invited to participate from a total population of 4 million individuals (MOFOM, 2013). The questionnaire design consisted of 18 items for job satisfaction from Ironson et al.’s (1989) Job in General scale, 18 items for organizational commitment from Wang’s (2004) five-component commitment model, 3 items for employment opportunity from Peters et al.’s (1981) Perceived Job Alternatives,
and 6 items for intention to quit from Peters et al.’s (1981) Thoughts of Quitting and Intention to Leave the Job. Pre-test and pilot test were undertaken before the full survey was launched. Ethical issues involved in the collection of the data complied with the guideline issued by the University of Newcastle, Australia. An online survey in the form of a self-administered anonymous questionnaire was uploaded to a website, together with an information statement. Potential respondents were initially contacted through email and social media accounts. SPSS software was used to conduct the study and test the hypotheses. Accordingly, factor analysis, Cronbach’s alpha, and regression analysis was conducted to examine validity, reliability, and the moderator effect. And lastly, Structural Equation Modeling (SEM) was built using AMOS 21 as an additional means to test the five hypotheses and to verify the findings derived from multiple regression tests.

Previous studies have found that job satisfaction, organizational commitment, and employment opportunity are strongly correlated to employee turnover (Wang, 2004; Michaels & Spector, 1982; Mobley, 1977). From a review of previous literature, it can be concluded that intention to quit is a commonly used predictor of actual turnover (Bowen, 1982), while turnover leads to organization competitiveness and performance. As such, five research questions were developed to gain a better understanding of the relationship between those constructs.

1. How does organizational commitment relate to employees' turnover intention in China’s IT outsourcing sector?

2. How does job satisfaction relate to employees' turnover intention in China’s IT outsourcing sector?

3. How does employment opportunity relate to employees' turnover intention in China’s IT outsourcing sector?
4. How does employment opportunity affect the relationship between organization commitment and employees' turnover intention in China’s IT outsourcing sector?

5. How does employment opportunity affect the relationship between job satisfaction and employees' turnover intention in China’s IT outsourcing sector?

Based on the literature reviewed for this study, five hypotheses were developed to answer the research questions and test the proposed conceptual framework for examining the interrelationship of job satisfaction, organizational commitment, employment opportunity, and intention to quit of IT outsourcing professionals in China. H1, H2 and H3 were posed for examining the direct affect of job satisfaction, organizational commitment and employment opportunity on intention to quit. H4 and H5 were posed for identifying the moderating effects of employment opportunity on the impact of job satisfaction and organizational commitment on intention to quit.

The five hypotheses were as follows:

Hypothesis 1: Organization commitment is significantly and negatively correlated to employee turnover intention in China’s IT outsourcing sector.

Hypothesis 2: Job satisfaction is significantly and negatively correlated to employee turnover intention in China’s IT outsourcing sector.

Hypothesis 3: Employment Opportunity is significantly and positively correlated to employee turnover intention in China’s IT outsourcing sector.

Hypothesis 4: Employment Opportunity moderates the relationship between organization commitment and employee turnover intention in China’s IT outsourcing sector.
Hypothesis 5: Employment Opportunity moderates the relationship between job satisfaction and employee turnover intention in China’s IT outsourcing sector.

5.3 Discussion of Findings

This study examined the moderating effect of employment opportunity for the impact of job satisfaction and organizational commitment on turnover intention of IT outsourcing professionals in China. This section highlights the major findings from Chapter 4 and provides further analysis and discussion related to the demographics, individual constructs and construct relationships.

5.3.1 Demographics

Demographic data from the on-line survey shows that a majority (68.5%) of the respondents was male, 58.2% were married, and 64.4% were aged 25-34 years. The much higher percentage of male respondents may be a reflection of male dominance in the IT outsourcing industry, which may be because IT outsourcing professions are less attractive to females. Two thirds of the respondents were married and most (39.7%) had a monthly income of “¥6000 - ¥12,000”. The large age group of 25-34 indicates that most of the respondents had previous working experience and are in the process of consolidating their career. People with less working experience may also want to work in the IT outsourcing sector in order to acquire technical skill-sets and project experience.

The majority (42.1%) of the firms had over 1000 employees with 19.5% having 301-1000 employees and 19.5% having 31-100 employees, indicating that most of the firms were either large companies or small to medium enterprises. Nearly half of the respondents had no more than 5 years IT outsourcing experience, and the majority (46.6%) of respondents had less than 2 years working experience in their companies. This can be interpreted to mean that, in general, IT outsourcing professionals do not stay long in organization and perhaps they are what Shahnawaz and Jafri (2009) referred to
as leavers. It could also mean that most employees do not stay long enough in the company or client projects to acquire the required skills and domain knowledge. Most (65.8%) of the respondents held an undergraduate degree and 21.2% had a master’s degree. This is in line with a recent MOFOM (2013) report that bachelor degree holders account for 67.8% of IT outsourcing professional employees. Evidently, IT outsourcing professionals in China are generally well educated.

5.3.2 Individual Construct

The descriptive analysis provided in Chapter 4 indicated the level of agreement that IT outsourcing professionals had with each item measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), except for job satisfaction related questions where the Job In General scale was used (yes/no/not sure). The mean score of the job satisfaction is 2.3, indicating that most IT outsourcing professionals in China have a positive perception of job satisfaction, which is associated with reduced stress, lowered absenteeism, increased motivation and higher productivity (Rothausen et al., 2009). In serving increasing expectation and service quality from international clients, IT outsourcing employees face many obstacles, such as poor English proficiency and lack of project management experience. Their current level of job satisfaction and the effort they make to tackle those obstacles can be explained by Herzberg's (1969) hygiene factors and intrinsic motivation. Fichter and Cipolla (2010) reported that some people are dedicated to jobs for work itself and socio-economic benefits. The expected returns for their efforts are mainly the opportunity for improvement and monetary reward, which is in sync with Vroom's (1964) expectancy theory that individuals consider material costs after overcoming obstacles (Tyagi, 2010). For IT outsourcing professionals working on overseas projects, they have the opportunity to learn how to work with customers in different time zones and adapt to different customer styles and culture. A common phenomenon is that such professionals interface directly with customers as they pick up the required communication skills and
process competencies, like the Software Capability Maturity Model (CMM). In time, they become key people in the project team, such as project managers or engagement managers, and move up the career and salary ladder.

Regarding the five components of organizational commitment, the mean scores of affective commitment, active continuance commitment, passive continuance, normative commitment and value commitment were 3.32, 3.19, 2.87, 2.46 and 3.72 respectively. The normative commitment score is 2.46, which is the lowest score compared with other components and means that employees did not feel a moral obligation to stay in their organizations. After China’s economic reforms, employees feel less moral obligation to stay in organizations compared with the ‘iron rice bowl’ in the lifetime employment system (Warner, 1995). The situation may be worse when IT outsourcing professionals are seconded to work on the client’s premises where they may have to work under different conditions than with their own employers. For example, they may have to do daily check-in and checkout when they arrive at the office and finish their duties at the end of each working day. They may also be requested to fill in daily timesheet to record how they spent each hour on specific project tasks. On special festive occasions in China, some employers allow employees to leave work early but this may not be extended to seconded staff.

In contrast to the normative commitment score of 2.46, the value commitment score of 3.72 could be associated with loyalty to the boss (Chen et al., 1998). It could also represent employee congruence with the organization’s values and their willingness to put extra effort into their work for the benefit of the organization (Wang, 2004). Chen et al. (2002) reported that the leaders of Chinese organizations are usually viewed as the symbol of their organization and employees have more loyalty to them rather than to the organization itself. This special relationship is a manifestation of ‘guanxi’, which is a culture phenomenon in China that can best be explained by social exchange theory. This theory is based on the belief that the process of human interaction and behaviour is
about exchanges of benefits among parties (Zafirovski, 2005). This involves hidden responsibilities for the parties (Wayne, Shore, & Linden, 1997; Blau, 1964) in that when one party offers some sort of benefit to another party, he or she is expects a return benefit of similar value in the future, such as a job opportunity or salary raise (Shore et al., 2009; Gong et al., 2009; Gouldner, 1960). However, as the mutual exchange of benefits cannot be measured by specific forms or within specific time frames, trust between the parties is an essential component of the relationship (Shore et al., 2009). This expectation of mutual benefits from those with whom you have a good relationship, helps to explain why people in China generally keep in touch with their ex-colleagues (Zafirovski, 2005). It is not therefore surprising to see that in China people often know each other before they join a company because people often follow their boss or friends when changing jobs.

The mean score of employment opportunity is 3.56, which is greater than the midpoint of the Likert scale, indicating that respondents generally perceived more employment opportunities. This could be due to the booming IT outsourcing industry where global IT outsourcing revenue increases yearly (Gartner, 2012b) and where China has been the second most preferred destination since 2003. China spends much more on marketing than the U.S. or Europe (Gartner, 2012a), representing the country’s commitment to the IT outsourcing market as a way of activating the labor market. The tremendous support from the Chinese government for IT outsourcing, such as the 1000-100-10 Project (Rebecca, 2009), also encourages entrepreneurs to develop bigger and better outsourcing firms, which has resulted in providing more employment opportunities in the market.

