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The impact of cross-cultural psychological capital and social support on expatriate effectiveness: A study of Chinese expatriates

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A thesis for the degree of Doctor of Philosophy

Department of Management and International Business
The University of Auckland
New Zealand 2014
Abstract

This thesis employs the conservation of resources (COR) theory to examine the impact of expatriates’ resources, cross-cultural psychological capital (PsyCap) and social support, with respect to expatriate adjustment and job performance. Using a sample comprising 212 Chinese expatriates, currently assigned to 56 different countries, I conclude that expatriates’ cross-cultural PsyCap is positively related to expatriate adjustment and job performance. Also, expatriates’ socio-cultural and psychological adjustment partially mediates the relationship between cross-cultural PsyCap and job performance. In addition, this research indicates that two types of social support, socio-emotional and instrumental support, are associated with cross-cultural PsyCap, expatriate adjustment and job performance. However, they function in opposite ways in relation to adjustment and job performance. Whereas instrumental support has a positive relationship with socio-cultural and psychological adjustment, socio-emotional support has an unexpectedly negative relationship with respect to psychological adjustment and job performance. Moreover, expatriates’ cross-cultural PsyCap mediates the relationship between social support and expatriate adjustment. In particular, cross-cultural PsyCap fully mediates the relationship between socio-emotional support and socio-cultural and psychological adjustment; cross-cultural PsyCap partially mediates the relationship between instrumental support and socio-cultural and psychological adjustment. An in depth discussion of findings, strengths, limitations and scholarly and practical implications are presented.
Acknowledgements

The first acknowledgement and gratitude are to my brilliant supervisors, Professor Snejina Michailova and Dr Zaidah Mustaffa. I would like to express my utmost thankfulness to them for their wisdom and professionalism, for instilling psychological capital and research competencies in me, and for their patience. Throughout these four years, Professor Snejina Michailova has always been whole-heartedly supportive, offering strict academic training and comprehensive career development opportunities. Dr Zaidah Mustaffa has also patiently and professionally directed my thesis writing whenever I needed her advice. With their terrific support, I have been able to accomplish my PhD study. I am so appreciative, proud and lucky to have had their guidance and supervision. It has been a very memorable experience which I am very grateful for. Many thanks go to my wonderful supervisors.

Additionally, I would very much like to thank all of my faculty instructors and PhD colleagues throughout the doctoral program for their continuous guidance and support especially my previous co-supervisor, Dr. Gloria Ge and our PhD administrative manager, Ms. Susan Sum. I thank my mother, Ms. Suying Zhang, and father, Mr. Taichang Liu, for their understanding my decision to pursue my PhD journey in New Zealand. I acknowledge that their great love and encouragement has enabled me to forge ahead. My father gave me a Chinese name, “Gaosheng”, expecting that I would be a person who would advance to higher and higher positions in life. I am driven by the expectation associated with my name. I give thanks to my sister, Ms. Hongyu Liu, for she helped me by looking after our parents whilst I was studying in Auckland.

I appreciate my schoolmates at Tsinghua University for supporting my research. Likewise, I appreciate my wife, Ms. Xiufeng Zha, for her full support to my study in New Zealand. Her kindness and patience has also provided me with confidence, encouragement, commitment and fortitude. I would like to express my heartfelt gratitude and thanks to the Buddha and Laozi for their philosophical teachings and meditation techniques which inspire me with wisdom, self-discipline, mindfulness and inner peace. Finally, I acknowledge and express my gratitude to all of those who made my doctoral journey possible.
### Abbreviations index

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>AE</td>
<td>Assigned expatriates</td>
</tr>
<tr>
<td>AVE</td>
<td>Average variance extracted</td>
</tr>
<tr>
<td>CB-SEM</td>
<td>Covariance Based Structural Equation Modelling</td>
</tr>
<tr>
<td>CI</td>
<td>Confidence intervals</td>
</tr>
<tr>
<td>CMV</td>
<td>Common method variance</td>
</tr>
<tr>
<td>COR</td>
<td>Conservation of resources</td>
</tr>
<tr>
<td>HR</td>
<td>Human resource</td>
</tr>
<tr>
<td>HRM</td>
<td>Human resource management</td>
</tr>
<tr>
<td>IHRM</td>
<td>International human resource management</td>
</tr>
<tr>
<td>KSA</td>
<td>Knowledge, Skills, and Abilities</td>
</tr>
<tr>
<td>KSAO</td>
<td>Knowledge, Skills, Abilities and Other characteristics</td>
</tr>
<tr>
<td>MNC</td>
<td>Multinational corporation</td>
</tr>
<tr>
<td>PLS</td>
<td>Partial Least Squares</td>
</tr>
<tr>
<td>OFDI</td>
<td>Outward foreign direct investment</td>
</tr>
<tr>
<td>PLS-SEM</td>
<td>Partial Least Squares Structural Equation Modelling</td>
</tr>
<tr>
<td>POS</td>
<td>Perceived organizational support</td>
</tr>
<tr>
<td>PsyCap</td>
<td>Psychological capital</td>
</tr>
<tr>
<td>RQ</td>
<td>Research question</td>
</tr>
<tr>
<td>SDB</td>
<td>Social desirability bias</td>
</tr>
<tr>
<td>SIE</td>
<td>Self-initiated expatriates</td>
</tr>
<tr>
<td>SOE</td>
<td>State-owned enterprise</td>
</tr>
<tr>
<td>SPSS</td>
<td>Statistical Package for the Social Sciences</td>
</tr>
<tr>
<td>SEM</td>
<td>Structural Equation Modelling</td>
</tr>
<tr>
<td>VIF</td>
<td>Variance inflation factor</td>
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Chapter 1: Introduction

This chapter begins by introducing the research background and presenting the theoretical and practical problems motivating me to join the academic conversation on expatriate adjustment and Chinese expatriates. I also explain the research purpose and potential significance of the study. Finally, the structure of the thesis is presented.

1.1. Background

Nowadays, an increasing number of companies seek to internationalize their business to optimize resources and achieve higher profits (Kim & Tung, 2013). Among these internationalized companies, multinational corporations (MNCs) play an important role in the global economy. The global operation of MNCs has been increasingly dependent on the effectiveness of expatriate assignments (Palthe, 2008). Accordingly, economic globalization and the rapid development of MNCs have given rise to an increase in expatriate staffing (United Nations, 2011). That is the reason 52 percent of MNCs expect to send more international assignees in the future, and why in 2012, despite global economic recession since 2007, 54 percent of MNCs reported an increase in the number of expatriates (Brookfield Global Relocation Services, 2013a).

MNCs increase overseas investment in developing locations to take advantage of new market opportunities and their manufacturing bases (Brookfield Global Relocation Services, 2013b). At the same time, MNCs from developing markets such as Brazil, the Russian Federation, India, China and South Africa (BRICS) have also in recent decades actively participated in overseas expansion. Outward foreign direct investment (OFDI) from the developing BRICS countries has risen considerably faster than those from developed countries, rising from $7 billion in 2000 to $145 billion in 2012; OFDI from developed countries fell by more than $274 billion in 2012 (United Nations, 2013). The increasing OFDI and the internationalization of BRICS’s MNCs require a growing number of expatriate professionals relocate to work in overseas markets. This is because expatriate staffing significantly affects both the managerial effectiveness of the parent firm and the performance of the foreign subsidiary (Fang, Jiang, Makino, & Beamish, 2010).
Among the developing countries China has been the most active in the internationalizing economy (Child & Rodrigues, 2005). China, particularly after joining the World Trade Organization has become increasingly integrated into the world economy. The Chinese government and Chinese MNCs have developed an international vision. Following the increase of OFDI from China, Chinese MNCs, as the main agent of outward investment, have steadily increased their international investment and global staffing activities. Contemporarily, a group of world-recognized Chinese MNCs are emerging as globally competitive players in a wide range of industries. For instance, companies such as COSCO, China Minmetals, CNOOC, and SINOCHEN are the pioneers of Chinese MNCs; Haier, TCL and Glanx are global producers of consumer electronics; Lenovo is a leading personal computer manufacturer throughout the world after the acquisition of IBM’s PC business; Huawei and ZTE are major competitors with those in developed countries in the global telecommunication field (Child & Rodrigues, 2005; UNCTAD, 2006). Consequently, international business scholars have paid increasing attention to China’s booming OFDI and to Chinese MNCs. An expanding body of studies has shed light on the motivation for China’s OFDI (Deng, 2004, 2007), OFDI location choice (Kang & Jiang, 2012), Chinese MNCs’ entry mode strategies (Cui & Jiang, 2009), and the international human resource management (IHRM) strategies of Chinese MNCs (Shen & Darby, 2006).

Compared to MNCs from developed countries, Chinese MNCs rely heavily on expatriate staffing due to underdeveloped IHRM systems and limited knowledge of global markets (Child & Rodrigues, 2005; Shen & Edwards, 2004). The process of internationalization of Chinese MNCs has been accompanied by an increase in the number of expatriates. The growth in the Chinese expatriate population became evident, especially after the world economic recession in 2007, at the time Chinese firms accelerated their steps into the international market by increasing their investment abroad. For instance, by the end of 2007, 10,000 Chinese enterprises abroad employed 658,000 employees; of these 363,000 were Chinese expatriate staff and 295,000 were foreign employees (Ministry of Commerce, 2008). Whereas by the end of 2012, mainland Chinese firms had established 22,000 companies in over 179 countries or regions and employed 1,493,000 employees, 784,000 of these were expatriate staffs and 709,000 were local employees (Ministry of Commerce, 2013). Consequently, from 2007 to 2012 the Chinese expatriate population has doubled.

The increasing expatriate population has stimulated a growing interest in expatriate research (Bonache, Brewster, Suutari, & De Saá, 2010; Harvey & Moeller, 2009; Stahl, Miller, &
Expatriates are individuals who change their dominant place of residence by moving to another country and execute dependent work abroad (Andresen, Bergdolt, & Margenfeld, 2013). In the field of international business, the term “expatriates” generally refers to assigned corporate expatriates who are home country nationals sent overseas by a parent company (McEvoy & Buller, 2013).

When MNCs implement their internationalization strategies, they rely heavily on expatriates to accomplish their international goals and control overseas operations. However, the process of cross-boundary staffing is accompanied by challenges, not the least of which is the effective adjustment and performance of the expatriates in a foreign setting. Because these expatriates have to work and live outside their home countries and confront various difficulties and uncertainties, the existing body of expatriate literature has paid particular attention to expatriate assignment effectiveness or expatriate failure (expatriates’ early return from international assignments). Expatriate failure refers to the inability of the expatriates to perform according to the expectations of the organization (Harzing & Christensen, 2004), which includes a range of under-performance problems during the assignment such as low performance and maladjustment. Accordingly, expatriate failure, together with expatriate adjustment and job performance, is a measure of expatriate assignment effectiveness.

The considerably high rate of expatriate failure, for example, six percent in 2012 (Brookfield Global Relocation Services, 2012) motivated researchers to identify the reasons for this situation. They found that the reasons for expatriate failure varied from expatriates’ motivation for working abroad, personal reasons, technical and management competency to family-related issues (Shen & Edwards, 2004; Tung, 1982). Moreover, expatriates’ inability to adjust to the host country is a widely-discussed common reason for an unsuccessful expatriate assignment (Harvey & Novicevic, 2001). Specifically, in existing studies of expatriates from developed countries (America, European countries and Japan), inability to adjust to their international assignment has been found to be the strongest cause for job ineffectiveness (Selmer, 2004; Tung, 1982). In the case of expatriates from developing countries such as Chinese expatriates and Brazilian expatriates, researchers have also found that personal reasons and international adaptability are the major challenges for expatriates effectiveness (Shen & Edwards, 2004; Tanure, Barcellos, & Fleury, 2009).

Good adjustment is important because maladjustment is costly to both parent companies and expatriates. The actual costs of an unsatisfactory expatriate assignment are substantial.
(Crocitto & Ashamalla, 2000), including both direct monetary cost and indirect loss. The direct financial expense for a MNC due to an ineffective expatriate manager has been evaluated at between $200,000 and $500,000 (USD) per candidate (Harvey & Moeller, 2009). In addition, the indirect cost of an unsuccessful international assignment includes the loss to the parent company’s performance and reputation (Harzing, 1995), and also the negative impact on the expatriate’s career (Forster, 1997; Mezias & Scandura, 2005) and psychological state (Tung, 1987). More specifically, under-performance or set-backs during an international assignment may harm the self-efficacy and self-esteem of expatriates and their career choice after repatriation. As such, expatriate adjustment and job performance have become the main focus of expatriate research.

Expatriates from Chinese MNCs experience a variety of adjustment problems such as language ability, social interaction and social support (Wang, 2006; Xu & Du-Babcock, 2012). However, the expatriates of Chinese MNCs and their behaviours, especially adjustment and performance have not received corresponding attention, when compared with the dramatic growth of China’s OFDI and the rapid internationalization of Chinese firms. Although a few pioneering studies have been conducted on the adjustment and job performance of Chinese expatriates (Selmer, Ebrahimi, & Mingtao, 2000a; Shen & Jiang, 2011), the majority of well-researched themes in the context of expatriates from developed countries have not been applied in the context of Chinese expatriation. Therefore, I have focused on the less well researched Chinese context and the factors impacting the assignment effectiveness, for example, adjustment and performance, of Chinese expatriates.

1.2. Statement of the research problems

1.2.1. Theoretical problems in expatriate literature

Whilst explaining the mechanisms of expatriate adjustment, the existing expatriate literature has been overwhelmingly occupied by studies adopting a stress-based perspective (Black, 1990; Stahl & Caligiuri, 2005; Takeuchi, Lepak, Marinova, & Yun, 2007; Takeuchi, Marinova, & Wang, 2005) and a stress-related learning-based perspective (Black & Mendenhall, 1990; Mezias & Scandura, 2005; Yamazaki & Kayes, 2004). Scholars have conceptualized adjustment as a stress-related concept and employed stressor-strain logic to understand the impact of the antecedents on adjustment (Harrison, Shaffer, & Bhaskar-Shrinivas, 2004). To cope with various stressors, expatriates have been advised to utilize one
or another stress buffer. The popular prescriptions for preventing expatriate maladjustment are selecting candidates with Big Five personality traits (openness, conscientiousness, extraversion, agreeableness, and neuroticism/emotional stability) (Caligiuri, 2000a), training expatriates at pre-departure stages (Waxin & Panaccio, 2005), and providing organizational and social support for expatriates (Black, 1990; Kawai & Strange, 2014; Kraimer, Wayne, & Jaworski, 2001). Although these prescriptions could provide buffers for expatriates to manage adjustment stress, dependency on a stress-based approach runs the risk of engendering a negativity bias within the scholarly conversation on expatriate adjustment.

Because international assignment can be both challenging and fascinating (Tung, 1981), it is of equal importance to ascertain both the factors that contribute to the achievement of good adjustment and the stressors that can lead to the stress of poor adjustment (Harrison et al., 2004). To enrich the current academic conversation on expatriate adjustment, it is also necessary to understand expatriate adjustment from the perspective of positive psychology (Park & Abbott, 2011) and to revisit expatriate adjustment and its antecedents from a less-used resource-based perspective. By employing resource-based theory, such as, conservation of resources theory, and positive psychology constructs to explain adjustment and performance, research can avoid the limitations of the over-used stress-based approach.

Even though the three-dimensional adjustment model offered by Black (1988) is widely accepted, it mainly addresses the socio-cultural aspects of expatriate adjustment, including work, general culture and interaction facets. The model omits the psychological facets of adjustment and job performance. In this thesis I extend the expatriate adjustment theoretical model by explicitly incorporating two main types of expatriate adjustment including three-dimensional socio-cultural adjustment and one-dimensional psychological adjustment. Whilst measuring expatriate assignment effectiveness, scholars generally consider certain main criteria such as expatriate adjustment, job performance and other variables, for example, early return intention. The existing literature further identifies that expatriate adjustment influences other expatriate effectiveness outcomes including job performance. By positioning expatriate adjustment as a resource, a high level of adjustment can be seen as an investment in good performance. Accordingly, I incorporate three expatriate effectiveness variables (socio-cultural adjustment, psychological adjustment and job performance) and investigate the influence of expatriates’ psychosocial resources on these three variables.
Expatriates’ psychosocial resources such as cross-cultural psychological capital (PsyCap) (Kawai & Strange, 2014; Reichard, Dollwet, & Louw-Potgieter, 2014) and two-dimensional social support resources can be employed to understand the resourcing mechanism related to expatriate adjustment. PsyCap, as a dynamic competency (Luthans, Avey, Avolio, Norman, & Combs, 2006; Luthans & Avolio, 2009), is an important resource for predicting work-related attitudes and behaviours and job performance in domestic work settings (Avey, Reichard, Luthans, & Mhatre, 2011). Although the predicting role of cross-cultural PsyCap on expatriate adjustment has not been fully examined, scholars have found its substantial relevance to global mind-set development during cross-cultural relocation (Clapp-Smith, 2009; Clapp-Smith, Luthans, & Avolio, 2007). Introducing cross-cultural PsyCap into expatriate research can help further understand the role of psychological resources in the development of good expatriate adjustment.

Social support is also an important resource to assist expatriates to adjust more easily. According to Adelman (1988), two main themes explain the mechanism linking social support and expatriate adjustment: decreasing uncertainty (buffer stress) and improving perceived mastery and control (enhance resources). Furthermore, existing studies have frequently viewed social support as a stress buffer in a stressor-strain relationship (Black, 1990; Caligiuri & Lazarova, 2002; Shaffer, Harrison, & Gilley, 1999) rather than a resource maker. In addition, the current literature frequently examines the role of social support from the perspective of the sources of support rather than the types of support such as socio-emotional and instrumental support (Halbesleben, 2006). Although the sources of social support help explain the construct social support from the perspective of the providers of support, the types of social support contribute to a comprehensive picture of the functions of social support in expatriate assignments (Caligiuri & Lazarova, 2002). Studying different types of social support provides expatriate research with a more accurate conceptualization of the social support construct and promotes the reliability and validity of this construct as the types of social support conform to the multidimensionality of social support. As existing studies on expatriates do not pay adequate attention to the types of social support, it will be necessary to specify the influence of different types of social support on expatriate adjustment. Therefore, in this thesis I examine the impact of a particular expatriate personal resource, cross-cultural PsyCap, and two types of social support (socio-emotional and instrumental support) on expatriate adjustment and job performance.
1.2.2. The theoretical problem in the context of China

The current expatriate literature has not given enough attention to studying expatriates from developing economies (Wang, Freeman, & Zhu, 2013). The current knowledge base of expatriate research and expatriate management practice is mainly derived from research on expatriates from developed countries such as the United States, Japan and European countries (Hechanova, Beehr, & Christiansen, 2003). However, a systematic examination of expatriates from developing economies is missing from the literature (Wang et al., 2013). China’s institutional and cultural environments are markedly different from those of developed countries (Li & Scullion, 2010). Most importantly, Chinese expatriates, especially Chinese mainland expatriates, have been found to be less well adjusted to host environments than Western expatriates (Selmer et al., 2000a). Therefore, it is necessary to understand the behaviours of expatriates from China and other developing countries in order to enrich the knowledge stock about expatriation.

According to current studies, Chinese expatriates experience indisputable adjustment challenges. Even so, only limited reasons have been identified, such as inadequate adjustment and performance intervention (Wood & El Mansour, 2010). Although a few empirical studies have begun to research on Chinese expatriates’ adjustment and job performance (Selmer, Ebrahimi, & Mingtao, 2000b; Shen & Jiang, 2011; Wang et al., 2013), the antecedents of expatriate adjustment and job performance, especially the impact of expatriates’ cross-cultural competencies and social support, remains inadequately identified and discussed. In the existing studies on expatriates from developed economies, cross-cultural competencies have been recognized as key resources that allow expatriates to cope with adjustment stressors and improve job performance (Caligiuri & Tarique, 2012; Leiba-O'Sullivan, 1999). Nonetheless, Wang et al. (2013) found that China’s unique face-saving culture and institutional differences between China and host countries may have a significant influence on expatriates’ cross-cultural dynamic competencies, namely, cultural skills and stable competencies, referring to multicultural personality. Additionally, Chinese expatriates receive limited social support in their host country or inadequate support from their parent companies such as cross-cultural training (Shen & Darby, 2006; Wang, 2006). The resources facilitating the adjustment and job performance of Chinese expatriates are less well researched. In particular, there is little evidence of the connections between Chinese expatriates’ dynamic competencies (e.g., cross-cultural PsyCap), social support and expatriate effectiveness. Hence, in order to investigate the impact of cross-cultural PsyCap and social support on
expatriate adjustment and performance, I have carried out this study in the context of Chinese expatriates.

1.3. Research questions and the study’s objectives

In light of the theoretical and contextual problems in the existing expatriate research, I put forward four main research questions (RQ). While I derive and justify in detail my research questions in chapter two, as a result of the literature review, this section briefly introduces the four research questions and the study’s objectives. RQ1 and RQ2 relate to the main effects of cross-cultural PsyCap and social support on expatriate adjustment and performance. RQ3 and RQ4 address the relationship between social support and cross-cultural PsyCap, and the mediating functions of cross-cultural PsyCap and expatriate adjustment in the proposed relationships. The four research questions are listed as follows.

RQ1: How does cross-cultural PsyCap influence expatriate adjustment and job performance?

RQ2: How do socio-emotional support and instrumental support influence expatriate adjustment and job performance?

RQ3: 3a: How does social support influence cross-cultural PsyCap? 3b: How does cross-cultural PsyCap influence the relationship between social support and Chinese expatriate adjustment?

RQ4: How does expatriate adjustment influence the relationship between expatriate cross-cultural PsyCap and job performance?

In the context of the four research questions, my thesis intends to investigate the relationships between expatriates’ psychosocial resources and expatriate assignment effectiveness in the context of Chinese expatriation. Accordingly, my purpose is to examine the impact of two groups of expatriates’ resources, in particular, cross-cultural PsyCap and social support, on expatriate adjustment and performance. In addition to the limited attention paid to Chinese expatriation, I have identified specific gaps in the literature. Consequently, four corresponding research objectives are explained in this thesis.

First, a gap exists in the current literature in that it has not examined in detail a significant cross-cultural competency, namely, cross-cultural PsyCap. Although it is an emerging construct, the important role it has in predicting an individual’s cross-cultural adjustment has
been recognized in a recent study conducted by Dollwet and Reichard (2014). Further investigation on the influence of cross-cultural PsyCap on the adjustment and performance of Chinese expatriates could be beneficial to the theoretical research on expatriate adjustment and the practice of expatriate management. As such, the first specific research objective is to investigate the influence of expatriates’ cross-cultural PsyCap on their adjustment and job performance.

Second, two types of social support have received less attention in the research literature related to expatriate adjustment. Even though social support is a well-studied construct in the existing expatriate literature, existing studies mainly focus on the sources of social support (Takeuchi, 2010). The functions of social support in expatriation remain unclear. Liu and Shaffer (2005), utilizing a sample of Western expatriates, found that instrumental and socio-emotional support might significantly influence expatriate socio-cultural adjustment. To further their investigation, the second objective of my research is to examine the influence of socio-emotional and instrumental support on socio-cultural and psychological adjustment and job performance in relation to Chinese expatriates.

My third aim is to test the relationship between cross-cultural PsyCap and social support and identify the mediating role of cross-cultural PsyCap in the relationship between social support and expatriate adjustment. Both cross-cultural PsyCap and social support are crucial resources for expatriates during an international assignment. Theoretically, personal resources and social support have close connections in coping with adjustment stressors within the framework of the conservation of resources (COR) theory (Hobfoll, 2002). In addition, personal resources also mediate the relationship between job resources (social support in work domain) and correlated variables (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007). The connections between cross-cultural PsyCap and social support and their impact on adjustment have not been studied despite the theoretical propositions that have been put forward. This thesis hence intends to examine the correlation of cross-cultural PsyCap and social support. Moreover, I intend to ascertain the potential mediating effect of cross-cultural PsyCap on the relationship between social support and expatriate adjustment.

Finally, this research aims to answer the question whether expatriate adjustment mediates the relationship between cross-cultural PsyCap and job performance. The extant literature has delivered a mixed conclusion in terms of the mediating effect of expatriate socio-cultural adjustment on the relationship between adjustment’s antecedents and job performance (Chen,
Lin, & Sawangpattanakul, 2011; Kraimer et al., 2001; Lee & Sukoco, 2008). To clarify this equivocal mediation proposition and further explore the mediating role of another adjustment facet, specifically, psychological adjustment, I examine the mediating role of both socio-cultural and psychological adjustment on the connection between cross-cultural PsyCap and job performance.

1.4. Significance of the study

This thesis seeks to add to existing expatriate research in the following ways. To begin with, this research contributes to the academic conversation on expatriate adjustment by using a resource-based perspective. By utilizing the resource-oriented COR theory (Hobfoll, 1989), the thesis conceptualizes a higher level of expatriate adjustment as a valuable personal resource because expatriate adjustment reflects the degree of fit between environmental resources/demands and individual resources/demands (Haslberger, Brewster, & Hippler, 2013). Good adjustment can be achieved by the investment of personal resources and social resources. The adjustment resource can also be invested to accumulate other resources such as high levels of job performance and career capital. In this sense, the process of expatriate adjustment is not merely a coping process, it is also a resourcing process in which expatriates invest their personal resources and utilize the external resources, such as, social resources to create new resources, namely, a satisfactory adjustment. The expatriate assignment hence can be viewed as a process of resource acquisition and creation. This novel resource-based perspective broadens the views about expatriate adjustment and serves as a useful approach to enriching expatriate research and practice. In short, I advance both COR theory and expatriate research by explaining expatriate adjustment from a resource-based perspective rather than from the much more widely-used stress-based or learning-based perspective.

Next, my thesis can benefit current expatriate research by highlighting cross-cultural dynamic competencies such as cross-cultural PsyCap. The existing research on expatriate adjustment and performance and their antecedents has been dominated by the stable competencies such as Big Five personalities and human capital such as knowledge, skills and abilities and has not paid as much attention to the role of PsyCap during international assignments. I introduce cross-cultural PsyCap into the study of expatriate adjustment and job performance. Cross-cultural PsyCap is a dynamic competency and a valuable personal resource. Investigating the role of cross-cultural PsyCap during expatriate adjustment can contribute to the scholarly
conversation of expatriation and could yield novel insights to expatriate management practice.

Moreover, with regard to the role of positive cross-cultural PsyCap during expatriate assignments in the field of international business, I offer an initial empirical examination. PsyCap has been conceptually proposed and empirically tested as a significant resource for an individual employee or an organization. Even so, extant expatriate research for the most part mainly invests attention into the impact of expatriate human capital. Particularly, except for the extensive attention paid to Big Five and multicultural personality, limited studies have explored the impact of dynamic competencies such as positive psychological states and the way in which they influence expatriate effectiveness. My study advances a positive psychology view on expatriate adjustment and performance and extends PsyCap research from the common work landscape to the context of expatriate assignment. By contextualizing cross-cultural PsyCap in expatriation, I propose that scholars could investigate psychological capital rather than human capital in expatriation studies. In doing so, they will bring HR managers’ attention to this emerging cross-cultural competency.

My thesis develops the resource mechanisms of COR theory. More specifically, I investigate the direct effects of social support and cross-cultural PsyCap on expatriate adjustment and the mediating effect of cross-cultural PsyCap on the linkage of social support and adjustment. Social support and expatriate cross-cultural PsyCap are two primary psychosocial resources for expatriates (Hobfoll, 1989; Lazarova, Westman, & Shaffer, 2010) to cope with job challenges and to be invested to gain additional resources during the international assignment. I have extended COR theory by initially introducing cross-cultural PsyCap into the COR theory resource family, by examining the effect of this dynamic cross-cultural competence during expatriation, and by testing the mediating effect of cross-cultural PsyCap on the relationship between social support resource and expatriate adjustment.

Lastly, in relation to research on expatriation from developing countries, I have sought to expand the research as emerging Chinese expatriates experience a lower level of cross-cultural adjustment compared to Western developed country expatriates, and a lower level of social support (Selmer et al., 2000a). This is in order to fill the gap in the literature in regard to the role of the above-mentioned expatriates’ individual resources and to bring attention to expatriates from developing and emerging countries. My findings may advance knowledge relating to the determining factors that influence expatriate effectiveness for expatriates from
both developing and developed countries. In addition, the introduction of cross-cultural PsyCap to the study of expatriates contributes to expatriate management practice. In regard to expatriates, my research suggests they ought to attach more importance to cross-cultural PsyCap during assignments as this could have a significant influence on their adjustment and performance. For human resource (HR) managers, the findings can be applied to establish strategies for expatriate selection, training, development and management. For those other expatriate stakeholders who have an interest in the successful implementation of expatriate assignments such as expatriates’ family and parent company, I recommend these stakeholders consider actively offering social support, especially instrumental support, to expatriates to improve their adjustment and performance.

1.5. Structure of the thesis

After presenting the research background, problem statement, research questions and study objectives, and the significance of my study in chapter one, chapter two reviews the expatriate literature concerned with definitional issues in relation to expatriate adjustment, factors affecting expatriate adjustment, and the adjustment-performance connection. On the basis of a wide review of the literature, I have formulated four main research questions. Chapter three explains the theoretical foundation and the development of six groups of hypotheses. Chapter four presents the research methodology, including research design, sampling, context issues, instruments, pilot studies, data collection and data analysis tools. In Chapter five the data analysis is conducted and the hypotheses tested. Chapter six discusses the results and main findings, and chapter seven presents the conclusions, strengths and limitations of the study, and implications for future research and management practice.
Chapter 2: Literature review and research questions

This chapter reviews the existing literature from 42 selected journals in regard to definitional issues, theoretical approaches related to expatriate adjustment research and the stressors, personal resources and social support factors affecting expatriate adjustment and effectiveness. In the first section I introduce the review method. After this, I discuss the definitional issues related to expatriates, and expatriate adjustment. Next, the stressors impacting adjustment, the personal resources and social support facilitating adjustment and the adjustment-performance relationship in both the general and Chinese expatriation context are reviewed in sequence. In the review, I identify the gaps in the literature and formulate four research questions with respect to the relationships amongst cross-cultural PsyCap, social support, expatriate adjustment and job performance.

2.1. Review method

As mentioned in chapter one, my focus of attention is expatriate adjustment especially the determinants of adjustment. Hence, I employed “expatriate”, “adjustment” and “expatriate adjustment” as keywords to search target expatriate literature for relevant studies about the definitions, theoretical approaches, determinants and consequences of expatriate adjustment. More specifically, I reviewed a) the definitional issues of expatriates and expatriate adjustment, b) the existing approaches to explaining the adjustment mechanisms, c) the stressors influencing expatriate adjustment, d) personal resources facilitating expatriate adjustment, e) social support facilitating expatriate adjustment and f) the adjustment-performance relationship. Specific attention is concentrated and focused on the Chinese context as it is the main research focus.

To understand the theoretical approach and empirical focus related to expatriate adjustment, I conducted an overview of the expatriate literature published in the top management journals. The selection of the journals on which to base the review of international management articles is a critical and underrated step in the literature review process (Pisani, 2009). This study combines the two lists of the top international management journals. The first list includes 20 journals. It was derived from a list of 21 journals originally developed by Gomez-Mejia and Balkin (1992). Although Werner and Brouthers (2002) adopted this 21-journal list they excluded the Harvard Business Review for it mainly focuses on practical application.
rather than on pure academic research. This adapted 20-journal list has been continuously employed by researchers (Judge, Cable, Colbert, & Rynes, 2007; Kothari & Lahiri, 2012; Pisani, 2009; Podsakoff, Mackenzie, Bachrach, & Podsakoff, 2005; Tsui, 2007) to review or evaluate management studies.

Additionally, as expatriate adjustment is an important theme topic in international human resources management (Schuler, Budhwar, & Florkowski, 2002), the inclusion of reliable journals in this field is required. As such, I also adopted a second journal list with 22 top IHRM journals developed by Ozbilgin (2004), which has been adopted in many studies in the field of IHRM (De Cieri, Cox, & Fenwick, 2007; Harris, 2008; Martín-Alcázar, Romero-Fernández, & Sánchez-Gardey, 2008; Ozbilgin, 2009). This 22-journal list contains six journals which overlap with the above list of 20 journals. As a result, the combined two lists have a total of 36 journals. In addition to the two lists, I have also added six journals to the review list in order to indicate the diversity of the research context in organizational psychology, cross-cultural learning and cross-cultural management. To be specific, four are related to organizational psychology and cross-cultural learning: Applied Psychology, Management and Organization Review, European Journal of Work and Organizational Psychology, and Academy of Management Learning and Education; two are related to cross-cultural studies: Cross-Cultural Management, and International Journal of Cross-Cultural Management. As a result, 42 journals are included in the review of the empirical findings on, and theoretical foundation of, expatriate adjustment.

Table 1 introduces the 42 journals included in the literature review of this thesis. The list includes 20 of the top management journals such as Academy of Management Journal, Academy of Management Review, Administrative Science Quarterly, Journal of Applied Psychology, Journal of International Business Studies and Journal of Management, 16 reliable journals in the field of IHRM such as International Journal of Human Resource Management, and six additional journals relating to my research purpose.
### Table 1: 42 Journals Included in the Literature Review

<table>
<thead>
<tr>
<th>Journal Name</th>
<th>Journal Name</th>
</tr>
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<tbody>
<tr>
<td>Academy of Management Executive</td>
<td>Industrial Relations</td>
</tr>
<tr>
<td>Academy of Management Journal</td>
<td>Journal of Applied Behavioural Science</td>
</tr>
<tr>
<td>Academy of Management Learning and Education</td>
<td>Journal of Applied Psychology</td>
</tr>
<tr>
<td>Academy of Management Review</td>
<td>Journal of Cross-Cultural Psychology</td>
</tr>
<tr>
<td>Asia Pacific Journal of Human Resources</td>
<td>Journal of International Business Studies</td>
</tr>
<tr>
<td>Applied Psychology</td>
<td>Journal of International Compensation</td>
</tr>
<tr>
<td>Administrative Science Quarterly</td>
<td>Journal of International Management</td>
</tr>
<tr>
<td>Cross-Cultural Management</td>
<td>Journal of Management</td>
</tr>
<tr>
<td>Decision Sciences</td>
<td>Journal of Management Studies</td>
</tr>
<tr>
<td>European Journal of Work and Organizational Psychology</td>
<td>Journal of Organizational Behaviour</td>
</tr>
<tr>
<td>European Management Journal</td>
<td>Journal of Occupational Psychology</td>
</tr>
<tr>
<td>Human Relations</td>
<td>Journal of Vocational Behaviour</td>
</tr>
<tr>
<td>Human Resource Management</td>
<td>Journal of World Business</td>
</tr>
<tr>
<td>Human Resource Management Journal</td>
<td>Management International Review</td>
</tr>
<tr>
<td>International Business Review</td>
<td>Management and Organization Review</td>
</tr>
<tr>
<td>International Journal of Cross-Cultural Management</td>
<td>Management Science</td>
</tr>
<tr>
<td>International Journal of Human Resource Management</td>
<td>Organizational Behaviour and Human Decision Processes</td>
</tr>
<tr>
<td>International Journal of Intercultural Relations</td>
<td>Psychological Bulletin</td>
</tr>
<tr>
<td>International Journal of Selection and Assessment</td>
<td>Personnel Psychology</td>
</tr>
<tr>
<td>Industrial and Labour Relations Review</td>
<td>Personnel Review</td>
</tr>
<tr>
<td>International Labour Review</td>
<td>Strategic Management Journal</td>
</tr>
</tbody>
</table>


### 2.2. Expatriates and expatriate adjustment: Definitional issues

#### 2.2.1. Expatriates

“Expatriate”, an inclusive term, generally refers to a person living and working in another country (Lasserre, 2003; Rhinesmith, 1996). It includes the assigned expatriate who is sent abroad by an organization (Adler, 2002; Aycan & Kanungo, 1997; Harrison et al., 2004) and self-initiated expatriates. Business expatriates and the related management practices, namely, selection, training, expatriate success or failure, have received considerable research attention since the early research conducted by Tung (1981). Before the 1980s, expatriates were not a well-researched subject (Hays, 1971, 1974; Miller, 1973; Newman, Bhatt, & Gutteridge, 1978). Along with the flourishing development of expatriate assignment studies in the late 1980s to the 1990s, there have been many definitions of the term expatriates.

The eight definitions in Table 2 incorporate three common elements: a) who, b) what and where, and c) when. Although three definitions broadly refer to an expatriate as a person (Andresen et al., 2013; Lasserre, 2003; Rhinesmith, 1996), they identify that an expatriate is...
an employee “who” executes dependent work in an organization. The second element, “what and where”, emphasizes an expatriate as an employee who is living and working in a country in which he or she is not a citizen. Baruch, Dickmann, Altman, and Bournois (2013) distinguish expatriates from migrants on the basis of whether or not the individuals have a right to permanently reside in the host country. This means that once expatriates obtain citizenship or permanent residency in the host countries, they could become migrants. The third point, “when” signifies that the employee should be living and working abroad on a temporary basis. Migrants may stay in the host country over a longer term as they have qualified for permanent residency. Business travellers might be sent abroad to conduct their business for a short term, such as less than six months.

**Table 2: Definitions of Expatriates**

<table>
<thead>
<tr>
<th>Definitions</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>A person is being sent outside his or her home country to work and live in another country.</td>
<td>Rhinesmith (1996)</td>
</tr>
<tr>
<td>Employees of business and government organizations who are sent by their organization to a related unit in a country which is different from their own, to accomplish a job or organization-related goal for a temporary time period of usually more than six months and less than five years in one term.</td>
<td>Aycan and Kanungo (1997, p. 250)</td>
</tr>
<tr>
<td>Home country nationals—people who are known and trusted at headquarters—are sent abroad to get a particular job done.</td>
<td>Adler (2002, p. 259)</td>
</tr>
<tr>
<td>People that are living and working in a non-native country.</td>
<td>Lasserre (2003, p. 313)</td>
</tr>
<tr>
<td>Any employee that is working outside his/her home country.</td>
<td>(Harzing, 2004, p. 252)</td>
</tr>
<tr>
<td>An employee who is working and temporarily residing in a foreign country.</td>
<td>Dowling and Welch (2004, p. 5)</td>
</tr>
<tr>
<td>Employees of business organizations are sent overseas on a temporary basis to complete a time-based task or accomplish an organizational goal.</td>
<td>Harrison et al. (2004, p. 203)</td>
</tr>
<tr>
<td>An individual who moves to another country while changing the dominant place of residence and executes dependent work abroad.</td>
<td>Andresen et al. (2013, p. 32)</td>
</tr>
</tbody>
</table>

In addition to these common elements, some of the definitions of expatriate explain “how” and “why”, which particularly distinguishes the self-initiated expatriates from assigned expatriates. The ‘how’ means the channels through which the individuals can travel abroad, for example, an international assignment by a company or voluntary travel. Unlike international assignees, self-initiated expatriates are not sent by their parent organizations, rather they travel on their own initiative (Jokinen, Brewster, & Suutari, 2008). International assignees or organizational expatriates are sometimes substituted for assigned expatriates. The major motivation for individuals to relocate to another country is the “why”. The motivation of assigned expatriates for going abroad is to fulfil organizational goals (Aycan &
Kanungo, 1997; Harrison et al., 2004). Self-initiated expatriates relocate to achieve their personal goals, career development and cultural experience (Andresen et al., 2013). Self-initiated expatriates manage their own career and assigned expatriates mainly rely on the firm in their parent country (Howe-Walsh & Schyns, 2010). In terms of international relocation, self-initiated expatriates seldom receive adjustment support from parent country firms whereas assigned expatriates generally do receive organizational support in regard to expatriate adjustment from their employers (Andresen, Bergdolt, Margenfeld, & Dickmann, 2014) such as MNCs.