The mean score for intention to quit is 2.58, which is lower than the midpoint of the Likert scale, indicating that respondents generally do not have the intention to leave the company. However, employees may still quit the job due to the availability of other jobs in the market and invitations from agencies and ex-bosses. The findings indicate that IT
outsourcing professionals in China are generally satisfied with their job, have certain degree of organizational commitment, but do not have the intention to leave the company even though they perceive there to be good employment opportunities outside their companies. The relationships of each construct (job satisfaction, organizational commitment, employment opportunity) with intention to quit are discussed in the following sections.

### 5.3.3 Organizational Commitment and Intention to Quit

It was hypothesized in this study that organizational commitment plays a negative direct variable role to turnover intention. As predicted, employment opportunity was found to have a negative and significant direct affect on turnover intention. Hence, hypothesis 1 is accepted.

Hypothesis 1: Organization commitment is significantly and negatively correlated to employee turnover intention in China’s IT outsourcing sector. **ACCEPTED**

Since this study used Wang’s (2004) five-component model for the organizational commitment construct, hypothesis 1 was further broken down into five sub-hypotheses.

Hypothesis 1a: Affective commitment is significantly and negatively correlated to employee turnover intention in China’s IT outsourcing sector. **ACCEPTED**

Hypothesis 1b: Active continuance commitment is significantly and negatively correlated to employee turnover intention in China’s IT outsourcing sector. **REJECTED**

Hypothesis 1c: Passive continuance commitment is significantly and negatively correlated to employee turnover intention in China’s IT outsourcing sector. **REJECTED**

Hypothesis 1d: Normative commitment is significantly and negatively correlated to employee turnover intention in China’s IT outsourcing sector. **ACCEPTED**

Hypothesis 1e: Value commitment is significantly and negatively correlated to employee turnover intention in China’s IT outsourcing sector. **ACCEPTED**
The above results show that hypothesis 1b and 1c were rejected and that the results of active continuance commitment and passive continuance commitment are different from Wang’s (2004) research results. Active continuance commitment refers to an employee’s active motivation for working in the organization, such as staying for better on the job training or career advancement opportunities. Perhaps this is due to the lack of perceived training opportunities within their existing firms. Passive continuance commitment refers to the continuance commitment where employees stay with their organizations because they cannot find alternative jobs easily. Perhaps, this is related to the strong perceived employment opportunity (mean score 3.56) that employees perceive to exist in the IT outsourcing market. Due to China’s booming IT outsourcing industry, employees are less sensitive to the costs associated with termination that they may need to bare (Meyer & Allen, 1991).

For the rest of organizational commitment components, the results are aligned with Wang’s (2004) research results. The results are also congruent with Mathieu & Zajac (1990) and Meyer et al. (2002) that organization commitment of employees is positively associated with numerous appropriate work consequences. Committed IT outsourcing professionals deliver a high quality service to clients and dedicate themselves to customer projects, the consequence of which is often more outsourcing projects. On the other hand, non-committed employees are often absent and will eventually leave the company (Mathieu & Zajac, 1990; Meyer et al., 2002). High employee turnover impacts resource stability and ultimately results in less outsourcing projects.

5.3.4 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 β=-0.20, t=-3.48, p< 0.05) on turnover intention. Hence, hypothesis 2 is accepted.
Hypothesis 2: Job Satisfaction is significantly and negatively correlated to employee turnover intention in China’s IT outsourcing sector. ACCEPTED

The result aligned with previous studies on the relationship between job satisfaction and turnover intention. William et al. (2008) 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 (Rad & De Moraes, 2009), 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 Vroom’s expectancy theory of motivation, employees will stay longer in their organizations if they are satisfied with their jobs (Kim et al., 1996). The more talent that is willing to stay in the organization, the greater the extent of outsourcing and of revenue from clients (Aubert et al., 2004).

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.

5.3.5 Employment Opportunity and Intention to Quit

It was hypothesized in this study that employment opportunity plays a positive direct variable role in 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 3 is accepted.

Hypothesis 3: Employment Opportunity is significantly and positively correlated to employee turnover intention in China’s IT outsourcing sector. ACCEPTED
The results of this study support Price's (1977) model that there may be other variables such as employment opportunity impacting turnover. Price (1977) believed employment opportunity may act independently or interactively with job satisfaction or organization commitment. The finding also is also consistent with Mobley (1977) who found that a comparison of alternative jobs is correlated to intention to quit.

Most IT outsourcing professionals move away from their hometown to work in tier 1 and tier 2 cities in China for better career development and higher financial returns. The outsourcing industry has a headcount based on a cost plus contract, where billing to the customer is based on the seniority or salary level of employees used on the outsourcing project. Once the job position or ranking is agreed with customer, it may take a further year or until the end of the project to adjust the employees pay rate. Very often, 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.

5.3.6 Employment Opportunity Moderates Organizational Commitment and Intention to Quit

It was hypothesized in this study that employment opportunity plays a positive role in moderating the relationship between organizational commitment and intention to quit. In other words, it was postulated that the direct influence of organizational commitment on intention to quit would be strengthened by the employment opportunity factor. However, the results from data analysis reveal that employment opportunity does not
play a moderating role in the relationship between organizational commitment and intention to quit. Hence, hypothesis 5 is rejected.

Hypothesis 4: Employment Opportunity moderates the relationship between organizational commitment and employee turnover intention in China’s IT outsourcing sector. REJECTED

Since this study used Wang's (2004) five-component model for the organizational commitment construct, hypothesis 5 was broken down into five sub-hypotheses.

Hypothesis 4a: Affective commitment moderates the relationship between organizational commitment and employee turnover intention in China’s IT outsourcing sector. REJECTED

Hypothesis 4b: Active continuance commitment moderates the relationship between organizational commitment and employee turnover intention in China’s IT outsourcing sector. REJECTED

Hypothesis 4c: Passive continuance commitment moderates the relationship between organizational commitment and employee turnover intention in China’s IT outsourcing sector. REJECTED

Hypothesis 4d: Normative commitment moderates the relationship between organizational commitment and employee turnover intention in China’s IT outsourcing sector. REJECTED

Hypothesis 4e: Value commitment moderates the relationship between organizational commitment and employee turnover intention in China’s IT outsourcing sector. REJECTED
The results of this study disagreed with Price's (1977) turnover model that showed employment opportunity acting interactively with organization commitment to induce turnover, suggesting that employment opportunity plays more of an independent variable role in intention to quit rather than a moderator role as portrayed in this study’s research model. However, this study’s results were consistent with Lee and Mowday’s (1987) research that concluded there were no interactive effects of availability of job opportunities and intention to quit; they also pointed to Arnold and Feldman’s (1982) studies as further justification for their conclusions. Perhaps, this may also be related to the booming IT outsourcing sector in China that might have affected respondents’ perception of organizational commitment.

5.3.7 Employment Opportunity Moderates Job Satisfaction and Intention to Quit

It was hypothesized in this study that employment opportunity plays a positive role in moderating the relationship between job satisfaction and intention to quit. In other words, it was postulated that the direct influence of job satisfaction on intention to quit would be strengthened by the employment opportunity factor. However, results of the data analysis reveal that employment opportunity does not play a moderating role in the relationship between job satisfaction and intention to quit. Hence, hypothesis 5 is rejected.

Hypothesis 5: Employment Opportunity moderates the relationship between job satisfaction and employee turnover intention in China’s IT outsourcing sector. REJECTED

The results of this study disagree with Price's (1977) turnover model, which suggested that employment opportunity plays more of an independent variable role in intention to quit rather than a moderating role as suggested by this study. On the other hand, the results of this study were consistent with Lee and Mowday (1987) who concluded from their research that there were no interactive effects of availability of job opportunities and intention to quit; they pointed to Arnold and Feldman (1982) studies as further
justification for their conclusions. Perhaps, this may also be related to the booming IT outsourcing sector in China that might have affected respondents’ perception of job satisfaction.

5.4 Contribution of the Study

The majority of international research has been on outsourcing decisions and outsourcing management from the client’s perspective. Very few studies have investigated offshore service providers from developing countries (Doren & Revti, 2009). Therefore, this study has a number of major contributions to the body of knowledge in this field of study.

First, job satisfaction is confirmed by this study to have a significant direct reverse effect on intention to quit, which supports the findings of William et al. (2008). 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.

Second, previous research into the relationship between organizational commitment and turnover mainly used samples in Western settings; such studies in an Asian context are rare (Wang, 2004). As this research used samples in China, it added to the body of knowledge of organizational commitment in the context of Asia. In addition, since Wang’s (2004) five-component commitment model had never been tested in China’s IT outsourcing industry, this research contributes by confirming that Wang’s (2004) five-component commitment model can be extended to China’s IT outsourcing sector.

Third, value commitment had the highest score compared to the other commitment components used in this research. As this value commitment concept may be new to many human resource managers in China, this study utilized social exchange theory, guanxi, and personalism to explain value commitment in the Chinese context.
Fourth, 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 and organizational commitment on intention to quit. This study clarified the role of employment opportunity in the turnover model and suggested that there might be other relationships among the variables other than those originally identified. In addition, the findings reveal that employment opportunity exerted some influence on the impact of job satisfaction and organizational commitment on intention to quit, though it does not moderate relationships between job satisfaction and organizational commitment with turnover intention.