Because their main research focus is related to the field of international business and management, Harrison et al. (2004) tailored the coverage of expatriates by defining the organization which sends the employee abroad as a business organization. However, with the emergence in recent years of self-initiated expatriates in the literature on international business, the concept expatriate has gradually been divided into assigned expatriates and self-initiated expatriates. Considering the important role of self-initiated expatriates in IHRM (Howe-Walsh & Schyns, 2010; Selmer & Lauring, 2011a; Tharenou & Caulfield, 2010), the definition of expatriates ought to include both assigned and self-initiated expatriates. Table 3 summarizes the differentiating elements between assigned expatriates, self-initiated expatriates and migrants. To distinguish them from the migrant group, one of the common characteristics of assigned expatriates and self-initiated expatriates is dependent work. That is, whereas an occupation is a mandatory condition for an expatriate, an occupation is not a mandatory necessity for a migrant.

<table>
<thead>
<tr>
<th>Items</th>
<th>AE</th>
<th>SIE</th>
<th>Migrant</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Initiative</strong></td>
<td>Organizationally initiated</td>
<td>Individually initiated</td>
<td>Individually initiated, or politically initiated</td>
</tr>
<tr>
<td><strong>Motives</strong></td>
<td>Professional motives with a dominance of organizational goals</td>
<td>Professional motives with a dominance of personal goals</td>
<td>Difference reasons, economic, political or environmental</td>
</tr>
<tr>
<td><strong>Duration</strong></td>
<td>Long term, rather predetermined</td>
<td>Long term, rather not predetermined</td>
<td>Long term, temporary to permanent</td>
</tr>
<tr>
<td><strong>Employment</strong></td>
<td>Employed individuals; dependent work</td>
<td>Employed individuals; dependent work</td>
<td>Occupation not mandatorily necessary; dependent or independent work</td>
</tr>
<tr>
<td><strong>Citizenship</strong></td>
<td>May or may not be</td>
<td>Not aspired but might change</td>
<td>May or may not be</td>
</tr>
<tr>
<td><strong>Repatriation</strong></td>
<td>Either intention to repatriate or not</td>
<td>Rather intention to repatriate</td>
<td>Either intention to repatriate or not</td>
</tr>
</tbody>
</table>

Source: adapted from Andresen et al. (2013, pp. 17 - 26)
Considering the changing concept of expatriates in the fields of international business and international management, I integrated the narrowed definitions provided by Harrison et al. (2004) and the broad definition offered by Andresen et al. (2013). In this study, expatriates refer to individuals, who execute particular dependent work in a country/region where they are not a citizen, on a temporary basis (no less than 6 months in one term) in order to accomplish an organization-related or personal goal. Utilizing this definition, expatriates can be divided into assigned expatriates, organizationally-initiated employed individuals who accomplish their organization-related goals, and self-initiated expatriates, those personally-initiated employed individuals who are mainly interested to achieve personal goals. Because this study focuses on individuals sent by business organisations, MNCs, I only target corporate expatriates, which is one type of assigned expatriate. Both business organisations and non-profit organizations, for example, government, universities and the military, employ expatriates. According to the study of Harrison et al. (2004), corporate expatriates, in particular, refer to the employees of business organizations who are sent overseas on a temporary basis to complete a certain task or accomplish their organizational goals.

2.2.2. Expatriate effectiveness

Expatriate effectiveness has been defined as the extent to which an expatriate’s job performance reflects behaviours that are relevant to the goals of the organization (Mol, Born, & Van Der Molen, 2005). In the existing literature the notion of effectiveness is measured by particular criteria in relation to expatriate attitudinal, cognitive and behaviour performance (Bhaskar-Shrinivas, Harrison, Shaffer, & Luk, 2005). Since the 1970s, expatriate adjustment and job performance have been the main focus of studies on expatriate effectiveness (Arthur & Bennett, 1995; Black, 1988; Black, Mendenhall, & Oddou, 1991; Caligiuri, 1997, 2000a; Lundstedt, 1963; McEvoy & Parker, 1995; Shaffer et al., 1999; Stoner, Aram, & Rubin, 1972). As the research developed, researchers have also paid attention to expatriates’ early return (Black & Gregersen, 1990; Florkowski & Fogel, 1999; Guzzo & Noonan, 1994; Shaffer & Harrison, 1998), organizational commitment (Kraimer & Wayne, 2004; Liu, 2009; Shaffer, Harrison, Gilley, & Luk, 2001), and job satisfaction (Downes, Thomas, & Singley, 2002; Kim & Slocum Jr, 2008). Among these criteria, intent to return early (withdrawal cognitions), job attitudes (job satisfaction and organizational commitment) and job performance are conceptualized as a consequence of expatriate adjustment, as these variables
represent the attitudinal, cognitive, and behavioural performance outcomes on the basis of adjustment (Bhaskar-Shrinivas et al., 2005; Hechanova et al., 2003).

The existing literature has shown that expatriate adjustment, early return intention and job performance are the most popular expatriate effectiveness criteria (Harrison & Shaffer, 2005). Although a majority of the studies have examined intent to early return (Bhaskar-Shrinivas et al., 2005), this intent did not represent the actual or satisfactory criterion by which to measure whether expatriates have achieved the goals set forth by their organization during their foreign assignments (Che Rose, Sri Ramalu, Uli, & Kumar, 2010). If an expatriate stays on an assignment yet performs inappropriately, it could be considered an expatriate failure (Harrison & Shaffer, 2005). Accordingly, intent to return early is not an adequate measure of expatriate effectiveness and has not been employed as a research focus of this study. Because of its leading role among the proxies of expatriate effectiveness, I selected expatriate adjustment as the main focus in the study (Hechanova et al., 2003). This study also chose expatriate job performance as a proxy of expatriate effectiveness because assignment effectiveness is measured mainly by the degree of fit between expatriate performance and the organization’s objectives. Previous research on expatriate job performance is limited due to the difficulty of measurement (Che Rose et al., 2010). Hence I adopt expatriate adjustment and job performance as the two main criteria variables of expatriate effectiveness.

2.2.3. The nature of expatriate adjustment

In most cases, the term “adjustment” and “adaptation” are used interchangeably although adaptation is employed with a broader meaning than adjustment (Shi & Franklin, 2014). The existing expatriate literature has identified three criteria for expatriate assignment effectiveness: expatriate adjustment, job performance and early return decisions (Harrison & Shaffer, 2005). Expatriate adjustment has been the most studied expatriate effectiveness criteria since Tung (1981) noted that an expatriate’s inability to adjust to living in the foreign country is one of the most frequently cited reasons for assignment failure. As the widely-recognized criterion of expatriate effectiveness, expatriate adjustment has also been the main research focus of expatriate literature since the late 1980s (Black, 1988; Black et al., 1991; McEvoy & Parker, 1995; Shaffer et al., 1999).
2.2.3.1. Adjustment as process

Expatriate adjustment has been defined as the process in which expatriates adapt to feel comfortable with a new environment and fit in with it (Huang, Chi, & Lawler, 2005). Adjustment has also been defined as the state of an expatriate’s psychological comfort with a variety of aspects of the new environment (Black, 1988). Some scholars propose that adjustment is a transitional experience. Based on work role transition theory, Nicholson (1984) characterized adjustment as a process of fit and proposed that individuals would experience four sequential modes to fit in to the new work role: (1) replication (low role discretion and low novelty of role requirement; minimal adjustment to new role systems), (2) absorption (low role discretion and high novelty of role requirement; moderate adjustment to new role by role learning), (3) determination (high role discretion and low novelty; adjustment to the demands of role transition), (4) exploration (high role discretion and high novelty of role requirement; relative fit between personal qualities and role parameters).

The adjustment process is instructive as it may guide researchers to associate unsuccessful adjustment with the two initial modes (replication and absorption) and successful adjustment with the two subsequent modes (determination and exploration) (Harrison et al., 2004). However, as the model is based on the theory of work role transition, the main limitation of this conceptualization is that it only explains the adjustment experience within work-related rather than non-work facets. Accordingly, few empirical studies in expatriate research have employed this process model.

Another group of scholars explain process through a time-based “U Curve Theory” of adjustment (Gullahorn & Gullahorn, 1963; Lysgaard, 1955; Ruben & Kealey, 1979) and social learning theory (Bandura, 1977). Black et al. (1991) argued that adjusting to a new culture involves an individual’s social learning. In light of social learning theory, Black et al. (1991) explained the four stages of the experience of the entire adjustment process. In the initial “honeymoon stage”, individuals may be infatuated by the new culture and are excited about all the new and interesting surroundings. Then the second “culture shock stage” emerges as enjoyment of the novel culture turns to frustration as individuals have to cope with the new challenges in their daily work and life. The third “adjustment stage” follows as individuals gradually adjust to the new culture and learn how to fit their behaviour with the cultural norms of the host country. The fourth stage is “mastery stage” in which individuals have successfully met the various demands to function effectively in the host culture by
incremental learning and gradual improvement of their capabilities. Because the theory explains adjustment over time and requires a longitudinal research design for empirical study, the U-curve adjustment model has received limited empirical support (Harrison et al., 2004) and its validity related to expatriate adjustment has also been limited.

2.2.3.2. Adjustment as state

Adjustment has also been defined as the degree of a person’s psychological comfort with a variety of aspects of a new environment (Black, 1988; Huang et al., 2005; Nicholson, 1984). In this definition, adjustment is conceptualized as a psychological state while adjusting to the overseas general living environment, workplace and interacting with host nationals (Black, 1988). There are two main advantages to considering expatriate adjustment as a state. First, adjustment can clearly be distinguished from similar concepts such as adaptation and acculturation. Both adaptation and acculturation reflect continual processes whereby relocating individuals change their emotions, cognition and behaviours to fit with the new cultural environment (Harrison et al., 2004). Second, positioning adjustment as state makes it possible to compare empirical findings. The majority of empirical studies conceptualize adjustment as a state and examine the determinants of adjustment. Consequently, the conceptualization of adjustment as a state helps identify the antecedents of expatriate adjustment. Because the primary purpose of this study is to identify the determinants of expatriate effectiveness, I prefer to refer to the concept of adjustment as a state.

2.2.4. Two dimensions of expatriate adjustment

Expatriate adjustment has been cast as a one-dimensional concept (Oberg, 1960), signifying the psychological states from overcoming cultural shock to satisfactory adjustment in the new culture. In earlier studies, prior to 1990, expatriate adjustment mainly represents the adjustment of a sojourner to a host country’s culture. However, in the particular context of expatriate assignments, individuals are involved with work-related relocation and interaction. Accordingly, scholars identified that expatriate adjustment ought to be a multi-dimensional construct that involves two main facets, socio-cultural adjustment including general living, interaction and work adjustment (Black, 1988; Black et al., 1991) and psychological adjustment (Searle & Ward, 1990; Ward & Kennedy, 1993; Ward & Kennedy, 1996; Ward & Searle, 1991). Aycan (1997b, p. 436) also viewed adjustment as a multifaceted construct and defined adjustment as “the degree of fit between the expatriate manager and the new environment in both work and non-work domains.”
In the field of international business the construct of socio-cultural adjustment or cross-cultural adjustment has received extensive attention over the past two decades and expatriate literature considers adjustment as a conclusive criterion of the expatriates’ assignment effectiveness (Stroh, Black, Mendenhall, & Gregersen, 2005). However, expatriate adjustment in this study is beyond the coverage of socio-cultural adjustment. The environment an expatriate aims to fit in with comprises both the living and working environment in the foreign country (Lee & Liu, 2006). As such, this thesis employs the distinction between socio-cultural adjustment and psychological adjustment as suggested by Searle and Ward (1990). On the one hand, I acknowledge that Black’s (1988) socio-cultural adjustment model reflects three important and distinct adjustment facets, general living, work and interaction, in both work and non-work domains. On the other hand, except for the three facets of socio-cultural adjustment I also intend to investigate expatriates’ psychological adjustment because psychological adjustment can supplement our understanding regarding the affective and cognitive facets of the expatriate experience. Searle and Ward (1990) also maintained that international adjustment includes two primary dimensions, socio-cultural and psychological adjustment.

Although both socio-cultural adjustment and psychological adjustment refer to an expatriate’s psychological comfort, they are distinctive in some facets. Table 4 summarizes the main differences between the two types of expatriate adjustment. In terms of definitive scope, socio-cultural adjustment only includes socio-cultural content such as general living, interaction and work, while psychological adjustment refers to general psychological well-being. Also, socio-cultural adjustment mainly represents the behavioural dimension of international adjustment; psychological adjustment mainly reflects the affective/attitudinal adjustment. Accordingly, psychological adjustment, distinct from socio-cultural adjustment, correlates with different determinants. Whereas psychological adjustment, the affective/attitudinal dimension of adjustment, is strongly affected by personality, coping strategies and social support, socio-cultural adjustment, the behavioural dimension of expatriate adjustment, is largely influenced by socio-cultural factors such as cultural distance and interaction skills in the host environment (Ward & Kennedy, 1999; Ward, Okura, Kennedy, & Kojima, 1998). Except for the distinct antecedents, psychological adjustment and socio-cultural adjustment are also different in terms of function modes. To be specific, the separation of the attitudinal dimension (psychological adjustment) from the behavioural adjustment (social cultural adjustment) is necessitated because behavioural changes may
occur involuntarily as a result of external structured mandates, while attitudinal changes are likely to be more voluntary (Jun, Lee, & Gentry, 1997), as a result of the adjustment of an individual’s internal balance (Ward & Kennedy, 1996). In addition, a number of studies still employ and validate the distinct dimension of psychological adjustment compared to socio-cultural adjustment (Fenner & Selmer, 2008; Selmer, 1999c; Swagler & Jome, 2005; Ward & Kennedy, 1993).

Table 4: Main Differences between the Two Dimensions of Expatriate Adjustment

<table>
<thead>
<tr>
<th>Concepts</th>
<th>Socio-cultural adjustment</th>
<th>Psychological adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facets</td>
<td>Psychological comfort with socio-cultural facets</td>
<td>General psychological well-being</td>
</tr>
<tr>
<td>Dimensions</td>
<td>Behavioural dimension of international adjustment</td>
<td>Affective/attitudinal dimension</td>
</tr>
<tr>
<td>Antecedents</td>
<td>Socio-cultural factors such as cultural distance and interaction skills (Ward &amp; Kennedy, 1999; Ward, Okura, Kennedy, &amp; Kojima, 1998)</td>
<td>Personality, coping strategies and social support (Ward &amp; Kennedy, 1999; Ward, Okura, Kennedy, &amp; Kojima, 1998)</td>
</tr>
<tr>
<td>Function modes</td>
<td>Involuntarily, as a result of external structured mandates (Jun, Lee, &amp; Gentry, 1997)</td>
<td>Voluntarily, as a result of an individual’s internal balance (Ward &amp; Kennedy, 1996)</td>
</tr>
</tbody>
</table>

2.2.4.1. Socio-cultural adjustment

Black and his colleagues have proposed three relevant facets of socio-cultural adjustment by an expatriate: general living, work and interaction (Black, 1988; Black & Mendenhall, 1990; Black et al., 1991). Through a series of studies, Black and his colleagues and their following scholars validated the three-dimension adjustment model (Black et al., 1991; Shaffer et al., 1999). Among the existing expatriate adjustment models, the socio-cultural adjustment model has been widely adopted as the classical model because it is the most influential one, in that it has received the most validation with extensive citation and empirical examination.

According to Black’s taxonomy, expatriate socio-cultural adjustment is divided into general living, work and interaction facets. General adjustment is defined by an individual’s psychological comfort with respect to general living conditions and everyday life, including weather, housing conditions, food, shopping, transportation system, cost of living, entertainment/recreation facilities, opportunities and health care facilities (Black & Stephens, 1989). Based on a stressor-strain viewpoint, Black (1990) noted that expatriates experience uncertainty or stress when they enter a new foreign country and need time to acclimatize to
the new host cultural environment. General adjustment reflects the degree of psychological fit with regard to the host culture environment. Normally, the general adjustment might become difficult for expatriates to work in a host county with marked cultural and environmental difference from their home country. For example, an American expatriate might find it difficult to adjust to huge traffic jams and odd-even car ban when driving, as well as crowded public transport if taking the bus or subway in Beijing. General adjustment is sometimes synonymous with general cultural adjustment because it is a distinct facet directly reflecting adjustment to a macro cultural environment.

Work adjustment represents an expatriate’s psychological comfort with respect to job tasks during the foreign assignment (Kraimer et al., 2001), such as adjustment to job responsibilities, supervision in subsidiaries, and performance expectations. MNCs utilize expatriates as agents to achieve either work or relationship-related goals. As such, successful adjustment to one’s work environment is crucial. Among the three dimensions of socio-cultural adjustment, work adjustment is distinct from general and interaction adjustment as it mainly reflects adjustment to the micro work environment and is directly related to expatriate work performance.

Interaction adjustment refers to an expatriate’s psychological comfort with socializing and speaking with nationals of the host countries (Black & Stephens, 1989). Developing and maintaining relationships with host nationals and local co-workers is a responsibility of expatriates. To distinguish from work and general adjustment, interaction adjustment reflects the micro relationship-related adjustment in both work and non-work domains and is closely related to expatriates’ relationship-based contextual performance.

2.2.4.2. Psychological adjustment

Although Black’s (1988) socio-cultural adjustment model reflects in detail the three behaviour facets of expatriate adjustment, the model omits one affective facet of adjustment, psychological adjustment (Aycan, 1997a). Psychological adjustment is defined as the perceived degree of psychological well-being with an emphasis on expatriates’ attitudinal and affective experience in adjustment (Selmer, 2004). Psychological well-being is the state in which an individual can function healthily and is generally reflected by positive mental health states (Veit & Ware, 1983) which allow him/her to realize their true potential (Ryff, 1995). Accordingly, the concept ‘psychological adjustment’ mainly describes the state of adjustment rather than the process of adjustment.
Although psychological adjustment has not been as widely investigated in the expatriate literature as the socio-cultural adjustment model of Black (1988), it is widely recognized that both the psychological and socio-cultural dimensions of international adjustment exist (Aycan, 1997b; De Cieri, Dowling, & Taylor, 1991; Selmer, 1999c; Ward & Kennedy, 1994). Psychological adjustment is significant for two reasons. First, expatriate assignment is an experience, the rebooting of socio-cultural behaviour, and is also the adaptation of psychological states. Both psychological fitness and socio-cultural effectiveness reflect the adjustment situation of an expatriate in an international assignment. With regard to Chinese expatriates, the adjustment experience in relation to psychological facets (feeling lonely) might be more intense than behavioural (socio-cultural) adjustment (Wang, 2006). As a result, I feel obliged to investigate psychological adjustment with respect to Chinese expatriates. Second, based on the determinants of the two dimensions of adjustment, socio-cultural adjustment can be developed by training related to intercultural skills, whereas psychological adjustment mainly relies on personal psychological capabilities. In terms of expatriate selection and development, the differences are relevant. This study expects to comprehensively understand the different facets of adjustment and contribute insights to expatriate selection practice. Hence, I employ both socio-cultural and psychological adjustment as the proxies of expatriate adjustment. In particular, the variable socio-cultural adjustment incorporates three subordinate facets: general, work and interaction adjustment.

Black’s (1988) three-dimensional socio-cultural adjustment has been used as a widely-recognized proxy of socio-cultural adjustment (Bhaskar-Shrinivas et al., 2005; Hechanova et al., 2003); Selmer’s (1998) one-dimensional psychological adjustment has also been considered as another important criterion of expatriate adjustment (Fenner & Selmer, 2008; Selmer, 1999c). To ensure the empirical results in the sections below (2.4, 2.5, 2.6 and 2.7) are comparable, this study follows the review approach of Puck, Holtbrügge, and Rausch (2008), by reviewing only the studies which employed Black’s (1988) three-dimensional socio-cultural adjustment or applied minor modification to the socio-cultural adjustment measure, and the studies which utilized Selmer’s (1998) one-dimensional psychological adjustment or employed minor changes with similar r measurements.

2.3. Existing perspectives to expatriate adjustment

From a review of the expatriate adjustment literature in the 42 selected journals, I identified three main theoretical approaches including the strain-based, learning-based and the resource-
based perspective. Each of the theoretical approaches is based on an understanding of the different adjustment mechanisms including the coping, learning and resourcing mechanism. From a person-environment fit perspective (Caplan, 1983, 1987; French, Rodgers, & Cobb, 1974; Haslberger et al., 2013), “adjustment mechanisms are means by which particular adjustment outcomes achieved and are predominantly understood to be the behaviours that individuals use to increase the ‘fit’ and reduce conflicts between environmental demands and personal inclinations” (Zimmermann, Holman, & Sparrow, 2003, pp. 46-47). Searle and Ward (1990) have identified the coping process and the learning process as the two main mechanisms of adjustment. A coping process is concerned with the strategies and behaviours that are used to cope with the stressful foreign environment to achieve a satisfactory level of psychological well-being (Zimnermann et al., 2003). As such, this study refers to the research approach employing a stress-related model as the ‘stress-based view’. Unlike psychological adjustment, socio-cultural adjustment during cross-cultural transitions may be more effectively analysed through a social learning process in which individuals learn to acquire the knowledge and abilities in order to function well in the host country. Accordingly, this study offers the label of ‘learning-based view’ for a study adopting the notion of adjustment as a cognitive and behavioural process of social learning.

In addition, my review found that the expatriate adjustment mechanism can also be explained from the perspective of a resourcing process. According to the person-environment fit theory, a good adjustment to a foreign environment is a desirable fit between personal resources and abilities with the environmental demands (Haslberger et al., 2013). Wheeler and his colleagues (Wheeler & Halbesleben, 2009; Wheeler, Halbesleben, & Shanine, 2012) have advocated that person-environment fit is a valuable resource for it conforms to the premise of a resource in the COR theory of Hobfoll (1988, 1989, 2001a, 2002, 2011). Based on the conservation of resources theory and the job demands-resources model (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007; Xanthopoulou et al., 2007) and person-environment fit theory (Wheeler et al., 2012), if an expatriate possesses sufficient resources (such as, competencies), s/he may report a higher level of adjustment (person-environment fit) and even achieve more resource gain including a higher level of job performance. On the contrary, if expatriates have inadequate resources or perceive that they face resource threats and resource loss in the host environment, they may report a lower level of adjustment (person-environment misfit). Considering the above adjustment mechanism as a resourcing
process I have therefore named the theoretical approach to understanding expatriate adjustment through resource-related theories or models as the “resource-based perspective”.

2.3.1. Stress-based perspective

Although previous studies have discussed expatriate adjustment from different theoretical perspectives, the stress-based framework represents the most popular theoretical approach to examining adjustment and adaptation (Park & Abbott, 2011; Ward & Kennedy, 2001). An international assignment, especially for relocation in a culturally distant country, is very challenging and stressful (Tung, 1981). Kim (1995) also noted that the whole process of cross-cultural adjustment is essentially a course of continual resolution of internal stress. In reality, people tend to make full use of various coping responses to a changeable environment (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986). Accordingly, the adjustment has been explained as a process of coping with uncertainty, reducing accumulative anxiety and restoring psychological states of comfort and inner peace. Hence, scholars tend to employ the stress-based perspective to research expatriate adjustment (Bhaskar-Shrinivas et al., 2005; Brown, 2008; Holopainen & Björkman, 2005; Kraimer & Wayne, 2004). The stressor-strain formulation, a typical model in stress-based approach, explains and tests the antecedents and consequences of expatriate adjustment (Harrison et al., 2004; Kraimer & Wayne, 2004). The majority of expatriate studies have adopted this stressor-strain model to investigate the impact of role and cultural/situational stressors on expatriates’ strain, for example, expatriate adjustment (Takeuchi, Marinova, et al., 2005).

Utilizing a stress management approach, coping theory is another widely-cited theory to explain expatriate adjustment mechanism (Folkman & Lazarus, 1980, 1985, 1988). Lazarus and Launier (1978, p. 311) have defined coping as “efforts to manage environmental and internal demands, and conflicts among them, which tax or exceed a person’s resources”. During international assignments, expatriates react to their challenges by using coping resources and coping strategies (Breiden, Mirza, & Mohr, 2004; Kraimer et al., 2001; Selmer, 1999c, 2001b; Stahl & Caligiuri, 2005). Coping resources include a range of solutions, such as support from family and parent company and various stress management skills helpful to achieve psychological comfort and to adapt effectively to different stressful socio-cultural situations. Coping strategies can be divided into two functions, problem-focused and emotion-focused (Lazarus & Launier, 1978): problem-focused coping strategies aim at managing the person-environment relationship directly at the source of the stress; emotion-
focused coping strategies refer to the regulation of emotions that result from the stress (Stahl & Caligiuri, 2005). In a study utilizing coping theory to investigate the adjustment of Western managers in China, Selmer (1999c) has found that expatriates employing problem-focused coping strategies are better adjusted, whereas those engaging with emotion-focused coping strategies are negatively related in their ability to adjust. This finding implies that coping strategies might not positively contribute to expatriate adjustment.

Based on stress research in a domestic context, scholars have conceptualised stressors, including personal stressors, role stressors and cultural stressors, as various uncertainties and demands in a foreign environment that are mismatched with an expatriate's personal resources (Bhaskar-Shrinivas et al., 2005). Accordingly, anxiety/uncertainty management (AUM) is also a significant part of intercultural adjustment. Gudykunst and his colleagues (Gao & Gudykunst, 1990; Gudykunst, 1998, 2005; Oguri & Gudykunst, 2002) introduced the AUM theory into cross-cultural research to understand the intercultural adjustment process. This theory is based on the Uncertainty Reduction Theory of Berger and Calabrese (1975) and explains how individuals feel comfortable in the host culture and communicate effectively with host nationals. Gudykunst (2005) has assumed that uncertainty is a cognitive phenomenon involving predictive and explanatory uncertainty. He also presumed that anxiety was the affective equivalent of uncertainty. Due to this certain amount of anxiety and uncertainty, foreign workers and sojourners, feel a certain lack of control and ability to adapt to their host culture. In order to interact effectively with host nationals and adapt to their behaviours, culture and society, individuals should be mindful to engage in anxiety management and uncertainty reduction. The AUM model of intercultural adjustment offers 47 axioms and a number of theorems to guide sojourners in adjusting to host cultures. Among these axioms, Gudykunst (2005) has stated that self-concepts such as self-esteem and positive cross-cultural psychology such as confidence and mindfulness influence individuals’ anxiety and uncertainty management and in turn impact the effective interaction with host nationals and the adjustment in the host culture.

2.3.2. Learning-based perspective

At a firm level, the learning-based perspective of internationalization can accelerate trajectories of cross-border learning for MNC latecomers (Li, 2010). Similarly, cross-cultural learning theories also contribute to successful expatriate adjustment (Yamazaki & Kayes, 2004) at the individual level. To date, Black et al. (1991) have developed one of the most
widely recognized expatriate adjustment models. Combining the “U Curve Theory” of adjustment (Gullahorn & Gullahorn, 1963; Lysgaard, 1955; Ruben & Kealey, 1979) with social learning theory (Bandura, 1977), Black et al. (1991) argued that adjusting to a new culture involves the process of an individual’s social learning after his/her arrival in the host country and proposed that integrated expatriate adjustment comprise three facets. Following this learning-based perspective, Shaffer et al. (1999) further confirmed the conceptualization of expatriate socio-cultural adjustment as three-faceted and empirically identified the determinants of adjustment.

In addition to the post-arrival learning process in the host country, social learning theory has also been adopted to explain the effectiveness of pre-departure cross-cultural training and personal attributes in improving cross-cultural adjustment (Black & Mendenhall, 1990). Pre-departure training can facilitate in-country training and post-arrival social learning as expatriates can prepare for their relocation prior to their arrival. Cross-cultural training enables expatriates to learn knowledge and skills which facilitate their effective cross-cultural interaction with host country nationals by reducing misunderstandings and inappropriate behaviours (Black & Mendenhall, 1990; Caligiuri, 2000b). If there are higher levels of cultural novelty or role novelty during the international assignment, pre-departure training could be necessary and helpful for expatriates (Shaffer et al., 1999).

According to social learning theory, expatriates’ personal attributes are highly relevant to their cross-cultural training. In particular, trait-like attributes such as Big five personality and multicultural personality work as the predictors of the effectiveness of cross-cultural training; state-like attributes such as positive psychological states, for instance, self-efficacy and cultural capabilities, such as cultural intelligence can be developed from the training. For example, expatriates who possess greater trait-like cultural openness are more willing to seek cross-cultural training from their trainers, and let’s say, these include their host national friends and acquaintances and may have greater interest in independent learning about new cultures from their own experience (Caligiuri, 2000a, 2000b). In the same manner, cross-cultural training may also develop expatriate state-like competencies. In line with social learning theory, the cross-cultural training help expatriates develop their self-efficacy and intercultural abilities regarding proper behaviours in order to interact successfully with host country nationals (Black & Mendenhall, 1990; Shaffer et al., 1999).
2.3.3. Resource-based perspective

Although few studies employ resource-based theories, researchers have started studying expatriate assignments from the theoretical perspective of a resourcing process. Three main theories adopted in adjustment research include the job demands-resources model, person-environment fit theory and the conservation of resources theory. To elucidate expatriates’ work-family interface in international assignments, Lazarova et al. (2010) applied the job demands-resources model to identify the content of expatriates’ resources and demands: attributes which contribute to positive expatriate experiences are classified as resources; attributes which are associated with negative expatriate experience are categorized as demands. They proposed that demands might be negatively related to adjustment and resources might be directly positively related to expatriate adjustment and indirectly mitigate the negative effects of demands on adjustment. The job demands-resources model is an extension of two earlier influential job stress models, specifically, the demand-control model (Karasek Jr, 1979) and the effort-reward imbalance model (Siegrist, 1996). Compared with the earlier models, the job demands-resources model considers both negative and positive indicators and outcomes of employee well-being and can be applied in the context of a wide range of occupations (Bakker & Demerouti, 2007). Within the context of expatriation, the job demands-resources model can be employed as a resource-based theoretical tool to understand expatriate adjustment and job performance.

The person-environment fit theory is proposed as a method to understand the process of adjustment between individuals and their work environment (Caplan, 1987). The degree of adjustment is defined in person-environment fit theory as the amount of improvement in person-environment fit. French et al. (1974) also explained person-environment fit as one type of adjustment. Person-environment fit traditionally includes person-vocation fit, person-job fit, person-group fit, person organization-fit and person-person fit (Edwards, Caplan, & Harrison, 1998; Jansen & Kristof-Brown, 2006; Morley, 2007). Previous studies related to cultural fit have mainly focused on the fit to organizations (Parkes, Bochner, & Schneider, 2001) as well as outside of organizations (Schiefer, Möllering, & Daniel, 2012). In an expatriate assignment, person-environment fit also includes person-culture fit and person-nation fit (Van Vianen, De Pater, Kristof-Brown, & Johnson, 2004). In particular, sociocultural adjustment can be viewed as the level of person-environment fit expatriates have with general living conditions, interaction and work in the host country. In a recent study about the dimensionality of expatriate adjustment, Haslberger et al. (2013), drawing on the
earlier adjustment model (Dawis & Lofquist, 1984), conceptualize expatriate adjustment as person-environment correspondence and state that the person-environment relationship is dynamic and international. In this sense, expatriate adjustment/maladjustment is an indicator or result of the needs-resources fit between expatriates and host countries’ environment.

The expatriate literature within the selected journals seldom employs COR theory to understand the expatriate adjustment mechanism. One exceptional case is an empirical study by Van Erp, Van der Zee, Giebels, and Van Duijn (2014), investigating the importance of expatriates’ and their partners’ intercultural personality for their successful adjustment. Van Erp et al. (2014) operationalized expatriates’ intercultural personality as an internal coping resource and identified its contribution to the achievement of additional resources. Furthermore, Van Erp et al. (2014) found other external resources, such as expatriates’ partners’ intercultural traits can act as a complementary power, at times when expatriates’ own resources are not sufficient, to moderate the relationship between expatriates’ inner resource and their adjustment. Van Erp et al.’s (2014) findings imply that COR theory can help understand the way in which expatriates’ personal resources contribute to expatriate adjustment and how personal resources work interactively with external resources.

Wheeler et al. (2012) stated that in regard to COR theory person-environment fit is a central resource. Along with the theoretical propositions of person-environment fit theory, expatriate adjustment is actually the degree of fit between expatriates and their environment. Hence, a higher level of expatriate adjustment, including satisfactory psychological well-being and socio-cultural effectiveness, is a crucial resource for expatriates. With respect to the resource-based approach, the adjustment mechanism can be explained as a resourcing process by which expatriates utilize their personal resources and other environmental resources, such as social support to gain additional resources, for example, good adjustment and high standards of job performance.

In Table 5 below, I summarize the three theoretical approaches and key theories related to expatriate adjustment in the existing literature. Also, I explain the relevance of COR theory to all three approaches in order to indicate that all of these three approaches can be integrated by the resource-based COR theory. In particular, stress-based adjustment can be understood as a process of utilizing coping resources to reduce stressors, anxiety and uncertainty. Learning-based adjustment can be viewed as a social learning process to accumulate personal resources, knowledge and abilities, as examples. From the perspective of the learning-based
perspective, cross-cultural training represents important personal resources for expatriates. As such, I mainly employ the stress-based and resource-based perspective to organize the literature reviewed relating to the antecedents of expatriate adjustment in order to identify the stressors impacting expatriate adjustment and resources facilitating expatriate adjustment.

Table 5: Theoretical Perspectives related to Expatriate Adjustment in Expatriate and IHRM Literature

<table>
<thead>
<tr>
<th>Perspectives</th>
<th>Key theories</th>
<th>Key references</th>
<th>Relationship to COR theory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stress-based</td>
<td>Stresor-strain model</td>
<td>Bhaskar-Shrinivas et al. (2005); Breiden et al. (2004); Gudykunst (1998); Kraimer and Wayne (2004); Selmer (1999b); Stahl and Caligiuri (2005);</td>
<td>The whole adjustment process is a process of reducing anxiety/uncertainty, preventing coping resource loss and/or promoting psychological resource (psychological comfort) gain.</td>
</tr>
<tr>
<td>(Coping)</td>
<td>Coping theory</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Anxiety/uncertainty management theory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning-based</td>
<td>Social learning theory</td>
<td>Black et al. (1991); Caligiuri (2000b); Shaffer et al. (1999); Yamazaki and Kayes (2004)</td>
<td>Social learning process is to accumulate resources (knowledge and abilities) which are required by host environment to fit in.</td>
</tr>
<tr>
<td>(Learning)</td>
<td>U-curve hypothesis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resource-based</td>
<td>Job demands-resources model</td>
<td>Haslberger et al. (2013) Lazarova et al. (2010); Van Erp et al. (2014); Van Vianen et al. (2004)</td>
<td>All of the corresponding relationships of the job demands-resources model and person-environment fit theory reflect a fit level between expatriates’ internal resources and external demands.</td>
</tr>
<tr>
<td>(Resourcing)</td>
<td>Person-environment fit</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conservation of resource theory (COR)</td>
<td></td>
<td></td>
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</tbody>
</table>

2.4. Stressors impacting expatriate adjustment

Based on the stress-related perspective and resource-based perspective, adjustment’s antecedents can be grouped into two themes, stressors that are related to problematic adjustment and resources that are related to successful adjustment. This approach is consistent with the demands-resources classification of Lazarova et al. (2010) and serve the research purpose of my study, to identify the stressors related to unsuccessful adjustment and the resources related to successful adjustment. From the perspective of stress, scholars proposed that unsuccessful expatriate adjustment is related to anxiety and uncertainty in a foreign country and answered this question by identifying various stressors that lead to adjustment problems (Harrison et al., 2004; Kraimer & Wayne, 2004). Stressors, also cast as demands (Lazarova et al., 2010), have been defined as any type of condition which can upset an individual’s adjustment capacity (Pearlin, 1999). In existing expatriate studies, researchers
have identified two main types of stressors, specifically, role stressors and cultural stressors (Kraimer & Wayne, 2004).

2.4.1. Role stressors

Based on work role transition theory (Nicholson, 1984), role characteristics might be related to problematic adjustment as they correlate to an individual’s demand for certainty and predictability. Expatriate work role transition and role characteristics have received extensive attention since the 1980s. Existing studies have identified four work role stressors: role novelty, role overload, role conflict and role ambiguity (Black, 1988; Black et al., 1991). As they might increase the stress or uncertainty of expatriate adjustment and hinder expatriates’ work role transition, these four role characteristics are conceived as stressors.

Role stressors play an important part in expatriate adjustment. Role novelty reflects the difference comparing an expatriate’s previous role and new work role during international assignments (Black, 1988). As expatriates have to cope with the role difference between the parent company and subsidiaries, if expatriates face a high level of role novelty, they are unlikely to adjust well to the host work setting (Shaffer et al., 1999). Role overload can occur if individuals lack the relevant skills to complete an assigned task or at times they realize the difficulties of completing the assigned work within the required time (Fenner & Selmer, 2008). Role ambiguity and role conflict, the other two role stressors, can also diminish and erode expatriate adjustment. Role ambiguity correlates to individual demand for certainty and predictability; role conflict is associated with expatriates’ need for compatibility for different expectations in multiple groups (Shenkar & Zeira, 1992) or the priority for multiple requirements (Peterson et al., 1995).

My review found a number of studies that have examined the relationships between role stressors and expatriate adjustment. These studies reported that although role stressors only had a negative influence on work adjustment, they did not influence other socio-cultural adjustment facets such as general living and interaction adjustment. A potential explanation is that as role stressors are only restricted to the work sphere, they do not reflect the influence of the wider cultural difference related to adjustment (Hechanova et al., 2003; Nicholson & Imaizumi, 1993). Even so, as it became clear, I realized that role stressors might not significantly predict expatriate adjustment. For example, role overload received little empirical support in predicting expatriate work, general, interaction, overall socio-cultural adjustment (Morley & Flynn, 2003) and psychological adjustment (Fenner & Selmer, 2008).
Although role overload might negatively influence expatriate adjustment, it did not have a significant effect on adjustment (Black, 1988). In a study of Irish expatriate adjustment in Moscow, role novelty was also found not to positively connect with work adjustment because role novelty in expatriate assignment could relate to task variety and positive work attitudes (Morley, Burke, & O'Regan, 1997). As existing adjustment studies are almost wholly reliant on the more or less out of date idea of stress-strain, scholars recently have suggested that future research should pay more attention to new approaches and additional determinants related to expatriate adjustment (Park & Abbott, 2011; Takeuchi, 2010).

### 2.4.2. Cultural stressors

Cultural stressors are also the focus of research on expatriate adjustment. However, cultural stressors such as cultural novelty, cultural distance and cultural toughness, may not be effective predictors of expatriate adjustment, or at least only equivocal predictors. Cultural stressors derive from the cultural or psychic differences between the parent country and host country (Lazarova et al., 2010). Specifically, cultural novelty, cultural distance (Church, 1982) and cultural toughness (Mendenhall & Oddou, 1985), have frequently been viewed as interchangeable variables to represent cultural stressors (Bhaskar-Shrinivas et al., 2005). In an initial study related to cultural novelty and socio-cultural adjustment, Black and Stephens (1989) showed that the novelty of the host culture had a negative relationship with expatriate spouse adjustment. Similarly, Black and Gregersen (1991) have revealed that cultural novelty also has a significant negative impact on expatriates’ general and interaction adjustment. It seems that expatriates have to be familiar with the novel host culture in order to adjust to their international assignments. Parker and McEvoy (1993) have also found that the more dissimilar the host-country culture is from the home country culture, the more difficult the interaction adjustment is likely to be. Moreover, Shaffer et al. (1999) have confirmed that cultural novelty hinders general adjustment and interaction adjustment. In a recent study, Jenkins and Mockaitis (2010) further indicated that expatriates’ perceived distance and objective cultural distance are negatively related to expatriates’ first assignment adjustment.

Although the above-mentioned studies support the significant impact of cultural distance on expatriate adjustment, others suggest that the influence of cultural difference has been exaggerated. First, in some cases cultural difference did not influence expatriate adjustment. In a study of cultural novelty and expatriate adjustment, Selmer (2006) has reported that while Western business expatriates are on their assignment in China, there is no significant
relationship between the cultural novelty and socio-cultural adjustment facets. This finding is consistent with a previous study in which Forster (1997) has found that the degree of cultural strangeness of the host country seems not to have any correlation with the outcome of expatriate assignments. One reason for the null effect of cultural novelty on adjustment is that expatriates who are sent to a distinctly different culture might be more mindful of their host culture so they can achieve a good fit with the cultural environment, whereas those assigned to a familiar culture, who are not mindful of the cultural difference, could suffer the cultural impact on adjustment more significantly (Selmer, 2006).