To summarize, 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. In addition, the study 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 (Feeny et al., 2005). Understanding and applying the findings from this research 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.

5.5 Implications of the Study

This study presents significant academic and business implications for both researchers and practitioners.

5.5.1 Academic Implications

The findings indicate that IT outsourcing professionals in China are generally satisfied with their job. They have a certain degree of organizational commitment and do not have the intention to leave even though they perceive good employment opportunities outside their companies. These findings suggest there might be other relationships
among the variables than originally identified and that there is a need to develop a more comprehensive turnover model for IT outsourcing professionals in China.

As value commitment is a particularly important component of Wang’s (2004) five-component model, the measurement items for value commitment taken from the model were adapted to suit the Chinese context. The special characteristics of Chinese value commitment provide more in-depth research opportunities in relation to its relationship with guanxi, leadership, and social exchange theories. In addition, although generalization of Wang’s (2004) five-component model to the IT outsourcing industry in China appears to be possible, except for the active continuance component and passive continuance component, more studies are required to validate this generalization.

5.5.2 Business Implications

Findings from this study offer a number of key business implications and human resource practice recommendations to IT outsourcing firm. First of all, as affective commitment was found to be one of the important commitment components among IT outsourcing professionals in China, human resource practitioners are advised to draw-up labour contracts that will discourage employees from approaching existing staff for job referrals. When leaders want change their job platform, they may sell themselves by saying that they can form a cohesive team that will work efficiently. Once they join the new company, they will then bring on board their former buddies that they worked well with from the previous company. This is about a lack of legal awareness and enforcement in China. Business and legal teams are advised not to follow all the business contract terms as proposed by clients. Instead, they should include terms and conditions that prevent clients from establishing their own companies and employing the previously outsourced staff. Perhaps, outsourcing companies should promote the Build-Operate-Transfer (BOT) model that allows proper transfer of IT talent in a planned manner.

IT outsourcing is a service-based industry that demands stable and reliable resources to
deliver software development and IT services. Findings from Board (2008) 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 (Gebauer, 2006). 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. For example, they could partner with universities by embedding IT outsourcing courses in final year studies. This way, organizations will have the opportunity to evaluate students over a period of time through pilot projects and students can have the opportunity of discovering if they are interested to work as an IT outsourcing professional. Organizations are also advised to offer career rotation to allow employees to move freely between functions and business units, and encourage goal settings to help with managing employee career expectations.

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. Organizations can differentiate themselves by providing proper training and human resource management practice to nurture talented employees in-house, while their competitors pay high salaries to attract the human resources they need. However, what may attract employees does not necessarily retain them. Therefore, only paying high salaries to attract talented IT outsourcing professional without doing anything to retain them, might end up increasing the total cost of doing business and jeopardize the cost competitive advantage that China currently has over it rivals.
5.6 Limitations of the Study

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, research in organizational psychology has been criticized for an over-reliance on self-report surveys (Podsakoff & Organ, 1986). Although pilot testing and an external review by the Hong Kong Management Association were employed to ensure the quality of questionnaire and it’s translation, the meaning of the questions and terms such as ‘perceived employment opportunity’ was subject to the respondents’ interpretation. Cook and Campbell (1979) have pointed out that self-reported data may represent what participants believe researchers expect or want to see or report. In addition, since this study was a quantitative approach using a self-completed Internet survey as the one and only method for data collection, it was exposed to common method bias that makes the actual phenomenon difficult to investigate (Hufnagel & Conca, 1994; Avolio & Bass, 1991). A face-to-face approach would allow questions to be more clearly explained and clarified.

Fourth, in light of the large number of IT outsourcing professionals in China, the researcher acknowledges that the research sample size was not large enough to generalize conclusions to other populations and settings. While the research data was reliable and valid, generalization of the findings to other sectors or countries may not be appropriate. A study with a larger sample size in other sectors is recommended.
Fifth, this research relied on intention to quit as the only predictor of turnover, even Dardar, Jusoh, and Rasli (2011) 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 (Mobley et al., 1982; Vandenberg & Nelson, 1999). This study would be more persuasive if a direct measure of turnover could be applied.

Sixth, the research did not address external market elements that may have an impact on perceived employment opportunity, job satisfaction, organizational commitment 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 (Sriram & Stump, 2004). This research could be more persuasive if a longitudinal study could be conducted.

The seventh and final limitation of the study relates to the finding that employment opportunity does not moderate the impact of job satisfaction and organizational commitment on turnover intention. This finding suggests that other factors might be involved in developing a more comprehensive research model for interpreting job turnover of IT outsourcing professionals in China.

5.7 Directions for Further Research

After analyzing 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 research 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 so that findings could strategically inform organization structures, constraints and policies. A study of the relationship between job satisfaction and commitment and their impact on intention to quit within the various IT outsourcing sectors in China would be interesting.

Third, it is recommended to conduct a cross-cultural study using Wang’s (2004) five-component model in a non-Chinese culture such as India. Researchers may find it interesting and valuable to compare the results between China and India as the two leading countries for global IT outsourcing.

Fourth, unlike this research that measured the intention to quit as a predictor of turnover, future research could use actual turnover data from specific organizations, or measure factors impacting the intention to stay. Such predictors might provide more direct insights for human resource practitioners.

Fifth, a mix of qualitative and quantitative research methodologies is recommended. For example, researchers could first find out the major factors of turnover intention in China through face-to-face interviews that would provide a rich description of the context for the different variables, which in turn would enrich data collected through surveys. A more holistic understanding of how job satisfaction, organizational commitment and employment opportunity takes place, and what constitutes intention to quit, can be gained by using multiple sources and procedures for data collection. In addition, mixed research methodologies would minimize the risk of common method bias as well as common method variance.
5.8 Conclusion

The study uniquely measured organizational commitment using Wang’s (2004) five-component model in China’s IT outsourcing sector. The conclusions reached for this study are that there is a negative relationship between job satisfaction and intent to quit, a negative relationship between organizational commitment and intention to quit, and a positive relationship between employment opportunity and intention to quit. The findings also reveal that employment opportunity neither moderates the relationship between job satisfaction and intention to quit, nor the relationship between organizational commitment 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.

The existing body of related research involves outsourcing management from the client’s perspective, with very little involving offshore service providers from developing countries (Doren & Revti, 2009). Therefore, two major contributions of this research are that the Job In General scale has been shown to work well in the context of China, and that Wang’s (2004) five-component commitment model can be successfully extended to China’s IT outsourcing sector. Overall, the study added to the existing body of knowledge in the field by providing a greater understanding of the key factors that impact the turnover of IT outsourcing professionals in China.
References


26(2), 156-172.


Appendix A - Ethics Application Form

***SAVE before ticking 'Complete' or closing the form. --- If 'Complete' is ticked use CHECK IN/OUT to edit form.

Human Research Ethics Committee
Initial Approval Submission - New Project

*I confirm I am applying for Initial approval for a new research project where the UoN HREC is the lead committee.

*Tick to continue

NEAF application

*Have you already determined that you will have to complete the National Ethics Application Form (NEAF), ie your research has the potential for significant risk? Yes No

Protocol Identification

*Project Title:
The moderating effects of employment opportunity on the impact of organizational commitment and job satisfaction on intention to quit: the perception of IT outsourcing professionals in China

*Project summary:
This study aims to examine turnover factors of IT Outsourcing Firms in China. People listed on the IT Outsourcing related public websites or databases and who are working in IT outsourcing firms in China will be invited to complete an anonymous online survey about their demographic information, job satisfaction and workplace opportunities.

Max 6 lines

Duration of Project

Provide the anticipated start and end dates for the whole of the project, including participant follow-up if applicable and data analysis.

*Anticipated start date: 01-May-2013 *Anticipated end date: 30-Apr-2014

*Are there any time-critical aspects relating to the research of which the HREC should be aware? Yes No

Page 2

Personnel - Review (Add Personnel - Review)

Wong, Tak Keung

Research Personnel

Name:
Wong, Tak Keung
CI / Supervisor
Start Date
01-May-2013
End Date Role
Student Researcher

Certification: Office use only

Certification Begin End

- - -

Tong, Canon
Research Personnel

Name:
Tong, Canon
CI / Supervisor
Start Date
01-May-2013
End Date Role
CI

Certification: Office use only
Certification Begin End

- - -

Page 3

Research Personnel Not Listed
*Were any members of the research team not listed in the personnel picklist? Yes No

Student Researchers
*Was one or more people given the role of Student Researcher? Yes No
*Type of program student(s) undertaking? (If more than one student, select the highest level.)
Postgraduate Research

Page 4

Project Funding/Support
Yes No
*Is the research the subject of a contract / agreement / grant awarded from or under consideration by an
external grants body, sponsor, etc?

Approval From Other HRECs
Yes No *Has the research been approved, or is under consideration, by another Human Research Ethics
Committee (HREC)?
*Tick to continue

Page 5

Type of Research
Does your project involve:
Yes No *Research to be conducted outside Australia involving participants NS4.8
Yes No *Research on workplace practices or possibly impacting on workplace relationships
Yes No *Deception or limited disclosure to participants NS2.3.1
Yes No *Access to existing data sets, databanks, or human tissue banks NS3.2
Yes No *Collection, extraction or use of human tissue (including cell lines), blood or other body fluids
NS3.4
Yes No *Access to personally identifiable information / records / human tissue samples (including cell lines other
than those acquired commercially) without specific consent from the individuals to whom the information/records
relate NS2.3;
NS2.3.6; NS3.4
Yes No *Human genetic testing / research NS3.5

146
Yes No  *A cellular therapy
Yes No  *Exposing participants to ionising radiation NS2.1
Yes No  *Clinical trial under the CTN or CTX scheme
Yes No  *Use of gametes or use or creation of embryos
Yes No  
*Use of drugs; alternative / complementary therapies or care; or surgical, or other therapeutic or diagnostic procedures
and devices NS3.3
Yes No  *An innovation or intervention which is not standard practice in the study population NS3.3
Yes No  
*Other type of research not covered above

Note: You must tick Yes if you have answered 'No' to all of above

Research Population
The category and source of participants being sought for this research are:
Select all that apply even if there will not be direct contact with the participants.
You must select at least one.

Adults 18 years of age or older
Children, or young people under 18 years who are not University students NS4.2
A focus on Aboriginal and Torres Strait Islander (ATSI) peoples, groups, communities or issues NS4.7
A focus on women who are pregnant, and/or research involving the human foetus NS4.1
A focus on people with a cognitive impairment, an intellectual disability, or a mental illness NS4.5
Adult participants who will not be competent to give consent are expected to be recruited NS2.2.12
People highly dependent on medical care who may be unable to give consent, eg unconscious or too ill NS4.4
The general public
Students or staff of University of Newcastle
Students or staff of other universities / colleges
School children, ie recruited through schools
Volunteer registers or databases
Members of particular community groups/ organisations
Employees of particular organisations
Clients / patients of health service providers
Hospital in-patients
Clients of organisations / community services
Prisoners or those held in detention
People who have a sight or hearing impairment
People with a specific health condition
People in a dependent or unequal relationship with the researchers
Participants not proficient in the English language
Records / information about people without contact with those people
Human tissue collections without contact with the donors
People who could be exposed to civil, criminal or other proceedings as a result of the research
Other

147
Research Methods/Techniques
The research methods / techniques to be used in the research are:
Select all that apply. You must select at least one.
Computer based tests
Data linkage
Focus groups
Interviews face-to-face
Interviews telephone
Internet / web based research
Observation of people
Covert observation NS2.3.1
Photographs of people
Physical activities / exercises / tests
Psychological tests
Questionnaire / survey / diary anonymous
Questionnaire / survey / diary identifying
Record / document analysis
Taping audio / video
Access to and/or use of information from a Commonwealth Agency
Access to and/or use of information from a private sector organisation
Case study
Case-control study
Epidemiological or other quantitative research
Qualitative research
Randomised controlled trial
Intervention study
Administration of drug / medicine (incl complementary / alternative)
Use of a placebo
Use of a medical device
Human stem cell therapy
Other

*Of the tests or procedures to be used, are any on the HREC Register of Approved Tests and Procedures?
No
*Provide details of other questionnaires / surveys / interview scripts / tests / instruments or procedures that are to be used and upload a copy with this submission when you get to the end of the form.
Researcher will setup the required questionnaire in SurveyMonkey. Once ethics application is accepted by the university, the researcher will collect email address, activate the survey and send out invitations accordingly.
The survey questionnaire will collect data relating to respondents' demographics, organizational commitment, job satisfaction, employment opportunity and intention to quit. Approximately 10 minutes will be required to complete the questionnaire. Likert-type scale
will be used for most items except demographics and JIG items. Survey items from Wang (2004)'s five component commitment model will be used to assess organizational commitment: affective, active continuance, passive continuance, normative and value commitment. As for job satisfaction, survey items in the Job in General (JIG) scale will be used to measure how employees feel about their job at a general level (Ironson, Smith, Brannick, Gibson, and Paul, 1989). Peters, Jackofsky and Slater (1981) introduced the Perceived Job Alternatives scale and that will be used to measure employment opportunity. Lastly, six items from Peters et al. (1981) will be used to measure thoughts of quitting and Intention to Leave the Job.

Consent Process
What method(s) of consent will be used to enable the research to be conducted? NS2.2
Select all that apply. You must select at least one.

- Written informed consent
- Recorded informed consent
- Parent / Guardian / Carer consent
- Child's assent with parent / guardian consent
- Young person 16-17 years consent
- Child < 16 years consent
- Organisational consent, ie from a CEO, Director, Manager, Principal, etc.
- Implied consent
- Retrospective consent
- Waiver of informed consent sought
- Waiver of parent / guardian consent sought
- Existing consent
- Other

Research Sites
*List the research sites, ie the communities / schools / hospitals / organisations etc from which participants will be sourced.
Potential participants will be recruited from IT Outsourcing related public websites and databases in China.
If more than 10, give number and type, eg "12 NSW government primary schools in the Hunter region"
*Is your research a single site or multi-centre project (click on icon to select)? Single site

Participant Numbers
*What is the total number of participants to be recruited at all sites involved in the research? 300
*What is the total number of participants covered by this application? 300
*What is the rationale for that number?
Random sampling technique will be used to ensure potential participants are evenly distributed in the population. Five thousand contact emails will be drawn from the population. The researcher anticipates receiving around 300 valid responses to enhance the reliability and validity for statistical analyses. Roscoe (1975) recommended that a minimum response of at least 10 times the number of items in the largest scale of the questionnaire. In this research, the largest scale of the questionnaire is 18 and therefore at least 180 participants
is required with an anticipated response rate below 10% (Bryman, 2004). However, the researcher will target at 300 valid responses in order to gain a better research quality.

*Tick to continue

**Follow-Up Questions**

Based on your answers to the above questions, additional information is required on the following features of your research.

**Research conducted outside Australia**

Yes No *Are there ethics or other approval processes in the country where the research will be conducted?

Yes No *Will co-researchers be recruited in the overseas country?

Yes No

*Are the proposed participant recruitment and consent methods, and remuneration (where used) acceptable to the local culture and its beliefs and practices?

Yes No *Are there social, educational or others factors that may compromise free and informed consent?

Yes No *Will participants be given a local contact for questions or complaints?

Yes No Can the risks be easily negated, minimised or managed?

*Explain how the risk to participants associated with this will be negated, minimised or managed.

This is a simply on-line questionnaire. The email invitation also contains contact email and phone number for questions at same time zone. If participants have any questions, they can contact researcher or university representative accordingly.

Researcher and supervisor also provide China local mobile number and participants can contact research any time in case of emergency cases.

The expected risk is very minimal and could be managed properly.

Max 2,000 char

**Participants not proficient in the English language**

*In which language will the material be presented and/or what use will be made of interpreters?

Both English and Chinese version of the survey will be available for participants. The survey will be conducted via on-line platform and there is no interpreter or local contacts available during the survey fill-in process.

An English version of all documents must be uploaded with this submission when you get to the end of the form. (When the documents are approved, you will need to submit a verified translation in the relevant language.)

**Eligibility for Expedited Review**

Yes No *Will participants be identifiable, either directly or indirectly, in reporting of the research?

Yes No *Are the potential participants in an unequal relationship? NS4.3

Yes No *Does the research involve physically invasive procedures? NS2.1

Yes No *Is there a risk of physical injury to participants? NS2.1

Yes No *Might the research involve pain or discomfort for participants? NS2.1

Yes No *Might the research cause participants psychological or emotional stress? NS2.1

Yes No *Does the research involve the collection of sensitive personal information?
*Could the research expose participants to economic loss or damage to their reputation? NS2.1
*Could the research have a negative impact on personal relationships? NS2.1
*Will potential participants be offered inducements that could be considered coercive? NS2.2.10; NS3.3.5

**Project eligible for expedited review**

*Your project appears to qualify for Level 2 (L2) Expedited Review.*
**Tick to continue.**

**Page 12**

**Project Details**

In the following sections, provide a brief ‘plain English’ description of the project. NS1

*Background to project:

In the past decades, IT outsourcing was one of the most popular industries in India (Budhwar, 2001). China IT services sector is growing very fast in the view of revenue and global client base, and China is picking up the momentum. However, the rate of China nationwide employee turnover was increasing every single year over the past decade and the employee turnover rate in 2011 reached 26.3% (AmCham, 2012). Empirical research supports that employee turnover significantly impacts organizational performance (Shaw, Gupta, and Delery, 2002), employee turnover is an important issue to both outsourcing providers as well as their customers. The extent of outsourcing is also subjected to the transaction attributes such as human resource stability (Aubert, Rivard, and Patry, 2004).

Majority of international research efforts are on outsourcing decision and outsourcing management from client's perspective, little research were conducted in relation to offshore service providers from developing countries (Doren and Revti, 2009). Max 250 words

*Aims / hypotheses / questions:

The aim of this study is to examine the moderating effects of employment opportunity on the impact of organizational commitment and job satisfaction on intention to quit of IT outsourcing professionals in China, findings of which will provide more insights for decisionmakers, enabling them to formulate better employee retention strategies.