Second, a dissimilar culture might not cause a lower level of expatriate adjustment. Although some studies on expatriates reported a negative relationship between cultural novelty and expatriate adjustment, other studies indicate that they might have a positive relationship or no relationship at all. Parker and McEvoy (1993) initially reported a highly counterintuitive result, that is, greater degrees of culture novelty are associated with greater, rather than lesser, general living adjustment. The novel culture might awaken expatriates’ cultural mindfulness so that they are better prepared for their relocation. Janssens (1995) further found that European managers executing a foreign assignment within Europe experienced less interaction adjustment than European managers in the context of other culturally distant locations such as North America and Asia. And those expatriates, assigned to their neighbour European countries, relied on their not-too-distant social network rather than making a commitment to integrate into the host country. As a result, they separated their work and social life, which led to lower levels of interaction adjustment. Another study of expatriates conducted by Caligiuri (2000b) also found that host country’s cultural difficulty is not related to socio-cultural adjustment. In particular, cultural difficulty demonstrated no linear relationship with adjustment.

The three studies reviewed above reported results that are contrary to the previous studies of Black and his colleagues (Black & Gregersen, 1991; Black & Stephens, 1989) in which cultural differences were significantly related to expatriate adjustment. To interpret these contradictory findings, Takeuchi et al. (2007) proposed that cultural novelty might have a nonlinear relationship with adjustment even though it has no linear relationship with adjustment. The time spent in an expatriate assignment and individuals’ nonlinear learning experience (Ackerman, 1987) could contribute to possible nonlinear relationships between cultural stressors and expatriate adjustment (Takeuchi et al., 2007).
Selmer and his colleagues also conducted a suite of studies in order to examine the connection of cultural similarity and dissimilarity between the home country and the host country in relation to expatriate adjustment. In a study involving Hong Kong Chinese expatriates in mainland China, Selmer and Shiu (1999) found that if expatriates perceived a cultural similarity between Hong Kong and mainland China, there would be a higher level of expectation of unhindered adjustment. On the other hand, if they did not, expatriates might suffer a negative adaptive experience. This study implies that cultural dissimilarity is highly dependent on subjective perception rather than objective cultural difference. In a subsequent study, Selmer (2000a) further found that Western expatriates were better adjusted to Hong Kong than expatriates from mainland China although Hong Kong and China share a similar cultural background. In another study involving a Western context, Selmer (2007) investigated the difference in adjustment of USA expatriates in a culturally similar country, Canada, and a culturally distant country, Germany. He found that the USA expatriates in Canada and those in Germany did not show significant differences in terms of socio-cultural adjustment. Cultural similarity may be irrelevant to expatriate adjustment because expatriates’ perception of similarity can prevent them from learning about critical differences; on the contrary, expatriates assigned to distinctly different host cultures may be mindfully aware of the dissimilarity (O’Grady & Lane, 1996; Selmer, 2007).

To further verify the predictive power of cultural similarity on adjustment, Selmer and Lauring (2009) surveyed two groups of expatriate academics in 34 universities in five European countries and reported the same result as in their previous studies. Their findings showed that the different perceived cultural similarity between the host and home country did not lead to any difference in their adjustment or difference in the time it took for them to master the host culture. Selmer’s series of studies offer evidence that cultural novelty/distance might not have a significant effect on expatriate adjustment. It may be as difficult to adjust to a similar culture as to adjust to a dissimilar culture. This result is consistent with the study of Tanure et al. (2009) in which they found that a small psychic distance does not equate to an unproblematic adjustment. This result is also in line with the psychic distance paradox that cross-cultural operations in culturally similar countries are not necessarily easy to manage because this similarity may, rather than increase the ease, hinder expatriates’ understanding by masking important differences and lead to adaptive ineffectiveness (O’Grady & Lane, 1996).

Third, the impact of cultural distance may also depend on the direction of the assignment. For example, in the context of a country A’s expatriate in country B and a country B’s expatriate
in country A, expatriates may demonstrate different levels of adjustment and performance. For instance, although a mainland Chinese manager in Hong Kong was expected to experience similar adjustment pressure as a Hong Kong expatriate manager in mainland China, the reciprocal adjustment did not happen (Selmer, Ling, Shiu, & De Leon, 2003). In fact, Chinese mainland managers adjusted much more easily to work and life in Hong Kong than Hong Kong managers did in mainland China. In another analogous study, a German expatriate in the USA was assumed to face the same cultural barriers as a USA expatriate in Germany. However, Selmer, Chiu, and Shenkar (2007) have shown that there is not any proof to justify that assumption and the logic in reality is the opposite. Their two studies reveal that the impact of cultural distance is asymmetric. As such, except for the length of cultural distance, assignment location may also exert influence on expatriate adjustment. This finding implies that the context of expatriates’ country of origin matters and might influence the role of cultural stressors in expatriation.

Based on the above review, I note that cultural stressors may not be significant predictors of expatriate adjustment. Furthermore, I also find that expatriates from different countries could experience different adjustment barriers especially related to cultural stressors. With regard to the adjustment research, the context of expatriates’ home country plays an important part. As this study focuses on the context of Chinese expatriates, clearly it is necessary to review the literature regarding the stressors related to Chinese expatriates further.

2.4.3. The stressors of Chinese expatriate adjustment

Although the existing expatriate literature has little empirical evidence on the stressors affecting Chinese expatriate adjustment, some researchers have discussed the adjustment barriers and the reasons for the failure of Chinese expatriates. Expatriate failure is defined as the early return of an expatriate manager before the period of the assignment is completed (Tung, 1984). Following Tung’s definition, the average expatriate failure rate in the Chinese MNCs observed by Shen and Edwards (2004) was four percent, which was lower than that of USA, Japanese and some European MNCs. They found the major reason for such low expatriate failure rates was that most expatriates cherished the expatriation opportunity and worked hard abroad. With regard to Chinese expatriates, the international assignment and working abroad had financial benefits and superior performance could lead to further promotion opportunities. Meanwhile, short expatriation periods and straightforward performance appraisals also facilitated the low rate of Chinese expatriate failure.
Whilst compared with their counterparts from developed countries, Table 6 below points out two reasons for Chinese expatriate failure that may be unique: lacking technological competence and lacking motivation to work abroad. The comparison indicates that different nationalities have some different reasons that could explain expatriate failure (Scullion & Brewster, 2002). However, both Chinese expatriates and expatriates from America shared similar reasons related to failure. Family-related and personal problems, such as leaving the company, were major reasons for expatriate failure in Chinese MNCs (Shen & Edwards, 2004) and American MNCs alike. In the Chinese context, family-related problems which resulted in expatriate failure seem to correlate with Chinese life and work values. Chinese mainland expatriates are loyal to their traditional values such as thrift and family-orientation so that siding with the family is a priority if their jobs force them to choose between family and work (Soo, Hendrik, & Keng-Howe, 2009). If parent firms lack consideration of expatriates’ needs in regard to family or ignore relevant support for expatriate families, especially for dual-career expatriate families, expatriate job hopping and expatriate failure may result. In addition, it is also necessary to take expatriates’ personal adaptive competencies and personalities into account during expatriate selection in order to minimize the expatriate failure rate. In sum, family problems, lack of technical and psychological competencies, and inability to adjust in host countries are the main reasons for Chinese expatriate failure.

Table 6: Reasons for Expatriate Failure

<table>
<thead>
<tr>
<th></th>
<th>American</th>
<th>Japanese</th>
<th>Chinese</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The inability of spouse to adjust</td>
<td>Inability to cope with larger overseas responsibility</td>
<td>Family-related and personal problems</td>
</tr>
<tr>
<td>2</td>
<td>Manager’s inability to adjust</td>
<td>Difficulties with new environment</td>
<td>Manager’s inability to adapt</td>
</tr>
<tr>
<td>3</td>
<td>Other family problems</td>
<td>Manager’s personal or emotional maturity</td>
<td>Manager’s personal or emotional maturity/poor interpersonal relationship</td>
</tr>
<tr>
<td>4</td>
<td>Manager’s personal or emotional maturity</td>
<td>Inability of spouse to adjust</td>
<td>Lack of technical and management competence</td>
</tr>
</tbody>
</table>


Although Shen and Edwards (2004) have identified Chinese family problems as stressors related to unsuccessful expatriate adjustment, in a study of Chinese female expatriates, the relationship between family-related problems and Chinese expatriate performance has not
been supported. Moreover, Shen and Jiang (2011) noticed that although family problems were not significantly related to Chinese female expatriate performance, a culture-related stressor, namely host country nationals’ gender prejudice toward women, has had a negative impact on their performance. Shen and Jiang (2011) have also indicated that expatriate efficacy is significantly and positively related to expatriate performance. In addition, social support resources have been found to be a moderating effect on the relationship between host-country nationals’ prejudice against females and performance. In particular, the impact of host-country nationals’ prejudice toward women on female expatriate performance was stronger if the level of social support from their organization was on the low side. On the one hand, the findings indicate that culture-related stressors might affect expatriate adjustment and performance yet this is only if expatriates are not resourceful in social support. On the other hand, they imply that expatriates’ personal resources and social support resources can contribute to expatriate performance and might also benefit Chinese expatriate adjustment as has also been suggested by Kraimer et al. (2001).

In sum, my review of the stressors impacting expatriate adjustment reveals that work-related stressors are only related to work adjustment rather than to general and interaction adjustment, whereas cultural stressors might not be significant determinants of expatriate adjustment. In the context of Chinese expatriates, I can clearly note that lack of personal and social resources especially personal competencies is significantly related to unsuccessful assignment and low job performance. Additionally, the existing studies show that Chinese expatriates experience lower expatriate failure rates than those of USA and Japanese expatriates. Thus, in order to understand what it is that contributes to successful adjustment I intend to further examine the resources that facilitate expatriate adjustment and performance.

2.5. Personal resources facilitiating expatriate adjustment

In light of the job demands-resources model, Lazarova et al. (2010) identified that resources from different domains might contribute to successful expatriate adjustment. These domains include general resources such as standard of living in host location, personal resources, job resources and family resources. To reduce the complexity of resources classification and fit with the resources clarification of COR theory, for example, personal resources, social resources and especially social support, I classified the resource factors facilitating expatriate adjustment into two primary groups, personal resources and social support resources. Specifically, social support includes the support from work-related sources such as
organizations, colleagues and supervisors and non-work related sources, for example, family members. As such, this section reviews expatriate personal resources and their connection with expatriate adjustment and the next section (2.6) reviews social support and their influence on expatriate adjustment.

According to the research of Lazarova et al. (2010), expatriates’ personal resources include three main categories: demographic attributes, individual difference and knowledge, skills and abilities (KSA). As they include demographic attributes, personal cross-cultural resources are more comprehensive than cross-cultural competencies. Johnson, Lenartowicz, and Apud (2006) defined cross-cultural competence as an individual’s effectiveness in drawing upon a set of knowledge, skills and abilities and other personal attributes (KSAO) in order to work successfully with people from other cultural backgrounds. Matsumoto and Hwang (2013) also suggested that KSAO factors are necessary proxies to demonstrate competencies and point out that individuals’ KSAO constitute an internal psychological resource pool for them to tap into wherever they are. Consistent with the definition of cross-cultural competencies, cross-cultural personal resources in this study can be demonstrated by KSAO in which “O” represents both demographic characteristics and other competencies.

Based on the trainability of a competency, competencies can be labelled as dynamic competencies, for example, KSA and state-like individual difference and stable competencies such as trait-like personalities. According to Leiba-O'Sullivan (1999), stable competencies are difficult to train whereas in contrast, dynamic competencies are likely to be developed through cultural training or international experience. Moreover, cross-cultural training also represents a significant personal resource to facilitate expatriate adjustment (Harrison et al., 2004) because it might promote expatriate personal competencies and adjustment in the context of Chinese expatriates (Qin & Baruch, 2010) and Western expatriates (Waxin & Panaccio, 2005). Hence, personal resources in this study comprise four parts, demographic characteristics, cross-cultural training, dynamic competencies and stable competencies. Specifically, demographic characteristics include gender, age, marital status and previous international experience. Cross-cultural training mainly consists of pre-departure training and post-arrival training. Stable competencies include personality traits such as Big Five personality, multicultural personality and individuals’ dispositional orientation, for example, goal orientation and learning orientation. Regarding dynamic competencies, these consist of KSA such as host country language ability, relational skills and willingness to go on assignment and various psychological states such as self-efficacy, and context-specific state-
like constructs such as cultural flexibility and ethnocentrism and cross-cultural PsyCap.

2.5.1. Demographic characteristics

Expatriates’ demographic attributes such as gender, age and marital status seem to have an influence on expatriate adjustment. However, my review found the connection between these demographic variables and expatriate adjustment relatively weak. In terms of gender, existing studies on female expatriates indicated that women on average were more comfortable with their cross-cultural work relations (Westwood & Leung, 1994), more sensitive to their ability and the host societal cues to fit in with host cultures, more realistic in terms of expectations concerning expatriate relocation (Harvey, 1997), and less discriminated against by host country nationals (Varma, Toh, & Budhwar, 2006) than their male counterparts. Also, male and female expatriates are influenced by different stressors in cross-cultural relocation. During expatriation, male expatriates indicated that their stress mainly sourced from both work and family domains such as family satisfaction, job performance related to expectations, marital satisfaction and a feeling of inadequate preparation for the foreign assignment, whereas, female expatriates’ stress mainly came from family/spouse issues, such as family stress, marital satisfaction and work/life/family balance issues. It appears that male and female expatriates could be different in terms of expatriate adjustment (Harvey, 1997).

Even so, gender differences seem not to be a convincing factor to explain the difference in expatriate adjustment. In an earlier study related to the intercultural adjustment model, Parker and McEvoy (1993) found that gender did not significantly correlate with general living, interaction and work adjustment. Although women might be more advantaged in disposition than men to work as expatriates (Guthrie, Ash, & Stevens, 2003), Caligiuri and Tung (1999) have illustrated that gender differences did not significantly influence work performance, the intent of early return and cross-cultural adjustment. Although female expatriates might experience greater difficulties in adjusting to certain countries such as masculine countries (Caligiuri & Tung, 1999), men and women can adjust and perform equally well in international assignments because women have other comparative advantages such as better skills to build interpersonal relationships in the host country (Taylor & Napier, 1996). In a later study of gender differences in relation to expatriate adjustment, Selmer and Leung (2003) reported that whereas female expatriates might have lower psychological adjustment and higher interaction and work adjustment than male expatriates, in terms of their general adjustment, there was no difference between men and women. Furthermore, Selmer (2000b)
confirmed that gender was not associated with any kind of expatriate socio-cultural and psychological adjustment.

Whilst examining gender differences in expatriate job performance, Sinangil and Ones (2003) found that there were no gender differences in adjustment to overseas business practices even though there was a popularly held belief that female expatriates would not be able to perform as well as male expatriates especially in a cultural environment that may be perceived to be unfriendly to females. Sinangil and Ones (2003) also indicated that although male expatriates might have slightly higher ratings related to technical competence, female expatriates are able to use their interpersonal skills to adjust to male oriented cultures. Female expatriates can also adjust better by taking advantage of their higher levels of self-transcendence in expatriate assignments (Cole & McNulty, 2011). Haslberger (2010) further confirmed that there is no significant difference between women and men in terms of possessing cognitive confidence about daily interactions, local values and general conditions, and feeling about their daily interactions and general conditions. Accordingly, in existing studies gender differences are not highly related to expatriate adjustment. The existing findings imply that gender differences do not seem to matter much for expatriate adjustment.

Although age might influence expatriate job transition because younger expatriates have fewer family responsibilities and commitments, middle-aged expatriates have status and responsibilities such as parenting (Feldman & Thomas, 1991). However, my review reveals that age differences do not significantly impact expatriate adjustment. Parker and McEvoy (1993) found that age did not significantly correlate with any of the three facets of socio-cultural adjustment. Furthermore, Selmer et al. (2000b) reported that no significant difference between younger Chinese expatriates and older expatriates exists in terms of both psychological adjustment and socio-cultural adjustment.

Although Meyskens, Von Glinow, Werther, and Clarke (2009) proposed that married individuals are more likely to be selected for international assignments than single individuals, from a review of the current literature no clear agreement exists regarding whether married expatriates adjust better or not. While investigating Western expatriates in Hong Kong, Selmer (2001a) found that being married positively correlates with expatriate work adjustment as married expatriates could get support from their spouses and family members if they accompanied family members on their assignment. Selmer and Lauring (2011b) also found that being married was positively associated with expatriates’ work
performance and assignment effectiveness. Married expatriates might enjoy higher levels of adjustment and performance as family/spouse support significantly facilitates their work and life in the host country (Caligiuri, Hyland, Joshi, & Bross, 1998). However, the existing studies only investigated the relationship between marital status and expatriate work adjustment, rather than other adjustment facets. Upon a thorough review of the literature, except for these few studies, no further evidence could be found with respect to the influence of marital status on expatriate psychological adjustment and socio-cultural adjustment.

The existing literature has also shown great interest in the relationship between previous international experience and expatriate adjustment. When examining the psychological adjustment of public sector expatriate managers and personal characteristic predictors, Fenner and Selmer (2008) showed that international experience has very little if any at all association with psychological adjustment. In an initial study related to expatriate socio-cultural adjustment, Black (1988) found that previous work experience did contribute to high levels of work adjustment. Kim and Slocum Jr (2008) also reported that prior experience in the USA was positively related to expatriates’ work and interaction adjustment. These findings indicate that previous international experience may influence some facets of socio-cultural adjustment, especially work adjustment, rather than psychological adjustment.

Although individual scholars reported a variety of results in regard to expatriates’ demographic attributes, quantitative reviews have reached some agreement on the relationship between adjustment and demographics. According to two meta-analytic reviews regarding expatriate adjustment (Bhaskar-Shrinivas et al., 2005; Hechanova et al., 2003), demographic attributes, age and gender, were relatively minor predictors of expatriate adjustment when compared to cultural competencies such as self-efficacy, language ability and relational skills. The meta-analyses also showed that previous overseas experience did not significantly predict expatriate adjustment. This is consistent with the findings of Fenner and Selmer (2008). Based on these findings, I find that expatriates’ demographic factors are not significant determinants of expatriate adjustment and performance. It will be necessary to pay more attention to other important predictors which significantly affect expatriate effectiveness.

2.5.2. Cross-cultural training

Most of the existing studies apply a learning-based approach to explaining the underlying mechanism from cross-cultural training to expatriate adjustment. By drawing on social
learning theory (Bandura, 1977), traditional research views cross-cultural training as a social learning mechanism in which an expatriate acquires social knowledge and skills through observation and experience (Littrell, Salas, Hess, Paley, & Riedel, 2006). Also, based on the learning mechanism involved, cross-cultural training can be viewed as an expatriate’s anticipatory resource to promote international adjustment (Kealey & Protheroe, 1996).

Although some studies did not distinguish pre-departure and post-entry training, a review of the current literature reveals the difference in the impact related to adjustment depending on the timing of the expatriate’s training. Pre-departure training has been studied more frequently than post-arrival partially because many companies perceive post-arrival training to be associated with high cost and low effectiveness (Wang & Tran, 2012). With regard to the impact of cross-cultural training on adjustment, the results are mixed. Some researchers found significant effects of training in regard to adjustment while others found non-significant associations with adjustment (Gregersen & Black, 1992; Littrell & Salas, 2005; Littrell et al., 2006; Paltche, 2004; Puck, Kittler, & Wright, 2008; Waxin & Panaccio, 2005).

For instance, even though Waxin and Panaccio (2005) reported that cross-cultural training accelerates expatriate adjustment, Puck, Kittler, et al. (2008) found that cross-cultural training is not highly related with all of the socio-cultural adjustment facets. Moreover, the mixed findings imply that the function of pre-departure cross-cultural training during expatriation might vary due to certain conditions such as the quality and relevance of the training. Accordingly, by influencing the accuracy of expatriates’ expectations prior to their assignment, tailored and relevant pre-departure training can further indirectly affect expatriate adjustment (Caligiuri, Phillips, Lazarova, Tarique, & Burgi, 2001).

Although few studies have focused on post-arrival training, the influence of this on-site training on socio-cultural adjustment cannot be ignored. Studying the impact of pre-departure, post-arrival and language training in relation to adjustment, Wang and Tran (2012) concluded that post-arrival training plays the most critical role in expatriate adjustment because post-arrival cross-cultural training has the strongest impact on expatriate general and work adjustment. Furthermore, language training was the most significant predictor of interaction adjustment. Post-arrival training is more effective than pre-departure training because it offers expatriates the opportunity to alleviate the stressors they have experienced and understood (Sanchez, Spector, & Cooper, 2000). Even so, a meta-analysis on cross-cultural training and adjustment confirmed that cross-cultural training, pre-departure or post-arrival, may not always facilitate socio-cultural adjustment. Hence, the direct correlation between
cross-cultural training and expatriates’ socio-cultural and psychological adjustment has not been fully confirmed.

Apart from the direct effect of training, some scholars also investigated the indirect effect of cross-cultural training on expatriate adjustment via certain personal resources. For instance, Selmer, Torbiorn, and de Leon (1998) noted that sequential cross-cultural training enhances an expatriate’s cultural awareness which in turn benefited socio-cultural adjustment. In terms of the relationship between training and personal resources, Osman-Gani and Rockstuhl (2009) found that by developing expatriate general and specific self-efficacy, cross-cultural training promotes expatriate adjustment. Recently, Wang and Tran (2012) stated that post-arrival cultural training helps in the acquisition of critical resources such as social support. One common finding among these studies is that cross-cultural training mainly promotes personal dynamic competencies such as cultural awareness and self-efficacy due to the trainability of dynamic competencies. Hence, the indirect effects of cross-cultural training on expatriate adjustment are mainly via expatriates’ dynamic competencies.

In sum, expatriate cross-cultural training contributes to and influences expatriate adjustment directly and indirectly. Although the direct effect is not completely conclusive, the indirect effect mechanism indicates that cross-cultural training can develop expatriate dynamic personal resources such as self-efficacy. Also, post-arrival training might be more effective than pre-departure training for on-site training contributes to personal dynamic competencies. These findings imply that some personal competencies can be developed by cross-cultural training and can significantly increase good adjustment. In the case of Chinese expatriates, although Chinese MNCs offer very limited training to expatriates (Shen & Darby, 2006), they have not suffered a lower expatriate failure rate than their Western counterparts (Shen & Edwards, 2004). Hence, I am curious as to that whether some other personal resources contribute to the low failure rate. As a result, further investigation on the role of personal competencies especially trainable dynamic competencies could help to understand the indirect effect of cross-cultural training on expatriate adjustment and identify which competencies work as robust adjustment boosters to help Chinese expatriates.
2.5.3. Stable competencies

Competencies, also called as KSAO (knowledge, skills, abilities, “other” attributes, referring to interests and personality constructs) (Tannenbaum & Yukl, 1992), which have been adopted to categorize the dynamic versus stable nature of competencies (Leiba-O'Sullivan, 1999). Research into competencies has already distinguished their trait-like/stable and state-like/dynamic nature. However, in the field of international business, Leiba-O'Sullivan (1999) argues that the extant literature fails to distinguish between dynamic and stable cross-cultural competencies.

As is shown in Table 7, dynamic cross-cultural competencies are those KSAO that can be acquired or enhanced through training and development whereas stable competencies are those KSAO that are difficult to be trained (Leiba-O'Sullivan, 1999). Accordingly, trainability is the main distinction between stable competencies and dynamic competencies. Specifically, stable competencies, such as Big Five personality and multicultural personality, are relatively dependable and steadfast over time, hard to change and not specific to a certain task or situation; dynamic competencies, such as cultural intelligence, cross-cultural psychological states (e.g., efficacy, resilience, optimism), tend to be malleable over time, open to development and specific to certain tasks or situations (Chen, Gully, Whiteman, & Kilcullen, 2000; Luthans, Avolio, Avey, & Norman, 2007).

Moreover, dynamic competencies, different from stable competencies, are more related to specific context due to their state-like nature rather than general context and trait-like nature. As such, in a specific context, a cross-cultural expatriate assignment, an expatriate’s dynamic competencies may directly influence the performance of expatriate adjustment. On the contrary, an expatriate’s stable competencies such as characteristic dispositions may impact expatriate adjustment indirectly through dynamic competencies. For instance, an expatriate’s multicultural personality may influence expatriate adjustment via his/her psychological states. One of the explanations of the different function modes to expatriate adjustment is that the two groups of competencies are interdependent (Shaffer et al., 2006). Wu and Bodigerel-Koehler (2013) also notes that as stable competencies may constrain or support the acquisition of dynamic competencies via training or experience, the influence of dynamic competencies on expatriate effectiveness might depends upon stable competencies.
Table 7: Differences between Dynamic Competencies and Stable Competencies

<table>
<thead>
<tr>
<th>Competencies</th>
<th>Dynamic competencies</th>
<th>Stable competencies</th>
</tr>
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<tbody>
<tr>
<td>Trainability</td>
<td>Trainable over time</td>
<td>Difficult to be trained</td>
</tr>
<tr>
<td>Context</td>
<td>More specific or state-like</td>
<td>More general or trait-like</td>
</tr>
<tr>
<td>Function mode</td>
<td>Direct impact on expatriate adjustment</td>
<td>Indirect impact on adjustment through dynamic competencies</td>
</tr>
<tr>
<td>Example</td>
<td>Cultural intelligence, Psychological states</td>
<td>Big Five personality, Multicultural personality</td>
</tr>
<tr>
<td>Correlation</td>
<td>The interdependence of the stable and dynamic competencies may have an effect on expatriate effectiveness (Shaffer et al., 2006).</td>
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</table>

From a review of the literature, my findings show that stable competencies have received the most research attention out of all of the personal attributes. As is shown in Table 8 below, over 20 studies have investigated the impact of stable competencies on expatriate adjustment. Clearly, the Big Five personality and multicultural personality have been intensively examined as predictors of expatriate adjustment and performance (Caligiuri, 2000a; Dalton & Wilson, 2000; Downes, Varner, & Musinski, 2007; Huang et al., 2005; Ramalu, Rose, Uli, & Samy, 2010; Shaffer, Harrison, Gregersen, Black, & Ferzandi, 2006).
Table 8: Summary of Antecedents and Findings of Expatriate Adjustment

<table>
<thead>
<tr>
<th>Categories</th>
<th>Subgroups</th>
<th>Main items</th>
<th>Key references</th>
<th>Overall findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stressors</td>
<td>Role stressors</td>
<td>Role novelty</td>
<td>Black (1988); Morley et al. (1997); Shaffer et al. (1999); Kraimer and Wayne (2004)</td>
<td>Role stressors were not significantly related to expatriate adjustment especially to psychological adjustment despite of a close relation with the work adjustment facet of socio-cultural adjustment.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Role ambiguity</td>
<td>Black (1988); Morley et al. (1997); Black and Gregersen (1991); Kraimer and Wayne (2004); Shimoni, Ronen, and Roziner (2005); Takeuchi, Yun, and Tesluk (2002)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Role conflict</td>
<td>Black (1988); Morley et al. (1997); Shaffer et al. (1999); Black and Gregersen (1991); Fenner and Selmer (2008); Palthe (2004); Selmer and Fenner (2009); Kraimer and Wayne (2004)</td>
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<td></td>
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<td>Role overload</td>
<td>Black (1988); Morley et al. (1997); Fenner and Selmer (2008); Selmer and Fenner (2009)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cultural stressors</td>
<td>Cultural novelty</td>
<td>Black and Gregersen (1991); Kraimer and Wayne (2004); Parker and McEvoy (1993); Shaffer et al. (1999); Takeuchi et al. (2007); Waxin (2004)</td>
<td>Cultural stressors (cultural novelty, cultural distance, cultural toughness) may not be significant predictors of expatriate adjustment.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cultural distance</td>
<td>Jenkins and Mockaitis (2010); Peltokorpi (2008); Selmer (2007); Selmer et al. (2007); Shimoni et al. (2005); Takeuchi, Yun, and Russell (2002); Van Vianen et al. (2004)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cultural similarity</td>
<td>Palthe (2004); Selmer (1999a)</td>
<td></td>
</tr>
<tr>
<td>Personal resources</td>
<td>Demographic</td>
<td>Age</td>
<td>Parker and McEvoy (1993); Selmer (2000b); Selmer and Leung (2003); Shi and Franklin (2014); Sinangil and Ones (2003)</td>
<td>Expatriates’ demographic factors were not significant determinants of expatriate adjustment and performance.</td>
</tr>
<tr>
<td></td>
<td>characteristics</td>
<td>Gender</td>
<td>Parker and McEvoy (1993); Caligiuri and Tung (1999); Peltokorpi (2008); Shi and Franklin (2014)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marital status</td>
<td>Selmer (2001a); Selmer and Lauring (2011b)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Previous international experience</td>
<td>Black (1988); Black and Gregersen (1991); Jenkins and Mockaitis (2010); Kim and Slocum Jr (2008); Li and Wong (2008); Morley et al. (1997); Parker and McEvoy (1993); Shaffer et al. (1999); Takeuchi, Tesluk, Yun, and Lepak (2005); Waxin (2004)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cross-cultural</td>
<td>Unidentified</td>
<td>Liu and Lee (2008); Okpara and Kabongo (2011); Osman-Gani and Rockstuhl (2009); Selmer (2005); Waxin (2004)</td>
<td>Cross-cultural training directly influenced adjustment and indirectly influenced adjustment via advancing expatriate personal resources such as self-efficacy.</td>
</tr>
<tr>
<td>Training</td>
<td></td>
<td>Pre-departure training</td>
<td>Black and Gregersen (1991); Fenner and Selmer (2008); Jenkins and Mockaitis (2010); Waxin and Panaccio (2005); Wang and Tran (2012)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Post-arrival training</td>
<td>Wang and Tran (2012)</td>
<td></td>
</tr>
</tbody>
</table>
Table 8: Summary of Antecedents and Findings of Expatriate Adjustment (continued)

<table>
<thead>
<tr>
<th>Categories</th>
<th>Subgroups</th>
<th>Main items</th>
<th>Key references</th>
<th>Overall findings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personal resources</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Stable competencies</strong></td>
<td>Big Five personality</td>
<td>Bruning, Sonpar, and Wang (2012); Caligiuri (2000a); Dalton and Wilson (2000); Huang et al. (2005); Huff, Song, and Gresch (2014); Parker and McEvoy (1993); Peltokorpi (2008); Shaffer et al. (2006); Ward, Leong, and Low (2004); Wu and Bodigerel-Koehler (2013)</td>
<td>Although lots of studies have examined the role of stable competencies especially the Big Five personality, stable competencies were insufficient to predict expatriate adjustment and performance.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Multicultural personality</td>
<td>Peltokorpi (2008); Peltokorpi and Froese (2012); Van Erp et al. (2014)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Goal orientation</td>
<td>Wang and Takeuchi (2007)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dispositional affectivity</td>
<td>Selmer and Lauring (2013)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Social initiative</td>
<td>Lee et al. (2013); Li and Wong (2008); Peltokorpi (2008); Peltokorpi and Froese (2012)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flexibility/adaptability</td>
<td>Peltokorpi (2008); Peltokorpi and Froese (2012)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Self-transcendence</td>
<td>Cole and McNulty (2011)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Dynamic competencies</strong></td>
<td>Self-efficacy</td>
<td>Osman-Gani and Rockstuhl (2009); Palthe (2004); Shaffer et al. (1999)</td>
<td>Compared with demographic resources and stable competencies, dynamic competencies generally have more significantly positive relationship with expatriate adjustment.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pre-departure knowledge</td>
<td>Black (1988); Takeuchi, Yun, and Russell (2002)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cultural intelligence</td>
<td>Abdul Malek and Budhwar (2013); Chen, Kirkman, Kim, Farh, and Tangirala (2010); Kim and Slocum Jr (2008); Lee and Sukoco (2010); Lee et al. (2013)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Language ability</td>
<td>Kim and Slocum Jr (2008); Shaffer et al. (1999); Takeuchi, Yun, and Russell (2002)</td>
<td></td>
</tr>
<tr>
<td><strong>Social support</strong></td>
<td></td>
<td>Organizational support</td>
<td>Kraimer and Wayne (2004); Morley et al. (1997); Wang and Takeuchi (2007); Wu and Ang (2011)</td>
<td>Mixed results on the relationship of family/spouse on expatriate adjustment have been found; supervisor support was not related to expatriate adjustment in two studies.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supervisor support</td>
<td>Kraimer et al. (2001); Shaffer et al. (1999); Waxin (2004)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Co-worker support</td>
<td>Bhaskar-Shrinivas et al. (2005)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Non-work sources</strong></td>
<td>Family/spouse support</td>
<td>Caligiuri, Joshi, and Lazarrova (1999); Kraimer et al. (2001); Waxin (2004)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Socio-emotional support</td>
<td>Liu and Shaffer (2005); Ward and Kennedy (2001)</td>
<td>Instrumental support was not related to socio-cultural adjustment but socio-emotional support might positively relate to interaction adjustment.</td>
</tr>
<tr>
<td></td>
<td><strong>Support types</strong></td>
<td>Instrumental support</td>
<td>Liu and Shaffer (2005); Ward and Kennedy (2001)</td>
<td></td>
</tr>
</tbody>
</table>

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Even so, the meta-analyses also illustrated that personality traits are not significantly related to all facets of expatriate socio-cultural adjustment except for general adjustment (Bhaskar-Shrinivas et al., 2005; Hechanova et al., 2003). Moreover, stable competencies such as personality traits do not significantly influence expatriate adjustment and performance. According to the research of Chen et al. (2000), trait-like individual factors are more distal from performance outcomes when compared to state-like differences because state-like individual difference mediates the process from traits to performance. That is, an individual’s stable competencies influence performance by their own efforts and through the mediating function of dynamic competencies. For example, individuals with higher levels of personal traits such as openness and emotional stability are more likely to have positive psychological states such as confidence and resilience, which in turn benefit their performance. From a review of the expatriate literature, Leiba-O'Sullivan (1999) also suggested that dynamic competencies mediate the impact of stable competencies on expatriate adjustment. In this sense, stable competencies are insufficient to directly predict expatriate adjustment and performance. Hence, as they have received limited research attention, it is necessary to investigate the role of dynamic competencies in expatriation.

2.5.4. Dynamic competencies

In this section I review the existing literature to understand the relationship between expatriate adjustment and specific dynamic competencies, in particular, expatriates’ KSA because they signify a range of expatriate specific cross-cultural competencies, consisting of cultural knowledge, language skills and various abilities. In addition, I also review a particular emerging construct, cross-cultural PsyCap, which originally derives from the construct psychological capital. Cross-cultural PsyCap represents an important dynamic cross-cultural competency of individuals (Kawai & Strange, 2014). Although this personal resource has not been studied in the expatriate literature, I review the literature related to cross-cultural PsyCap in order to verify whether it is a potential resource for expatriate assignment effectiveness.

2.5.4.1. Knowledge, skills and abilities

As KSA is representative of a group of dynamic competencies it may facilitate expatriate adjustment. Existing studies have identified the importance of KSA in regard to expatriate adjustment. Black (1988), for example, examined the predictive role of cultural knowledge in expatriation and found that pre-departure knowledge is positively correlated with the general
adjustment of American expatriate managers in Japan. In a subsequent study, Black and Porter (1991) further confirmed the predictive function of pre-departure cross-cultural knowledge to adjustment. Except for cultural knowledge, Leiba-O'Sullivan (1999) noted that knowledge of conflict-resolution strategies is also critical to expatriates for them to effectively interact with individuals from different cultural backgrounds. Takeuchi, Yun, and Russell (2002) found that having previous knowledge about the host country positively relates to levels of general and interactional adjustment and it was also indirectly connected with work adjustment through cultural novelty. In addition to knowledge, expatriates’ specific skills and abilities also benefit adjustment. For instance, the two meta-analyses about expatriate adjustment indicated that relational skills and language abilities positively relate to expatriate general and interactional adjustment (Bhaskar-Shrinivas et al., 2005; Hechanova et al., 2003).

In Table 8 above it is evident that studies on dynamic competencies remain limited among the reviewed journals as from a review of the literature only ten studies could be found. However, cultural intelligence, an emerging cross-cultural ability (Ang, Van Dyne, & Koh, 2006), has been widely examined. An example is a study comparing the predictive power of emotional intelligence and cultural intelligence. Compared with emotional intelligence, Lee et al. (2013) found that cultural intelligence has more power to explain expatriate socio-cultural adjustment. One main reason for this difference is that cultural intelligence is a contextualized dynamic resource. Its main elements, cross-cultural knowledge, cognition and motivation all fit better within the cross-cultural context than emotional intelligence. The other main reason is that whereas cultural intelligence is more dynamic and easily advanced by the learning experience and training programs, emotional intelligence is more stable and not as easy to improve. Although emotional intelligence is different from stable personality traits (Law, Wong, & Song, 2004), it has been conceptualized as a somewhat enduring, trait-like characteristic (Goleman, 1995; Mayer, Caruso, & Salovey, 1999; Petrides et al., 2010; Salovey & Mayer, 1989; Smith, Heaven, & Ciarrochi, 2008). Accordingly, in terms of adaptability and predicting adjustment, emotional intelligence is less reliable compared to cultural intelligence. Lii and Wong (2008) confirmed this difference, finding that trait-like emotional intelligence had no relationship at all with expatriate adjustment.

Table 8 explicitly illustrates that cultural intelligence, an expatriate’s ability for successful adjustment in culturally diverse contexts (Earley & Ang, 2003), has received scholars’ attention in the field of cross-cultural adjustment studies. All of the reviewed studies...
found that cultural intelligence positively and significantly influenced expatriate adjustment (Abdul Malek & Budhwar, 2013; Koo Moon, Kwon Choi, & Shik Jung, 2012; Lee et al., 2013; Templer, Tay, & Chandrasekar, 2006). The main underlying reason for the influence of cultural intelligence on expatriate adjustment is that cultural intelligence represents an individual’s dynamic ability to function effectively in a cross-cultural context (Ang et al., 2007). From a resource-based perspective, this dynamic competency can help expatriates acquire other key resources in their assignments including a good adjustment.

Although previous studies have emphasized the important role of special knowledge, skills, and abilities in international assignments, meta-analysis found that expatriates’ skills such as language skills did not affect expatriates’ work adjustment (Bhaskar-Shrinivas et al., 2005). The predictive function of KSA to expatriate adjustment is still limited. In addition, particular KSA are more convenient to evaluate compared with other dynamic competencies such as psychological states. As a result, the impact of some dynamic competencies on expatriate adjustment may receive less empirical attention and examination compared with KSA due to the difficulty related to measurement. Thus, more research attention to an expatriate’s dynamic competencies, rather than merely KSA, may contribute to an in depth understanding of the relationship between personal resources and expatriate effectiveness and in turn benefit expatriate selection and assessment.

2.5.4.2. Cross-cultural PsyCap

Led by Seligman and other positive psychologists (e.g., Seligman, 1999; Seligman & Csikszentmihalyi, 2000), research on positive psychology shifts the focus of psychology from what it is that is wrong with people, for example, people’s weakness, vulnerability and the remediation of pathology, to what it is that is right with people, such as, their strengths, resilience and developing well-being and the good life (Luthans, 2002). Luthans (2001, 2002, 2003) initially introduced four positive psychological variables, including hope, self-efficacy, optimism and resilience, into the organizational behaviour research. Luthans, Luthans, and Luthans (2004) employed the term “psychological capital” or its abbreviation “PsyCap”, which consists of the four positive psychological states of confidence, hope, optimism and resilience, in order to promote the study of positive organizational behaviour.