Research Questions

1. How does organizational commitment relate to employees' turnover intention in the IT outsourcing sector in China?
2. How does job satisfaction relate to employees' turnover intention in the IT outsourcing sector in China?
3. How does employment opportunity relate to employees' turnover intention in the IT outsourcing sector in China?
4. How does employment opportunity affect the relationship between organization commitment and employees' turnover intention in the IT outsourcing sector in China?
5. How does employment opportunity affect the relationship between job satisfaction and employees' turnover intention in the IT outsourcing sector in China? Max 150 words

*Research design:

This quantitative study will use an on-line self-administrative anonymous questionnaire
survey to collect data for statistical analysis. Invitations to participate will be sent by email to potential participants randomly selected from IT Outsourcing related public websites and databases in China. 

The five hypotheses developed will be tested using multiple regression to establish the relationships amongst all the constructs within the research. Univariate analysis of variance (ANOVA) will be used to test whether the model is fit. Pearson correlation coefficient will also be used to test the correlation of all variables.

Max 250 words

*Potential value and significance of the research:
There is a gap in the literature that few studies include offshore service providers from developing countries (Doren & Revti, 2009). This study will add to the existing literature by gaining more understanding on key factors impacting turnover from IT outsourcing talents perspective in China. In addition, the study will contribute to managerial policy by allowing policy-makers to plan for retention strategies at a more focused approach. Understanding how the predictors of employees' decisions to leave an organization may give policy-makers more insights about retention strategies of IT outsourcing firms in China, help to retain IT talents and hence, allows China to aggressively seize the global outsourcing opportunities and market.

Max 250 words

*Experience and skills of researchers. NS1.1
Research supervisor
Dr Canon Tong (PhD) is the supervisor for this research project. He has supervised more than 60 research projects at doctoral level during the last 11 years.

Student researcher
Chesney Wong Tak Keung obtained a Master of Business Administration from the University of Wales. He is studying a Doctor of Business Administration (DBA) programme offered by the University of Newcastle and the Hong Kong Management Association (HKMA). Chesney has completed all the required ten courses from the DBA programme. In addition, Chesney has more than 10 years experience in IT outsourcing. He managed outsourcing team with more than 300 and is knowledgeable in human resource management. Chesney is familiar with SPSS and statistics methods. Lastly, Chesney is born in China and lived in China since 2003 for more than 7 years, he can understand Chinese culture and can speak good Mandarin for required communications.

Max 300 words

Participants

*How, and by whom, will potential participants be selected, and
(a) initially contacted, and
(b) recruited? NS1.4; NS3.1
- Potential participants will be IT Outsourcing professionals randomly selected from IT Outsourcing related public websites and databases
- User account or email addresses of potential participants will be collected and randomly selected as potential participants
- Researcher will use computer program to randomly select participants based on the contacts collected from public websites and databases
- Potential participants will receive an invitation email from the researcher which contains Participant Information Sheet to each potential participant and a web link to SurveyMonkey for an online self-administered questionnaire survey.

Max 300 words

*Detail the procedure to be used to ensure voluntary and informed consent NS2.2*

Researcher will set up the required questionnaire in SurveyMonkey. Once the ethics application is accepted by the university, the researcher will collect email addresses, activate the survey and send out invitations accordingly. Before participants conducting the online survey, the site will display a personal information statement to inform participants their rights and confidentiality to ensure voluntary and informed consent. Once participants completed the survey online, it is considered as implied consent and their participation cannot be withdrawn.

Max 300 words

*List the inclusion and exclusion criteria NS1.4*

Inclusion criteria - IT Outsourcing professionals aged 18 or above in China. They could be managers, administrative or actual service delivery staff. There are different names for IT Outsourcing positions and possible ones within the inclusion criteria are delivery manager, project manager, technical leader, engineer, tester to technical supporting staff.

Exclusion criteria:
- People who are not working in IT Outsourcing field
- IT Outsourcing professionals who are below 18 years old
- IT Outsourcing professionals who are not working in China

*What is required of participants?*

Participants are expected to fill in the self-administered questionnaire within one month after they received the invitation. They are required to access an online platform containing the purpose of the study, survey instructions and consent form. Participants are expected to use about 10 minutes to complete the online survey.

Max 300 words

*What, if any, benefits might there be from the research for participants or others? NS1.6*

By default, individual respondents will not receive any feedback or study results about the research except when they send an email request to the researcher. The study results will then be shared with the respondents after the dissertation has been completed.

To support the China IT Outsourcing industry, the information gathered from this survey will be submitted to major China software parks which can be further distributed to other IT firms in China. The findings will allow policy-makers have a deeper understanding on the turnover factors and plan for more effective retention strategies to retain IT talents in China.

Max 300 words

*Will participants receive any reimbursements / payments / rewards for participating in the research? NS2.2.10; NS3.3.5 Yes No*

**Analysis and Reporting**

*How will the information you receive be analysed / interpreted? What specific approaches or techniques (statistical or qualitative) will be employed?*

This study uses statistical approach in analyzing and interpreting collected datasets. After the completion of survey period, researcher will download the survey results from SurveyMonkey.
in a MS Excel file and later on imports to SPSS for further data analysis. First is to recode some items of scales reversely in order to have consistent standard with other items. Secondly, the response rate will be calculated along with a summary of the sample demographics. Then descriptive statistics will be used to measure the means and standard deviations of variables identified in the study.

In this study, the five hypotheses will be tested using multiple regression to determine if any of the model variables are related to intention to quit. Model variables will be tested using univariate analysis of variance (ANOVA) about whether the model is fit. Pearson correlation coefficient will be also used to test the correlation of all key variables.

To check for the internal consistency reliability of the identified measures, Cronbach’s alpha will be used and see if value above 0.7 which is an acceptable level in the research community. The researcher will increase the reliability of the scales if Cronbach’s alpha is insufficiently low (<0.7) by omitting those items that relatively uncorrelated with the other items from a scale. The research will use Kaiser-Meyer-Olkin (KMO) for an overall measure of whether there are a number of significant correlations among independent variables. Max 300 words

*Detail how the results of the research will be reported / disseminated, including appropriate provision of results to participants. NS1.1; NS1.3; NS1.4; NS2.2.6; NS3.1.4; NS3.1.11

Survey results will be reported in the researcher’s dissertation. Additionally, results may be reported in scholarly journal articles and conference paper. Besides, the information gathered from this survey will be submitted to major China software parks which can be further distributed to other IT firms in China. To take good care on confidentiality, researcher will not reveal to readers about the raw data, nor do they report individual response. Max 300 words

**Storage, Access and Disposal of Data**

*Detail the mechanisms that will be in place to ensure appropriate storage, access and disposal of data. According to Neuman (2003), ensuring confidentiality significantly improves response rates. The on-line survey is confidential, only the researcher has access to personally identifiable information to ensure anonymity. Related computer files will be password protected with backup procedure. All collected data remains confidential and will be kept securely for five years, and then will be destroyed completely by WipeDrive software (WhiteCanyon, 2012) to avoid any potential recovery. Max 300 words

**Safety Implications**

Does the proposed research involve work on, use of, or exposure to any of the following?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash reimbursements / payments to research participants</td>
<td>*</td>
</tr>
<tr>
<td>Fieldwork / off-campus activity, eg interviews</td>
<td>*</td>
</tr>
<tr>
<td>Recombinant DNA</td>
<td>*</td>
</tr>
<tr>
<td>Genetically modified organisms</td>
<td>*</td>
</tr>
<tr>
<td>Biologically hazardous micro-organisms</td>
<td>*</td>
</tr>
<tr>
<td>Chemically hazardous materials</td>
<td>*</td>
</tr>
<tr>
<td>Human body fluids or tissue</td>
<td>*</td>
</tr>
<tr>
<td>Radioisotopes / unsealed sources</td>
<td>*</td>
</tr>
</tbody>
</table>
Yes No *Ionising radiation
Yes No *Non-ionising radiation
Yes No *Any other potential safety hazard for either participants or researchers?

**Confirmation**

*Information I have provided in this submission is accurate and complete.*

*(This will close all Help text.)*

**Comments**

Please use this section if you would like to provide additional information regarding your research which has not been covered elsewhere in the submission, or if you wish to make comments about this submission form.

Here are the attached documents:

1. Appendix A – Conceptual Framework of Study
2. Appendix B – Email Invitation Letter
3. Appendix C – Participant Information Statement
4. Appendix D – Online Questionnaire
5. Appendix E – Translation Verification from HKMA
6. Appendix F – Peer Review and HOS Declaration Form
7. Appendix G – References

**Declaration**

In making this submission, I declare that:

1. The research protocol conforms to the *National Statement on Ethical Conduct in Human Research, 2007*, which I have read.
2. I undertake to conduct the research in accordance with the approved protocol, the *National Statement*, relevant legislation and the policies and procedures of the University of Newcastle.
3. Where I am the project supervisor for the research described herein which will be conducted by a student of the University of Newcastle, I declare that I have provided guidance to the student in the design, methodology and consideration of ethical issues of the proposed research.
4. I make this application on the basis that the information it contains is confidential and will be used by the University of Newcastle for the purposes of ethical review and monitoring of the research project described herein, and to satisfy reporting requirements to regulatory bodies. The information will not be used for any other purpose without my prior consent.

*Yes No*

*Each member of the research team is being identified in this submission with his/her knowledge and consent; they have access to the submission; and I have made them aware of the requirement for the research to be conducted according to the approved protocol.*

I have uploaded required documents as follows:

**Yes *Peer Review Declaration**
Yes *Head of School Declaration
Yes *Participant Information Statement(s)
Yes *Verified translations of Participant Information Statement(s)
No *Participant Consent Form(s)
Yes *All recruitment material, eg advertisements, posters
Yes *Surveys / questionnaires
No *Focus group / Interview schedule(s)
No *Funding application(s) / Contract / Agreement not administred by University of Newcastle
Yes *Approval(s) from other HRECs
*I have completed all requirements for this submission.

**Chief Investigator / Project Supervisor: Tong, Canon**
Date: 07-May-2013

Please don't forget to SAVE before ticking 'Complete' or closing the eform

Form published 1 September 2012
Appendix B - Ethics Application Approval

HUMAN RESEARCH ETHICS COMMITTEE

Notification of Expedited Approval

To Chief Investigator or Project Supervisor: Mr Canon Tong
Cc Co-investigators / Research Students: Mr Tak Keung Wong

Re Protocol: The moderating effects of employment opportunity on the impact of organizational commitment and job satisfaction on intention to quit: the perception of IT outsourcing professionals in China

Date: 29-May-2013
Reference No: H-2013-0148
Date of Initial Approval: 29-May-2013

Thank you for your Response to Conditional Approval (minor amendments) submission to the Human Research Ethics Committee (HREC) seeking approval in relation to the above protocol.

Your submission was considered under Expedited review by the Ethics Administrator.

I am pleased to advise that the decision on your submission is Approved effective 29-May-2013.

In approving this protocol, the Human Research Ethics Committee (HREC) is of the opinion that the project complies with the provisions contained in the National Statement on Ethical Conduct in Human Research, 2007, and the requirements within this University relating to human research.

Approval will remain valid subject to the submission, and satisfactory assessment, of annual progress reports. If the approval of an External HREC has been "noted" the approval period is as determined by that HREC.

The full Committee will be asked to ratify this decision at its next scheduled meeting.
A formal *Certificate of Approval* will be available upon request. Your approval number is **H-2013-0148**.

**If the research requires the use of an Information Statement, ensure this number is inserted at the relevant point in the Complaints paragraph prior to distribution to potential participants** You may then proceed with the research.

**Conditions of Approval**

This approval has been granted subject to you complying with the requirements for *Monitoring of Progress, Reporting of Adverse Events,* and *Variations to the Approved Protocol* as detailed below.

**PLEASE NOTE:**
In the case where the HREC has "noted" the approval of an External HREC, progress reports and reports of adverse events are to be submitted to the External HREC only. In the case of Variations to the approved protocol, or a Renewal of approval, you will apply to the External HREC for approval in the first instance and then Register that approval with the University's HREC.

- **Monitoring of Progress**

Other than above, the University is obliged to monitor the progress of research projects involving human participants to ensure that they are conducted according to the protocol as approved by the HREC. A progress report is required on an annual basis. Continuation of your HREC approval for this project is conditional upon receipt, and satisfactory assessment, of annual progress reports. You will be advised when a report is due.

- **Reporting of Adverse Events**

  1. It is the responsibility of the person **first named on this Approval Advice** to report adverse events.

  2. Adverse events, however minor, must be recorded by the investigator as observed by the investigator or as volunteered by a participant in the research. Full details are to be documented, whether or not the investigator, or his/her deputies, consider the event to be related to the research substance or procedure.

  3. Serious or unforeseen adverse events that occur during the research or within six (6) months of completion of the research, must be reported by the person first named on the Approval Advice to the (HREC) by way of the Adverse Event Report form (via RIMS at [https://rims.newcastle.edu.au/login.asp](https://rims.newcastle.edu.au/login.asp)) within 72 hours of the occurrence of the event or the investigator receiving advice of the event.
4. Serious adverse events are defined as:
   o Causing death, life threatening or serious disability.
   o Causing or prolonging hospitalisation.
   o Overdoses, cancers, congenital abnormalities, tissue damage, whether or not they are judged to be caused by the investigational agent or procedure.
   o Causing psycho-social and/or financial harm. This covers everything from perceived invasion of privacy, breach of confidentiality, or the diminution of social reputation, to the creation of psychological fears and trauma.
   o Any other event which might affect the continued ethical acceptability of the project.

5. Reports of adverse events must include:
   o Participant's study identification number;
   o date of birth;
   o date of entry into the study;
   o treatment arm (if applicable);
   o date of event;
   o details of event;
   o the investigator's opinion as to whether the event is related to the research procedures; and
   o action taken in response to the event.

6. Adverse events which do not fall within the definition of serious or unexpected, including those reported from other sites involved in the research, are to be reported in detail at the time of the annual progress report to the HREC.

- Variations to approved protocol

If you wish to change, or deviate from, the approved protocol, you will need to submit an Application for Variation to Approved Human Research (via RIMS at https://rims.newcastle.edu.au/login.asp). Variations may include, but are not limited to, changes or additions to investigators, study design, study population, number of participants, methods of recruitment, or participant information/consent documentation. Variations must be approved by the (HREC) before they are implemented except when Registering an approval of a variation from an external HREC which has been designated the lead HREC, in which case you may proceed as soon as you receive an acknowledgement of your Registration.

Linkage of ethics approval to a new Grant
HREC approvals cannot be assigned to a new grant or award (ie those that were not identified on the application for ethics approval) without confirmation of the approval from the Human Research Ethics Officer on behalf of the HREC.

Best wishes for a successful project.

Professor Allyson Holbrook

Chair, Human Research Ethics Committee

For communications and enquiries:

Human Research Ethics Administration

Research Services
Research Integrity Unit
The Chancellery
The University of Newcastle
Callaghan NSW 2308
T +61 2 492 18999
F +61 2 492 17164
Human-Ethics@newcastle.edu.au
Appendix C - Email Invitation Letter (English)

Newcastle Graduate School of Business  
Faculty of Business and Law  
Level 3, University House, Callaghan 2300  
University of Newcastle, Australia

For further information:

Student Researcher:  
Chesney Wong  
Tel.: (852) 8100 4874 / (86) 13713654282  
email: c3154081@uon.edu.au

Research Supervisor:  
Dr Canon Tong  
Tel.: (852) 2722 6677 / (86) 13530988800  
Email: canon.tong@newcastle.edu.au

SURVEY INVITATION

The moderating effects of employment opportunity on the impact of organizational commitment and job satisfaction on intention to quit: the perception of IT outsourcing professionals in China

Dear Friends,

I am a doctoral candidate of the Newcastle Graduate School of Business at the University of Newcastle, Australia. I am conducting a research titled "The moderating effects of employment opportunity on the impact of organizational commitment and job satisfaction on intention to quit: the perception of IT outsourcing professionals in China". I would like to invite you to participate an on-line survey questionnaire and I believe the results will help provide more insights for decision-makers of IT outsourcing firms in China to enhance their retention strategies.
Your participation in this study is voluntary. You may choose not to response to any or part of the study. This is an anonymous survey that will take around 10 minutes of your time. Further information about the research, and a link to the survey is provided in the attached Participant Information Statement. I can assure you that the information collected as part of this study will be used for academic purposes only and treated confidentially. All data will be aggregated and reported properly so no information that could possibly lead to identification of any firms or individual. The survey data stored on the online server (SurveyMonkey) will be deleted once it has been securely downloaded to the researcher's computer. Related computer files will be password protected. All collected data remains confidential and will be kept securely for five years, and then will be destroyed completely afterwards.

Thanks in advance for your support to my research. As a token of appreciation, I am happy to share with you the results of my study after the survey completed. Please kindly drop me an email request and I will send you a copy of the summary after the approval of my dissertation.

Regards,

Chesney Wong
Doctoral Candidate
Newcastle Graduate School of Business
University of Newcastle, Australia

Complaints about this research

This project has been approved by the University’s Human Research Ethics Committee, Approval No. H-2013-0148. Should you have concerns about your rights as a participant in this research, or you have a complaint about the manner in which the research is conducted, it may be given to the researcher, or, if an independent person is preferred, to the Human Research Ethics Officer, Research Office, The Chancellery, The University of Newcastle, University Drive, Callaghan NSW 2308, Australia, Telephone: (02) 49216333, email: Human-Ethics@newcastle.edu.au.
Appendix D - Email Invitation Letter (Chinese)

学院名称：Newcastle Graduate School of Business
商业法学系：Faculty of Business and Law
位置于澳洲：Level 3, University House,
Callaghan 2300
University of Newcastle, Australia

Newcastle Graduate School of Business
纽卡素商业法学院

For further information:

Student Researcher (研究生):
Chesney Wong (王德强先生)
电话: (852) 8100 4874 / (86) 13713654282
电邮: c3154081@uon.edu.au

Research Supervisor (研究主管兼导师):
Dr Canon Tong (唐博士)
电话: (852) 2722 6677 / (86) 13530988800
电邮: canon.tong@newcastle.edu.au
调查邀请

就业机会的调节作用于组织承诺与工作满意程度对员工的离职意向影响：中国软件外包专业人士的看法

亲爱的朋友们：

我是澳洲纽卡斯索大学的工商管理博士研究生。我正在进行一项名为“就业机会的调节作用于组织承诺与工作满意程度对员工的离职意向影响：中国软件外包专业人士的看法”。我想邀请您参与一项网上问卷调查，我相信结果将有助于在中国的IT外包公司决策者提供更多有关保留政策的考虑。