To clarify the emerging concept of psychological capital, Table 9 below compares five concepts in regard to capital. The classical concept of physical capital emphasizes the tangible assets such as money, land and labour. The core value of physical capital comes from
“what you have”. The concepts of human capital, social capital and psychological capital have been evolved from the classical physical capital, underlining intangible personal resources such as knowledge, skills, social relationships and psychological states. Specifically, human capital mainly values the resources sourcing from “what you know”; social capital mainly stresses the value derived from “who you know”, namely, the social relationships and contacts such as social networks and social support; psychological capital and its corresponding context-specific concept, cross-cultural psychological capital, highlights the psychological resources in relation to “who you are (in a cross-cultural context)”, especially an individual’s positive psychological states, namely, hope, optimism, self-efficacy and resilience (Luthans, Youssef, & Avolio, 2007).

Table 9: Forms of Capital, Conceptual Focus, Value Sources and Examples

<table>
<thead>
<tr>
<th>Forms of capital</th>
<th>Conceptual focus</th>
<th>Value sources</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical capital</td>
<td>Tangible assets</td>
<td>What you have</td>
<td>Money, land, labour</td>
</tr>
<tr>
<td>Human capital</td>
<td>Knowledge, skills</td>
<td>What you know</td>
<td>Knowledge, skills, intelligence</td>
</tr>
<tr>
<td>Social capital</td>
<td>Social relationships, contacts</td>
<td>Who you know</td>
<td>Networks, social support</td>
</tr>
<tr>
<td>Psychological capital</td>
<td>Psychological states</td>
<td>Who you are</td>
<td>Hope, optimism, self-efficacy</td>
</tr>
<tr>
<td>Cross-cultural psychological capital</td>
<td>Cross-cultural psychological states</td>
<td>Who you are in a cross-cultural context</td>
<td>Cross-cultural self-efficacy, cross-cultural optimism</td>
</tr>
</tbody>
</table>

Source: partially adapted from Luthans, Youssef, et al. (2007)

PsyCap, as an individual’s important dynamic competency, refers to an individual’s positive psychological state of development that is characterized by self-efficacy, hope, optimism and resilience (Luthans, Youssef, & Avolio, 2007). In particular, the state of self-efficacy is an “individual’s conviction or confidence about his or her abilities to mobilize the motivation, cognitive resources or courses of action needed to successfully execute a specific task within a given context” (Stajkovic & Luthans, 1998b, p. 66). The state of hope is defined as “the sum of the perceived capabilities to produce routes to desired goals, along with the perceived motivation to use those routes” (Snyder, 2000, p. 8), which consists of three essential theoretical components, for example, attainable and valuable triggers or goals, capability to generate various routes to reach a goal or pathways and mental willpower to motivate individuals to build their routes or agency thought (Snyder, 2002). The state of optimism refers to a general expectancy for positive outcomes, regardless of the source of the outcomes.
The state of resilience is characterized by positive adjustment in the context of significant adversity or risk (Masten & Reed, 2002).

Empirical findings have shown the significance of PsyCap in predicting work effectiveness such as job satisfaction, organizational commitment and performance (Avey, Wernsing, & Luthans, 2008; Jensen & Luthans, 2006; Luthans, Avey, Clapp-Smith, & Li, 2008; Luthans, Avolio, Walumbwa, & Li, 2005). A meta-analysis on the impact of PsyCap on employee attitudes, behaviours and performance (Avey et al., 2011) showed that PsyCap is significantly and strongly related to attitudes and behaviours considered desirable such as job satisfaction, organizational commitment, psychological well-being at work, organizational citizenship behaviours and that PsyCap is negatively related to attitudes considered undesirable, such as employee cynicism, turnover intentions, and employee stress, anxiety and deviance. In addition, this meta-analysis also found that PsyCap has a significant relationship with performance measured in multiple ways such as self-reports, supervisor evaluations and objective measures.

Although the construct of PsyCap was originally positioned in research on the domestic workspace, PsyCap is applicable to various specific work-related contexts such as cross-cultural work settings (Clapp-Smith et al., 2007). Compounding four positive psychological states, PsyCap as a context-flexible composite construct represents a unique dynamic competency for individuals especially the individual who works in a cross-cultural context. As PsyCap is significantly related to employee’s attitude, behaviour and performance in domestic workplace, it is necessary to understand the role of context-specific PsyCap in such a context as challenging expatriate assignments. Accordingly, scholars have put forward a context-specific PsyCap: cross-cultural PsyCap (Clapp-Smith, 2009; Dollwet & Reichard, 2014). Following the definition of PsyCap by Luthans and his colleagues (Luthans, Youssef, et al., 2007), cross-cultural PsyCap in this study refers to individuals’ positive psychological state in a cross-cultural environment, which can be characterised by being efficacious, hopeful, optimistic and resilient in terms of accomplishing their tasks and goals.

PsyCap, a dynamic competency, consists of the psychological states of self-efficacy, hope, optimism, and resilience. Analogously, cross-cultural PsyCap as a cross-cultural dynamic competency is a compound of four subordinate cross-cultural psychological states, including cross-cultural self-efficacy, cross-cultural hope, cross-cultural optimism and cross-cultural resilience. Cross-cultural self-efficacy, as one component of cross-cultural PsyCap, has been
shown to have a significant impact on expatriate assignment. Based on social learning theory (Bandura, 1977), self-efficacy beliefs enable an expatriate to cope with various stressors to achieve higher levels of adjustment. Similarly, the possession and investment of the self-efficacy resource can help in the acquisition of other resources especially a higher level of fit between an expatriate and his or her host environment. A number of studies have examined the relationship between self-efficacy and expatriate adjustment. Two meta-analytical reviews have confirmed the importance of self-efficacy in predicting three facets of expatriate socio-cultural adjustment. In addition, Fenner and Selmer (2008) also reported that self-efficacy facilitates expatriate psychological adjustment. In the same manner, cross-cultural hope, cross-cultural optimism and cross-cultural resilience and overall cross-cultural PsyCap may also significantly benefit expatriate adjustment and performance.

Given the positive functions of PsyCap, work effectiveness in domestic work settings, cross-cultural PsyCap are also expected to facilitate expatriate assignment effectiveness. Compared with widely-known cultural intelligence, cross-cultural PsyCap and its three elements, hope, optimism and resilience, have not been studied in the field of expatriate research. Nevertheless, the difference between cross-cultural PsyCap and other cross-cultural dynamic competencies in facilitating socio-cultural adjustment has been identified. In the latest investigation on the individuals who have cross-cultural experience, Dollwet and Reichard (2014) found that cross-cultural PsyCap had more added value than other cross-cultural competencies including cultural intelligence, openness and ethnocentrism for the purpose of predicting socio-cultural adjustment.

In sum, despite the significance in developing expatriate adjustment, the current knowledge in relation to expatriates’ cross-cultural dynamic competencies is insufficient. The latest literature indicated that cross-cultural PsyCap seems to be one of the most important cross-cultural dynamic competencies for expatriation. For this reason, it is necessary to introduce cross-cultural PsyCap into expatriate research and investigate the impact of this dynamic competency as it relates to expatriate adjustment and performance.

2.5.5. Personal resources of Chinese expatriates

In the literature on the selection of Western expatriates, expatriate personal resources including both dynamic and stable competencies are highly valued (Graf, 2004; Leiba-O'Sullivan, 1999). However, these types of advice have not necessarily been well applied into practice in Chinese MNCs. In a study of expatriate recruitment and selection, Shen and
Edwards (2004) pointed out that the primary selection criteria are the domestic track record, technical skills, language ability and attitudes to international assignments and company regulations. The expatriates’ stable competencies such as personality traits and dynamic competencies such as psychological capability are neglected. Shen and Edwards (2004) also reported that Chinese MNCs did not employ psychological tests for expatriate selection and that the relationship between expatriates and decision-makers determined the selection results. Therefore, research on Chinese expatriates’ personal resources and their impact on expatriate effectiveness could provide more empirical evidence for the expatriate selection practices of Chinese MNCs.

Although there are few empirical studies which have examined the function of Chinese business expatriates’ personal resources, a study of mainland Chinese academic expatriates and students contributes to our understanding of the impact of personal resources on expatriate adjustment and performance. In that study, Tsang (2001) showed that both the dynamic competency (i.e., self-efficacy) and stable competency (i.e., extroversion) were positively relevant to expatriate general and interaction adjustment. In another study, Shen and Jiang (2011) found that expatriates’ personal resource, self-efficacy, positively predicted the job performance of Chinese female business expatriates. Even so, there is little if any evidence for the relationship between Chinese business expatriates’ personal resources, especially cross-cultural dynamic competencies, and the effectiveness of their assignments. To further understand the role of cross-cultural dynamic competencies in expatriation, my study intends to undertake a study of Chinese expatriates by examining the impact of expatriates’ cross-cultural PsyCap on their adjustment and performance.

2.5.6. Research question No.1

Based on the above review of the expatriate literature, I note that limited attention has been paid to the impact of expatriates’ dynamic competency, especially cross-cultural PsyCap. According to my review of the stressors of expatriate adjustment, the existing adjustment literature has conducted intensive research on the relationship between role and cultural stressors and adjustment. Researchers have also confirmed the predictive role of expatriates’ personal resources, for example, personality traits, psychological states, capabilities and social resources, such as social support, for successful adjustment and high job performance (Bhaskar-Shrinivas et al., 2005; Caligiuri, 2000a; Downes, Varner, & Hemmasi, 2010; Farh, Bartol, Shapiro, & Shin, 2010; Hechanova et al., 2003; Huang et al., 2005; Kim & Slocum Jr,
However, few studies have investigated the relationship between expatriates’ dynamic competencies and expatriate adjustment (Holopainen & Björkman, 2005; Kim & Slocum Jr, 2008; Shaffer et al., 2006) even though they are potential contributors to good adjustment. Furthermore, expatriates’ dynamic competencies as valuable strategic personal resources can be developed by training or performance intervention. As such, more research on expatriate dynamic competencies will benefit both scholarly conversation and expatriate management practice.

The two extant meta-analytic reviews (Bhaskar-Shrinivas et al., 2005; Hechanova et al., 2003) showed that certain individual factors, self-efficacy, language skills and interpersonal skills significantly contributed to expatriate adjustment and performance. However, compared to the other groups of adjustment’s predictors, such as work-related factors and environmental factors, only a few personal resources have received research attention. The meta-analytic review also supported the importance of personal resources in predicting expatriate performance. Based on the 30 primary empirical studies in relation to the determinants of job performance, Mol, Born, Willemsen, and Van Der Molen (2005) comprehensively reviewed the performance predictors including personalities, experience, intelligence and abilities and provided solid evidence for the relevance of expatriates’ personal resources to job performance. This meta-analysis also indicated that although some personal resources, for example, openness had domestic validity, they may not generalize to the expatriate context. This finding, together with the results of the meta-analyses on expatriate adjustment, provides plenty of encouragement to me to continue focusing on the impact of some personal resources wherein predictive ability has been validated in the domestic context yet in the expatriate context, has not received adequate testing. This is the reason I intend to take a closer look at expatriates’ personal resources rather than other predictors.

In terms of the individual antecedents of expatriate adjustment, past research has highlighted the importance of a number of personal resources such as personality traits and specific job competencies (Caligiuri, 2000a; Lii & Wong, 2008). Scholars in the field of expatriate studies recommend that it is necessary to undertake further empirical examination in regard to cross-cultural competencies because these personal resources, while they remain abstruse and unclear, could be crucial for a successful assignment and expatriate adjustment (Kim &
Slocum Jr, 2008; Shaffer et al., 2006; Templer, 2010). As such, my study intends to examine the relationship between cross-cultural competencies and expatriate adjustment.

In light of my review on expatriate’s cross-cultural competencies, I noticed that it is necessary to study dynamic competencies rather than stable competencies. As listed in Table 8, over 20 studies have examined the relationship between Big Five and multi-cultural personality and expatriate adjustment. Expatriates’ various specific skills such as language skills and relational skills have also received intensive study. Yet, the reviewed literature has not engaged with dynamic cross-cultural competencies especially cross-cultural PsyCap.

Expatriate adjustment mainly represents the level of psychological comfort in the new setting. Expatriates’ psychological states may closely relate to their adjustment. Similar to self-efficacy, cross-cultural positive psychology such as hope, resilience, and optimism may also positively influence expatriate socio-cultural and psychological adjustment. Expatriates’ cross-cultural PsyCap can accelerate the process of the development of intercultural competencies such as a global mind-set (Clapp-Smith et al., 2007) and improve cross-cultural adjustment (Dollwet & Reichard, 2014). To date, no particular empirical study in the expatriate literature has examined the role of cross-cultural PsyCap. Hence, I intend to examine the impact of this cross-cultural dynamic competence on expatriate effectiveness. Thus, I put forward the following research question:

RQ1: How does cross-cultural PsyCap influence expatriate adjustment and job performance?

2.6. Social support facilitating expatriate adjustment

Social support is another important group of expatriate resources. There are different forms of social support, such as structural and functional support (Beehr & Glazer, 2001). Whereas structural support pertains to the availability of others where social structures exist such as organizational, religious and familial setting, functional support refers to supportive actions, tangible and intangible, provided by supportive others (Glazer, 2006). Studies that exist in relation to the expatriate literature, have acknowledged that social support is a multidimensional construct (Drach-Zahavy, 2004; Kraimer & Wayne, 2004; Zimet, Dahlem, Zimet, & Farley, 1988). Moreover, to clarify the different dimensions of social support, the expatriate literature identifies two approaches: one is related to the sources of social support (similar to structural support); the other is the types (corresponding to the functional support) of social support (Caligiuri & Lazarova, 2002).
In Table 10 below, I summarize the taxonomy and dimensions of social support in the expatriate context. According to Caligiuri and Lazarova (2002), expatriates’ social support can be classified by sources, such as from whom, and types or functions. In terms of sources, my review identifies that expatriates receive social support either from work-related sources, including parent company, co-workers and supervisors or non-work sources, such as, family members, friends and host country nationals. In regard to the types of support, social support involves socio-emotional support, instrumental and informational support (Caligiuri & Lazarova, 2002). Whereas these three types of support have been merged into two basic functional support types, emotional support represents intangible assistance such as trust, empathy, and compassion, which meets individuals’ social and emotional needs and instrumental support represents tangible assistance such as money, information and assistance with work, to meet individuals’ instrumental demands (Glazer, 2006).

The distinction between the two primary support types, socio-emotional support and instrumental support, has been widely recognized by researchers (Podsiadlowski, Vauclair, Spiess, & Stroppa, 2013; Semmer et al., 2008; Shakespeare-Finch & Obst, 2011). In the context of cross-cultural work settings, Ong and Ward (2005) have also confirmed social-emotional support and instrumental support as the two main types and validated this distinction. According to the conceptualization of Ong and Ward (2005), instrumental support includes the content of informational support. To be consistent with this recognized model and the widely-acknowledged scholarly classification of support types, I select socio-emotional support and instrumental support as the two distinct support types for expatriate research. In particular, socio-emotional support functions by meeting expatriates’ social and emotional needs; instrumental support functions by meeting expatriates’ instrumental needs including informational demands.
Table 10: Taxonomy and Dimensions of Social Support

<table>
<thead>
<tr>
<th>Taxonomy</th>
<th>Sources</th>
<th>Types</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dimension</strong></td>
<td><strong>Support from work sources</strong></td>
<td><strong>Socio-emotional support</strong></td>
</tr>
<tr>
<td></td>
<td>Organization support</td>
<td>Support to meet social and emotional needs</td>
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<td></td>
<td>Supervisor support</td>
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<td></td>
<td>Co-work support</td>
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<td></td>
<td>Mentor support</td>
<td></td>
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<tr>
<td><strong>Support from non-work sources</strong></td>
<td><strong>Instrumental support</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Family/spouse support</td>
<td>Support to meet the instrumental needs including informational demands</td>
</tr>
<tr>
<td></td>
<td>Host nationals support</td>
<td></td>
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<tr>
<td></td>
<td>Friends support</td>
<td></td>
</tr>
</tbody>
</table>

2.6.1. Sources of social support

Social support mainly derives from either work sources or non-work sources. In order to identify the relationship between expatriate adjustment and social support from work sources and non-work sources, in this section, I review the existing expatriate adjustment literature related to various sources of social support.

2.6.1.1. Social support from work sources

Social support from work sources, for example, organizational support, supervisory support, co-worker support, is a critical factor to expatriate adjustment. In the process of critically reviewing expatriate adjustment from the perspective of parent companies, Takeuchi (2010) found that a majority of current studies employ perceived organizational support as a research focus. Perceived organizational support refers to the employees’ “global belief concerning the extent to which the organization values their contribution and cares about their well-being” (Eisenberger, Huntington, Hutchison, & Sowa, 1986, p. 501). By referencing the norm of reciprocity (Gouldner, 1960), organizational support theory suggests that employees reciprocate their employers with commitment, effort and performance when they perceive high levels of support (Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001). To date, the correlation between perceived organizational support and work-related outcomes such as organizational commitment, adjustment, job satisfaction, performance and withdrawal behaviours have received extensive empirical support in many studies and two meta-analyses (Rhoades & Eisenberger, 2002; Riggle, Edmondson, & Hansen, 2009). For example, Caligiuri et al. (1999) found that perceived organizational support facilitated expatriate adjustment. The positively supportive relationship between POS and expatriate adjustment has also been further confirmed in two subsequent studies (Kraimer et al., 2001; Wang &
Based on social exchange theory (Homans, 1958), expatriates with higher levels of social support from parent companies can adjust better in the socio-cultural domain because perceived organizational support offers expatriates favourable treatment that motivates them to engage in a positive exchange with their parent companies through good performance and adjustment efforts. In addition, from a resource-based perspective, perceived organizational support meets expatriates’ socio-emotional and instrumental needs and then develops their cross-cultural positive psychology such as self-efficacy and hope which facilitates their adjustment.

Supervisor support is a second type of social support from the work source. In a study of expatriates from different cultures, Waxin (2004) found that supervisor support is significantly related to interaction adjustment in French, Korean and Scandinavian samples. However, although leader-member exchange, a proxy of supervisor support, had a direct effect on expatriate job performance, it did not influence work adjustment (Kraimer et al., 2001). This finding was consistent with an earlier study of supervisor support. In that study, Shaffer et al. (1999) reported that supervisor support is not related to expatriate adjustment. One possible explanation is that social exchange between supervisors and expatriates might benefit organization-related behaviour such as job performance rather than an expatriate’s personal psychology such as work adjustment. It also implies that supervisor support does not affect job performance through the mediation of adjustment (Kraimer et al., 2001). Another reason is that the function of supervisor support on performance and adjustment might depend on expatriates’ assignment experience. Those on their first assignment, might rely heavily on co-worker support (Shaffer et al., 1999). As a result, supervisor support might have negative or null influence on expatriate adjustment as the adjustment could be a social learning process by expatriates themselves.

Co-workers are the third type of social support for expatriates from the work source. A meta-analysis on expatriate adjustment conducted by Bhaskar-Shrinivas et al. (2005) reported that social support from co-workers aids expatriate work adjustment and interaction adjustment. Two recent studies have shown the importance of co-worker support to adjustment and job satisfaction. Specifically, a study of expatriate nurses conducted by Bozionelos (2009) found that peer support was significantly related to job satisfaction. Another study of expatriate English teachers in Taiwan showed that co-worker support can help in easing expatriate general adjustment (Lee & Van Vorst, 2010). In their study, Lee and Van Vorst (2010) also reported that social support from local Taiwanese co-workers also positively affects
interaction adjustment and work adjustment. This means that support from both expatriate co-workers and host co-workers has a positive relationship with expatriate adjustment.

Through a meta-analysis of 70 studies, Rhoades and Eisenberger (2002) have identified reciprocal mechanism, socio-emotional mechanism and expectancy mechanism as the three main mediating mechanisms underlying perceived organizational support. The reciprocal mechanism can be explained by a situation in which an employee receives a high level of support or favourable treatment from an organization and via the norm of reciprocity the employee will be obliged to return the treatment (Gouldner, 1960) through his or her positive attitudes and behaviours. The socio-emotional mechanism substantiates that perceived organizational support meets the employees’ needs for socio-emotional support, esteem and approval (Rhoades & Eisenberger, 2002). The expectancy mechanism corroborates the contribution of perceived organizational support to performance-reward expectancies. That is, that perceived organizational support can positively affect employees’ expectations of reward for better performance. Compared with the application of the reciprocal mechanism in the existing literature, limited studies examine the socio-emotional mechanism (Chen, Aryee, & Lee, 2005). The socio-emotional mediators in this mechanism consist of such variables that reflect the fulfilment of socio-emotional needs such as social support or the receipt of socio-emotional and psychological resources as self-efficacy. In light of this logic, the relationship between social support and expatriate adjustment can also be explained from a resource-based perspective in which social support functions as the provider of socio-emotional and psychological resources.

2.6.1.2. Social support from non-work sources

Social support from non-work sources, for example, family members, friends and host country nationals also seems to influence expatriate adjustment and performance. The importance of family support in the international assignment of married expatriates has been confirmed in the past decade (e.g., Konopaske, Robie, & Ivancevich, 2005). Before the last decade, Caligiuri et al. (1998) found that family characteristics such as family support and family adaptability are related to expatriate adjustment. Chew (2004) also found that one of the main attributes for expatriate success in their international assignment is having an adaptive and supportive spouse. Spouse support has become a crucial resource to expatriates (Lazarova et al., 2010).
A few studies have investigated the effect of social support from family sources on expatriate adjustment. For example, in a study of female expatriates working in US-headquartered companies, Caligiuri et al. (1999) provided evidence that support from a spouse and/or children is significantly related to socio-cultural adjustment. Waxin (2004) also found that partner social support positively correlates with expatriates’ interaction adjustment. However, when studying three sources of social support including spouse, supervisor and organization in regard to expatriate adjustment, Kraimer et al. (2001) did not find a significant relationship between spouse support and expatriates’ general and work adjustment. These studies had mixed views on the role of social support in relation to expatriate adjustment. As a result, the impact of family support on expatriate adjustment is still not completely clear.

The main reason for the mixed result is that different studies adopted different measures of spouse support. In particular, Caligiuri et al. (1999) utilized a single-item scale yet Waxin (2004) and Kraimer et al. (2001) employed the widely-recognized measure developed by Black (1988). Also, family members mainly offer socio-emotional needs and interactional support to expatriate, not work-related support. Accordingly, spouse support and expatriates’ general and work adjustment might benefit interaction adjustment rather than work adjustment, as found in the study of Kraimer et al. (2001). In addition, Takeuchi (2010) noted that family/spouse was one of the primary stakeholders of expatriates who can affect expatriates or be affected by expatriates in a reciprocal way. For example, a well-adjusted expatriate may not require high levels of spouse support as they may have other resources to achieve good adjustment. Hence, the relationship between spouse/family support and expatriate adjustment might not be easy to identify.

Except for family and the organization in which expatriates work, host country nationals represents one of three main stakeholders in expatriate assignments (Takeuchi, 2010). Social support from host country nationals is also an expatriate’s resource which enables them to cope with work and emotional demands and buffer the negative effect of demanding conditions (Lazarova et al., 2010). Yet there are few studies about the effect of host country nationals on expatriate adjustment. An exception is Black’s (1990) study, which investigated the relationship between host country nationals’ social support and expatriate adjustment and found while social support from expatriate host country nationals helps expatriates improve their interactional and general adjustment, it does not help their work adjustment.
Apart from family members and host country nationals, social support from friends also has an impact on socio-cultural adjustment. Two studies have investigated the role of social support from friends during the expatriate assignment. Specifically, Black (1990) reported that social support from the host country’s friends is significantly related to expatriates’ interaction and general adjustment. Herleman, Britt, and Hashima (2008) also found social support from friends is positively related to spouses’ personal and interaction adjustment.

Combined with the findings of social support from family members and host country nationals, social support from non-work sources mainly influences expatriate interaction adjustment and general living adjustment rather than work adjustment. The findings imply that social support might function in different ways. Even though social support from non-work sources might relate highly with expatriate socio-emotional needs and non-work related adjustment, social support from work-related sources might relate highly with instrumental needs and work adjustment.

In sum, while social support from non-work sources might effectively predict expatriate adjustment some studies’ findings about family support are not significant. Together with the studies on social support from work sources, my literature review identifies that social support represents an important resource for expatriate adjustment. However, as a majority of these studies mainly conceptualize social support from the perspective of support sources, further investigation on social support in expatriate adjustment from other perspectives, for instance, different types of social support, could contribute to an in-depth understanding of the role of social support in expatriation.

2.6.2. Types of social support

Both of the two types of social support seem to influence expatriate adjustment because they meet expatriates’ socio-emotional demands and instrumental demands. This section reviews the existing expatriate adjustment literature in relation to socio-emotional support and instrumental support.

2.6.2.1. Social-emotional support

Socio-emotional support refers to the support provided to meet emotional needs such as trust, attention and affection (Harvey, 1997). Among the reviewed journals, two studies related to socio-emotional support and expatriate adjustment have been identified. Even so, the two empirical studies on socio-emotional support have inconsistent results. In particular, Ward
and Kennedy (2001) employed a sample of British expatriates to investigate the relationship between socio-emotional support seeking and psychological adjustment and found socio-emotional support seeking was not related to psychological adjustment. With this finding, Ward and Kennedy (2001) indicated that the use of social support might be different from source, quality, or perceived availability of social support. Utilizing a sample of Western expatriates, Liu and Shaffer (2005) found that the depth of social network relationship with host nationals, measured by emotional support, network closeness and socialization, represent important predictors of interaction adjustment and job performance. As the measurements of socio-emotional support seeking and depth of social network do not equate to socio-emotional support, the two available studies cannot testify to a positive relationship between socio-emotional support and expatriate adjustment.

In a recent study, Podsiadlowski et al. (2013) identified a significant positive relationship between socio-emotional support and expatriate assignment satisfaction. This latest finding further implies socio-emotional support might be related to expatriates’ emotional or psychological states. However, little if any empirical evidence directly explaining or confirming the connections between socio-emotional support and expatriate adjustment exists. As a result, because sufficient emotional support may be helpful for expatriates to buffer the stress associated with adjustment to working, living and interacting in the host country, Farh et al. (2010) recommended researchers to change their research focus onto the types of support, especially socio-emotional support.

From a resource-based perspective, socio-emotional support represents a valuable external resource for an individual to create other resources or prevent job burnout (Hobfoll, Freedy, Lane, & Geller, 1990). In studies on the sources of social support, the findings confirm that social support from family members and friends might facilitate expatriate adjustment by meeting social and emotional demands. However, it is not clear whether social support from these two non-work sources functions as a socio-emotional resource to meet expatriates’ affective needs. For this reason, in order to clarify the function of socio-emotional support, I seek to investigate the influence of the socio-emotional dimension of social support on expatriate effectiveness.

2.6.2.2. Instrumental support

Instrumental support has been defined as the support provided for instrumental needs, both tangible and informational, such as resources, skills, or information (Ong & Ward, 2005).
Instrumental support represents an important function of social support. From a resource-based perspective, expatriates can utilize instrumental support to cope with adjustment barriers or acquire additional resources such as psychological resources and person-environment fit. However, the two relevant reviewed studies in the expatriate literature do not support the positive influence of instrumental support on expatriate adjustment. Similar to socio-emotional support, seeking instrumental support is not related to expatriate psychological well-being (Ward & Kennedy, 2001). Likewise, Liu and Shaffer (2005) found that instrumental support from host country nationals is not related to any facet of socio-cultural adjustment and expatriate job performance. These two findings are contrary to those of another empirical study of cross-cultural sojourners. In that study, Ong and Ward (2005) found that socio-emotional and instrumental support affect sojourner’s adjustment and significantly associated with a higher sense of mastery and lower levels of interpersonal distrust and depression.

The mixed results among the three expatriate and sojourner studies indicate that the impact of instrumental support on expatriate adjustment has not been confirmed because the measurements of instrumental support in the three studies are different. In the study of Ward and Kennedy (2001), instrumental support seeking is different from instrumental support itself. In the study of Liu and Shaffer (2005), they investigated instrumental support from one special source, host country nationals, rather than from other sources such as parent company or co-workers. Yet Ong and Ward (2005) measured the construct instrumental support by the perception of instrumental support from any source. The difference between the measurements partly explains the contradictory findings.

In the context of expatriation, instrumental support might play a positive role in buffering uncomfortable psychological states, uncertainty and under-performance by provision of practical resources such as advice, training and financial assistance (Caligiuri & Lazarova, 2002; Kraimer & Wayne, 2004; Kraimer et al., 2001). From a review of the literature, I notice that social support offered from work-related sources is generally associated with expatriate general adjustment and work adjustment. Also, Kraimer and Wayne (2004) confirmed that instrument-related support, for example, financial support from parent companies had a significantly positive relationship with one expatriate effectiveness criterion, namely, organizational commitment. Although its impact has received little examination, the finding implies that instrumental support is likely to work as a positive determinant of expatriate effectiveness. Considering that the few existing studies have reached contradictory
results, it is necessary to examine the impact of instrumental support on expatriate adjustment.

2.6.3. Social support in Chinese expatriation

Chinese MNCs provide limited adjustment support to their expatriates and families. In particular, only limited cross cultural training is provided to expatriates (Qin & Baruch, 2010; Shen & Darby, 2006). The spouses and families of expatriates do not have any pre-departure training at all (Shen & Darby, 2006). In some Chinese MNCs, family members are not permitted to accompany expatriates. In these situations, as social support for Chinese expatriates is relatively low in regard to helping with social-cultural and psychological adjustment, the result could be a low level of fulfilment of socio-emotional and instrumental demands.

Speaking of socio-emotional support, Chinese expatriates perceive themselves as disadvantaged, especially in respect of corporate level policies and individual level career management issues (Selmer, Ebrahimi, & Mingtao, 2002). The level of corporate career development activities provided by mainland Chinese MNCs to their expatriates was also quite low (Selmer et al., 2003). Hence, since one of their primary motivations for accepting overseas assignment is career development, I presume that Chinese expatriates would be to some extent unhappy or dissatisfied with their parent companies (Shen & Edwards, 2004). To Chinese expatriates, financial benefit is another main motivation to work abroad. Although expatriates can receive a higher income than working at home (Shen & Edwards, 2004), Chinese mainland expatriate managers complained that they could not get the same compensation package as other managers in Hong Kong (Selmer et al., 2003). They also felt financially stressed while living with their families in developed countries since, apart from Hong Kong, only the executive managers’ spouses were financially supported by companies when going abroad (Shen & Edwards, 2004). In their leisure time, Chinese managers can ill afford recreational activities in Hong Kong (Selmer et al., 2003). This exerts a negative impact on their general and interaction adjustment because recreational activities are necessary avenues for expatriates to socialize with local colleagues. Therefore, instrumental support may closely correlate with the adjustment of Chinese expatriates and their performance.

Empirical studies addressing Chinese expatriates indicate that expatriates’ social support significantly influences their intercultural adjustment and job performance. For instance,
Tsang (2001) investigated the impact of social support on expatriate adjustment and found that the level of social support positively relates with the general and interaction adjustment of Chinese academic expatriates. With regard to a Chinese immigrants sample, Lu, Samaratunge, and Härtel (2011) also found that social support positively predicts their acculturation. Whereas both of the above studies operationalized social support as a one-dimensional construct and were conducted in the samples of academics and migrants, this leaves room for a further investigation on multi-faceted social support and its impact on the effectiveness of Chinese business expatriates.

2.6.4. Research questions No.2 and No.3

Takeuchi (2010) stated that social support is a significant common factor to expatriate adjustment in terms of all three stakeholders, family members, the parent company and host country nationals. Social support is involved with both non-work and work domains according to my review. Even so, the extant expatriate literature does not examine explicitly the different types of support and their impact on expatriate adjustment. Previous studies have provided evidence that social support is a multidimensional construct (e.g., Drach-Zahavy, 2004; Kraimer & Wayne, 2004; Zimet et al., 1988). The literature on social support indicates a distinction between socio-emotional support and instrumental support (Podsiadlowski et al., 2013; Shakespeare-Finch & Obst, 2011). In the literature of expatriation, Ong and Ward (2005) have also validated social-emotional and instrumental support as the two distinctive social support types.

The existing literature acknowledges that social support from various sources can benefit expatriate socio-cultural adjustment. Most of the current studies pay more attention to expatriate social support from the perspective of support sources especially support from organizational sources. For example, quite a lot of importance has been focused on perceived organizational support as a special source of support. To date, with regard to the effects of the two types of social support, socio-emotional and instrumental support, on expatriate adjustment and job performance, the results remain unknown.

Theoretically, socio-emotional support helps individuals to recognize their uncertainties and problems and even enables them to resolve their difficulties (Albrecht & Adelman, 1987a). Likewise, instrumental support reduces uncertainty through the assistance of personal resources, including time, money and information, and can promote individuals’ social effectiveness and psychological fitness (Osman-Gani & Rockstuhl, 2008). If applicable in
expatriation, both socio-emotional and instrumental support might contribute to successful adjustment and high performance. In addition, Beehr and Glazer (2001) indicated that the interpretation and perception of social support is different across cultures. Although existing expatriate studies on socio-emotional support and instrumental support have not confirmed a significant relationship between the two support types and expatriate adjustment in the context of Western expatriates, it does not necessarily equate that this applies in the context of Chinese expatriates. Hence in the context of Chinese expatriation, it is necessary to understand the role of socio-emotional support and instrumental support in expatriate assignment. Therefore I put forward the following question about social support and expatriate adjustment.

RQ2: How do socio-emotional support and instrumental support influence expatriate adjustment and job performance?

As Adelman (1988) suggested, personal resources can function as mediating links in the relationships between social support and expatriate adjustment. Specifically, social support can either reduce uncertainty or enhance personal resources such as a sense of mastery and self-confidence to facilitate expatriate adjustment. Accordingly, in addition to the direct effect of social support on expatriate adjustment, cross-cultural PsyCap might mediate the impact of social support and expatriate adjustment. Hence, with regard to the connection between social support and expatriate adjustment and the mediation effect of cross-cultural PsyCap, I intend to address another question on the relationship between social support and cross-cultural PsyCap.

RQ3: 3a: How does social support influence cross-cultural PsyCap? 3b: How does cross-cultural PsyCap influence the relationship between social support and expatriate adjustment?

2.7. Adjustment-performance relationship

A review of the expatriate literature has also found that expatriate adjustment has an influence on the other criteria variables of expatriate effectiveness such as organizational commitment (Shaffer & Harrison, 1998), early return intention or intent to stay (Black & Stephens, 1989; Shaffer et al., 2006), job performance (Kraimer et al., 2001), cultural effectiveness (Lee & Sukoco, 2010), and assignment satisfaction (Pinto, Cabral-Cardoso, & Werther Jr, 2012). Among these variables, one of the most highlighted consequences of expatriate adjustment is job performance, indicated by the existing meta-analysis conducted by Bhaskar-Shrinivas et
al. (2005). Although most of these expatriate effectiveness criteria are examined independently, this study intends to investigate the two criteria of expatriate effectiveness and their interrelationship.

One is the leading focus of expatriate research and the primary proxy of expatriate effectiveness, expatriate adjustment. The other is another important effectiveness criterion and adjustment’s consequence, job performance. Both of them are the widely-recognized main proxies of expatriate effectiveness and hence become the main research objects of this study.

2.7.1. Conceptualization of expatriate job performance

Job performance is one of the main criteria of expatriate effectiveness and the consequence of expatriate adjustment (Hechanova et al., 2003). Similar to adjustment, job performance is not a one-dimensional construct. The existing studies have examined the nature of the construct of expatriate job performance and suggested that the appraisal of expatriate performance should be beyond the single facet of task performance (Caligiuri, 1997; Kraimer et al., 2001). By drawing the distinction made by Borman and Motowidlo (1993) between task performance and contextual performance, Caligiuri (1997) noted that expatriate job performance may include at least both task and contextual aspects specific to expatriate assignments. Although Caligiuri (1997) also tried to further subdivide job performance into managerial performance, technical performance, contextual performance and expatriate specific performance, the empirical research has not followed her suggestion due to the complex conceptualization. As a result, existing expatriate studies mainly employ a shortened version (task and contextual performance) of expatriate performance measured by Caligiuri (1997) in order to be consistent with the classification of Borman and Motowidlo (1993) (Lee & Donohue, 2012). Task performance refers to the expatriate’s performance in meeting specific job objectives and definable projects of the overseas duties (Lee & Sukoco, 2010). Contextual performance represents expatriates’ performance in relationship-related aspects of the job, such as establishing and maintaining good work relationships with employees and developing ties with host country nationals (Kraimer et al., 2001).

2.7.2. The relationship between expatriate adjustment and performance

Although both expatriate adjustment and job performance are recognized as the main criteria of expatriate effectiveness, job performance has been identified as an outcome of expatriate
adjustment (Hechanova et al., 2003). Based on a time-based stress-strain model, existing meta-analyses have confirmed that expatriate adjustment functions as the main primary expatriate outcome and job performance is a more distal outcome of expatriate adjustment (Bhaskar-Shrinivas et al., 2005; Hechanova et al., 2003).

The adjustment-performance relationship has been consistently positive (Harrison et al., 2004). Three meta-analytic reviews on expatriate adjustment and expatriate performance have confirmed that three facets of expatriate socio-cultural adjustment are positively related to expatriate job performance (Bhaskar-Shrinivas et al., 2005; Hechanova et al., 2003; Mol, Born, & Van Der Molen, 2005). In particular, general adjustment has been significantly associated with both task performance and relationship-based contextual performance. Interaction adjustment is more strongly connected to relationship-based performance and work adjustment is more strongly related to task-based performance. Most evidently, scholars consistently reported that work adjustment is positively related to task performance (Kraimer et al., 2001; Parker & McEvoy, 1993; Wu & Ang, 2011). Compared with socio-cultural adjustment, the relationship between psychological adjustment and job performance has received little attention. One exception is a study conducted by Shi and Franklin (2014), that found a positive relationship between psychological adjustment and expatriate performance. As such, the existing literature mainly supports the view that expatriate adjustment is positively related to expatriate job performance.

2.7.3. Expatriate adjustment as a mediator in antecedent-performance relationship

Although the direct relationship between expatriate adjustment and job performance has been confirmed, the mechanism from expatriates’ predictors to adjustment to performance remains unclear and the precise relationship between expatriate adjustment and performance remains unresolved (Thomas & Lazarova, 2006). To understand the mechanism underlying the relationships between expatriates’ predictors and performance, scholars have studied the mediating effect of expatriate adjustment. From a stress-based perspective, expatriate adjustment is a temporal and transitional phenomenon and job performance is a distal and resultant phenomenon. Without good adjustment, the adjustment’s stressors would turn into strain, namely, low job performance. From a resource-based perspective, expatriate adjustment represents a valuable person-environment fit resource as it is a subjective self-assessment of the relationship between one’s own resources and environmental demands (Wheeler et al., 2012). Based on the job demands-resources model, personal resources
mediate the relationship between job resources, for example, job performance and their correlated variables (Xanthopoulou et al., 2007). According to COR theory, individuals have a strong motivation to invest their available resources to gain additional resources or prevent resource loss (Hobfoll, 2011). In light of resource-based logic, expatriates invest their personal or social resources to achieve job resources by accumulating a person-environment fit resource, let’s say, good adjustment. Whether from a stress-based perspective or resource-based perspective, expatriate adjustment might have a potential mediating effect on the connections between adjustment’s antecedents and job performance.

Table 11 below shows that the 11 empirical studies which have examined the mediating role of expatriate adjustment. To be consistent with the existing literature and my review in the preceding sections, I organize adjustment’s antecedents into three groups, namely, personal resources, social support and stressors. My review shows that existing studies have only researched the mediating role of socio-cultural adjustment especially the mediating effect of work adjustment. Few if any studies have investigated the mediating function of psychological adjustment. One main reason is the leading role of the socio-cultural adjustment model of Black (1988) in expatriate adjustment studies. Also, the two facets of socio-cultural adjustment, work adjustment and interaction adjustment have direct-viewing correlations with task performance and contextual (relational) performance respectively. Although Shi and Franklin (2014) have found that psychological adjustment is significantly relevant to expatriate job performance, little attention has been paid to the mediating effect of psychological adjustment. In fact, similar to socio-cultural adjustment, psychological adjustment may also mediate the flow from adjustment’s antecedents to job performance (Hechanova et al., 2003). Accordingly, further investigation on the mediating role of psychological adjustment is expected in future expatriate studies.