参加这项研究是自愿的，您可以选择不回应任何或部分的研究。这是一项需要大约10分钟的匿名调查，附加的参与者信息声明内会提供进一步的研究信息及调查问卷的超链接。我可以保证所收集的的资料将只用于学术目的和保密处理，所有数据将妥善处理，不可能辨别出任何公司或个人。当研究者安全地把调查资料从在线服务器(SurveyMonkey)下载到研究者的计算机，研究者便会删除在线服务器(SurveyMonkey)的相关调查资料，相关的电脑文件将被密码保护，所有收集到的数据的将妥善地保存五年，限期后将不留任何记录。

最后，感谢您对此项研究的支持。作为答谢，我很乐意与您在调查完成后分享我
的研究结果。如有需要，请电邮给我，我会送你一份我的论文摘要副本。

多谢您阅读此邀请函。

此致

澳洲纽卡素大学纽卡素商业法学院

博士研究生王德强

研究项目的投诉

本研究项目已获得大学的人类伦理道德研究委员会的批准，审批编号为H-2013-0148。如果您觉得作为一个参加者的权利受到侵害，或投诉研究指导过程当中表现，可以向研究人员申诉，或向人类伦理道德研究委员会主管申诉。

(University of Newcastle)澳洲纽卡素大学的联络负责人/办公室和地址：Human Research Ethics Officer, Research Office, The Chancellery, The University of Newcastle, University Drive, Callaghan NSW 2308, Australia 电话: (02) 49216333, 电邮: Human-Ethics@newcastle.edu.au.
Appendix E - Information Statement (English)

Information Statement Questionnaire

Newcastle Business School
Faculty of Business and Law
Level 3, University House
University of Newcastle
Callaghan 2300
University of Newcastle

For further information:
Mr. Chesney Wong Tak Keung
+852-81004874
+86-13713654282
c3154081@uon.edu.au

Dr. Canon Tong,
+852-27226677
+86-13530988800
canon.tong@newcastle.edu.au

Participant Information Statement for the Research Project:
The moderating effects of employment opportunity on the impact of organizational
commitment and job satisfaction on intention to quit: the perception of IT
outsourcing professionals in China

You are invited to participate in the research project identified above which is being
conducted by Dr. Canon Tong, Newcastle Business School and Chesney Wong, a
candidate of the Doctor of Business Administration degree from the Newcastle Business
School, University of Newcastle.

The research is part of Chesney Wong’s studies of Doctor of Business Administration at
the University of Newcastle, supervised by Dr. Canon Tong.

Why is the research being done?
As China threatens the Indian monopoly on IT outsourcing, so too is the Chinese
success in this area threatened by high employee turnover. This study is to examine
turnover factors of IT Outsourcing Firms in China, hence to provide more insights for decision-makers of IT outsourcing firms in China to enhance their retention strategies.

Who can participate in the research?
Your contact is randomly selected from IT Outsourcing related public websites and databases in China to participate this on-line survey. If you are aged 18 or above and are working in IT outsourcing firms in China, you are eligible to participate.

What choice do you have?
Participation in this research is entirely voluntary. Although we have been invited you to participate in this research, the survey is completely anonymous so that neither responses nor individuals can be identified. There can be no record of you or whether or not you have participated. If you do decide to participate, you may withdraw from the project at any time prior to the electronic submission of your survey. However, you cannot withdraw once you have submitted your survey.

What you are being asked to do?
If you agree to participate, you are required to complete an online questionnaire found at the following address: https://www.surveymonkey.com/s/8M6PSQL

How much time will it take?
The questionnaire will take approximately ten minutes to complete.

What are the risks and benefits of participating?
There are neither risk nor direct benefit for any individual participant. The research findings will be submitted to major China software parks which can be further distributed to their related IT firms in China. A summary of the research findings will also be sent to interested participants upon receipt of their email requests when this research project has been completed. The research findings will allow policy-makers in China’s IT outsourcing industry have a better understanding on the turnover factors and develop more effective retention strategies in retaining IT talents in China.
How will your privacy be protected?

As the data collected in this research is anonymous, no individual respondent or survey is able to be identified. Access to the survey will be via the hotlink in this Information Statement and thus no link can be established between your email address and your completed survey. Information from individual questionnaires will be aggregated for analysis. The data will be stored in password-protected computers accessible only by the researcher and supervisors. All data will be disposed after five years of the research.

How will the information collected be used?

The results from this research will be used in the researcher's doctoral dissertation. Additionally, results may be reported in scholarly journal articles and conference paper. Once the report is approved by the Faculty Board, copies will be distributed to all those participants upon requests. It is anticipated that the report will be available by March, 2014.

What do you need to do to participate?

Please read this Participant Information Statement and be sure you understand its contents before you commence the questionnaire. If there is anything you do not understand, or you have questions, contact the researcher. Once you have read and understood the statement and wish to proceed, please click on the link to https://www.surveymonkey.com/s/8M6PSQL and complete the questionnaire.

Further information

If you would like further information please contact me, Chesney Wong Tak Keung. My contact details are listed on the letterhead. Thank you for considering this invitation.

Mr. Chesney Wong Tak Keung, Student Researcher
24 March, 2013

Complaints about this research

This project has been approved by the University’s Human Research Ethics Committee, Approval No. H-2013-0148. Should you have concerns about your rights as a participant in this research, or you have a complaint about the manner in which the research is conducted, it may be given to the researcher, or, if an independent person is preferred, to the Human Research Ethics Officer, Research Office, The Chancellery, The University of Newcastle, University Drive, Callaghan NSW 2308, Australia, telephone: (02) 49216333, email: Human-Ethics@newcastle.edu.au.
Appendix F - Information Statement (Chinese)

Information Statement Questionnaire

学院名称：Newcastle Graduate School of Business

商业法学系：Faculty of Business and Law

位置于澳洲：Level 3, University House, Callaghan 2300, University of Newcastle, Australia

Newcastle Graduate School of Business

更多信息：

Student Researcher (研究生):

Chesney Wong (王德强先生)

电话: (852) 8100 4874 / (86) 13713654282

电邮: c3154081@uon.edu.au

Research Supervisor (研究主管兼导师):

Dr Canon Tong (唐博士)

电话: (852) 2722 6677 / (86) 13530988800

电邮: canon.tong@newcastle.edu.au
研究项目的研究者信息声明：

就业机会的调节作用与组织承诺与工作满意度对员工的离职意向影响：中国软件外包专业人士的看法

亲爱的参与者：

诚挚邀请您参加以下的问卷调查，此问卷调查是王德强先生 (Mr. Chesney Wong) 在澳洲纽卡素商业法学院 (Newcastle Graduate School of Business) 之工商管理博士学位研究论文的部份内容，并由唐博士 (Dr. Canon Tong) 作监督及指导。

为什么要这么做研究？

由于中国的软件外包正威胁着印度在软件外包的垄断市场，但同时，中国的软件外包却受到雇员高离职率所影响。所以，本研究论文将深入探讨于中国软件外包公司的雇员离职原因，希望此研究结果能帮助软件外包产业对雇员保留制定适当的策略。

谁能参与研究？

您收到这份邀请函是因为我们在中国的软件外包相关网站及数据库上随机抽取到阁下的数据。若您年龄满十八岁或现在并从事中国软件外包从业员，那么您符合参加这项研究。

您有什么选择？
您参加这项研究是完全自愿性的。虽然你被邀请参加这次问卷调查，但你所做的问卷结果将不记名，对个人身份或机构数据采取保密处理。你参加与否亦不会有任何记录。如果您决定参加，请完成调查问卷所有问题并将资料发送到我们网站的综合数据库，在您未提交数据之前，您可以决定撤销参加研究计划而无需要给予任何理由。但提交问卷后，将不能撤销参加研究计划。

如何配合此研究？

如果您同意参加，请进入此网站 https://www.surveymonkey.com/s/8M6PSQL 完成调查问卷。

要用多少时间完成问卷？

完成问卷约需十分钟。

参与研究的风险和利益是什么？

参加这项研究并没有风险也没有利益。为了支持中国 IT 外包行业，从本次调查产出的研究结果将提交到中国的主要软件园，并可进一步分发到其他 IT 外包公司。受访者可以通过电子邮件请求研究员于完成博士论文后发放有关的研究结果。研究结果将让决策者对中国 IT 外包人才有更深的理解及计划更有效的人才保留策略。

将如何保障您个人资料呢？

此为匿名问卷。并在互联网上执行，您所提供的资料将会被保密处理，亦不会与您的电邮地址相连。您所填之问卷调查只作研究分析之用。同时，完成后的问卷
将被自动传递到综合数据库存。只有研究者王先生和唐博士本人才能从数据库中查看相关数据。研究后的 5 年，所有数据将被删除。

资料收集将有什么用途？
此项研究结果将会用于王先生提交博士学位论文其中一部份或发布在有关学术期刊和研讨会论文。如有参加者要求报告之副本，需于学系允许此报告后派发，而报告将拟定于 2014 年三月发报。

怎样才能参加呢？
请于同意参加此研究项目之前细阅此邀请函，并清楚明白其内容。如果有不明白的地方，或有任何疑问，请与研究员联络。当你细阅及清楚明白后欲想参加此研究项目，请进入此网站 https://www.surveymonkey.com/s/8M6PSQL 及完成问卷。

其它数据
如果您想获得更多有关本研究项目的数据，请联络王先生(Mr. Chesney Wong)或唐博士(Dr. Canon Tong)。

多谢您阅读此邀请函。

此致

澳洲纽卡素大学澳洲纽卡素商业法学院
博士研究生王德强
研究项目的投诉

本研究项目已获得大学的人类伦理道德研究委员会的批准，审批编号为H-2013-0148。如果您觉得作为一个参加者的权利受到侵害，或投诉研究指导过程当中表现，可以向研究人员申诉，或向人类伦理道德研究委员会主管申诉。

(University of Newcastle)澳洲纽卡索大学的联络负责人/办公室和地址：Human Research Ethics Officer, Research Office, The Chancellery, The University of Newcastle, University Drive, Callaghan NSW 2308, Australia 电话 (02) 49216333, 电邮 Human-Ethics@newcastle.edu.au
Appendix G - Online Questionnaire

Newcastle Business School
Faculty of Business and Law
Level 3, University House
University of Newcastle
Callaghan 2300
University of Newcastle

For further information:
Mr. Chesney Wong Tak Keung
+852-81004874
+86-13713654282
c3154081@uon.edu.au

Dr. Canon Tong,
+852-27226677
+86-13530988800
canon.tong@newcastle.edu.au

Survey Questionnaire

The moderating effects of employment opportunity on the impact of organizational commitment and job satisfaction on intention to quit: the perception of IT outsourcing professionals in China

就业机会的调节作用于组织承诺与工作满意程度对员工的离职意向影响: 中国软件外包专业人士的看法。

Please select an answer which is most applicable to you in each of the following questions. Please select the most appropriate choice that describes how you feel. There are no right or wrong answers. Your honest opinion is required on each of the statements.
请在下列问题选出最适当的答案。答案没有对与错,只需要真诚选出最能代表你的意见的答案。

Section A) Job Satisfaction

甲部分：工作满意度

Think of the work you do at present. How well does each of the following words or phrases describe your work?

下列词语表达个人对工作的满意度，请于下列每组形容词，选出最能代表你的意见的词语。

<table>
<thead>
<tr>
<th></th>
<th>Yes (是)</th>
<th>No (否)</th>
<th>Not Sure (不确认)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pleasant (愉快)</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>2. Bad (不舒服)</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>3. Ideal (理想)</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>4. Waste of time (浪费时间)</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>5. Good (好)</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>6. Undesirable (不合意)</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>7. Worthwhile (值得)</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>
8. Worst than most (比大多数的差)  O O O O
9. Acceptable (可接受)  O O O O
10. Superior (优越)  O O O O
11. Better than most (比大多数的好)  O O O O
12. Disagreeable (不愉快)  O O O O
13. Makes me content (让我满足)  O O O O
14. Inadequate (不足)  O O O O
15. Excellent (优秀)  O O O O
16. Rotten (烂)  O O O O
17. Enjoyable (愉快的)  O O O O
18. Poor (差)  O O O O

Section B) Organizational Commitment
乙部分：组织承诺
<table>
<thead>
<tr>
<th></th>
<th>I am extremely glad that I chose this company to work for over others I was considering at the time I joined.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>我十分庆幸我选择在这间公司工作</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>I talk up this company to my friends as a great company to work for.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>我特意告诉朋友还是一间很好的公司</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>I am proud to tell others that I am part of this company.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.</td>
<td>告诉别人我是这间公司的一份子，使我感到荣幸</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>I work for the company because it provides me with many on-the-job training opportunities.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.</td>
<td>我在这间公司工作，因为这里提供很多在职培训机会</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>I work for the company because it is a good chance to realize my goals.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
<td>我在这间公司工作，因为这里提供一个良好机会让我实现目标</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>I work for the company because I can make full use of what I have learned here.</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.</td>
<td>我在这间公司工作，因为我可以学以致</td>
</tr>
</tbody>
</table>
7. I work for the company because of the challenging job.

我在这间公司工作，因为我的工作充满挑战性

8. I work for the company because there are many opportunities for promotion.

我在这间公司工作，因为这里提供很多晋升机会

9. I work for the company because I cannot find a better one.

我留在这间公司工作，因为我未能找到一份更好的工作

10. I cannot quit the job arbitrarily because I have to support my family.

我不可能随意辞去工作，因为我是家中经济支柱

11. I work for the company because I do not want to lose my fringe benefits.

我留在这间公司工作，因为我不想失去附带福利

12. I consider it my obligation to work for the same company all the while.

我认为由始至终应该只为同一间公司工作
<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>13.</td>
<td>I would like lifetime employment if possible.</td>
<td>若可能的话，我会在此工作至退休。</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>I would do any job as long as I work here.</td>
<td>只要我仍在公司工作，我乐意担任任何类型的工作。</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>I am willing to put in a great deal of effort beyond that normally expected in order to help this company to be successful.</td>
<td>我愿意付出最大的努力，超越公司对我方的要求，尽力协助公司成功发展。</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>I really care about the fate of this company.</td>
<td>我关心这间公司的前景。</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>This company really inspires me to do my job to the very best of my abilities.</td>
<td>这间公司让我尽展所长。</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>One should work with utmost efforts for the company.</td>
<td>员工应尽心尽力为公司。</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Section C) Employment Opportunity**

丙部分: 就业机会
Section D) Intention to Quit

丁部分：辞职倾向

D1. Thoughts of Quitting

丁一：辞职想法

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

1. I often think about taking a different job.

我常有转工的想法

2. I have frequent thoughts of quitting this job.

我有频繁辞职的念头
### D2. Intention to Leave the Job

丁二：离职倾向

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I intend to remain on this job.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>我打算继续留在现在的工作</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I am actively looking for a new job.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>我正在积极地找工作</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I will quit my job soon.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>我将在短时间内辞去现在的工作</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Section E) Demographic Information

茂部分：人口统计资料

Please select one of the following that best describes your current status.

请在下列选择适合描述你目前状况。（只能选一项）

1. My Position is:
   我目前的职位是：
   
   O Manager/Administrative (经理/行政)
O Service Delivery/Developer/Tester

(技工/质检)

O Others (其他)

4. How many employees in your company?

我们公司的员工数目:

O 30 or less (30 人或者更少)
O 31 to 100 (31 至 100 人)
O 101 to 300 (101 至 300 人)
O 301 to 1000 (301 至 1000 人)
O Over 1000 (超过 1000 人)

3. Years of working experience in the IT Outsourcing field?

我在 IT Outsourcing 行业里工作经验有:

O 2 or less (2 年或者更少)
O 2 to 5 (2 至 5 年)
O 6 to 10 (6 至 10 年)
O 11 to 20 (11 至 20 年)
O More than 20 (超过 20 年)

4. Years working in present company?

我在现在的公司工作了:

O 2 or less (2 年或者更少)
O 2 to 5 (2 至 5 年)
5. What is your gender?

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>(女性)</td>
</tr>
<tr>
<td>Male</td>
<td>(男性)</td>
</tr>
</tbody>
</table>

6. What is your age?

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-24</td>
<td>(18-24 岁)</td>
</tr>
<tr>
<td>25-34</td>
<td>(25-34 岁)</td>
</tr>
<tr>
<td>35-44</td>
<td>(35-44 岁)</td>
</tr>
<tr>
<td>45-54</td>
<td>(45-54 岁)</td>
</tr>
<tr>
<td>55 and above</td>
<td>(55 或以上)</td>
</tr>
</tbody>
</table>

7. What is your marital status?

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>(单身)</td>
</tr>
<tr>
<td>Married</td>
<td>(已婚)</td>
</tr>
<tr>
<td>Others</td>
<td>(其他)</td>
</tr>
</tbody>
</table>

8. What is your highest level of education?

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
</table>

O Secondary/High School (中学/高中毕业)

O Associate Degree/Higher Diploma (副学士/高级文凭)

O Bachelor or Prof. Degree (学士学位/专业学位)

O Master Degree (硕士学位)

O Doctorate (博士学位)

9. What is your monthly income (RMB)?

我的月薪:

O Less than ¥6,000 (少于¥6,000)

O ¥6000 to ¥12,000 (¥6000 至¥12,000)

O ¥12,001 to ¥20,000 (¥12,001 至¥20,000)

O ¥20,001 to ¥40,000 (¥20,001 至¥40,000)

O More than ¥40,001 (超过 ¥40,000)

<<End of Questionnaire>>

<<问卷完毕>>
Appendix H - Translation Certification

Circular No.  DBAS05 - Ethics Application  Date  16 April 2013

Translation Verification

This serves to confirm that the attached Chinese copies of Survey Invitation Letter, Questionnaire and Participant Information Statement submitted by Mr. Wong Tak Keung (student no.: 3164081), is a true and accurate translation of the English version.

Should you have any queries, please feel free to contact Mickey Lau of the local Newcastle DBA Secretariat of the Hong Kong Management Association on (852) 27748513 or by email at mickeylau@hkma.org.hk.