Although most of the studies in Table 11 below report that expatriate adjustment partially mediates the relationships between predictors and job performance, existing studies have mixed results and inconsistent findings. Specifically, among the 11 studies listed below in , two studies found all socio-cultural adjustment facets have little or no mediating effects on antecedent-performance relationships (Kim & Slocum Jr, 2008; Kraimer & Wayne, 2004). Additionally, five studies identified that only certain adjustment facets had mediating effects. Moreover, socio-cultural adjustment did not mediate the relationship between some antecedents (e.g., role and situational stressor, perceived organizational support) and job performance mainly because these variables were not significantly related to expatriate
adjustment (see Kraimer et al., 2001; Morley et al., 1997). In terms of inconsistent findings, socio-cultural adjustment sometimes fully or partially mediates the relationship between perceived organizational support and job performance (Kraimer & Wayne, 2004) yet has no mediating effect at all in other cases (Kawai & Strange, 2014; Kraimer et al., 2001). One possible reason for this is that these studies employed different measurements for the same construct. For example, Kraimer et al. (2001) employed one-dimensional perceived organizational support whereas Kawai and Strange (2014) adopted the three-dimensional perceived organizational support which are separately measured by adjustment, financial and career perceived organizational support. Another reason might be the different research context as Kawai and Strange (2014) conducted their study in the context of Japanese expatriates assigned to Germany while Kraimer and Wayne (2004) adopted a sample of American expatriates. Shaffer et al. (2006) also had remarkably different results when conducting the mediation test for the flow from four personal attributes to socio-cultural adjustment to job performance in different samples. This implies that the mediating effect of expatriate adjustment might differ among expatriates from different countries or in a different context.

Although scholars have found that expatriate adjustment plays little mediating role in the relationship between social support, stressor and expatriate performance (Kawai & Strange, 2014; Kraimer & Wayne, 2004; Kraimer et al., 2001), I notice expatriate adjustment does mediate the influence of personal resources on job performance. The studies investigating the mediating effect of expatriate adjustment on the relationship between dynamic competencies and job performance had mixed results (Kim & Slocum Jr, 2008; Shaffer et al., 2006). For instance, unlike other dynamic competencies, cultural intelligence does not predict job performance through socio-cultural adjustment even though it is highly related to expatriate adjustment. As a result, the mediating mechanism of expatriate adjustment in the connection between dynamic competencies and job performance remains equivocal or undecided.
### Table 11: Antecedents-Adjustment (mediators)-Performance (outcomes) Relationships

<table>
<thead>
<tr>
<th>Antecedents</th>
<th>Mediators</th>
<th>Findings</th>
<th>Study</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personal resources</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Prior experience</td>
<td>Work adjustment</td>
<td>Partial mediation for the flows of cross-cultural motivation to work adjustment to job performance.</td>
<td>Chen et al. (2010)</td>
</tr>
<tr>
<td>Cross-cultural motivation</td>
<td>Socio-cultural adjustment</td>
<td>Full mediation for the flow of people leadership to work adjustment to overall performance. No mediation for others.</td>
<td>Shaffer et al. (2006) study 1</td>
</tr>
<tr>
<td>Five stable traits:</td>
<td>Emotionally stable</td>
<td>Full mediation for the flows of intellectance to work adjustment to job performance. No mediation for others.</td>
<td>Shaffer et al. (2006) study 2</td>
</tr>
<tr>
<td>SOCIAL SUPPORT</td>
<td>Cultural flexibility</td>
<td>Partial mediation for the flow of ethnocentrism to contextual performance. No mediation for others.</td>
<td>Shaffer et al. (2006) study 3</td>
</tr>
<tr>
<td><strong>Dynamic competencies:</strong></td>
<td>Task leadership</td>
<td>Partial mediation for the flow of people leadership to work adjustment to overall performance. No mediation for others.</td>
<td></td>
</tr>
<tr>
<td><strong>Dynamic competencies:</strong></td>
<td>People leadership</td>
<td>Partial mediation for the flow of ethnocentrism to contextual performance. No mediation for others.</td>
<td></td>
</tr>
<tr>
<td><strong>Training:</strong></td>
<td>Ethnocentrism</td>
<td>Full mediation for the flow of post-arrival training to interaction and work adjustment to job performance. No mediation for others.</td>
<td>Wang and Tran (2012)</td>
</tr>
<tr>
<td>Perceived organizational support (POS)</td>
<td>Socio-cultural adjustment</td>
<td>Partial mediation, no specification.</td>
<td>Kraimer et al. (2001)</td>
</tr>
<tr>
<td>Financial POS</td>
<td>Work adjustment</td>
<td>Partial mediation for the flows of career POS to work adjustment to job performance. No mediation for others.</td>
<td>Kawai and Strange (2014)</td>
</tr>
<tr>
<td>Career POS</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Role stressors</td>
<td>Socio-cultural adjustment</td>
<td>No mediation.</td>
<td></td>
</tr>
<tr>
<td>Situational stressors</td>
<td>Socio-cultural adjustment</td>
<td>No mediation.</td>
<td></td>
</tr>
</tbody>
</table>
2.7.4. Job performance of Chinese expatriates

To date, there are few current studies focusing on the job performance of Chinese expatriates. In regard to task performance, a study by Qin and Baruch (2010) found the mean of expatriates’ self-evaluated performance and organization-evaluated performance were both over 85 percent. The significance of this result is that Chinese expatriates performed well in their assignments. Qin and Baruch (2010) also identified a significant correlation between expatriate self-reported performance and family package, having family members accompany them. These findings are somewhat inconsistent with the research of Selmer et al. (2000a), who noted Chinese mainland expatriates had significantly lower scores than their Western counterparts on all adjustment variables including general adjustment, work adjustment, interaction adjustment and psychological adjustment. One of the important reasons for this difference could be that married Western expatriates were more often accompanied by their spouses/families. Yet, as many Chinese mainland expatriates cannot have their family members with them, this may, in turn, have a detrimental effect on the adjustment of Chinese expatriates. In terms of contextual performance, language barriers, financial constraints and scant interaction opportunities with locals limited the relationship network building between Chinese mainland expatriates and locals in Hong Kong (Selmer et al., 2003). The situation is similar for Chinese expatriates from SINOCHEM whose social circle was still mainly Chinese although they had lived in the USA for several years (Wang, 2006). Thus, the contextual performance of Chinese expatriates could be negatively influenced by their interaction adjustment.

With respect to the antecedents of expatriate job performance, Shen and Jiang (2011) examined the effect of family problems, expatriate-efficacy, host-country nationals’ prejudice on the job performance of Chinese female expatriates. Although they found a positive relationship between an expatriate’s dynamic competency, efficacy and job performance, family problems had no significant relationship with Chinese expatriates’ performance. This finding offers some insights to explain the difference found in other studies between low levels of expatriate adjustment and high levels of performance. Yet, the function of expatriate adjustment on the relationship between adjustment’s antecedents and job performance has not been explained. As such, whether adjustment’s determinants influence job performance through the mediation of expatriate adjustment becomes one focus of my research. Additionally, considering the potential significance of cross-cultural PsyCap to expatriate performance, my study purposefully investigates whether expatriate adjustment mediates the
relationship between cross-cultural PsyCap and job performance in the context of Chinese expatriation.

2.7.5. Research question No.4

Based on the above review, I notice that very few studies have investigated the mediating role of expatriate socio-cultural adjustment in the relationship between expatriate predictors and job performance (Kraimer et al., 2001; Shay & Baack, 2006). In addition, the current literature has not effectively explained the inconsistent findings in terms of the mediating effect on the relationship between dynamic competencies and performance. As both expatriate adjustment and job performance are the significant criteria of expatriate effectiveness, it is necessary to further detect the relationship between adjustment’s antecedents and performance and the mediating mechanism of expatriate adjustment.

Furthermore, the connection between expatriates psychological adjustment and job performance has not been explicitly explained, especially in the context of Chinese expatriation. Since socio-cultural adjustment only represents the cultural, interaction and work facets of adjustment, it is important to further examine the potential mediating role of psychological adjustment on the association between expatriate predictors and job performance. Given the predicative potential of cross-cultural PsyCap on expatriate adjustment and performance, further empirical investigation is required to examine the mediating role of both socio-cultural adjustment and psychological adjustment in the flow from expatriates’ cross-cultural PsyCap to job performance. Based on the above literature review on the adjustment-performance relationship and the mediating function of expatriate adjustment, I put forward the following research question:

RQ4: How does expatriate adjustment influence the relationship between expatriate cross-cultural PsyCap and job performance?

Based on the literature review in chapter two, I put forward four research questions derived from the literature gaps that I have identified. In order to answer these questions, I employ COR theory. Accordingly, in relation to the research questions, chapter three will offer an in-depth discussion of COR theory and develop hypothesized relationships that link cross-cultural PsyCap, social support, and expatriate adjustment and performance.
Chapter 3: Theoretical foundation and hypotheses

To address the research questions formulated in chapter two, this chapter utilizes COR theory to develop a conceptual model and hypotheses as the COR theory is one of the leading theories in the research related to job stress and motivational resources (Halbesleben & Buckley, 2004; Hobfoll, 2001b). COR theory as a theoretical foundation functions well to explain the influence of individuals’ personal resources and social support on work-related outcomes. Positioning COR theory as a resource-based framework, I explain the roles and the relationships of social support and cross-cultural PsyCap in relation to expatriate adjustment and performance. Plus I conceptualize expatriate adjustment as a person-environment fit resource and introduce expatriate adjustment into the COR resource family in order to explain the relationships between expatriate social support, cross-cultural PsyCap and adjustment. Accordingly, the connections of these different types of COR resources are easier to understand.

The six groups of hypotheses in regard to the four research questions are also developed based on the key principles and corollaries of COR theory. In particular, I explain the reason why cross-cultural PsyCap and two types of social support are positively related to expatriate adjustment and job performance. The resource mechanism through which social support influences expatriate adjustment via cross-cultural PsyCap is hypothesized by the explanation of COR theory. In addition to this mechanism, I further propose that expatriate adjustment mediates the relationship between cross-cultural PsyCap and job performance because expatriate adjustment could be a transitional resource consequence of expatriates’ PsyCap as well as one of the pre-conditions of job performance.

This chapter includes two main sections to explain the theoretical foundation and to develop the hypotheses. The first section reviews the motivation for applying COR theory and then reviews the principle and corollaries of this theory. After introducing cross-cultural PsyCap and expatriate adjustment into the COR resource family, I develop and present the conceptual model of my study. The second section introduces the hypotheses in regard to the relationships between expatriates’ cross-cultural PsyCap and expatriate effectiveness variables. The association of social support and cross-cultural PsyCap is also discussed along with the mediating function of cross-cultural PsyCap in the linkage of social support and
adjustment. Finally the mediating mechanism from cross-cultural PsyCap to expatriate adjustment to job performance is addressed.

3.1. COR theory as the theoretical foundation

In regard to studies related to adjustment, the literature review presented in the preceding chapter illustrates the significance as well as the novelty of the resource-based perspective. The application of COR theory can help examine the relationship between expatriates’ resources and expatriate assignment effectiveness. These findings from the literature review served as encouragement and motivated me to conduct an in-depth review of COR theory and its principles and corollaries in order to understand the relevance of the theory in relation to the main constructs, including cross-cultural PsyCap, social support and adjustment, in connection with my research questions. The motivation for the applying COR theory and its relevance to my conceptual model are also elaborated in this section.

3.1.1. The motivation for applying resource-based COR theory

The majority of existing studies explain expatriate adjustment from a stress-based perspective and from a learning-based perspective as I have demonstrated in the literature review. In addition, some of the traditional frameworks related to the adjustment model and adjustment mechanism rely heavily on social learning, cultural learning and stress coping theories. Still and all, with regard to expatriate adjustment, to gain a more complete understanding it is necessary to look through a lens comprised of a multiple of perspectives (Takeuchi, 2010). Hence, as I will elaborate, COR theory has the potential to advance the theoretical exploration of expatriate adjustment from a novel perspective.

Compared with a stress-based approach, the main advantage of applying a resource-based approach is avoiding a negativity bias. Existing studies on expatriate adjustment have been overwhelmingly based on stress literature, as this approach follows the conventional psychological approach of investigating the reasons people become ill and how to treat their illness (Park & Abbott, 2011). However, the contemporary positive psychology movement has emphasized people’s positive human functioning including their strengths, competencies and resources rather than a person’s weakness, negative experience and negative states of mind. Thus the positive psychology movement is devoted to understanding the positive, adaptive, creative and emotionally fulfilling aspects of human attitudes and behaviours (Seligman, 1999; Seligman & Csikszentmihalyi, 2000). Although COR theory has been
intensively utilized in the stress literature, it has largely been developing into a motivational theory and applied into positive psychology studies (Hobfoll, 2011). Previous studies related to COR theory have mainly paid attention to the resource loss principle and therefore appear to neglect the resource investment principle. The resource investment principle implies that an individual’s strength and capability can be motivated by resource accumulation or resource investment. This principle enables the link between COR theory and positive psychology. Given that expatriate research so far has not incorporated the positive psychology movement and its impact on expatriation (Park & Abbott, 2011), the application of positive psychology and its relevant theories and constructs into expatriate study offer a new perspective to help understand the expatriate adjustment. After all, as noted by Tung and Miller (1990), expatriates’ overseas experience is challenging as well as exciting.

The resource-based perspective is a useful theoretical foundation in the research of firm-level strategic management (Barney, 2001; Ray, Barney, & Muhanna, 2004). At the individual level, resource-based theories, for example, COR theory and the job demands-resources model can also be helpful for the theoretical study of expatriate adjustment and international human resources management practice. The resource-based approach explains the mechanism of international adjustment and offers a great range of new input-based determinants, such as personal resources. These new resource-based determinants are vital to expatriate management practice including selection, appraisal, training and development.

Moreover, COR theory can effectively integrate both the stress-based perspective and the learning-based perspective. As a stress and motivational theory, COR theory is broadly used in the organizational behaviour literature (Hobfoll, 2011). This theory emphasizes motivational resources that refer to materials, conditions, states or symbols that one values and that can be invested in to gain additional resources and also to prevent stress and burnout (Halbesleben, 2010). Within the context of international assignments, expatriates strive to obtain, preserve and protect these resources to cope with stress in order to successfully perform their international assignment. To effectively cope with stressful work and life relocation, expatriates often seek to utilize coping resources to reduce stressors and attain psychological comfort. The whole stress-coping process is also a process of preventing resource loss and/or promoting new resources. In this sense, COR theory can explain the stress and coping process related to expatriate adjustment. In addition, the learning-based adjustment mechanism emphasizes the process by which individuals acquire the knowledge and abilities to fit in with the host culture. Knowledge, skills, abilities and other personal
competencies are typical personal resources according to COR theory (Hobfoll et al., 1990). Moreover, the main constructs of social learning theory, efficacy beliefs, including self-efficacy and outcome-expectancy, represent a type of personal resources the COR theory also takes account of. Accordingly, resource-based COR theory has the ability to integrate the learning-based adjustment mechanism. Hence, with regard to expatriate adjustment research, the COR theory is appropriate as an integrative theoretical foundation as it can further contribute to adjustment research by providing more insights from a resourcing mechanism perspective.

As COR theory comprises a wider spectrum of resources, my study has not adopted the job demands-resources model. COR theory incorporates different kinds of personal and environmental resources whereas the job demands-resources model mainly focuses on the explanation of the relationship between an individual’s job-related resources and demands. Based on a review of current studies on cross-cultural adjustment, Kim (2005, p. 377) noted that little research attention had been given “to micro-level factors such as the background and psychological characteristics of the individual”. Therefore based on a review of the literature, it is clear that cross-cultural PsyCap represents one of the least well studied micro-level factors. The personal resources that have attracted my attention are the central resource constructs of COR theory, not the job demands-resources model. To understand the impact of personal resources and their mediating effect on other resources including social support and expatriate adjustment, it is justifiable and highly appropriate to employ the COR theory.

3.1.2. COR theory overview

More than twenty-five years ago, Hobfoll (1988) presented his motivational stress theory and termed it COR theory. This theory has been applied in three different fields including stress study, burnout study and positive psychology (Hobfoll, 2011). In the field of stress study, COR theory was originally employed as a framework to understand major life stress (Benight et al., 1999; Chen, Westman, & Eden, 2009; Freedy, Shaw, Jarrell, & Masters, 1992; Hobfoll, Canetti-Nisim, & Johnson, 2006; Kaiser, Sattler, Bellack, & Dersin, 1996; Mayo, Sanchez, Pastor, & Rodriguez, 2012). In the field of burnout study, COR theory has been fundamental to research job burnout (Alarcon, Edwards, & Menke, 2011; Brotheridge & Lee, 2002; Halbesleben, 2006; Halbesleben & Buckley, 2004; Hobfoll & Freedy, 1993; Janssen, Schaufeliwe, & Houkes, 1999). In the field of positive psychology, COR theory has been utilized as an underlying resource-based framework to study emerging positive psychological
constructs such as PsyCap (Avey, Luthans, Smith, & Palmer, 2010; Bakker et al., 2007; Halbesleben & Bowler, 2007; Zellars, Perrewé, Hochwarter, & Anderson, 2006).

The basic tenet of COR theory is that individuals seek to acquire, retain, foster, and protect their personal and social resources and that people will be stressed when they are threatened by environment conditions or loss of their valued states or where they fail to obtain sufficient resources following substantial resource investment (Hobfoll, 1988, 1998, 2001b; Hobfoll et al., 1990). Resources refer to “those objects, personal characteristics, conditions, or energies that are valued by the individual or that serve as a means for attainment of these objects, personal characteristics, conditions, or energies” (Hobfoll, 1989, p. 516). Resources include object resources, such as home, tools for work, car, condition resources, for example, a good marriage, supportive work relationships, personal resources, for instance, key skills and personal traits such as self-esteem, and energy resources, let’s say, time, knowledge, credit and social support resources, such as support from co-workers, support from family members (Hobfoll, 1989, 2011). In a broad sense, personal resources include all the aspects of the self that are related to resiliency and refer to individuals’ perception of their competence to successfully control and influence their environment (Hobfoll, Johnson, Ennis, & Jackson, 2003). Based on COR theory, all of these personal resources are limited and valuable, thus individuals are motivated to obtain and protect these limited resources, and engage in behaviours to accumulate additional resources and simultaneously prevent resource loss.

3.1.3. Key principles and corollaries of COR theory

As is shown below in Table 12, COR theory consists of two main principles and four basic corollaries (Hobfoll, 2001b, 2011). The first principle is the primacy of resource loss: resource gain is less salient than resource loss. The second principle is that people must invest resources in order to protect against resource loss, recover from losses, and gain resources. This principle reveals the positive sides of individuals’ resource management. That is, people can capitalize their resources to achieve additional resource profits.

Based on these two main principles, Hobfoll (2001b) developed four related corollaries. Corollary one notes that “those with greater resources are less vulnerable to resource loss and more capable of orchestrating resource gain; conversely, those with fewer resources are more vulnerable to resource loss and less capable of resource gain” (Hobfoll, 2011, p. 117). This corollary implies that the possession of resources has an influence on individuals’ abilities in relation to resource gain and resource loss. Likewise, resourceful individuals tend to acquire
more resources and conversely individuals who possess fewer resources are more vulnerable to resource loss. Corollary two and corollary three of COR theory pertain to resource loss and resource gain spirals. Corollary two explains resource loss spiral, in other words, those who lack resources are more vulnerable to resource loss and that the initial loss can lead to future loss. Corollary three states that those who possess resources are more capable of gaining more resources, and that initial resource gain leads to further gain. Compared with corollary one, corollary two and three suggest that the possession of resources has an impact on resource loss and gain and can also have an influence on the loss spiral and gain spiral. Corollary four relates to the conservation of resources, which posits that those who lack resources tend to adopt defensive attitudes and behaviours to conserve their resources.

**Table 12: Key Principles and Corollaries of COR theory**

<table>
<thead>
<tr>
<th>Principles and corollaries</th>
<th>Brief description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two main Principles</td>
<td>1. The primacy of resource loss.</td>
</tr>
<tr>
<td>2. Resource investment.</td>
<td></td>
</tr>
<tr>
<td>Four basic corollaries</td>
<td>1. Resource possession and the capability of resource loss and gain.</td>
</tr>
<tr>
<td>2. Low resource possession and resource loss spiral.</td>
<td></td>
</tr>
<tr>
<td>3. High resource possession and resource gain spiral.</td>
<td></td>
</tr>
<tr>
<td>4. Lack of Resources and defensive conservation.</td>
<td></td>
</tr>
<tr>
<td>Two support-related corollaries</td>
<td>1. Social support widens personal resources.</td>
</tr>
<tr>
<td>2. Personal resources and social support are integrated.</td>
<td></td>
</tr>
</tbody>
</table>

Source: adapted from Hobfoll (2001b) and Hobfoll et al. (1990)

Apart from the two main principles and four basic corollaries, Hobfoll et al. (1990) also point out two additional support-related corollaries, as described in Table 12. First, social support is the main vehicle by which individuals can widen the limited resources that are contained in their self. Second, personal resources and social resources are integral aspects of people’s identity. These two supported-related corollaries explain the potential relationship between personal resources and social support. The corollaries imply that social support can work as a resource input to develop personal resources.

In sum, COR theory focuses on two groups of resources constructs, namely, personal resources and social support. My research is involved with an investigation of these two core
constructs of COR theories and their relationship with expatriate adjustment which is one of the novel features of my thesis. Furthermore, I am aware of very few studies that have examined expatriate adjustment through the lens of COR theory.

3.1.4. Cross-cultural PsyCap, social support and adjustment in COR theory

PsyCap is a dynamic competency as its four constituent psychological states are malleable, measurable and can be managed for more effective work performance (Luthans et al., 2004). Likewise, due to its state-like characteristic and context-specific nature, cross-cultural PsyCap, as a whole, represents a type of cross-cultural dynamic competency in the family of personal resources. In resource theories, personal resources are a central construct of COR theory along with social support (Hobfoll, 2001a, 2002, 2011; Hobfoll & Freedy, 1993; Hobfoll et al., 2003). Personal resources generally comprise all of an individual’s internal resources especially personal psychological resources such as self-efficacy. Drawn from the job demands-resources model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Llorens, Bakker, Schaufeli, & Salanova, 2006) and Hobfoll’s COR theory, Lazarova et al. (2010) further conceptualized the concept personal resources as personal attributes which are associated with positive expatriate experiences. Following the conceptual framework of Lazarova et al. (2010), I conceptualize and operationalize the expatriates’ personal attributes which are positively correlated to expatriate adjustment as expatriates’ personal resources. In particular, these personal resources consist of KSA, demographic attributes, stable competencies and dynamic competencies. PsyCap belongs to personal dynamic resources based on the above classification. Then, cross-cultural PsyCap is a cross-cultural personal resource in COR theory’s resource family.

COR theory has been utilized in research on the constructs of PsyCap in domestic work settings even though the existing expatriate literature has not fully studied the positive psychological constructs or examined the impact of cross-cultural PsyCap on expatriation. Avey et al. (2010) adopted COR theory to understand the impact of PsyCap on an employee’s well-being. Tay, Westman, and Chia (2008) applied COR theory to identify the antecedents and consequences of short-term expatriated business travellers in the context of expatriation. Moreover, Van Erp et al. (2014) employed COR theory to explain the importance of expatriates’ intercultural personality for expatriate adjustment and job performance. Their study indicates the interpretive ability of COR theory in regard to the relationship between expatriates’ cross-cultural competencies and expatriate effectiveness. Still and all, a gap
exists as the COR model has not been utilized to explain the function of cross-cultural PsyCap during expatriate adjustments.

Social support represents a type of external social resource (Hobfoll et al., 1990), which is comprised of both “perceived” and “received” social support (Hobfoll, 2009). Both personal resources and social support have been examined by applying COR theory even though social support has been the most studied COR resource (Hobfoll, 2002; Wright & Hobfoll, 2004). Although it may be that perception of social support is more important than actual received social support, I only discuss social support in the context of expatriate assignment (Hobfoll, 2002). Hence, it is necessary and advisable to adopt COR to understand how social support works (Hobfoll, 2009) with adjustment in the context of expatriation.

By integrating person-environment fit theory (Wheeler et al., 2012) into COR theory, I further conceptualize expatriate adjustment as a type of person-environment fit resource. A higher level of expatriate adjustment indicates a good fit of expatriate and host country’s environment and signifies a resource gain for an expatriate. Conversely, a lower level of adjustment reflects a certain extent of a lower level fit between expatriates and environment, which represents a resource loss or resource threat. Social support, cross-cultural PsyCap and expatriate adjustment are the three main constructs in the COR resource family.

Figure 1 illustrates three main groups of resources and the positions of expatriates’ social support and cross-cultural PsyCap and expatriate adjustment in the COR resource family based on my analysis and understanding of the resource spectrum of COR theory. Social support and personal resources, especially personal psychological resources, are two of the traditionally recognized groups of resources in COR theory (Hobfoll, 2002). Person-environment fit is also a type of crucial resource within COR’s third group of resources, “other resources” (Wheeler et al., 2012). The three expatriate resources in the ellipse below, instrumental support, socio-emotional support and cross-cultural PsyCap, represent the main resource constructs in the COR resource family. Whereas, instrumental support and socio-emotional support represent two of specific types of social support resources, cross-cultural PsyCap is a state-like personal resource. These three resources represent the three key resources of the COR resource system. Hence, it is relevant to apply COR theory to explain the impact of expatriates’ personal resources and social support resources on a person-environment fit resource, such as expatriate adjustment and job performance.
3.1.5. Conceptual model

In order to effectively apply COR theory to answer the research questions put forward in chapter two, I will now explain the theoretical framework. As shown below in Figure 2, the conceptual model consists of two main variable groups. Whereas the independent variables in the ellipse are all expatriates’ psychosocial resources, the dependent variables in the rectangle are all expatriate effectiveness criteria. The independent variables are all key resources of the COR resource family. The first and the second research questions ask about the direct effects of these three expatriate resources on the expatriate effectiveness variables. The third research question addresses the interrelationship among expatriate resources and the mediating process from expatriate social support to expatriate cross-cultural PsyCap to expatriate adjustment. Furthermore, the fourth research question addresses the mediating mechanism of expatriates’ cross-cultural PsyCap to the temporal effectiveness variables, namely, expatriate adjustment, to distal effectiveness variable, job performance.

As expatriate adjustment is a type of person-environment fit resource in the COR resource family, the conceptual model can explain the impact of expatriate resources on expatriate person-environment fit resources and job performance. In other words, the model mainly focuses on social support, cross-cultural PsyCap and expatriate effectiveness and the relationships among the three resources.
Considering the two support-related corollaries with key principles and basic corollaries, COR theory hints that individuals who have greater social support resources are able to acquire other resources (personal resources, such as self-efficacy). Reciprocally, personal resources can also help individuals gain more social support. Hobfoll et al. (1990) also emphasized the important positive role of social support in widening personal resources. Following this tenet, scholars frequently employ COR theory to examine the relationship between social support and personal resources and their outcomes in the context of common work settings (Halbesleben, 2006; Hobfoll, 2002; Hobfoll, Shoham, & Ritter, 1991). Hence, this model is a solid basis for an investigation of the mediating function of personal resources in the relationship between social support and expatriate adjustment.

This conceptual model also includes the proposition that expatriate adjustment mediates the relationship between expatriate resources and job performance. According to COR theory, good expatriate adjustment is a valuable resource, which can be invested to acquire more resources and well-being. As such, expatriate adjustment will affect additional resource gain or further resource loss. In particular, expatriate adjustment, as a special person-environment fit resource, might in turn positively contribute to improving expatriate job performance. These initial theoretical observations lead me to the more explicit development of research hypotheses. I attend to this next.
3.2. Development of hypotheses

This section develops the hypotheses related to the impact of expatriate’s two types of social support and cross-cultural PsyCap on expatriate adjustment and job performance. To begin by discussing the interrelationships between expatriates’ social and psychological resources, I propose positive relationships between two types of social support and cross-cultural PsyCap. Following that, I hypothesize a direct association of socio-emotional support and instrumental support with expatriate adjustment and job performance. Then, the possible direct relationships between cross-cultural PsyCap and expatriate adjustment and job performance are deduced. Furthermore, I hypothesize that cross-cultural PsyCap might mediate the relationship between social support and expatriate adjustment and then propose that expatriate adjustment could mediate the relationship between cross-cultural PsyCap and job performance.

3.2.1. Social support and cross-cultural PsyCap

Social support can contribute to the development of expatriate cross-cultural PsyCap as in COR theory social support and cross-cultural PsyCap are valuable and interconnected resources. According to COR theory (Gorgievski & Hobfoll, 2008; Hobfoll, 1989), people seek to create, foster, retain and protect the quality and quantity of their resources including object resources, conditions, personal characteristics and energies (Hobfoll, 1989). Among these resources, social support represents social resources whereas cross-cultural PsyCap is a type of personal psychological resource. Based on the principles of COR theory, people invest in their resources to protect against resource loss and seek to gain resources so that their resource gain can spiral (Hobfoll, 2011). In other words, the availability and investment of one type of resource might lead to a creation or accumulation of other resources, especially when work and organizational settings can create ecologies (resource caravan passageways) to foster engagement and positive psychological capabilities (Hobfoll, 2011). In addition, the two support-related corollaries of COR theory also describe the possible relationship of social support and cross-cultural PsyCap. Social support and personal resources are integrated and that social support can promote personal resources (Hobfoll et al., 1990). Thus, social support resources may potentially motivate in their own right through the creation, maintenance and accumulation of personal resources (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009) such as cross-cultural PsyCap.

Socio-emotional support represents important social and emotional resources which can help
expatriates feel more positive about themselves and their environment if and when the adjustment become challenging (Farh et al., 2010). Accordingly, higher levels of socio-emotional support might be positively related to an expatriate’s cross-cultural PsyCap. First, higher levels of socio-emotional support can work as psychological, physiological or emotional sources to help expatriates develop their confidence in the host cultural environment (cross-cultural self-efficacy). Second, higher levels of socio-emotional support allow expatriates to develop positive expectations about the assignment and be more optimistic (cross-cultural optimism). Optimism is positively correlated with problem-focused coping and adaptive activities such as seeking of socio-emotional support (Scheier, Weintraub, & Carver, 1986). Third, higher levels of socio-emotional support also motivate expatriates’ willpower and develop pathways to help the parent company achieve its goals and the expatriates’ personal goals (cross-cultural hope). Fourth, sufficient socio-emotional support enables expatriates to recover quickly and effectively from adverse events during the assignment (cross-cultural resilience). In sum, socio-emotional support can boost positive psychological states of expatriates in their intercultural relocation. Accordingly, socio-emotionally supported expatriates are likely to be psychologically positive in cross-cultural assignments. Therefore, I propose that socio-emotional support is positively related to expatriates cross-cultural PsyCap:

H1a: Socio-emotional support is positively related to expatriate cross-cultural PsyCap.

A higher level of instrumental support might also contribute to an expatriate’s cross-cultural PsyCap. During expatriation, sufficient instrumental support such as financial and logistical support helps expatriates to maintain or enhance their living standard abroad and to improve psychological certainty thus easing the life of expatriates in the host country. Instrumental information support and career support can help expatriates to prevent burnout and to keep employees mentally and physically competent. Moreover, desirable instrumental support triggers expatriates’ positive expectancy that their increased effort and better performance might result in career advancement and financial rewards. In addition, instrumental support (such as mentorship and training) from the parent company’s human resource division can help expatriates to develop positive states of resilience (Luthans, Vogelgesang, & Lester, 2006). This instrumental help might be, for example, mentorship and training. Finally, higher levels of instrumental support are also beneficial to expatriates by providing them with higher levels of hope during their overseas assignments.
A supportive organizational climate stimulates employees to be more positive toward accomplishing work-related goals (Luthans, Norman, Avolio, & Avey, 2008). During international assignments, expatriates as agents of the parent company operate in subsidiary markets and manage staff in host countries. Instrumental support, especially the support from the parent company, motivates expatriates to develop their cross-cultural positive psychology in order to help the parent company achieve its goals. Thus, I propose high levels of instrumental support can motivate expatriates’ cross-cultural PsyCap. Accordingly, I set forward the following hypothesis:

H1b: Instrumental support is positively related to expatriate cross-cultural PsyCap.

3.2.2. Social support, expatriate adjustment and performance

To adjust to life and work in the host country, expatriates must try to obtain critical emotional and instrumental support resources (Farh et al., 2010). With regard to Chinese expatriates, they receive limited social support in their international assignments (Wang, 2006). In a recent study, Shen and Jiang (2011) reported that social support from family members, host country nationals, and employers positively influenced the performance of Chinese female expatriates. Additionally, as Chinese expatriates are loyal to their traditional values such as family-orientation, which is the most important determinant of their job attitudes (Soo et al., 2009), greater emotional support from family members can motivate expatriates to adjust to the host country.

Previous studies on Chinese expatriates demonstrate the important role of expatriate spouse and family support to the success of their assignments. For instance, Selmer et al. (2000b) illustrated that those mainland Chinese business expatriates who were accompanied by their spouse showed significantly better adjustment, speaking in terms of socio-cultural adjustment and psychological adjustment. Similarly, Wang (2006) pointed out that expatriates felt anchored when their spouse offered emotional support to them. That explains, to some degree, why family-related issues remain a key factor to explain the failure of Chinese expatriates (Shen & Edwards, 2004).

In addition to kinship ties, as Chinese have a high regard for their relationships with friends and colleagues and business partners, referred to as “guanxi”, a guanxi network matters and is vitally important for an individual’s well-being, performance, and even survival in the Chinese context (Michailova & Worm, 2003; Worm & Frankenstein, 2000). For this reason,
Chua, Morris, and Ingram (2008) found that compared with Western managers, affect and cognition were more intertwined in Chinese managers’ network relationships. As such, socio-emotional support, irrespective of the sources, might be crucial to improving Chinese expatriates’ socio-cultural adjustment, subjective well-being (psychological adjustment) and job performance. Hence, I develop the following hypotheses:

H2a: Socio-emotional support is positively related to expatriate socio-cultural adjustment.

H2b: Socio-emotional support is positively related to expatriate psychological adjustment.

H2c: Socio-emotional support is positively related to expatriate job performance.

Instrumental support received by expatriates offers a supportive environment by providing them with essential resources (Caligiuri & Lazarova, 2002). These resources might include informational support, for example, advice and assistance from host country nationals (Liu & Shaffer, 2005) and tangible aid, such as direct service and financial support (Kraimer & Wayne, 2004). Irrespective of the sources of support, instrumental support can help ease stressful situations and facilitate the adjustment and performance of expatriates (Caligiuri & Lazarova, 2002). Empirical studies have provided support for the positive influence of instrumental support on expatriate performance. Kraimer and Wayne (2004) reported that instrumental support for expatriates, for instance, relocation assistance, cross-cultural training and financial support was positively related to expatriate adjustment and commitment to the parent company and the foreign subsidiaries.

With regard to Chinese expatriates, the primary motivations for accepting an overseas assignment are financial reward and career development (Shen & Edwards, 2004). Also, Qin and Baruch (2010) found high income and high position were the top two career objectives among Chinese expatriates. Parent companies’ instrumental support such as career planning and financial rewards influence expatriate’ outcome expectancy, which in turn motivates better adjustment and performance. According to COR theory, socially supported expatriates possess valuable social resources. High resource possession can facilitate their adjustment and performance in work, life, interaction and psychological well-being. As such, a socially supported expatriate can be more adaptive and perform better in host countries. Thus, this study sets forth the following hypotheses:

H3a: Instrumental support is positively related to expatriate socio-cultural adjustment.
H3b: Instrumental support is positively related to expatriate psychological adjustment.

H3c: Instrumental support is positively related to expatriates’ job performance.

3.2.3. Cross-cultural PsyCap, expatriate adjustment and performance

For expatriates, successful socio-cultural adjustment and psychological well-being are important resources in their international assignments. Expatriate adjustment reflects the degree of fit between expatriate individuals and the host environment. Wheeler et al. (2012) have identified that person-environment fit is a core resource in COR theory. In light of this theory, if expatriates are not successful fitting in with the socio-cultural environment including such facets as life, work and interaction, they could risk resource loss. On the other hand, expatriates can maintain and obtain further resources if they successfully adjust. To succeed in expatriate assignments, it is necessary for expatriates to invest their personal resources to protect resource loss and obtain resources. These personal resources include demographic characteristics (e.g., age, experience), trait-like personal resources (e.g., Big Five personality, emotional intelligence), state-like personal resources (e.g., self-efficacy, cultural intelligence), and KSA (e.g., cultural knowledge, language skills, and relational abilities). In a cross-cultural work setting, one of the most important personal resources is dynamic competencies and cross-cultural PsyCap is one of those. With the presence of high levels of positivity in the cross-cultural environment, expatriates will more likely have greater resources to cope with psychological discomfort and utilize these psychological resources to capitalize on the creation of other useful resources such as socio-cultural effectiveness and psychological fitness (Clapp-Smith, 2009).

All of the four subordinate psychological resources of cross-cultural PsyCap, including cross-cultural hope, cross-cultural resilience, cross-cultural optimism, and cross-cultural self-efficacy, can contribute to expatriate adjustment. An expatriate assignment is a reciprocal process of achieving organizational goals and advancing individual career goals (Larsen, 2004). In order to achieve organizational objectives and individual’s expectations, international adjustment is the pathway which expatriates cannot avoid. Hopeful expatriates will have more willpower (agency thinking) to adjust to the new working and living environment and fulfil their responsibility until the completion of the assignment.

As Carver and Scheier (2002) explained, when they have positive expectancies, people could continue to invest their effort even in an increasingly challenging environment. In the process
of expatriate adjustment, an optimistic outlook such as a realistic expectation in terms of career development can protect them from cross-cultural shock and may help expatriates positively adjust emotional fluctuations. As such, a cross-cultural optimistic state facilitates expatriate adjustment.

Cross-cultural efficacy is another significant predictor of expatriate effectiveness. Bandura (1997) argued that a belief in self-efficacy could determine the goals individuals set and their perseverance in the face of difficulties. In this sense, expatriates who possess strong efficacy belief will exert greater effort and perseverance in regard to their international adjustment. Self-efficacy positively predicts all three facets of socio-cultural adjustment including general living, work and interaction adjustment (Hechanova et al., 2003). Thus, a higher level of cross-cultural self-efficacy can result in a higher level of expatriate adjustment.

In addition, resilient expatriates are likely to be adaptive in their international relocation. Overseas positions for expatriates are challenging (Tung & Miller, 1990) as an expatriate assignment is a scenario full of uncertainty and adversity. Expatriate adjustment is a process of tolerating cultural difference and environmental uncertainty and risk. ‘Mediating’ people who are characterized as having cultural sensitivity and good resilience are able to easily make adjustment between multiple cultures (Bochner, 1977). Accordingly, resilient expatriates may have a greater ability to ‘bounce back’ from cultural challenges, job conflicts and environmental risks. Therefore, expatriates who possess high levels of cross-cultural resilience can be more adaptive in their international assignment.

The above arguments indicate possible relationships between expatriate adjustment and the four components of cross-cultural PsyCap. The composite cross-cultural PsyCap will likely be more significant in predicting expatriate adjustment and performance than its four elements. According to the research by Luthans, Avolio, et al. (2007), PsyCap as a core construct, comprised of four components, can predict performance and satisfaction better than any of the individual components. In addition, COR theory also notes that an individual’s composite PsyCap, as a personal psychological resource, is essential for their effective adjustment and management of life and work (Gorgievski, Halbesleben, & Bakker, 2011). That is, psychologically resourceful people are adaptive to work setting and environment. The meta-analysis by Avey et al. (2011) has also provided evidence that positive PsyCap is significantly related to desirable employees’ attitudes, behaviours and performance. Expatriates with a higher level of cross-cultural PsyCap tend to achieve good
socio-cultural and psychological adjustment in their assignments. In a recent study of cross-cultural individuals, Dollwet and Reichard (2014) found that the cross-cultural PsyCap of sojourners significantly predicted their cultural adjustment and cross-cultural effectiveness. Correspondingly, I expect that expatriates’ cross-cultural PsyCap is positively related to their socio-cultural and psychological adjustment. Thus, I develop the following hypotheses:

H4a: Cross-cultural PsyCap is positively related to expatriate socio-cultural adjustment.

H4b: Cross-cultural PsyCap is positively related to expatriate psychological adjustment.

I further expect that cross-cultural PsyCap can positively influence expatriate job performance. In a meta-analysis consisting of 114 studies, Stajkovic and Luthans (1998a) found a strong positive relationship between self-efficacy and work-related performance. In the sample of Chinese expatriates, Shen and Jiang (2011) also reported that expatriate self-efficacy shows a significant positive relationship with female expatriate performance. Despite a lack of preliminarily empirical studies on the relationship between cross-cultural PsyCap and performance within the expatriation literature, certain studies on optimism in the workplace also provide support for the relationship between optimism and performance. For example, Luthans et al. (2005) found optimism was a significant predictor of rated performance among Chinese factory workers. Two other studies also reported that employees’ optimism was related to their performance (Luthans, Avey, et al., 2008; Youssef & Luthans, 2007). Consequently, I expect expatriates’ cross-cultural optimism to be a supportive psychological factor in relation to expatriate performance. Resilient and hopeful expatriates can perform better as the capacities of willpower, agency thinking and flexibility help expatriates actively meet performance standards, adapt to work uncertainty and find suitable solutions to role stressors. Past empirical studies on hope have also found it is related to Chinese workers’ supervisory-rated performance (Luthans, Avey, et al., 2005) and employees’ reported performance (Luthans, Avey, et al., 2008).

An expatriate’s dynamic cross-cultural competencies are crucial determinants of their job performance (Shaffer et al., 2006) and global leadership effectiveness (Caligiuri & Tarique, 2012). Empirically, the meta-analytic review on PsyCap by Avey et al. (2011) also confirmed the significant relationship between PsyCap and job performance in domestic work settings. Cross-cultural PsyCap as an emerging dynamic cross-cultural competency can also positively influence expatriate job performance. It is a vital cross-cultural skill required to build expatriate cross-cultural skills and improve socio-cultural adjustment and performance
Based on COR theory, the possession and investment of cross-cultural PsyCap can accumulate other significant resources. In the context of expatriate assignments, a good performance is one of the valuable target resources which expatriates expect to obtain. Thus, I argue that cross-cultural PsyCap may also positively influence expatriates’ job performance. Accordingly, I develop the following hypothesis:

H4c: Cross-cultural PsyCap is positively related to expatriate job performance.

As shown below in Figure 3, the hypothesized model of direct relationships illustrates the four groups of hypotheses related to direct effects. In this model, the three expatriate resources, socio-emotional support, cross-cultural PsyCap, and instrumental support, are proposed to be positively related to the three expatriate effectiveness criteria. In light of the corrolaries of the connections between personal resources and social support in COR theory (Hobfoll et al., 1990), I also hypothesize a positive relationship between the two types of social support and cross-cultural PsyCap.

![Figure 3: Hypothesized Model of Chinese Expatriate Effectiveness: Direct Relationships](image)

3.2.4. The mediating role of cross-cultural PsyCap

Social support represents a type of job-related social resource (Xanthopoulou et al., 2009). Job resources refer to physical, social, psychological and/or organizational aspects of the job that are functional in (a) achieving work goals, (b) reducing job demands and the associated psychological costs, and (c) stimulating individual growth and development (Demerouti et al.,
2001). In expatriate assignments, work attributes, including logistical support and relocation assistance, generous assignment compensation packages, instrumental support from the organization, supervisors or other expatriate co-workers are all valuable job resources (Lazarova et al., 2010). Likewise, social and emotional support from family, friends, colleagues and host country nationals constitutes valuable socio-emotional resources.

All of these job and social resources help individuals to build their personal psychological resources such as confidence, sense of mastery, optimism and resilience. Similar to job resources, personal resources can also function as tools to achieving goals, protecting from threats and stimulating individual development (Xanthopoulou et al., 2009). The main function of personal resources is in linking resilience and resources to build individuals’ sense of their ability to control and impact their environment (Hobfoll et al., 2003). In turn, these psychological resources contribute to adaptability to socio-cultural change and to improvement in psychological well-being.

Expatriates’ cross-cultural PsyCap consists of four important resources as mentioned earlier. In line with COR theory’s corollaries, social support and personal resources are integrated and social support helps develop personal resources (Hobfoll et al., 1990). During their international assignments the provision of higher level job and social resources such as social support can help stimulate expatriates’ cross-cultural PsyCap which in turn affects expatriate adjustment. Hence, I will further investigate the mediating role of cross-cultural PsyCap.

Previous studies identified two main mechanisms underlying the relationship between social support and socio-cultural adjustment including stress-buffering (reducing uncertainty) and resource-enhancing (promoting self-confidence and sense of control and mastery) (Adelman, 1988). Hence, the adjustment can be understood as a resourcing process in which social support fulfils expatriates’ psychological need for resources. As a result, expatriates’ increased effort and performance can be motivated by the strength of psychological needs and the receipt of psychological resources. In this sense, the resourcing mechanism underlying the linkages of social support and adjustment incorporates the fulfilment of psychological needs and the receipt, creation and investment of personal resources. PsyCap represents a significant psychological resource, which includes human and social capital (Luthans, Youssef, et al., 2007). The receipt, creation and investment of expatriate cross-cultural PsyCap can engender effective expatriate adjustment. Particularly, I argue that cross-cultural PsyCap may mediate the link between emotional social support and expatriate
adjustment and the relationship between instrumental support and expatriate adjustment.

Moreover, social resources and cross-cultural psychological resources promote an individual’s adjustment (Hobfoll, 2002), whilst social support works as an antecedent of cross-cultural PsyCap and then influences expatriate adjustment. While sufficient socio-emotional support is available, the input of social and emotional support resources can also initiate expatriates’ resource gain spiral. Therefore, higher levels of socio-emotional support may develop expatriate cross-cultural positivity and the increase of cross-cultural PsyCap subsequently improves expatriate socio-cultural adjustment and psychological fitness. Hence, I hypothesize as follows:

H5a: Cross-cultural PsyCap mediates the relationship between socio-emotional support and socio-cultural adjustment.

H5b: Cross-cultural PsyCap mediates the relationship between socio-emotional support and psychological adjustment.

Similarly, receipt of instrumental support, no matter whether from work or non-work sources, can also be invested to develop the resource gain chain. That is, the deposit of instrumental support can be capitalized to build expatriate cross-cultural PsyCap and positivity profits, improving the effectiveness of expatriate socio-cultural interaction and psychological well-being. As such, I also expect that expatriates’ cross-cultural PsyCap can mediate the associations between expatriates’ instrumental support and social-cultural and psychological adjustment. Hence, I develop the following two hypotheses:

H5c: Cross-cultural PsyCap mediates the relationship between instrumental support and expatriate socio-cultural adjustment.

H5d: Cross-cultural PsyCap mediates the relationship between instrumental support and expatriate psychological adjustment.

3.2.5. The mediating role of expatriate adjustment

This section hypothesizes the mediating role of expatriate adjustment in the relationships between cross-cultural PsyCap and job performance. In particular, I propose that both socio-cultural adjustment and psychological adjustment mediate the impact of cross-cultural PsyCap on job performance. These hypotheses are based on COR theory and empirical findings of existing expatriate studies.
According to the principles and corollaries of COR theory, resources can be invested to improve an individual’s adaptive performance (Hobfoll, 2002). Furthermore, high resource possession can give rise to a resource gain spiral (Hobfoll, 2011; Hobfoll et al., 2003). To perform successfully in expatriate assignments, expatriates with high levels of cross-cultural PsyCap can invest their cross-cultural psychological resources to achieve another key resource, expatriate adjustment. Subsequently, good adjustment offers a resource foundation for expatriates to achieve a high standard of job performance. Conversely, low levels of cross-cultural PsyCap signify the risk of resource loss such as psychological discomfort or suffering in the host environment. As a result, maladjustment can translate into poor performance (Caligiuri, 1997).

In the extant expatriate literature, empirical studies acknowledge two main levels of expatriate effectiveness criteria, whereas expatriate adjustment is the primary outcome, job performance, job satisfaction and intent to early return are often the secondary outcomes and the more distal consequences of expatriate adjustment (Hechanova et al., 2003). I also pay attention to the intermediate role of adjustment and expect to test the hypothesized model, as shown in Figure 4, allaying expatriate success criteria with primary outcomes (social-cultural and psychological adjustment) and a secondary outcome (job performance). Empirically, certain studies have found that expatriate adjustment mediates adjustments’ predictors and job performance (Kraimer et al., 2001; Wang & Takeuchi, 2007) and intent to complete the assignment (Shaffer & Harrison, 1998; Wang & Takeuchi, 2007). However, other studies in the context of Western expatriates, do not support the idea of expatriate adjustment as a significant predictor of expatriate job performance (see Kraimer & Wayne, 2004). Hence, I investigate the mediating effect of expatriate adjustment in the linkages from cross-cultural PsyCap to job performance which sets forth the following two hypotheses:

H6a: Socio-cultural adjustment mediates the relationship between cross-cultural PsyCap and expatriate job performance.

H6b: Psychological adjustment mediates the relationship between cross-cultural PsyCap and expatriate job performance.

In sum, I develop six main hypotheses. Four hypotheses focus on the direct effects of social support and cross-cultural PsyCap on expatriate adjustment and job performance. Two hypotheses identify the mediating mechanisms of cross-cultural PsyCap and expatriate adjustment in the chain of social support to cross-cultural PsyCap to expatriate adjustment to
job performance. Apart from the four groups of direct relationships as shown in Figure 3, Figure 4 illustrates the mediating effects of cross-cultural PsyCap and expatriate adjustment. In particular, this study expects cross-cultural PsyCap to fulfill a mediating function in the linkages between social support and expatriate adjustment. Moreover, as I test whether expatriate adjustment works as a mediator in the relationship between cross-cultural PsyCap and job performance, I propose that both psychological and socio-cultural adjustment mediate the impact of cross-cultural PsyCap on expatriate job performance.

Figure 4: Hypothesized Model of Chinese Expatriate Effectiveness: Mediating Relationships

Chapter three discusses the theoretical foundation of my study, namely COR theory. Based on this theory, I developed a set of hypotheses in relation to the direct and mediating relationships of expatriate resources and adjustment and performance. To examine these hypotheses, chapter four presents the methodological issues in regard to research design, pilot studies, sampling, instruments and data collection. In addition, in the next chapter, I address issues related to the specificity of the Chinese context as a research setting and the way in which this affects a number of methodological choices and decisions.
Chapter 4: Methodology

Chapter 4 presents the research methodology of this study. Accordingly, I provide a detailed explanation in regard to eight issues including research design, Chinese context and methodological decisions, population and sampling method, instruments, questionnaire translation, pilot studies and final questionnaire, data collection method and procedures, and data analysis techniques.

4.1. Research design

Methodological fit refers to “internal consistency among elements of a research project—research question, prior work, research design, and theoretical contribution” (Edmondson & McManus, 2007, p. 1155). As this study investigates the connection between six main constructs, a quantitative research design is adopted in order to test the hypotheses. Quantitative research, as the dominant research methodology in the social sciences, enables researchers to test the degree of the relationships between variables in business research (Bryman & Bell, 2011). Moreover, quantitative methods have been the main research approach in the field of international business (Doz, 2011). With regard to this study, all of the variables can be measured by established scales and all of the specific hypotheses and the fit of hypothesized models are testable via employing statistical instruments. Because my research questions mainly focus on identifying, clarifying and examining the direct and mediating effects, the theory I employed, COR theory, is an existing mature theory. While applying mature theories, the suggested research method is to adopt a quantitative approach (Edmondson & McManus, 2007). Thus, the present study employs a quantitative approach through questionnaire surveying to test the hypothesized model and to test and develop COR theory.

This study utilizes quantitative research methods including surveys, partial least squares (PLS) statistical analysis and mediation tests to examine the hypothesized relationships. Cross-cultural PsyCap and the two types of social support are viewed as independent variables in the design and expatriate effectiveness criteria, including socio-cultural adjustment, psychological adjustment and job performance, are viewed as dependent variables. The research is based on structural equation modelling with six variables by utilizing cross-sectional data from Chinese expatriates. Three pilot studies were run to pre-
test and select the measurements of the main study. In the main study, for data collection, email surveys plus an online survey were utilized.

To conduct theory-testing research, the first step in addressing level issues is to specify the level of theory (Klein, Dansereau, & Hall, 1994). By examining the theory adopted in the present study, I propose, as suggested by Klein et al. (1994), that the individual members of a group are independent of the group’s influence. That is, all of the key theories in this study are operationalized at an individual level. COR theory, the main theory of my study, is an individual-level theory. This study applies this theory to examine the impact of expatriates’ individual resources on assignment-related work outcomes. In particular, all of the independent and dependent variables are individual-level constructs because they are individuals’ perceptions, attitudes and behaviours including socio-emotional support, instrumental support, cross-cultural PsyCap, expatriate adjustment and job performance. All of the dependent variables are expatriate self-rated work outcomes. Thus, the variables in this study reflect between-individual variability (Klein et al., 1994). Although Hobfoll (2011) developed COR theory by supposing that resources exist in caravans rather than as single or isolated variables, COR theory begins with the tenet that individuals strive to obtain, retain, foster, and protect things they value (Hobfoll, 1988). In line with this tenet, an individual’s work and psychological resources reflect differences between individuals. COR theory is suitable for my research design and for my study’s purpose as in my research I focus on the relationships between individual-level variables.

The data collection and analysis also conform to the theory-testing quantitative method. To assure that the data and analysis conform to the level of theory, I conducted data collection and analysis at an individual level. All data were collected through survey measures. In addition, in order to maximize between-individual variability, I also tried to choose a diverse and independent sample by inviting expatriates assigned to different countries and from firms in different industries (Klein et al., 1994). In terms of data analysis, individual raw scores of the items belonging to the same factor were employed to test the hypotheses.

4.2. Chinese context and methodological decisions

Michailova (2011) suggested that international business is highly involved in more than one context. Expatriate studies have been frequently conducted in the context of expatriates from developed countries. This research is a context-embedded study of Chinese expatriates. Some
Empirical observations have indicated that Chinese human resources management (HRM) practices have unique characteristics, which differ from the developmental paths of Western HRM practices (Child, 1994; Warner, 2000). China’s HRM practice is a hybrid HRM system integrating certain personnel management traditions from a socialist planned economy (Warner, 2008). For example, “iron rice bowl” can provide a secure job and stable income no matter whether an employee works hard or not. China’s HRM practice also comprises traditional cultural values especially Confucian work values such as guanxi-based culture, reciprocity and family-based collectivism (Warner, 2010). By positioning the level of analysis, selecting measurement of constructs, designing suitable survey and collecting data through Chinese guanxi networks, this study set forth efforts to match this specific context to contextualize expatriate research into a Chinese context.

Management research in China commenced from the 1980s (Shenkar, 1994). With regard to HRM studies in China, Zheng and Lamond (2009) reviewed the literature on Chinese HRM and noted that there are only 58 empirical studies on HRM practices in mainland China published in 26 leading international journals across a span of 30 years (1978–2007). In addition, their review also showed that there are only a few studies which focus on the issues related to IHRM in regard to Chinese firms which invest in other countries outside China. For example, Selmer’s research on Chinese expatriates’ adjustment and career management only captured the single host context of Hong Kong and explored adjustment comparisons between Chinese expatriates and Western expatriates (Selmer et al., 2000a, 2000b, 2002; Selmer et al., 2003). In order to update research on IHRM, it is necessary to conduct further research in the context of Chinese expatriation and in a diversified host context. This is also the reason I have made every effort to recruit a more diversified expatriate sample, for example, expatriates assigned to different host countries or from different industries.

My choice of research level also relates to the existing literature in regard to a Chinese context. For example, Deng (2012) reviewed articles published in major scholarly journals over the past 20 years (1991–2010) and found that the studies on the internationalization of Chinese firms mainly focus on firm level, industry level and country level. Compared with the volume of predictors and consequences of the internationalization of Chinese firms, the process of internationalization including subsidiary management and operation has received less attention although it is of high importance. Expatriate management, especially individual-level expatriate adjustment and performance, has received little if any attention. Xu and Du-Babcock (2012) also noted that current studies on Chinese MNCs usually address
macro-level issues such as host environment, industry analysis, and corporate operation and strategies, yet there is an urgent need to investigate the micro-level issues, namely, in-depth research on Chinese expatriate adjustment issues in order to offer practical guidelines for Chinese MNCs’ overseas operations. This is the reason why I conducted an individual-level study of expatriate adjustment and performance and their personal resources and social support.

Moreover, my literature review on Chinese expatriates shows that previous studies have emphasized the expatriate HRM practice at the firm-level, for example, Chinese MNCs’ expatriate recruitment and selection, staffing approaches, training and management development (Shen & Darby, 2006; Shen & Edwards, 2004). Although some researchers have in recent years turned their attention to expatriates’ individual-level behaviours (e.g., Qin & Baruch, 2010; Shen & Jiang, 2011), the examination of expatriate adjustment is at an exploratory stage due to the relatively low level of attention it has received and the difficulties involved in accessing samples. While investigating expatriate behaviours at an individual-level, Shen and Jiang (2011) found that there was no significant association between family problems and job performance for Chinese female expatriates. This finding counters the proposition that their family-oriented culture might influence the job performance of Chinese expatriates (Yang, Chen, Choi, & Zou, 2000). However, in the context of Western expatriates, family issues are the main contributors to expatriate underperformance (Tung, 1987). Accordingly, conducting expatriate research at the individual level in the context of Chinese expatriates can further develop and enrich the extant knowledge in relation to Chinese expatriates. Also, a study at an individual-level helps further reveal the subtle behavioural differences between Chinese expatriates and Western expatriates and prevents researchers from taking the available findings for granted. This is another important reason I chose to further examine expatriates’ individual-level variables in the context of Chinese expatriation.

In terms of the constructs and their measurements, I also take a Chinese context into account. Most of the constructs in this study have been examined in the context of Chinese employees. In terms of PsyCap, Luthans and his colleagues have applied the PsyCap scale in their studies of the relationship between Chinese workers’ psychological capital and their job performance (Luthans, Avey, et al., 2008; Luthans et al., 2005), which showed a good reliability. Given that this study employed psychological capital construct in the cross-cultural context rather than domestic context, I employed the cross-cultural PsyCap scale to measure Chinese
expatriates’ cross-cultural PsyCap. Previous studies indicate that the construct of PsyCap conforms to the Chinese context. However, psychological constructs such as psychological abilities, intelligence, and well-being, are closely bound with cultures (Triandis, 1999). PsyCap is also a context-flexible construct which can be applied in various circumstances such as in a cross-cultural context. Hence, the construct of cross-cultural PsyCap is applicable in Chinese context and merits further investigation in the context of expatriation.

A two-dimensional construct of social support was originally utilized to measure social support in the context of sojourners (Ong & Ward, 2005). Currently, scholars have employed this construct to investigate expatriate assignments (Podsiadlowski et al., 2013; Stroppa & Spieß, 2011). To date, this particular two-dimensional construct has not been employed in the context of Chinese expatriates. While studying social support across cultures, Glazer (2006) suggested that individuals’ perceptions of various types and sources of social support differ across cultures. In a hierarchical and conservative culture, Chinese are likely to value instrumental support and reciprocity of instrumental support yet are likely to consider individuals who receive emotional support to be disadvantaged (Beehr & Glazer, 2001). The importance of social support in sojourner adjustment and expatriate adjustment has been documented in the existing literature (Adelman, 1988; Kraimer et al., 2001). In the context of Chinese sojourners, Tsang (2001) found social support was a significant factor affecting the general and interactional adjustment of Chinese academic expatriates and students. This finding implies that the application of social support could fit within the context of Chinese expatriates. As Tsang’s study examined academic expatriates and utilized social support from two sources, this study can further broaden the Chinese-related context by investigating the impact of social support types, rather than sources, on expatriate adjustment from a sample of Chinese corporate expatriates. Additionally, conducting pilot studies to validate such established scales as instrumental support and socio-emotional support in a Chinese context could be useful and instructive to my research and overall social support research.

Adjustment and performance variables have also been used to study the behaviours of Chinese expatriates. For example, Selmer and his co-authors tested the association of Chinese expatriates’ personal attributes and their socio-cultural adjustment and psychological adjustment (Selmer et al., 2000a, 2000b; Selmer et al., 2003). Also, Shen and Jiang (2011) examined job performance in their study of Chinese female expatriates. These studies support the feasibility of adopting adjustment and job performance constructs when researching Chinese expatriates.
Chinese context still influences the design of Likert scales. Although a few scales in this study had a reliable Chinese version, up until now, these scales have not been employed in a cross-cultural context. More importantly, literature suggests that Chinese are more likely to choose the midpoint of a Likert scale item, compared to Americans especially for items involving expression of positive feelings (Lee, Jones, Mineyama, & Zhang, 2002). This study conducted a simple pre-test within a small self-initiated expatriates group prior to my three pilot studies. I noticed that the participants preferred to choose the midpoint for 5-choice or 7-choice Likert scales. Hence, I adapted all my scales into 6-point Likert scales in order to reduce measurement bias and unify the long questionnaire. To guarantee the reliability of the 6-point Likert scales, pilot studies were conducted to measure the reliability of each scale.

Speaking of scale translation, my study addressed the issue related to the meaning in terms of the cultural difference between the source version and Chinese context. In different cultures, the same word can signify different things. For example, the word ‘stress’ might be back-translated into stressor such as ‘pressure’ or into strain such as ‘tension’ (Glazer, 2002). To ensure the appropriateness of the translation to the Chinese context, five PhD colleagues and I refined some items. For example, an original item of the scale of positive affectivity is “life is a great adventure”. The literal translation into Chinese is “生命 (life) 是 (is) 一次 (a) 伟大的 (great) 冒险 (adventure)”. However, the Chinese translation changed the positive meaning in the Western context into a negative feeling because Chinese consider “adventure” in a negative sense. Finally, group members suggested I paraphrase this item into “生命是一次伟大的旅程” (life is a great journey) which fitted well with the original positive meaning in the context of Western culture. I separately tested the different translations in the pilot studies. The 3-item scale with the translation “life is a great journey” showed a higher Cronbach’s $\alpha$; the other translation reached a very low reliability value.

During data collection, a Chinese unique approach, guanxi network method, has been adopted. Most Chinese OFDI enterprises are state-owned enterprises (SOEs) (Luo, Xue, & Han, 2010), such as Haier, China Ocean Shipping Company, Sinopec, China Minmetals Corporation. These OFDI SOEs with national influence are relatively bureaucratic in culture and politics (Liou, 2009) and thus are relatively unapproachable compared with private firms especially for a PhD student. In a Chinese context, personal guanxi networks matter and work as a crucial exchange mechanism such as while assisting others (Gu, Hung, & Tse, 2008; Tsui & Farh, 1997). Chinese guanxi culture also presents barriers to data collection (Zhou &
Nunes, 2013). As a result, many scholars suggest that researchers should consider using personal guanxi networks such as friends, colleagues and schoolmates to gain access to the intended participants (Ting & Sandel, 2014). In a previous study, Shen and Edwards (2004) had to ask for the help of a celebrated Chinese scholar in order to contact Chinese MNCs and expatriates in Britain in order to gain appropriate access to speak to them. After experiencing access difficulties, I also found that it was necessary to employ the network approach employed by Selmer et al. (2000a) in order to gain access to the potential MNC participants. I approached them through my personal network or through introduction by my referrers such as schoolmates or teachers at Tsinghua University. I asked eight senior scholars and schoolmates to propose a recommendation for me to the target firms. Although some Chinese MNCs did not reply to me or rejected my survey at the beginning, they finally approved.

While in the process of approaching the target Chinese MNCs, I also addressed the issue of sensitive questions in my survey. In order to successfully conduct my survey, I discussed this issue with the HR managers of participating MNCs. Following the request of some HR managers, I had to omit some scales and some sensitive items which may lead to expatriates’ aversion. To conduct my survey in certain important Chinese MNCs, I had to delete some scales such as affective commitment scale (a proposed control variable), positive affectivity scale (a proposed maker variable for common method variance test) due to the sensitivity of these scales. Following the HR gatekeepers’ request in order to gain access to a key participating company, it was suggested that I omit the scale of perceived organizational support (a proposed control variable for social support).

4.3. Population and sampling

The target population of this study comprises Chinese expatriates working in countries or regions outside mainland China. To date, no complete directory including contact information of Chinese corporate expatriates is available. Moreover, based on the information from a personal communication with some Chinese expatriates and from my online search, no regular association or meeting of peers among Chinese expatriates has been organized. Although the annual official report on China’s OFDI reports the overall number of employees of Chinese overseas businesses, up to date and accurate statistics on the population of Chinese expatriates are not available. As a result, it is not actually possible to obtain an accurate population size of mainland Chinese expatriates.
In targeting corporate expatriates, I adopted a convenience sampling method. The main reason for employing this non-probability sampling approach is that the target population is difficult to reach (Goodman, 2011). Corporate expatriates represent a group of hard-to-reach individuals as they are geographically dispersed and many hold executive positions (Culpan & Wright, 2002). Corporate expatriates of Chinese MNCs are even less available to approach due in part to the strict regulations governing their co-operation with academic researchers (Wang, 2006). In fact, collecting random samples is almost impossible and impractical in the Chinese context due to a variety of cultural and institutional barriers (Manion, 1994). Existing research in the context of Chinese expatriates mainly adopts non-probability sampling methods such as snowball sampling or convenience sampling (Liu, 2009; Selmer, 1999b; Selmer et al., 2000b; Shen & Jiang, 2011). Through the alumni network of Tsinghua University School of Economics and Management and my personal contacts, I obtained the names and contact information of the executives and HR managers of 24 recognized Chinese MNCs. I asked the HR managers and executives who agreed to participate in my study to distribute my survey by letters of invitation to their current expatriates through emails from their headquarters. A majority of these participating companies refused to do a pair-sampling for the study because their inner management system did not support a pair-survey. As such, I could only collect self-report responses from the expatriates themselves. Due to the emerging nature of expatriate research in regard to expatriates from China and the elusive characteristics of their population including size, location and accessibility, it was not possible to employ a random sampling method to collect data. A convenience sampling technique and a self-reported method were utilized as an alternative to collect data from expatriate participants.

With regard to sample size, researchers recommend having about 8-10 observations per variable in order to apply structural equation modelling or other multivariate analyses (Lattin, Carroll, & Green, 2003). Hence, it was necessary to collect adequate responses to meet the criterion. In addition, it is also necessary for the sample size to meet the requirements of application of the PLS technique. Barclay, Higgins, and Thompson (1995) recommended a rule of thumb for robust PLS path modelling estimations, which suggests that the sample size should be equal to the larger of the following two amounts: (1) ten times the number of indicators of the scale with the greatest number of formative indicators, or (2) ten times the greatest number of structural paths which link with a particular construct in the inner path.
model. Consequently, an acceptable sample for this study should meet the criteria both for structural equation modelling and for the application of PLS analysis.

In this research, the scale of cultural psychological capital has the largest formative indicators, 16 items. The largest number of structural paths directed at PsyCap in the path model is 5. Based on the rule of thumb set forth by Barclay et al. (1995), the acceptable sample size of this study should be greater than ten times the number of the formative indicators, or more than 160 (10 multiples 160, the number of formative indicators of cross-cultural PsyCap). In addition, the application of structural equations requires a minimum sample size with 10 observations per variable (Lattin et al., 2003). As this research has six main constructs and 12 variables, it requires a minimum sample size of 120 responses. In the process of comparing the available 212 responses with the two criteria for minimum sample size (160 and 120), it was found that this study met the sample size requirements of PLS analysis and structural equation modelling.

4.4. Instruments

Cross-cultural PsyCap

Cross-cultural psychological capital is measured by the 16-item cultural positive psychological capital scale developed by Clapp-Smith (2009) and the 4-item self-developed expatriate cross-cultural PsyCap scale. The 16-item scale originally adopted from the 24-item PsyCap questionnaire (Luthans, Youssef, et al., 2007) was transferred into a cross-cultural setting by Clapp-Smith (2009) when she conducted a study of global mind-set. It includes four sub-dimensions: hope (four items), self-efficacy (four items), optimism (four items) and resilience (four items). In particular, the samples related to the hope dimension include “There are lots of ways around any problem that I face when in another culture”, and “When in another culture, I think that I can obtain goals that are important to me.” The examples related to optimism include “When interacting with people from a different culture, and things are uncertain, I usually expect the best”, and “I’m optimistic about what will happen to me in the future as it pertains to interacting with people from cultures other than my own.” The questions related to self-efficacy dimension include “I feel confident contributing to discussions about issues when I’m interacting with people from other cultures”, and “I feel confident that I can find my way around in a culture other than my own.” The samples related to resilience dimension include “I can get through difficult times in another culture because
I’ve experienced difficulty before” and “Even when things are tough, I can perform quite well in other cultures.”

Because the construct of cross-cultural PsyCap only consists of 16 formative indicators at the first order for the four PsyCap elements, I developed four-item reflective indicators into its scale to further conform to the expatriate context because the 16 indicators only measure the four components of cross-cultural PsyCap and no items are utilized to directly measure expatriate cross-cultural PsyCap. The sample items include “Generally speaking, I am a hopeful expatriate”; “Generally speaking, I am a resilient expatriate”. Expatriates were requested to answer whether they agreed that each statement described them in a cross-cultural context by ticking a 6-point scale (“1 = strongly disagree”, “6 = strongly agree”). A sample question related to the Cultural PsyCap Scale is “There are lots of ways around any problem that I face when in another culture”. A complete list of the items used is shown in Appendix D.

The most widely used PsyCap measurement is the 24-item PsyCap questionnaire developed by Luthans, Youssef, et al. (2007). However, there is a severe restriction on the use of their 24-item PsyCap scale (http://www.mindgarden.com/products/pcqagreement.htm). Although the short version 12-item PsyCap scale is free of use conditions, the reliability of this short scale is not high enough (Luthans, Avey, et al., 2008). In addition, the 24-item PsyCap scale is designed only for the general work context such as a domestic work setting. To fit the cross-cultural context of expatriate study and guarantee the reliability of measurement, this study does not utilize the conditional 24-item PsyCap scale or the unconditional 12-item short version PsyCap scale.

Socio-emotional support

Socio-emotional support is measured using the social support scale developed by Ong and Ward (2005). The social support scale includes a socio-emotional support sub-scale and an instrumental support sub-scale. Although the socio-emotional support scale was originally designed to measure sojourners’ perceived socio-emotional support, I adapted it and applied it to measure expatriates’ socio-emotional support. The measurement of instrumental support and socio-emotional support had previously been validated in the context of corporate expatriates (McGinley, 2008; Podsiadlowski et al., 2013; Stroppa & Spieß, 2010). Using a 6-point Likert scale, participants were asked to what extent they agreed that each statement described them. Responses were made on the scale from “1 = strongly disagree” to “6 =
strongly agree”. The nine items of the socio-emotional support scale taps expatriate perception of received socio-emotional support. A sample item of socio-emotional support is, “Somebody comforts you whenever you feel homesick”. A complete list of the items used can be found in Appendix D.

**Instrumental support**

Instrumental support was also measured using the scale developed by Ong and Ward (2005). The nine items of this scale tapped expatriate perceived instrumental support. Participants were asked to what extent they agreed that each statement described them with a 6-point scale. Responses were made on the scale from “1 = strongly disagree” to “6 = strongly agree”. A sample item of instrumental support is, “Somebody explains and helps you understand the local culture and language.” A complete list of the nine items used is listed in Appendix D.

**Socio-cultural adjustment**

To assess the three facets of expatriate socio-cultural adjustment: general living, interaction, and work adjustment, I utilized the 14-item scale of Black (1988). This self-related multidimensional scale has proven to be of high reliability and structural equivalence across multiple samples (Black, 1988; Black & Stephens, 1989). Expatriates were asked to indicate how well they adjusted to the host country using a 6-point scale (“1 = much unadjusted”, “6 = much adjusted”). In particular, general living adjustment consists of seven items (e.g., living conditions); interaction adjustment includes four items (e.g., Interacting with host country nationals outside work); work adjustment comprises three items (e.g., working with host country nationals). A complete list of the items utilized can be found in Appendix D.

**Psychological adjustment**

The 12-item General Health Questionnaire (Goldberg, 1972) is used to measure expatriates’ psychological adjustment. Selmer (2004) has employed this scale to measure psychological adjustment in the context of Chinese expatriates. Expatriates were asked to answer how they had been feeling over the past one month about the listed situations by marking their answers on a 6-point scale (“1 = Not at all”, “6 = Always”). A sample of this scale is “Have you been able to concentrate on whatever you are doing?” In this scale, there are 6 reverse-designed questions. A complete list of the items used can be found in Appendix D.
Job performance

Job performance is measured by a combined 9-item scale adapted from existing studies. In particular, expatriate task performance was measured using the 5-item expatriate performance scale of Black and Porter (1991). In terms of contextual performance, I adopted the four self-reported items adapted by Shaffer et al. (2006), originally located in the expatriate performance measurement of Caligiuri (1997). All performance items were recorded on a 6-point rating scale, 1 (i.e., extremely bad) to 6 (i.e., extremely good). The items in this measure asked respondents to recall their most recent performance evaluation and compare their own performance to that of their peers in similar positions. This scale was retested by Shay and Baack (2006) and showed good reliability.

Control variables

Four control variables are included in this study. In particular, gender, English proficiency, previous expatriate experience, and time spent in the host country were controlled. Ang et al. (2007) suggested that gender and previous expatriate experience might influence expatriate adjustment while examining cross-cultural competency and its impact on adjustment. Accordingly, this study kept gender and previous expatriate experience controlled. As English language proficiency has been found to significantly influence Chinese expatriate’s adjustment (Xu & Du-Babcock, 2012), therefore I controlled for the impact of English language proficiency in the hypothesized model. English language proficiency was measured by a 5-point scale (“1 = not fluent”, “5 = very fluent”). Also, as the time that expatriates spent in host country (or current assignment tenure) could affect expatriate adjustment because the level of adjustment could change over time (Selmer, 2001a; Shaffer et al., 1999; Takeuchi, Tesluk, et al., 2005), therefore I also controlled for the time spent in the host country.

Other variables

Although perceived organizational support was utilized in the pilot study as it was once a potential control variable in relation to social support, it was deleted in the main study as it could not be surveyed. A 12-item scale to measure the dimensions of perceived organizational support (i.e., financial support, career support and adjustment support) was developed by Kraimer and Wayne (2004). The scale items are based on the research of Guzzo, Noonan, and Elron (1994) and of Aryee, Chay, and Chew (1996) where the most common types of
organizational support provided to expatriates are discussed. Responses were made on the scale from “1 = strongly disagree” to “6 = strongly agree”.

In order to guarantee the reliability of the measurement of PsyCap, this study also tried to employ a 24-item implicit PsyCap scale adapted from an available implicit psychological capital scale (Harms & Luthans, 2012). As a backup in case cross-cultural PsyCap scale showed an unacceptable level of reliability, I intended to employ implicit PsyCap, due to the fact that in the existing literature, the Chinese-version cross-cultural PsyCap scale had not been tested.

To test the potential common method variance, I tried to utilize positive affectivity as a marker variable to test this variance. As suggested by Podsakoff, MacKenzie, Lee, and Podsakoff (2003), the threat of common method variance can be tested by introducing common factors (e.g., positive affectivity) which can be common factors affecting all the variables in the hypothesized model. Positive affectivity is measured by three items developed by Iverson, Olekalns, and Erwin (1998). A sample of this scale is, “For me life is a great adventure.” All of the sources of the main variables are listed below in Table 14.

4.5. Questionnaire translation

Since this study surveys Chinese expatriates, it was necessary to translate English scales into Chinese prior to conducting the pilot studies and the main study. Although several scales had Chinese versions such as socio-cultural adjustment, socio-emotional support and instrumental support available, all the measures were translated into Chinese and then tested for reliability in three pilot studies. The translation procedures of Brislin (1970) were adopted for the scales including translating the source language (English) into the target language (Chinese) and translating from the target version (Chinese) back to the source version (English) and evaluating the equivalence. The translation work was conducted by a group consisting of six Chinese PhD students (including myself) from different disciplines such as business, language study, sociology, media and film. This PhD group was a regular academic group which aimed to communicate, discuss and improve group members’ academic study. We held a weekly meeting every Thursday afternoon and from 3 November 2011, we had five group meetings and spent approximately ten hours to complete the translation work.

The scales were first translated from the original language (English) into Mandarin Chinese by me with support from two PhD colleagues. Then, the Chinese-version scales were
translated back into English and the accuracy of these versions was discussed at the regular meeting of the six PhD students. Finally, the translated English version was compared to the original and any discrepancies were resolved by unanimous consent of the six PhD students. The group meeting and translation procedure effectively helped correct translation issues, such as the above-mentioned confused translation issue wherein the different meaning of “adventure” in Chinese context and Western context and ensure the appropriateness of the translation to the Chinese context.

4.6. Pilot studies and final questionnaire

4.6.1. Pilot studies

Prior to the full survey of the main study, three pilot studies were performed to examine the measurement instrument. Although all scales in this study had been translated into Chinese by a Chinese PhD group, some scales had not been employed in a cross-cultural study or in the context of Chinese individuals (e.g., cross-cultural PsyCap). In addition, it was necessary to examine the reliability of the scales as all of the scales had been reframed into 6-point Likert scales. To guarantee the reliability of my questionnaire, I conducted three pilot studies among Chinese expatriate scholars, students and self-initiated expatriates from 20 November 2011 to 3 March 2012. The main reasons for conducting each test and the overall results of them are shown below in Table 13.

<table>
<thead>
<tr>
<th>Pilot study</th>
<th>Motivation</th>
<th>Items</th>
<th>Sample</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>Test cross-cultural PsyCap, socio-cultural adjustment, psychological adjustment, job performance, perceived organizational support, positive affectivity</td>
<td>66</td>
<td>63 self-initiated expatriates and students</td>
<td>Nov. 2011 to Dec. 2011</td>
</tr>
</tbody>
</table>

From 20 November 2011 to 6 December 2011 I conducted the first pilot study. The pilot questionnaires were distributed to participants through a snowballing approach. Initially, I contacted four self-initiated expatriate friends and two student friends to ask them if they could persuade their friends to participate in my study. Except for my friends, I also
personally asked eight Chinese roommates to support me to distribute the survey. Finally, about 24 Chinese self-initiated expatriates and 37 Chinese students who were currently working or studying in Auckland participated in my first pilot study. From 70 invitations, I was able to collect 63 fully completed questionnaires. The overall response rate was 90 percent. The high response rate was a result of guanxi and face-giving favour because I asked my friends to only send the questionnaires to their close friends or classmates. To enhance the responses, my friends accompanied me during visits to participants to explain the motivation and challenges involved in my PhD research in order to ask for and receive their assistance. I also communicated with participants via online instant messaging.

During the first round pilot study, I was informed that the copyright owners of Psychological Capital Questionnaire (Luthans, Youssef, et al., 2007) restricted the use of their 24-item scale. Meanwhile, Harms and Luthans (2012) recommended researchers to adopt their implicit PsyCap scale. Since the first pilot study only examined cross-cultural PsyCap scale, testing the implicit PsyCap scale developed by Harms and Luthans (2012) was therefore considered for this study. If the result provided good reliability, I could adopt it as a complementary measure of PsyCap.

In the second pilot study, I tested the reliability of the scales of implicit psychological capital. My pilot questionnaire consisted of 24 items about implicit psychological capital. From 22 December 2011 to 21 January 2012, 65 questionnaires were sent to Chinese expatriates in Auckland and 47 completed responses were received. The response rate was 72.3 percent. During my first pilot study, I received the notice from one main participating MNC, Company L. The HR manager of Company L who had assisted with my survey declined to survey the perceived organizational support scale on the grounds he believed the questions might arouse dissatisfaction with the survey as they asked expatriates to make sensitive appraisals on the relationship between expatriates and the parent company. If I were to insist on these questions, they would not allow my survey in the company. Considering this company might offer considerable expatriate participants, I deleted this scale and only utilized the social support scale of Ong and Ward (2005) and pre-tested it among the pilot group in my third pilot study which took place from February to March 2012.

The third pilot study aimed to test the social support scale and the overall reliability of the reflective indicators of cross-cultural PsyCap. The reason for developing these indicators was that there were no reflective indicators in the previous scales. As such, I developed four
indicators for expatriate’s overall cross-cultural PsyCap. The four indicators of overall PsyCap include “Generally speaking, I am an optimistic expatriate”; “Generally speaking, I am a hopeful expatriate”; “Generally speaking, I am a resilient expatriate”; “Generally speaking, I am a confident expatriate”. From 20 February 2012 to 6 March 2012, seventy questionnaires were sent to expatriates in Auckland and 52 qualified responses were received. The response rate was 74.3 percent.

According to the results of the pilot studies listed below in Table 14, all the variables reached a satisfactory reliability index except for the scale of positive affectivity. In particular, the Cronbach’s α of the scale of 16-item expatriate cross-cultural psychological capital reached 0.91, which is significantly higher than an acceptable level of 0.6. Furthermore, all of the sub-scales of PsyCap achieved an above 0.7 Cronbach’s α. However, the Cronbach’s α of 3-item positive affectivity scale only reached 0.54 and 0.66 respectively in regard to the two different versions of translation. I finally decided to omit this scale due to its low reliability. The dependent variables such as socio-cultural adjustment, psychological adjustment and job performance also showed a satisfactory reliability alpha, which were 0.90, 0.82 and 0.87 respectively. In the second pilot study, the Cronbach’s α of the 24-item implicit psychological capital only reached 0.65. Although Harms and Luthans (2012) recommended this scale as a new implicit approach to testing PsyCap, my pilot study found that the scale of implicit psychological capital may not be highly reliable. By utilizing this cultural PsyCap scale, this study is difficult to compare the PsyCap measurement with the existing PsyCap literature as except the PhD dissertation of Clapp-Smith (2009) no existing studies have utilized this scale. However, this scale fits better with cross-cultural context than Luthans and his colleagues’ 24-item PsyCap questionnaire and the implicit questionnaire. Considering the high reliability and degree of fit with the context of expatriation, I finally determined it would be best to utilize the cultural PsyCap scale as the measure of cross-cultural PsyCap instead of the implicit PsyCap scale. The third pilot study was mainly to test the 18-item social support scale, including 9-item socio-emotional support scale and 9-item instrumental support scale, and four reflective indicators of cross-cultural PsyCap. All of these three scales illustrated high levels of Cronbach’s α. In particular, the 4-item overall cross-cultural PsyCap scale’s Cronbach’s α value was 0.90. The socio-emotional support scale and instrumental support scale showed Cronbach’s α value at 0.91 and 0.94, respectively.
### Table 14: Variables and Measures

<table>
<thead>
<tr>
<th>Variable</th>
<th>Item</th>
<th>Source</th>
<th>Cronbach’s α of pilot studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socio-emotional support</td>
<td>9 items</td>
<td>Ong and Ward (2005)</td>
<td>0.91</td>
</tr>
<tr>
<td>Instrumental support</td>
<td>9 items</td>
<td>Ong and Ward (2005)</td>
<td>0.94</td>
</tr>
<tr>
<td>Cross-cultural PsyCap</td>
<td>16 items</td>
<td>Clapp-Smith (2009)</td>
<td>0.92</td>
</tr>
<tr>
<td>Overall cross-cultural PsyCap</td>
<td>4 items</td>
<td>Self-developed</td>
<td>0.90</td>
</tr>
<tr>
<td>Socio-cultural adjustment</td>
<td>14 items</td>
<td>Black (1988)</td>
<td>0.90</td>
</tr>
<tr>
<td>Psychological adjustment</td>
<td>12 items</td>
<td>Goldberg (1972)</td>
<td>0.82</td>
</tr>
<tr>
<td>Job performance</td>
<td>9 items</td>
<td>Black and Porter (1991); Shaffer et al. (2006)</td>
<td>0.87</td>
</tr>
<tr>
<td>Perceived organizational support</td>
<td>12 items</td>
<td>Kraimer and Wayne (2004)</td>
<td>0.92</td>
</tr>
<tr>
<td>Implicit cross-cultural PsyCap</td>
<td>24 items</td>
<td>Harms and Luthans (2012)</td>
<td>0.65</td>
</tr>
<tr>
<td>Positive affectivity</td>
<td>3 items</td>
<td>Iverson et al. (1998)</td>
<td>0.54; 0.66</td>
</tr>
</tbody>
</table>

Note: Perceived organizational support, implicit cross-cultural PsyCap and positive affectivity were only used in pilot studies, not in the main study. Positive affectivity scale has two Cronbach’s α values as it has two versions of translation.

### 4.6.2. Final questionnaire

Based on the pilot studies, I developed the final questionnaire. This 7-page, 88-question Microsoft Office WORD document questionnaire was used to collect the data for this study. A copy of the questionnaire can be found in Appendix D. The questionnaire consists mainly of three sections except for a brief introduction and contact information on the cover page.

The first section, Section A, of the questionnaire asked for information concerning the expatriates’ social support and cross-cultural PsyCap. I utilized this section to measure socio-emotional support and instrumental support and expatriate cross-cultural PsyCap. Section A1 lists the 18 questions of the social support scale. Section A2 lists 20 items regarding expatriates’ cross-cultural PsyCap. Among the 20 questions, four questions were used to measure overall PsyCap; sixteen items asked about the four states of cross-cultural positive psychological psychology: hope, resilience, self-efficacy and optimism. Section B was employed to measure expatriate effectiveness criteria. Three subsections were designed to ask participants about their socio-cultural adjustment, psychological adjustment, and job performance including task and contextual performance. Subsection B1 utilized 14 items to measure socio-cultural adjustment; subsection B2 used 12 items to measure psychological adjustment. Subsection B3 presented nine items related to job performance appraisal. In Section C, expatriates were asked to provide some general demographic and background information, for example, age, English proficiency, gender, education and marital status.
4.7. Data collection

To facilitate the process of data collection, data was collected from the Chinese expatriates through three types of questionnaires including paper-based, email questionnaires and an online survey. To identify the Chinese MNCs with a group of expatriates, based on a 2011 list of China’s Top 500 Enterprises issued by China Enterprise Federation (China Enterprises Federation and China Enterprise Directors Association, 2011), I chose 24 Chinese MNCs. The reason I adopted email, paper based questionnaires and an online survey was to accommodate participants some of whom were not so familiar with Microsoft Office software or for whom it was inconvenient to fill out the Microsoft Word questionnaire. Utilizing the three types of questionnaires helped to obtain more responses from the expatriates.

The invitation letters and recommendations from my referees were sent via email to the 24 companies. At the initial stage, I received replies from only two companies. Because this study was expected to have diversified participants and statistical analysis required a large sample, I decided to visit the selected MNCs and present my research purpose utilizing a face-to-face approach. In May 2012 and June 2013, I personally returned to China twice to contact and visit the headquarters of the 24 target Chinese MNCs. Among the 24 MNCs, nine companies declined the visit and the survey. Finally, 12 of the remaining 15 companies accepted my survey for their expatriates.

One of the 12 MNC participants, Company A, a leading MNC in Electronics, permitted me at the first meeting to contact some current expatriates. In May 2012, I contacted the HR manager of Company A and requested his help to conduct an email survey of their expatriates. The permission of Company A initiated the trust of other companies. Together with the reference from my schoolmates at Tsinghua, 10 additional MNCs (Company B to Company K) also permitted my study. Company L is considered the most important participant because it is one of the largest global high-tech companies and has thousands of expatriates. I perceived this firm as the main data source of my study. The HR executives of Company L approved my survey on 12 June 2012 after my continuous approach to them from March and a visit on May 2012 via the introduction of a senior Tsinghua schoolmate (the vice CEO of the company). During the discussion including the best way to survey the expatriates, a junior HR manager who assisted me in the survey requested that I delete or change some scales with sensitive questions as he was convinced that I could not survey their expatriates with such a
sensitive question as “I want to return to my home company before my completion of my expatriate assignment”. After four months and four rounds’ of discussion and waiting, my final questionnaire, as discussed above in section 4.5, received approval. However, the senior HR executive of company L resigned in November 2012. The new successive HR executive rejected my research survey for their expatriates during November and December 2012 since end of year is a busy time for expatriates in the process of completing their annual job objectives. In June 2013, I revisited this company and met the new HR executive and he granted approval for my survey of a group of expatriates.

By June 2013, I had successfully approached 12 Chinese MNCs and the executives or HR managers of the 12 Companies (A to L) had approved distribution of my questionnaires to their expatriates through emails or the online-survey. Table 15 below illustrates the profile of the 12 Chinese companies and expatriate participants. These MNCs operate in a range of industries including high-tech, financial services, manufacturing, engineering, natural resources and logistics. A majority of these companies are state-owned enterprises located in Beijing. All the expatriate participants had to fulfil two basic conditions: (1) they were currently or had recently been on an international assignment; (2) the length of assignment should be a minimum of six months.

Table 15: Profiles of Sample Chinese Companies

<table>
<thead>
<tr>
<th>Company</th>
<th>Industry</th>
<th>Ownership</th>
<th>Headquarter</th>
<th>Questionnaire sent</th>
<th>Response received</th>
<th>Response rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Electronics</td>
<td>SOE</td>
<td>Huizhou</td>
<td>20</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Logistics</td>
<td>SOE</td>
<td>Beijing</td>
<td>15</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Engineering</td>
<td>SOE</td>
<td>Beijing</td>
<td>19</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Radio and TV</td>
<td>Private</td>
<td>Beijing</td>
<td>94</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>Petrochemical</td>
<td>SOE</td>
<td>Beijing</td>
<td>13</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>Finance</td>
<td>SOE</td>
<td>Shanghai</td>
<td>11</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>Engineering</td>
<td>Shareholding</td>
<td>Changsha</td>
<td>30</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>Mining</td>
<td>Shareholding</td>
<td>Beijing</td>
<td>9</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>Power</td>
<td>SOE</td>
<td>Beijing</td>
<td>18</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>J</td>
<td>Finance</td>
<td>SOE</td>
<td>Beijing</td>
<td>47</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>K</td>
<td>Engineering</td>
<td>SOE</td>
<td>Beijing</td>
<td>32</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>L</td>
<td>Telecom</td>
<td>SOE</td>
<td>Shenzhen</td>
<td>100</td>
<td>62</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>408</td>
<td>212</td>
<td>52%</td>
</tr>
</tbody>
</table>

Note: SOE = state-owned enterprises; shareholding enterprises are also called as joint-stock enterprises, which are usually financed and controlled by different SOEs or other groups in China.
The responding data was collected by emailing the completed questionnaires to me or by filling the survey online. By July 2013, 408 email invitations and questionnaires had been sent to expatriate managers of 12 Chinese MNCs and I collected 212 usable responses including 32 online responses and 180 completed emailed questionnaires. The overall response rate was 52 percent. The relatively high response rate resulted from the communication efforts of the HR managers because I surveyed these companies with the assistance of their HR managers or Headquarters’ senior officers. Another reason was that the executives had showed an interest in my study and wanted to learn from the findings. Hence, the executives and HR managers called on expatriates to participate in my study.

4.8. Data analysis techniques

4.8.1. PLS for direct effect tests

This study applied the PLS technique of structural equation modelling (SEM) via SmartPLS 2.0 for data analysis. There are five main reasons for using the PLS method. First, PLS-SEM, a variance-based approach to structural equation modelling, can be used to specify both the relationships among the constructs (structural model) as well as a measurement of the constructs (measurement model) simultaneously. Although most researchers believe that SEM is equivalent to carrying out covariance-based structural equation modelling (CB-SEM) analyses using such software as Amos, LISREL and Mplus, PLS-SEM often provides more robust estimations of the structural model (Hair, Ringle, & Sarstedt, 2011). Second, most of the variables in this research are second-order formative constructs, such as cross-cultural PsyCap, socio-cultural adjustment and job performance. CB-SEM is typically only applied with reflective indicators whereas PLS-SEM can adapt to both reflective and formative indicators (Hair et al., 2011). Third, the sample size of this study is relatively small to adopt CB-SEM. Typically, conducting CB-SEM requires more than 200 observations (Reinartz, Haenlein, & Henseler, 2009). The advantage of PLS is that it is less restrictive with regard to a sample size with unbiased estimates (Falk & Miller, 1992). Fourth, the hypothesized model in this study is a relatively complex model. Even though CB-SEM is likely to have identification problems, PLS is better suited to explain complex relationships (Hair et al., 2011). Fifth, the PLS-SEM approach also has other comparative advantages. Compared to CB-SEM, PLS has the advantage of not making any assumptions about population or scale measurement while working with no distributional assumption (Haenlein & Kaplan, 2004).
As discussed above, PLS-SEM is a proper methodological tool for this research. SmartPLS 2.0 is a well-recognized PLS software, designed and developed by three German scholars (Ringle, Wende, & Will, 2005). For all of reasons mentioned above, I chose the PLS via SmartPLS 2.0 for data analysis. In addition, the main study also adopted SPSS 20.0 to conduct basic statistical analysis such as a reliability test of scales and factor analysis.

4.8.2. SPSS macros-“INDIRECT” for mediation test

To assess the hypothesized mediation effects, I employed the logic of mediation test proposed by Preacher and Hayes (2004, 2008). Often, researchers tend to adopt the classic mediating test proposed by Baron and Kenny (1986) or the Sobel test developed by Sobel (1982). According to Baron and Kenny’s (1986) study, there is support for mediation if the following conditions are obtained: (1) the first regression equation shows that the independent variable is significantly related to the dependent variable; (2) the second equation shows that the independent variable significantly relates to the mediating variable; (3) the third regression shows that the mediating variable significantly relates to the dependent variable and the relationship of the independent variable with the dependent variable is significantly lower in magnitude while both the independent variable and mediator are considered. However, as revised by Kenny, Kashy, and Bolger (1998), condition one is no longer required for mediation as long as the second and third are met. They note that as long as step two and three are met, the path to the dependent variable is implied. Also, the approach outlined by Baron and Kenny (1986) has low statistical power and higher rates of Type I error (false positive). In addition, the Sobel test requires a large sample size and normally distributed data. Accordingly, it was not feasible for this study to adopt Baron and Kenny’s approach and the Sobel test.

As an alternative, this study mainly employs the bootstrapping approach outlined by Preacher and Hayes (2008) and SPSS macros called “INDIRECT” for testing multiple mediation. This INDIRECT test can address the limitation of the method by Baron and Kenny (1986) and the Sobel test. Similar to the revised approach of Kenny et al. (1998), the bootstrapping method does not require a significant relationship between the dependent variable and the independent variable. In contrast to these two frequently used tests of mediation, for example, those of Baron and Kenny (1986) and Sobel, the multiple mediation test developed by Preacher and Hayes (2004) does not rely on the assumption of normality of the sample distribution. More importantly, in small to moderate samples, the bootstrapping approach can
reduce the problems of Type I error rate through randomly creating 5000 new samples by use of the original sample (Preacher & Hayes, 2008). This non-parametric approach further extends the Sobel test by comparing the indirect effect of an independent variable on a certain dependent variable with the null hypothesis that the indirect effect is zero. This approach can simultaneously measure the mediating effect of multiple mediators via controlling the other mediations while examining the effect of one mediator.

In line with the methodological logic of the mediation effect test of Baron and Kenny (1986), I first identified the different relationship paths (i.e., $a$, $b$, $c$ and $c'$) among the independent variables ($X$), mediating variables ($M$), and dependent variables ($Y$). In the mediation model of this particular study, the relationship between the independent variables $X$ (i.e., socio-emotional support, instrumental support, cross-cultural PsyCap) and the mediators $M$ (i.e., cross-cultural PsyCap, socio-cultural adjustment and psychological adjustment) is known as path ($X \rightarrow M$) $a$. The relationship between the mediators and the dependent variables (socio-cultural adjustment, psychological adjustment and job performance) is known as path ($M \rightarrow Y$) $b$. The total effect of the independent variables on dependent variables is known as path ($X \rightarrow Y$) $c$. The arithmetic product of $a$ and $b$ (i.e., $ab$) represents the indirect effect of the independent variable on the dependent variable. $c'$ is the direct effect of $X$ on $Y$ when controlling the mediators, which represents the difference between the total effect of $X$ on $Y(c)$ and the indirect effect of $X$ on $Y$ through $M$ (Preacher & Hayes, 2008). That is, $c' = c - ab$.

This INDIRECT bootstrapping test can estimate the total, direct, and single-step indirect effects of $X$ on $Y$ through $M$ concurrently. The output presents the total and specific indirect effects as well as percentile based and bias-corrected bootstrap confidence intervals (CI) for the indirect effects. This multiple mediation test provides a 95 percent CI for the total indirect effect. The 95 percent CI for the total indirect effect that does not include 0 indicates a significant effect of the mediated path whereas the 95 percent CI that does contain 0 is considered to be a non-significant mediated path. Before mediation bootstrapping, SmartPLS calculated the latent scores of the six substantive variables, including socio-emotional support, cross-cultural PsyCap, socio-cultural adjustment, psychological adjustment and job performance. Because cross-cultural PsyCap, socio-cultural adjustment and job performance are first-order reflective and second-order formative constructs, SmartPLS can help produce these latent scores through the PLS-Algorithm. Next, all these latent scores were extracted from SmartPLS and then imputed into SPSS to conduct bootstrapping.
Chapter 5: Data analysis and results

This chapter presents the results of the statistical analysis to investigate the hypothesized relationships presented in chapter three. First, an overview of the methods to analyse the research hypotheses is discussed. The next two sections explain the data preparation and descriptive statistics. To control research bias, I conduct the common method variance test and social desirability correction. The last three sections offer the results of the structural equation modelling in sequence. The results of the hypotheses test are presented, followed by the evaluation of the measurement model and a discussion of the structural model analysis.

5.1. Data analysis overview

The raw data derived from the questionnaires was screened via SPSS to detect any missing data and to run descriptive characteristics prior to analysis. Next, through a reliability test, the reliability of the scales was examined. As this study collected all of the cross-sectional data from a common source, expatriates’ self-report, to detect common method bias via SPSS, Harman’s one-factor test (Podsakoff & Organ, 1986) was applied. The validity of the construct and the reliability of revised scales were performed through the PLS algorithm.

Regarding hypothesis testing, both SmartPLS and SPSS were adopted to analyse the direct effect test and the mediation test. To be specific, I executed the PLS bootstrapping procedure to test the magnitude of the direct effects of the three predicting variables, cross-cultural PsyCap, instrumental support and socio-emotional support, in relation to the expatriate effectiveness variables, socio-cultural adjustment, psychological adjustment, and job performance. To conduct multiple mediation analysis while testing the underlying mediating mechanism of expatriate adjustment in relation to personal resources and job performance, I utilized SPSS. SmartPLS can conduct a mediation test (e.g., Baron and Kenny’s (1986) method and Sobel test) for a model with only one mediator. The SPSS macros developed by Preacher and Hayes (2004), “INDIRECT”, works better than SmartPLS while working with a research model with multiple mediators. Hence, the SPSS bootstrapping procedure was chosen as the main method to test the mediating roles of expatriate adjustment.
5.2. Data preparation

All of the data including Microsoft Word electronic-version, paper-pencil version and online survey responses were entered manually into a Microsoft Excel sheet and the SPSS program. The accuracy of data entry was double checked by comparing the questionnaires and spreadsheet data. Six reversed questions for psychological adjustment were recoded by computing the face values into the intended values (e.g., “3” (intended value) = “7” (six Likert scale) minus “4” (face value)).

Missing data might be problematic, which may lead to different findings from those with a complete dataset. Researchers in the item response theory (Lord, 1980) context have shown that ignoring such missing data can create problems in the estimation of the model parameters. Accordingly, this study examined the issue of missing values prior to data analysis. I received 216 responses from the participants, with two pairs of repeated questionnaires, one blank response and one answered with the same scores. Finally, the study got 212 usable respondents. Among these usable respondents, 24 questionnaires were detected with missing values. Of these 24 incomplete questionnaires, 20 questionnaires only missed one or two values of certain scales. Five questionnaires missed more than ten items.

A number of commonly used approaches are recommended to cope with missing cross-sectional data: listwise deletion, item mean substitution, person mean substitution, regression imputation, ‘hot deck’ substitution and multiple imputation (Hawthorne & Elliott, 2005; Huisman, 2000; Roth, Switzer, & Switzer, 1999). Listwise deletion of participants with any missing data is one traditional method however due to the limited sample size this study did not accept listwise deletion. Item mean substitution requests that the missing value is replaced by the mean value of all other participants that have a valid value, which is a conservative approach since the sample mean does not change (Hawthorne & Elliott, 2005).

Multiple-imputation using the two-way-mean and corrected-item-mean substitution methods tend to complicate data imputation as it needs to be performed by programs or software such as NORM (Schafer, 1999), MPLUS, SPSS’s multiple imputation add-on module, or the MI and MIANALYZE procedure in SAS. Regression imputation and ‘hot deck’ imputation are complex missing data techniques. Comparing the current missing data imputing technique, Parent (2013) found that available case analysis (listwise deletion), mean substitution, and multiple imputation showed similar results across low levels of missing item-level data. Researchers recognize mean substitution as one of the most efficient choices for cases where
the number of missing items on a scale is less than half of the items on the scale (Hawthorne & Elliott, 2005). This study adopted the mean substitution approach for missing data. All of the missing data were replaced with the mean values of the participants. Additionally, for the responses which showed items with two answers, I selected the lower score.

5.3. Descriptive statistics

From 408 questionnaires sent, I obtained 212 complete responses from 12 Chinese MNCs. The 212 expatriates worked in their international assignments among about 55 countries. The majority of participants (152) were distributed in Asian and African countries. As Asian countries are the traditional destination of China’s OFDI, this study obtained 92 responses from Chinese expatriates who had been sent to Asian countries. Others were scattered in Oceania (16), Europe (16), South America (13) and North America (8). In addition, seven respondents did not indicate their host country. The participants’ distribution implies that developing countries especially African and Asian countries are important investment destinations. I received responses from 60 Chinese expatriates assigned to Africa, 40 of which came from Company D as its overseas business focuses only on African countries.

Listed below in Table 16, female participants accounted for 31 (14.6%) of the respondents and men for 181 (75.4%). 125 (59%) of them had married before their expatriation. 203 expatriates, accounting for 95.7%, had at least an undergraduate degree and 79 of them held a postgraduate degree. In terms of assignment experience, although 82 (38.7%) respondents had been on at least one international assignment, 130 (61.3%) were on their first assignment. Table 16 also illustrates the age distribution of respondents. Accordingly, 98.6% of the respondents which represent the main groups of expatriate participants, were between 21 and 50 years of age, 94 (44.3%) were between 21 and 30 while 86 (40.6%) were between 31 and 40, respectively. Only one expatriate participant was under 20 while two expatriates were in their 50s. In addition, no respondents were over the age of 60, mainly because 60 years of age represents the age of retirement in China.
Table 16: Descriptive Characteristics of Respondents

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>181</td>
<td>85.4</td>
</tr>
<tr>
<td>Female</td>
<td>31</td>
<td>14.6</td>
</tr>
<tr>
<td><strong>Marital status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>125</td>
<td>59</td>
</tr>
<tr>
<td>Not married</td>
<td>87</td>
<td>41</td>
</tr>
<tr>
<td><strong>Age group</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤ 20</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>21-30</td>
<td>94</td>
<td>44.3</td>
</tr>
<tr>
<td>31-40</td>
<td>86</td>
<td>40.6</td>
</tr>
<tr>
<td>41-50</td>
<td>29</td>
<td>13.7</td>
</tr>
<tr>
<td>51-60</td>
<td>2</td>
<td>0.9</td>
</tr>
<tr>
<td>&gt; 60</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school (and below)</td>
<td>9</td>
<td>4.2</td>
</tr>
<tr>
<td>Undergraduate and diploma</td>
<td>124</td>
<td>58.5</td>
</tr>
<tr>
<td>Postgraduate (and above)</td>
<td>79</td>
<td>37.3</td>
</tr>
<tr>
<td><strong>Experience</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has assignment experience</td>
<td>82</td>
<td>38.7</td>
</tr>
<tr>
<td>First assignment</td>
<td>130</td>
<td>61.3</td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asia</td>
<td>92</td>
<td>43.4</td>
</tr>
<tr>
<td>Africa</td>
<td>60</td>
<td>28.3</td>
</tr>
<tr>
<td>Europe</td>
<td>16</td>
<td>7.5</td>
</tr>
<tr>
<td>North America</td>
<td>8</td>
<td>3.8</td>
</tr>
<tr>
<td>South America</td>
<td>13</td>
<td>6.1</td>
</tr>
<tr>
<td>Oceania</td>
<td>16</td>
<td>28.3</td>
</tr>
<tr>
<td>Missing</td>
<td>7</td>
<td>3.3</td>
</tr>
</tbody>
</table>

5.4. Method bias test and correction

5.4.1. Common method variance test

Self-reported surveys can create certain methodological biases (Podsakoff et al., 2003) in which common method variance (CMV) is the most significant one. Although I considered collecting key data from different sources or at different points of time, the surveyed companies in my study rejected the provision of supervisor-rated job performance responses for the candidates. Therefore, I had to rely on expatriates’ self-reports and had to address CMV issues.

In general, four approaches are suggested as main remedies to address CMV issues (Podsakoff et al., 2003) as follows: 1) collecting key data from different sources or at different points of time, 2) CMV-reducing questionnaire design such as mixing the order of
questions, 3) complex specification of model, and 4) statistical remedies to detect and control CMV. In international business research, Chang, Van Witteloostuijn, and Eden (2010) suggested that if IB scholars cannot implement the first *ex ante* remedies, for instance, collecting key data from different sources or at different points of time, multiple use of *ex post* remedies are recommended to reduce CMV issues.

This study applied three strategies to control CMV. First, I mixed the order of the questions of all of the scales during my questionnaire design and separated the dependent and independent variables into different sections of the survey, which is an *ex ante* remedy. Second, I conducted *ex post* statistical analysis to detect and control CMV. In particular, Harman’s one-factor test was adopted to ascertain whether or not this research was affected by CMV. If the result of Harman’s one-factor test does not show one factor accounting for a majority of the covariance between the measures, it indicates that CMV does not offer a serious threat to the study. If Harman’s one-factor test shows one general factor accounting for above 50 percent of the covariance, the validity of the measurements in the study will be challenged. Third, considering the potential limitations of Harman’s one-factor test, I employed the partial correlation procedure of including a marker variable within the model. Lindell and Whitney (2001) recommended that the common method bias can be estimated by identifying a marker variable, if this maker variable is not theoretically related to at least one other variable in a study. If the marker variable is not significantly related to any of the variables in the model, then common method variance will not be a concern. Through a combination of the above three *ex ante* and *ex post* methods, I reduced, assessed and controlled the level of CMV.

This study performed the Harman’s one-factor test with principal axis factoring and principal component factoring and found in both cases that more than one factor emerged. For principal axis factoring, the largest factor explained 23.3 percent of the variance. For principal component factoring, 17 components were extracted to explain 70.1 percent of the variance, and 23.3 percent of the variance was explained by the largest factor. The one-factor test showed that the variances which are explained by the biggest factor were below the critical value of 50 percent. Common method variance, therefore, was not a main concern.

Except for Harman’s one-factor test, I also used a marker variable to assess the common method variance. Because previous studies have successfully adopted age as a marker to detect CMV (Griffith & Lusch, 2007), this research employed age of the expatriates as a marker variable. Most importantly, I employed age as the marker variable because existing
studies have identified that age is not theoretically related to expatriate adjustment. Hechanova et al. (2003), in their meta-analysis of expatriate adjustment, confirmed that age has little relationship with the three facets of expatriate socio-cultural adjustment (general adjustment, work adjustment and interaction adjustment). By using sample sizes of 605 and 974, this meta-analysis found that the average sample-weighted correlation \( r \) (effect size) between age and general adjustment was 0.01, the \( r \) between age and work adjustment was 0.06, and the \( r \) between age and interaction adjustment was 0. That is, age is not highly correlated to adjustment variables. In my study, age is categorized into six different ordinal groups: 1 = age < 20, 2 = age at 21-30, 3 = age at 31-40, 4 = age at 41-50, 5 = age at 51-60, 6 = age > 60. While testing the correlation between age and all substantive variables, this study found that age was not significantly correlated to any substantive variables. That is, the \( t \)-values of all path coefficients in Table 17 below are lower than 1.65 (\( t > 1.65 \) for \( p < 0.1 \)). These results suggest that the common method bias is not a serious problem in my study.

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Path coefficient</th>
<th>( t )-values</th>
<th>( p )-values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marker(age) -&gt; Contextual performance</td>
<td>-0.05</td>
<td>0.71</td>
<td>0.48</td>
</tr>
<tr>
<td>Marker(age) -&gt; General adjustment</td>
<td>-0.02</td>
<td>0.32</td>
<td>0.75</td>
</tr>
<tr>
<td>Marker(age) -&gt; Hope</td>
<td>0.05</td>
<td>0.69</td>
<td>0.49</td>
</tr>
<tr>
<td>Marker(age) -&gt; Instrumental support</td>
<td>-0.01</td>
<td>0.17</td>
<td>0.87</td>
</tr>
<tr>
<td>Marker(age) -&gt; Interaction adjustment</td>
<td>0.02</td>
<td>0.25</td>
<td>0.80</td>
</tr>
<tr>
<td>Marker(age) -&gt; Optimism</td>
<td>0.06</td>
<td>0.86</td>
<td>0.39</td>
</tr>
<tr>
<td>Marker(age) -&gt; Psychological adjustment</td>
<td>-0.05</td>
<td>0.69</td>
<td>0.49</td>
</tr>
<tr>
<td>Marker(age) -&gt; Resilience</td>
<td>0.00</td>
<td>0.03</td>
<td>0.98</td>
</tr>
<tr>
<td>Marker(age) -&gt; Self-efficacy</td>
<td>0.09</td>
<td>1.23</td>
<td>0.22</td>
</tr>
<tr>
<td>Marker(age) -&gt; Socio-emotional support</td>
<td>-0.11</td>
<td>1.51</td>
<td>0.13</td>
</tr>
<tr>
<td>Marker(age) -&gt; Task Performance</td>
<td>0.02</td>
<td>0.27</td>
<td>0.79</td>
</tr>
<tr>
<td>Marker(age) -&gt; Work adjustment</td>
<td>0.02</td>
<td>0.37</td>
<td>0.71</td>
</tr>
</tbody>
</table>

5.4.2. Social desirability correction

Another potential bias in this study is social desirability bias (SDB). In my survey, I asked expatriates to reflect on their perception of social support, cross-cultural PsyCap, and their appraisal in regard to socio-cultural adjustment, psychological adjustment and performance. Responses to these moderately sensitive questions are prone to SDB. While answers to survey questions are affected by social desirability responses, participants consciously provide untruthful responses to present themselves in a better status or to prevent threats to
self-image and self-esteem (De Jong, Pieters, & Fox, 2010). In Chinese society, the norm of preserving others’ face (mianzi, similar to esteem and image in Western culture) and preventing losing one’s face encourages people not to critique the negative sides of others and to show a neutral position on sensitive questions. Consequently, these response tendencies harm the validity of research employing self-reports, especially questionnaires.

This study applied three measures to reduce SDB. First, I made a significant effort to guarantee anonymity. Anonymity is a widely-used approach to controlling social desirability bias and works well for single-shot surveys and sensitive questions (De Jong, Pieters, & Stremersch, 2012). As this study was a single-shot survey, it included some moderately sensitive items. In the introduction to my questionnaire, I notified all participants that the survey was anonymous and that their privacy would be well protected. In addition, I also requested HR managers of participating MNCs to indicate that all responses were to be sent directly to my email box. This approach relieved expatriates’ possible concern about direct exposure of their responses to parent companies. Accordingly, this strategy encouraged expatriates to objectively answer the questions. Second, I reduced the sensitive nature of the survey questions. During the negotiations with HR managers, I revised some sensitive questions such as the items relating to the relationship between parent company and expatriates. Third, the 6-Likert scale design helped control the expatriates’ tendency to adopt a neutral or middle position on sensitive questions. This study considered use of a social desirability scale. However, a previous study indicated that the 10-item social desirability scale developed by Strahan and Gerbasi (1972) was not reliable and valid among senior managers (Thompson & Phua, 2005). As most of the participating Chinese expatriates in this study were executives or senior managers, the social desirability scale might not useful for my research. In addition, the entire Marlowe-Crowne Social Desirability Scale includes 33 items, which can reduce the rate and quality of responses. Therefore, this study did not adopt a social desirability scale and instead took the above three steps to correct SDB.

5.5. Evaluation of the measurement model

The measurement model, evaluated through the approach suggested by Chin (2010) includes validity evaluation, reliability evaluation and construct specification. Both SPSS 20.0 and SmartPLS 2.0 were employed to test the reliability and validity of the measurement model. During data screening, SPSS was initially used to test for reliability of the original latent variable scales. After this step, the data were imported into SmartPLS 2.0. For the test of
reliability in SmartPLS, both individual items and the revised scales of reflective latent variable scales are reported. In this model, three constructs, cross-cultural PsyCap, socio-cultural adjustment and job performance are first-order reflective and second-order formative. All other constructs are reflective in nature.

Any indicator of reflective constructs with loading that did not illustrate acceptable reliability was omitted. SmartPLS output, composite reliability and coefficient alpha, were then employed to evaluate the internal consistency of the measurement model. For validity, the criteria proposed by Fornell and Larcker (1981) were adopted. For the second-order formative constructs, different measures were used to test reliability and validity, both of which are explained in the following section of this chapter.

5.5.1. Validity

This study analysed the discriminant validity of the constructs by comparing the square root of the average variance extracted (AVE) between the constructs and the measurement items within any construct with the correlations between it and any other construct. As a rule of thumb, the square root of the AVE of any construct should be larger than the correlations in the model (Chin, 1998). To facilitate this examination, the correlation matrix derived from PLS output is displayed with the bolded square root of the AVE on the diagonal, as shown below in Table 18. AVEs of all reflective latent variables were greater than 0.5, demonstrating adequate ‘convergent validity’. In addition, each of the square roots of AVE listed in Table 18 is larger than the correlations in the matrix with one exception, for the correlation of self-efficacy and optimism. For example, the square root of AVE of contextual performance is 0.83. In contrast, the maximum of correlation between contextual performance and another construct is 0.69. The results of this comparison suggest that this measurement model has adequate discriminant validity and convergent validity.
Table 18: Correlations of the Constructs and the Square Root of AVE

<table>
<thead>
<tr>
<th>Variable</th>
<th>AVE</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
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<th>12</th>
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<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contextual performance</td>
<td>0.72</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International experience</td>
<td>1.00</td>
<td>0.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>1.00</td>
<td>-0.02</td>
<td>0.16</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>General adjustment</td>
<td>0.60</td>
<td>0.46</td>
<td>0.00</td>
<td>0.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Hope</td>
<td>0.62</td>
<td>0.45</td>
<td>0.09</td>
<td>0.01</td>
<td>0.44</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instrumental support</td>
<td>0.65</td>
<td>0.18</td>
<td>-0.04</td>
<td>-0.08</td>
<td>0.27</td>
<td>0.26</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction adjustment</td>
<td>0.69</td>
<td>0.64</td>
<td>0.05</td>
<td>-0.09</td>
<td>0.63</td>
<td>0.48</td>
<td>0.22</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>English proficiency</td>
<td>1.00</td>
<td>0.32</td>
<td>0.14</td>
<td>-0.01</td>
<td>0.14</td>
<td>0.19</td>
<td>-0.07</td>
<td>0.20</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>1.00</td>
<td>-0.05</td>
<td>0.11</td>
<td>0.19</td>
<td>-0.03</td>
<td>0.05</td>
<td>-0.01</td>
<td>0.02</td>
<td>-0.12</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optimism</td>
<td>0.61</td>
<td>0.45</td>
<td>0.02</td>
<td>0.02</td>
<td>0.44</td>
<td>0.74</td>
<td>0.28</td>
<td>0.47</td>
<td>0.11</td>
<td>0.06</td>
<td>0.78</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological adjustment</td>
<td>0.59</td>
<td>0.52</td>
<td>0.04</td>
<td>0.08</td>
<td>0.34</td>
<td>0.36</td>
<td>0.30</td>
<td>0.46</td>
<td>0.00</td>
<td>0.04</td>
<td>0.44</td>
<td>0.77</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resilience</td>
<td>0.57</td>
<td>0.47</td>
<td>0.12</td>
<td>0.04</td>
<td>0.39</td>
<td>0.77</td>
<td>0.23</td>
<td>0.46</td>
<td>0.19</td>
<td>0.00</td>
<td>0.71</td>
<td>0.39</td>
<td>0.75</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>0.66</td>
<td>0.48</td>
<td>0.07</td>
<td>0.00</td>
<td>0.01</td>
<td>0.42</td>
<td>0.77</td>
<td>0.29</td>
<td>0.58</td>
<td>0.11</td>
<td>0.09</td>
<td>0.80</td>
<td>0.45</td>
<td>0.80</td>
<td>0.81</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Socio-emotional support</td>
<td>0.66</td>
<td>0.06</td>
<td>0.04</td>
<td>-0.12</td>
<td>0.21</td>
<td>0.28</td>
<td>0.53</td>
<td>0.20</td>
<td>-0.08</td>
<td>-0.11</td>
<td>0.28</td>
<td>0.11</td>
<td>0.23</td>
<td>0.23</td>
<td>0.81</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task Performance</td>
<td>0.69</td>
<td>0.73</td>
<td>0.08</td>
<td>0.01</td>
<td>0.41</td>
<td>0.50</td>
<td>0.23</td>
<td>0.50</td>
<td>0.25</td>
<td>0.02</td>
<td>0.50</td>
<td>0.51</td>
<td>0.52</td>
<td>0.53</td>
<td>0.09</td>
<td>0.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time spent in host country</td>
<td>1.00</td>
<td>0.08</td>
<td>-0.01</td>
<td>0.10</td>
<td>-0.06</td>
<td>-0.06</td>
<td>-0.06</td>
<td>0.03</td>
<td>0.02</td>
<td>0.32</td>
<td>-0.05</td>
<td>0.06</td>
<td>0.08</td>
<td>0.05</td>
<td>-0.06</td>
<td>0.10</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Work adjustment</td>
<td>0.75</td>
<td>0.47</td>
<td>0.06</td>
<td>-0.08</td>
<td>0.57</td>
<td>0.47</td>
<td>0.33</td>
<td>0.62</td>
<td>0.17</td>
<td>0.02</td>
<td>0.40</td>
<td>0.50</td>
<td>0.45</td>
<td>0.48</td>
<td>0.20</td>
<td>0.51</td>
<td>0.06</td>
<td>0.87</td>
</tr>
</tbody>
</table>

Note: The diagonal line of the correlation matrix represents the square root of AVE. \( n = 212 \)
5.5.2. Reliability

Individual items loadings were first examined for reliability. According to Barclay et al. (1995), the criterion to accept one indicator is an item loading higher than 0.7. Consequently, when I ran the PLS algorithm, items of all constructs with a loading less than 0.7 were dropped. The final factor loadings in Appendix A are all above 0.7. As shown below in Table 19, all the values of Cronbach’s α of individual items are above 0.6. According to Nunnally (1967), α > 0.6 is considered to be an acceptable level of reliability. The individual item reliability was met. To test for internal consistency, Cronbach’s α was first calculated in SPSS for all latent variables and then computed in SmartPLS.

Table 19: Reliability Analysis of Original Scales and Revised Scales

<table>
<thead>
<tr>
<th>Variables</th>
<th>Original scales (SPSS output)</th>
<th>Revised scales (SmartPLS output)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Items</td>
<td>Cronbach’s α</td>
</tr>
<tr>
<td>Instrumental support</td>
<td>9</td>
<td>0.88</td>
</tr>
<tr>
<td>Socio-emotional support</td>
<td>9</td>
<td>0.88</td>
</tr>
<tr>
<td>Hope</td>
<td>5</td>
<td>0.80</td>
</tr>
<tr>
<td>Optimism</td>
<td>5</td>
<td>0.80</td>
</tr>
<tr>
<td>Resilience</td>
<td>5</td>
<td>0.76</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>5</td>
<td>0.83</td>
</tr>
<tr>
<td>General adjustment</td>
<td>7</td>
<td>0.81</td>
</tr>
<tr>
<td>Interaction adjustment</td>
<td>4</td>
<td>0.80</td>
</tr>
<tr>
<td>Work adjustment</td>
<td>3</td>
<td>0.61</td>
</tr>
<tr>
<td>Psychological adjustment</td>
<td>12</td>
<td>0.74</td>
</tr>
<tr>
<td>Contextual performance</td>
<td>4</td>
<td>0.87</td>
</tr>
<tr>
<td>Task performance</td>
<td>5</td>
<td>0.66</td>
</tr>
</tbody>
</table>

Note: the revised scales were employed for the subsequent analysis.

Table 19 also reports the internal consistency proxy (Cronbach’s α) of each construct for both original scales and the revised version. The revised measures excluded items which had loadings lower than 0.7. Generally, the level of Cronbach’s α can be improved by deleting items with lower loadings (< 0.7). This situation was found in the scales of socio-emotional support, self-efficacy, task performance and work adjustment. However, after dropping items with poor loading, the scales of instrumental support, general adjustment, hope, resilience and
optimism get lower Cronbach’s α. In the revised scales, all of the revised scales that can be considered acceptable for the values of alpha are over 0.65. Hence, both the revised scales group and the original scales group in the study meet the reliability requirement. All of those revised simplified scales were employed for the subsequent analysis. Another reliability index of the measurement model is composite reliability. Hair et al. (2011) recommended that composite reliability should be over 0.7. In this study, composite reliability in the revised measurement model with revised scales is higher than 0.8 for all of the latent variables, suggesting that the measurement model has adequate internal consistency.

5.5.3. Results of the measurement model: Formative constructs

The multidimensional nature of cross-cultural PsyCap, social support, socio-cultural adjustment and job performance enables them to be second-order formative constructs (Law & Mobley, 1998; Petter, Straub, & Rai, 2007). In terms of social support, this research directly employs the first-order variables: socio-emotional support and instrumental support. Accordingly, I only examine the formative nature of cross-cultural PsyCap, socio-cultural adjustment, and job performance. In a formative higher-order model, the first-order constructs do not reflect the second-order construct as they would be in regular scales. Instead, each first-order construct represents a unique aspect that contributes a new aspect to the higher order construct (Jarvis, MacKenzie, & Podsakoff, 2003). The indicators of each dimension are not interchangeable. Despite the fact that researchers have recognized its multidimensional nature, PsyCap in the literature has been treated as a core reflective construct while conducting statistical analyses (Luthans, Avey, et al., 2008). While job performance and socio-cultural adjustment are also conceptualized as multidimensional constructs, they are operationalized as reflective constructs.

In the process of deciding whether cross-cultural PsyCap, job performance and socio-cultural adjustment should be treated as a higher-order reflective or formative construct, I followed the main criteria proposed by MacKenzie, Podsakoff, and Jarvis (2005) and Jarvis et al. (2003) as shown below. First, four first-order constructs of PsyCap (i.e., hope, optimism, resilience, self-efficacy), three first-order constructs of socio-cultural adjustment (i.e., general adjustment, interaction adjustment and work adjustment) and two first-order constructs of job performance (i.e., task performance and contextual performance) are all reflective constructs because their indicators are manifestations of the corresponding latent constructs and indicators of each construct are correlated and are conceptually interchangeable (MacKenzie
et al., 2005). Second, cross-cultural PsyCap, socio-cultural adjustment and job performance are second-order formative constructs that consist of first-order reflective constructs as each first-order construct represents a unique aspect that contributes a new aspect to the higher order construct.

Although proposing cross-cultural PsyCap, socio-cultural adjustment and job performance as second-order formative constructs is theoretically reasonable, further statistical analyses are required to examine the appropriateness of these propositions (Pavlou & El Sawy, 2006). First, as reflected in Appendix B, the relative weights of the first-order indicators are all significant. Second, this study conducted the collinearity diagnostic through regression analysis within four first-order constructs of cross-cultural PsyCap, four first-order constructs of socio-cultural adjustment and two first-order constructs of job performance. All of the variance inflation factor (VIF) values are not more than 4.12 for the four first-order variables of cross-cultural PsyCap, not more than 4.90 for general adjustment, work adjustment and interaction adjustment, and not more than 4.92 for contextual performance and task performance. VIF < 5 or VIF < 10 are commonly recognized to determine if the problem of collinearity is strong enough to require remedial measures (Craney & Surles, 2002). All VIF results are below the generally accepted cut-off value of multicollinearity (VIF < 5). In addition, correlation coefficients are all relatively no more than 0.80 (only the relationship between self-efficacy and optimism equals 0.80) when referring to the rule of thumb suggested by Schmidt and Muller (1978) which explains intercorrelation among independent variables above 0.80 indicates possible collinearity. As such, no multicollinearity was found among each first-order construct and these sub-dimensions represent different meanings. Consequently, cross-cultural PsyCap, socio-cultural adjustment and job performance should be treated as formative constructs.

5.6. Evaluation of the structural model

The PLS structural model and hypotheses were assessed by examining path coefficients and their significance levels. To assess the significance of the path coefficients, I utilized the bootstrapping procedure implemented in SmartPLS with 500 re-samples and 212 cases, which tests the statistical significance of path coefficients using a t-test. As Chin (2010) suggested, the central evaluation criterion of the structural model in PLS analysis is the $R^2$ whose interpretation is the same as traditional regression. According to the classification of Chin (1998), $R^2$ values of 0.67, 0.33, or 0.19 for endogenous latent variables in the inner path
model represent substantial, moderate and weak interpretation respectively for the structural model.

Before testing the main model, this study tested the impact of five control and marker variables on the endogenous variables. The coefficients of associations of control variables and endogenous variables are listed in Table 20. The results indicate the control variables do not sufficiently explain endogenous variables except for language proficiency and time spent in host country. For the purpose of model parsimony, I should only maintain the statistically significant paths between controlled and endogenous variables. Accordingly, age and gender, and previous expatriate experience were omitted in the following hypotheses test since they had no significant influence on the endogenous variables. In the subsequent analysis, I only control three paths: language proficiency to socio-cultural adjustment, language proficiency to job performance, and time spent in host country to job performance.

Table 20: Coefficients of Relationships between Control and Endogenous Variables

<table>
<thead>
<tr>
<th>Control variables</th>
<th>Endogenous variables</th>
<th>Socio-cultural adjustment</th>
<th>Psychological adjustment</th>
<th>Job performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0</td>
<td>-0.05</td>
<td>-0.06</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-0.07</td>
<td>0.07</td>
<td>-0.02</td>
<td></td>
</tr>
<tr>
<td>Experience</td>
<td>0</td>
<td>0.02</td>
<td>0.02</td>
<td></td>
</tr>
<tr>
<td>Language proficiency</td>
<td>0.12**</td>
<td>-0.08</td>
<td>0.18***</td>
<td></td>
</tr>
<tr>
<td>Time spent in host country</td>
<td>0.02</td>
<td>0.08</td>
<td>0.99*</td>
<td></td>
</tr>
</tbody>
</table>

Note: ***: p < 0.01; **: p < 0.05; *: p < 0.1

In Figure 5, the results of PLS analysis illustrate the $R^2$ values of the three endogenous variables. When adding all of the exogenous variable into the main model, the $R^2$ values of socio-cultural adjustment (0.39), psychological adjustment (0.25) and job performance (0.56) are all near or above moderate level based on the thresholds of Chin (1998): 0.67, 0.33, and 0.19. Accordingly, in the structural method, job performance has been substantially interpreted; socio-cultural adjustment has been moderately explained; psychological adjustment has been moderately explained. Hence, the results indicate that the fit of the structural model is acceptable.
5.7. Hypotheses testing

5.7.1. Direct effect

With regard to the significance of path coefficients, Hair et al. (2011) suggested employing a two-tailed approach to evaluating the critical t-values. If the size of the resulting t-value is above 1.65, we can assume the path coefficient is significantly different from 0 at a significance level of 10 percent (p = 0.10, two-tailed test). The critical t values for significance levels of 5 percent (p = 0.05, two-sided test) and 1 percent (p = 0.01, two-sided test) are 1.96 and 2.58 respectively. Based on the above criteria of t values and p values, Table 21 below displays the results of the hypothesis test of the direct effects. The test includes 11 specific hypotheses relevant to the direct effects of two types of social support on cross-cultural PsyCap (H1a, 1b), social support on expatriate adjustment and performance (H2a, 2b, 2c; H3a, 3b, 3c), and cross-cultural PsyCap on expatriate adjustment and performance (H4a, 4b, 4c).

H1a and H1b posit that socio-emotional support and instrumental support will be positively connected with expatriate cross-cultural PsyCap. Both of the path coefficients were significant, at the level of p < 0.05. As such, H1a and H1b are supported. H2a, H2b and H2c
hypothesize that socio-emotional support would be positively related to expatriate socio-cultural adjustment, psychological adjustment and job performance. Socio-emotional support was found to have no significant positive relationship with socio-cultural adjustment, which led to no support for H2a. The impact of socio-emotional support on expatriate psychological adjustment and job performance were significant. However, the results show that socio-emotional support negatively correlates with the two effectiveness variables, which is opposite to the hypothesized positive realtionships. This means that H2b and H2c are not supported. In H3a, H3b and H3c, instrumental support is expected to positively relate with expatriate adjustment and performance. Supporting H3a and H3b, instrumental support has significantly positive effects on both socio-cultural adjustment and psychological adjustment, although not on job performance. Thus, H3c is not supported. H4a, H4b and H4c propose a positive connection between cross-cultural PsyCap and the three expatriate effectiveness variables. The results indicate that cross-cultural PsyCap significantly correlates with all three expatriate adjustment and performance variables, supporting H4a, H4b and H4c. To be more specific, the effect sizes of cross-cultural PsyCap on socio-cultural adjustment and psychological adjustment are 0.53 and 0.43 respectively, which signify cross-cultural PsyCap does have a significant relationship with expatriate adjustment. In addition, the total direct effect size of cross-cultural PsyCap on job performance is 0.24.

5.7.2. Mediation effect

H5a and H5b propose a mediating effect of cross-cultural PsyCap on the relationships between socio-emotional support and expatriate socio-cultural and psychological adjustment. H5c and H5d propose that cross-cultural PsyCap mediates the relationships between instrumental support and expatriate socio-cultural and psychological adjustment. SPSS “INDIRECT” bootstrapping served as an examination tool to identify the mediating effect after controlling for a range of personal attributes such as age, gender, previous international experience, language proficiency and time spent in the host country.

As shown below in Table 22, zero does not occur in bias corrected and accelerated 95 percent confidence intervals (0.0938, 0.2645), (0.0692, 0.2460), (0.0841, 0.2560) and (0.0583, 0.2169), suggesting that the mediating effect of cross-cultural PsyCap on the relationships between social support and expatriate adjustment is significant. In particular, in the paths of Socio-emotional support -> Cross-cultural PsyCap -> Socio-cultural adjustment and Socio-emotional support -> Cross-cultural PsyCap -> Psychological adjustment, the mediating
effects are full mediation because the significant relationships between socio-emotional support and expatriate socio-cultural and psychological adjustment have been found to change from coefficient levels of 0.2539 and 0.1306 to nonsignificant 0.0803 and -0.0193 respectively. Cross-cultural PsyCap also partially mediates the relationships of instrumental support and socio-cultural and psychological adjustment because the effect sizes of the two significant relationships have been reduced from 0.3140 to 0.1505 and from 0.3092 to 0.1814 respectively, at the time cross-cultural PsyCap was added into the initial direct effects. The four indirect effects reached 0.1739, 0.1526, 0.1643, and 0.1295 respectively. As a result, H5a, H5b, H5c and H5d are completely supported. For the detailed output of mediating results, please see the Appendix C: SPSS output of mediation tests.

H6a and H6b propose a mediation effect of expatriate adjustment on the relationship between cross-cultural PsyCap and job performance. Accordingly, I tested the mediation effects of socio-cultural adjustment and psychological adjustment concurrently. As shown in Table 22, the total effect of PsyCap on job performance is significant because $c = 0.5473, p = 0.0000$. However, when two adjustment variables were included into the model, the effect size was markedly reduced, with $c' = 0.2293, p = 0.0000$. The total indirect effect of psychological adjustment and socio-cultural adjustment is significant, as indicated by an indirect effect size at 0.3211 (0.1824 plus 0.1387). Moreover, the bootstrapping confidence intervals of the mediation effect of socio-cultural adjustment and psychological adjustment are (0.1113, 0.2659) and (0.0581, 0.2128) respectively, both of which do not include zero. Hence, both socio-cultural adjustment and psychological adjustment partially mediate the effect of cross-cultural PsyCap on job performance, indicating that H6a and H6b are supported.

In sum, chapter five presents the process of data analysis and results of the evaluations of measurement and structural model and hypotheses testing. In next chapter, the findings derived from data analysis, especially the findings in relation to hypotheses test will be in depth discussed.
Table 21: Results of Hypotheses of Direct Effects

<table>
<thead>
<tr>
<th>Hypothesized relationships</th>
<th>Path coefficients</th>
<th>t-values</th>
<th>p-values</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social support -&gt; Cross-cultural PsyCap</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H1a: Socio-emotional support -&gt; Cross-cultural PsyCap</td>
<td>0.18**</td>
<td>2.24</td>
<td>0.03</td>
<td>Supported</td>
</tr>
<tr>
<td>H1b: Instrumental support -&gt; Cross-cultural PsyCap</td>
<td>0.20**</td>
<td>2.25</td>
<td>0.03</td>
<td>Supported</td>
</tr>
<tr>
<td><strong>Social support -&gt; Effectiveness</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H2a: Socio-emotional support -&gt; Socio-cultural adjustment</td>
<td>0.02</td>
<td>0.33</td>
<td>0.74</td>
<td>Not supported</td>
</tr>
<tr>
<td>H2b: Socio-emotional support -&gt; Psychological adjustment</td>
<td>-0.14*</td>
<td>1.90</td>
<td>0.06</td>
<td>Not supported</td>
</tr>
<tr>
<td>H2c: Socio-emotional support -&gt; Job performance</td>
<td>-0.10*</td>
<td>1.70</td>
<td>0.09</td>
<td>Not supported</td>
</tr>
<tr>
<td>H3a: Instrumental support -&gt; Socio-cultural adjustment</td>
<td>0.15*</td>
<td>1.81</td>
<td>0.07</td>
<td>Supported</td>
</tr>
<tr>
<td>H3b: Instrumental support -&gt; Psychological adjustment</td>
<td>0.24***</td>
<td>3.26</td>
<td>0.0</td>
<td>Supported</td>
</tr>
<tr>
<td>H3c: Instrumental support -&gt; Job performance</td>
<td>0.04</td>
<td>0.60</td>
<td>0.55</td>
<td>Not supported</td>
</tr>
<tr>
<td><strong>Cross-cultural PsyCap -&gt; Effectiveness</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H4a: Cross-cultural PsyCap -&gt; Socio-cultural adjustment</td>
<td>0.53***</td>
<td>8.49</td>
<td>0.0</td>
<td>Supported</td>
</tr>
<tr>
<td>H4b: Cross-cultural PsyCap -&gt; Psychological adjustment</td>
<td>0.43***</td>
<td>6.62</td>
<td>0.0</td>
<td>Supported</td>
</tr>
<tr>
<td>H4c: Cross-cultural PsyCap -&gt; Job performance</td>
<td>0.24**</td>
<td>2.48</td>
<td>0.01</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Note: *: p < 0.1; **: p < 0.05; ***: p < 0.01.
Table 22: The Results of the Mediation Effects of Cross-cultural PsyCap and Expatriate Adjustment

<table>
<thead>
<tr>
<th>Hypothesized relationships</th>
<th>Coefficients</th>
<th>Bootstrapping</th>
<th>Mediation effects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$a$ (X→M)</td>
<td>$b$ (M→Y)</td>
<td>$c$ (X→Y) Total effect</td>
</tr>
<tr>
<td>H5a: Socio-emotional support -&gt; Cross-cultural PsyCap -&gt; Socio-cultural adjustment</td>
<td>.3130***</td>
<td>.5546***</td>
<td>.2539***</td>
</tr>
<tr>
<td>H5b: Socio-emotional support -&gt; Cross-cultural PsyCap -&gt; Psychological adjustment</td>
<td>.3130***</td>
<td>.4789***</td>
<td>.1306*</td>
</tr>
<tr>
<td>H5c: Instrumental support-&gt; Cross-cultural PsyCap -&gt; Socio-cultural adjustment</td>
<td>.3072***</td>
<td>.5321***</td>
<td>.3140***</td>
</tr>
<tr>
<td>H5d: Instrumental support-&gt; Cross-cultural PsyCap -&gt; Psychological adjustment</td>
<td>.3072***</td>
<td>.4160***</td>
<td>.3092***</td>
</tr>
<tr>
<td>H6a: Cross-cultural PsyCap -&gt; Socio-cultural adjustment -&gt; Job performance</td>
<td>.5794***</td>
<td>.2876***</td>
<td>.5473***</td>
</tr>
<tr>
<td>H6b: Cross-cultural PsyCap -&gt; Psychological adjustment -&gt; Job performance</td>
<td>.4730***</td>
<td>.3139***</td>
<td>.5473***</td>
</tr>
</tbody>
</table>

Note: n = 212; Number of bootstrapping resample = 5000; *: p < 0.1; **: p < 0.05; ***: p < 0.01.
Chapter 6: Discussion

This chapter discusses the main findings from hypotheses testing. Following a brief introduction of the overall findings, two separate sections are devoted to a discussion of the hypothesized direct effects and mediating effects. My main purpose has been to investigate and examine whether two types of social support and cross-cultural PsyCap are positively related and to establish whether they facilitate expatriate effectiveness in the context of Chinese expatriation. More specifically, I predicted that 1) socio-emotional support will be positively relevant to expatriates’ cross-cultural PsyCap, 2) instrumental support will be positively relevant to expatriates’ cross-cultural PsyCap, 3) socio-emotional support will have a positive relationship with expatriate effectiveness variables (socio-cultural adjustment, psychological adjustment and job performance), 4) instrumental support will be positively related to expatriate effectiveness variables, 5) cross-cultural PsyCap will have a positive relationship with the three expatriate effectiveness variables. Further, I proposed a mediating function for cross-cultural PsyCap and expatriate adjustment in the flow from social support to cross-cultural PsyCap to expatriate adjustment to job performance. More specifically, two social support variables would influence expatriate socio-cultural and psychological adjustment through cross-cultural PsyCap; two expatriate adjustment variables have been hypothesized to mediate the relationship between cross-cultural PsyCap and job performance. These relationships were tested through controlling the effect of covariates such as age, gender and previous international experience, English language proficiency and time spent in the host country.

Overall, the results confirm that cross-cultural PsyCap positively correlates to expatriate socio-cultural and psychological adjustment, and job performance. Even though instrumental support has also been found to positively relate to socio-cultural and psychological adjustment, it is not related to job performance. Unexpectedly, my results indicate that socio-emotional support is not positively related to all adjustment and performance variables. On the contrary, socio-emotional support has a significant negative influence on psychological adjustment and job performance. Moreover, the findings confirm that cross-cultural PsyCap and expatriate adjustment variables function as mediators in the connection chain from social support to PsyCap to adjustment to job performance.
6.1. Discussion of direct effects

By employing the PLS tool, SmartPLS 2.0, the hypothesized direct relationships emerge. With regard to the four hypotheses related to direct effect, two hypotheses are fully supported. Namely, the positive relationships between expatriates’ socio-emotional support, instrumental support and cross-cultural PsyCap are all reported; the positive relationships between cross-cultural PsyCap and expatriate effectiveness criteria variables (socio-cultural and psychological adjustment, and job performance) are fully confirmed. Nevertheless, support was not found for positive relationships between socio-emotional support and expatriate effectiveness criteria variables. Also, between instrumental support and expatriate job performance, no significant relationship was found. In section 6.1.2, I will return to this finding. The two supported hypotheses for the direct effect of social support on expatriate effectiveness are the positive associations between instrumental support and socio-cultural and psychological adjustment. In the next subsections I will elaborate on these results.

6.1.1. Social support and cross-cultural PsyCap

Complete support for the first group of hypotheses, relationship between social support and cross-cultural PsyCap illustrates that expatriates who receive higher levels of instrumental or socio-emotional support are more likely to report higher levels of cross-cultural PsyCap. COR theory has highlighted the positive role of social support in facilitating the development of personal resources. When explaining the relationships between different types of resources, COR theory has proposed the way in which resources behave in the service of adjustment (Hobfoll, 2002). “Resources are linked to other resources” (Hobfoll, 2002, p. 318) in order to achieve successful adjustment. Hence, it is reasonable to conclude that the possession of social support resources leads to possession of psychological resources. In the context of expatriate assignment, it is a predictable result that social support resources are positively linked with cross-cultural PsyCap.

My results are consistent with the findings of existing studies related to social support and positive psychological resources. Social support positively relates to the development of workplace psychological capital. Luthans, Vogelgesang, et al. (2006) noted that psychologically positive individuals, resilient people, are more likely to have a strong social support network. In addition, greater positive psychological resources are positively related with supportive social resources, social network and social support (Brissette, Scheier, & Carver, 2002). Yang et al. (2010) also found that subjective social support predicts positive
psychological resources, self-efficacy. In terms of the specific types of social support, little research has been conducted on how different types of social support influence PsyCap. As an exception, Karademas (2006) identified positive correlations between two types of social support (emotional and instrumental) and two components of psychological capital (optimism and self-efficacy), with regard to insurance companies employees. Compared with the existing empirical studies, my analysis further confirms the positive relationship between social support functions (emotional and instrumental) and cross-cultural psychological resources (cross-cultural PsyCap) in the context of expatriation. Although COR theory conceptually deduces the probability of this association, my study contributes to the knowledge of resource mechanisms by broadening the research context and providing initial empirical evidence of this relationship.

6.1.2. Socio-emotional support and expatriate effectiveness

Hypotheses 2a, 2b, 2c and Hypotheses 3a, 3b, 3c propose the positive effects of two types of social support on expatriate adjustment and job performance. The mixed results regarding the direct effects of social support on expatriate effectiveness variables deserve a more in depth discussion. It is surprising to find that there is no significantly positive relationship between socio-emotional support with all adjustment and performance variables. More specifically, socio-emotional support has no significantly positive relationship with expatriate socio-cultural adjustment. Conversely, socio-emotional support has significantly negative connection with psychological adjustment and job performance.

Although scholars have proposed that emotional support can be helpful by allowing expatriates to buffer the stress arising from socio-cultural adjustment including adjustment to working, living, and interacting (Caligiuri & Lazarova, 2002; Farh et al., 2010), no empirical studies offer support for the positive link between socio-emotional support and socio-cultural adjustment. Very few if any studies could be found that showed a positive relationship between emotional support-related variables, depth of social network relationship and expatriate interaction adjustment as one facet of socio-cultural adjustment (Liu & Shaffer, 2005). Although the findings of this study do not support the positive relationship, it is risky to rush to a conclusion that socio-emotional support does not influence socio-emotional support. The reason for this is that the results of the mediation tests found that socio-emotional support indirectly influence expatriate socio-emotional support through cross-cultural PsyCap. As a potential antecedent of socio-cultural adjustment, social emotional
support might be a distal resource to facilitate expatriate adjustment. Socio-emotional support resources might function when they are transformed into personal resources. In a study of resource mechanisms of job resources and personal resources, Xanthopoulou et al. (2007) found that personal resources mediate the relationship between job resources, social support, and work outcomes and also influence the perception of social support. While I have not found a positive direct link from socio-emotional support to socio-emotional support, emotionally supported expatriates possess higher levels of cross-cultural PsyCap, resulting in better socio-cultural adjustment.

Unexpectedly, my results show that socio-emotional support is negatively related with psychological adjustment and job performance. These findings counter the expectation proposed in my hypotheses. The results also contradict the research of Wang and Kanungo (2004) who concluded that a social support network has a significantly positive relationship with expatriates’ psychological well-being. However, my findings are similar to those of the study by Ong and Ward (2005) in that socio-emotional support is not significantly related to lower depression. In a review of the outcomes of social support, Albrecht and Adelman (1987b) identified a wide range of unanticipated outcomes of social support and alerted researchers to take note of the dark sides of support such as constraints on enthusiasm. Also, Cranford (2004) found that higher levels of social support fail to function as a stress-buffering resource among married people; conversely, low levels of social support significantly produce a stress-exacerbation effect. My results might be in line with the dysfunctional situation and stress-exacerbation effect of socio-emotional support.

When discussing the operation of resource mechanisms during adjustment, Hobfoll (2002) noted that having too much of a resource could be negative and raised the question whether too many “good things” lead to good outcomes. An appropriate answer to this question is that it depends on certain conditions. Shinn, Lehmann, and Wong (1984) noted that the fit between social support and individual situation depends on five conditions, including the timing, the amount, the source, the structure and the function of support. In the context of an expatriate assignment, emotional support might function well to mitigate negative psychological effects such as isolation and loneliness in the early stages of assignment (Caligiuri & Lazarova, 2002). Nonetheless the positive role of emotional support might dilute and change over time. Social support may trigger more life stress. Parasuraman, Purohit, Godshalk, and Beutell (1996) found that both emotional and instrumental support have marginally positive relationships with life stress. Thus, socio-emotional support might have a
negative relationship with psychological well-being which is similar to psychological adjustment in expatriate research. During expatriation, socio-emotional support may make expatriates feel good at the early stages and prevent them from taking action to cope with adjustment problems.

Although socio-emotional support might improve psychological adjustment over a certain period of time, the cross-sectional data of my study might not capture the dynamic relationship between them. In a study with a sample of British expatriates, socio-emotional support seeking was not related to psychological adjustment (Ward & Kennedy, 2001). This indicates that the relationships between social support and psychological adjustment might vary in different circumstances. As my study is focused on Chinese expatriates, more investigation in other expatriate contexts could be helpful in clarifying the correlation between socio-emotional support and psychological adjustment.

In addition, the amount of support also has an impact on the function of support (Shinn et al., 1984). Too much socio-emotional support can be problematic. In terms of the negative relationship between socio-emotional support and job performance, one possible explanation is that extensive socio-emotional support increases family and social involvement and negatively impacts job involvement (Parasuraman et al., 1996), resulting in a negative association with job performance. Moreover, the pursuit of socio-emotional support requires the expenditure of other resources or potentially loses the opportunities to obtain resources from other domains (Hobfoll, 2002). This proposition draws insight from self-determination theory which proposes that the pursuit of certain goals may detract individuals from basic needs and therefore lead to a lower level of well-being. In this way, high emotional support, low psychological well-being and performance or low support, high psychological well-being and performance can simultaneously exist because expatriates might pursue one resource (e.g., adjustment and job performance) as a priority by substituting the pursuit of other resources (e.g., emotional needs). As such, the pursuit of socio-emotional support might negatively impact the attainment of higher levels of psychological well-being and job performance.

In sum, the results of my study counter the propositions of the existing expatriate literature by finding a non-significant relationship between socio-emotional support and socio-cultural adjustment and a significantly negative impact of socio-emotional support on expatriate psychological adjustment and job performance. The findings imply that the fit between socio-
emotional support and expatriate effectiveness variables, especially psychological adjustment and job performance, could be influenced by other conditions. This would certainly be a worthwhile research avenue to pursue further in future research.

6.1.3. Instrumental support and expatriate effectiveness

Unlike socio-emotional support, my findings show that instrumental support has a significantly positive relationship with psychological adjustment. Whilst Ward and Kennedy (2001) did not find a significant relationship between instrumental support seeking and expatriate psychological adjustment, Ong and Ward (2005) reported that higher perceived availability of instrumental support predicts high psychological adjustment in relation to cross-cultural sojourners. Consistent with the work of Ong and Ward (2005), the result of my study indicates that expatriates who have support for their instrumental needs are more likely to possess good levels of psychological adjustment.

With regard to the impact on socio-cultural adjustment, my results show that whereas instrumental support and socio-cultural adjustment are also positively related, their relationship is not as significant as the relationship between instrumental support and psychological adjustment. This finding is partially consistent with existing expatriate studies, as the significant correlation has not been confirmed. For example, Liu and Shaffer (2005) found that instrumental support from host country nationals is not positively related to expatriate socio-cultural adjustment. Additionally, Kraimer and Wayne (2004) also reported that instrumental financial support from organizations is not significantly linked with expatriate socio-cultural adjustment. McGinley (2008) reported a significant positive relationship between instrumental support and general adjustment, one facet of socio-cultural adjustment. Yet this result cannot prove a correlation of socio-cultural adjustment as a whole with instrumental support. Together with the finding about the relationship between socio-emotional support and socio-cultural adjustment, the findings seem to indicate that social support has a moderately positive influence on socio-cultural adjustment.

The relationship between instrumental support and expatriate job performance has been investigated in the existing literature. Studying the adjustment and performance of American expatriates, Kraimer and Wayne (2004) did not find that financial support had a strong positive contribution to expatriate contextual performance although it has a positive relationship with task performance. In the context of American expatriates, Liu and Shaffer (2005) also reported that instrumental support does not predict expatriate job performance.
The results of my study found a non-significant relationship between instrumental support and job performance in the context of Chinese expatriates. The results in both the American and Chinese expatriate samples partially demonstrate that expatriates perceive instrumental support might not directly contribute to their assignment performance. In sum, by confirming a positive relationship with psychological adjustment and non-significant relationships with socio-cultural adjustment and job performance, my study supports previous research on the relationships between expatriate instrumental support and expatriate effectiveness.

The findings identify different effects of the two types of social support on expatriate effectiveness variables. To make it clear, as shown below in Table 23, I compare the results of socio-emotional support with instrumental support and find distinctly different results in their relationship with the effectiveness variables. Two effects emerge, with regard to null effects of socio-emotional and instrumental support, namely, the relationship between socio-emotional support and socio-cultural adjustment, and the relationship between instrumental support and job performance. Moreover, two social support types are markedly different in relation to psychological adjustment. Specifically, perceived support for socio-emotional needs is not significantly beneficial to expatriate psychological well-being. Conversely, perceived support of instrumental needs might strongly facilitate psychological adjustment. In other words, expatriates with a higher level of perceived instrumental support would have better psychological adjustment. The results indicate that the significance of social support, especially instrumental support, during expatriate adjustment cannot be overlooked.

<table>
<thead>
<tr>
<th>Effectiveness</th>
<th>Resources</th>
<th>Social support</th>
<th>Cross-cultural PsyCap</th>
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<td>Socio-emotional support</td>
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<td>Socio-cultural adjustment</td>
<td>Non-significant</td>
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<td>Psychological adjustment</td>
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<td>Job performance</td>
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Cultural differences seem to partially explain the different roles of the two social support types. Even though socio-emotional support from supervisors might lead the support receivers to lose face in China, instrumental support is more favourable in Chinese culture and plays a greater role in almost all Asian societies than in Western cultures (Glazer, 2006).
Protecting face is one of the most important values among Chinese (Ho, 1976). Accordingly, instrumental support had a greater positive role than socio-emotional support among the sample of Chinese expatriates. However, social support is complex and goes beyond a solely cultural perspective. Considering that this study only examines the perceived socio-emotional support and instrumental support (rather than amount, source, and timing) as the proxies of social support and employs a composite of socio-cultural adjustment and job performance, the in-depth relationships between social support functions and expatriate effectiveness criteria represent a topic for further exploration in future research.

6.1.4. Cross-cultural PsyCap and expatriate effectiveness

Compared with social support resources, cross-cultural PsyCap has a more direct and significant relationship with all expatriate effectiveness variables. H4a, H4b and H4c are all supported, which confirms the positive connections between cross-cultural PsyCap in relation to expatriate adjustment and job performance. Furthermore, the finding on the relationships between cross-cultural PsyCap and socio-cultural adjustment is consistent with a recent study in the context of sojourners (Dollwet & Reichard, 2014). Dollwet and Reichard (2014) only surveyed those individuals who had cross-cultural experience rather than an expatriate group, whereas my study is different from their study in terms of the application of cross-cultural PsyCap in the context of expatriation. Although I utilized a different approach to measuring cross-cultural PsyCap, Dollwet and Reichard (2014) and I respectively confirm that individuals experience better socio-cultural adjustment whilst they have higher levels of dynamic psychological resources, namely, cross-cultural PsyCap.

In the general work setting, PsyCap has been confirmed as a significant predictor of employee’s psychological well-being (Avey et al., 2010). In the process of transferring PsyCap into a cross-cultural context, the results indicate cross-cultural PsyCap is also significantly and positively related to psychological adjustment. This result further confirms that PsyCap, as a context-specific variable, can be applied in varied circumstances.

In addition to its contribution to expatriate adjustment, PsyCap can also directly benefit job performance. In a domestic work setting, PsyCap significantly predicts job performance (Avey et al., 2011). In the context of expatriation, the results of my study illustrate that the significant and positive relationships related to cross-cultural PsyCap and job performance are replicated. This signifies that expatriates with higher levels of cross-cultural PsyCap will be more competent in socio-cultural and psychological adjustment and more likely to perform
better in international assignments than those with lower levels of PsyCap. Combining the findings of the main effect of cross-cultural PsyCap, the results regarding the direct effects of cross-cultural PsyCap on expatriate adjustment and performance are consistent with existing studies in the expatriate adjustment literature and PsyCap research in domestic work settings. Further, the findings support the proposition that PsyCap is both an effective and flexible context-specific construct.

In Table 23, to illustrate the remarkable difference between social resources (social support) and psychological resources (cross-cultural PsyCap), I compare the direct impact of social support and cross-cultural PsyCap on expatriate effectiveness. Given the results of the direct effects of social support and cross-cultural PsyCap, for the purpose of predicting expatriate adjustment and job performance, my findings show that personal psychological resources seem to be superior to social resources. Most evidently, cross cultural PsyCap has positive relationships with all the three expatriate effectiveness criteria variables. In contrast, only one significant positive relationship between two social support types and the three expatriate effectiveness variables was supported. In particular, both socio-emotional support and instrumental support were not found to have any significant relationship with expatriate socio-cultural adjustment. The two social support functions are also not positively linked with expatriate job performance. The findings imply that personal psychological resources could be more direct and significant in predicting expatriate adjustment and job performance than social resources. These results could be helpful for expatriate management especially in relation to expatriate selection and performance intervention.

A number of reasons help explain the distinct findings related to the direct effects of social support and cross-cultural PsyCap. The operationalization of the construct is one potential explanation for the relationship between social support and socio-cultural adjustment and job performance. To simplify the research model, I utilized composite socio-cultural adjustment rather than subordinate dimensions such as general cultural adjustment, interaction adjustment and work adjustment. Likewise, rather than its two main dimensions: task performance and contextual performance, I also utilized composite job performance. This might have influenced the significance of the relationship between antecedents and the effectiveness outcomes. In other words, the relationship between socio-emotional support and socio-cultural adjustment may be clearer if the relationship between each dimension of socio-cultural adjustment and socio-emotional support could be investigated further.
6.2. Discussion of mediation effects

After testing the direct effects of social support on cross-cultural PsyCap, I tested two groups of hypothesized mediation effects. Using rigorous statistical methods of mediation tests (Preacher & Hayes, 2004, 2008), the results confirm all the mediation effects of cross-cultural PsyCap and expatriate adjustment. The findings suggest that cross-cultural PsyCap functions as a mediator between social support and expatriate adjustment. In particular, cross-cultural PsyCap provides a full mediation in relation to the linkage of socio-emotional support and expatriate adjustment and partial mediation as it relates to the relationship between instrumental support and expatriate adjustment. In addition, I found that cross-cultural PsyCap indirectly influenced job performance via expatriate adjustment since socio-cultural adjustment and psychological adjustment partially mediated the relationship between cross-cultural PsyCap and job performance.

6.2.1. The mediating role of cross-cultural PsyCap

Hypotheses 5a-5d explicate that cross-cultural PsyCap mediates the effect of social support variables on expatriate adjustment. This group of hypotheses was extended from the direct effects of social support on cross-cultural PsyCap in Hypothesis 1(1a,1b) and the direct effects of cross-cultural PsyCap on expatriate adjustment variables in Hypothesis 4 (4a, 4b, 4c). In regard to COR theory the mediating effects of cross-cultural PsyCap were derived from the theoretical underpinnings regarding relationships between social support and personal psychological resources. Hobfoll (2002) posited that social and psychological resources are integrated to benefit the extent of fit between individuals’ resources and environmental demands during adjustment. In the expatriate context, the two key resources can function on expatriate adjustment individually and jointly through the mechanism of the use of resources.

According to COR theory, individuals who possess resources are capable of further resource gain (Hobfoll, 2001b). Thus, the availability or investment of one resource will advance an accumulation of other resources. To an employee, the existence of sufficient social support represents possessing an important social and job resource, which can activate personal resources and result in positive outcomes. According to the findings of a recent study, the possession of social support increases personal resources such as organization-based self-esteem, optimism, and self-efficacy (Xanthopoulou et al., 2007). In another recent study, Karatepe and Olugbade (2009) reported social support resources, as manifested by supervisor
support, heightened efficacy beliefs in a sample of hotel employees. More recently, it was found that personal resources, such as, optimism and resilience directly and indirectly influence psychological health via social resource mediators (Boudrias et al., 2011).

In the literature on expatriates, scholars also acknowledge the resource-based approach to explaining expatriate adjustment. More specifically, Adelman (1988, p. 192) stated that “access to support outside the distressed social unit can expand resources and help to restore a system’s equilibrium”. In the same way, having sufficient social support enables expatriates to acquire more psychological or cognitive resources to fit the demands of the host environment. Caligiuri and Lazarova (2002), further proposed that social support can help mobilize psychological resources by serving socio-emotional needs such as affiliation, reinforcement, recognition and affirmation or offering a host of instrumental resources including money, skills, and advice in handling work and life situations, which in turn facilities expatriate adjustment. In addition, Lazarova et al. (2010) posited that levels of adjustment could likely be reflected by perception of the availability of physical, emotional, and psychological resources. Accordingly, they proposed that expatriates are well adjusted while they perceive their possession of sufficient available psychological resources. As such, distal social support resources can be invested to accumulate proximal psychological resources, which reflect improved socio-cultural and psychological adjustment.

Combining the results of the direct effect of social support on expatriate adjustment and the mediation tests, I have noticed that the function of social support during expatriate adjustment can be in a direct or indirect manner. In the indirect mechanism, the input of social resources is invested to obtain psychological resources and the increased psychological resources are directly related to the improvement of expatriate adjustment. Overall, the results confirm the resource-based propositions in the existing expatriate literature about the positive role of psychological resources during adjustment.

6.2.2. The mediating role of expatriate adjustment

The final hypotheses (6a and 6b) proposed the mediating role of expatriate adjustment. Investigating the mediating role of cross-cultural PsyCap, the results illustrate the social support variables work as distal antecedents of expatriate adjustment whereas cross-cultural PsyCap functions as a proximal predictor in predicting expatriate adjustment. Similarly, among expatriate effectiveness variables, adjustment belongs to temporal outcomes and performance to distal effectiveness outcomes. The influence of an antecedent on expatriate
job performance is mediated by expatriate adjustment variables. Previous studies have had mixed results when investigating the mediating effect of socio-cultural adjustment. Although some studies found partial mediation effects (Kim & Slocum Jr, 2008; Shaffer et al., 2006), other studies reported little or no mediating effect (Kramer & Wayne, 2004). My research confirms that socio-cultural and psychological adjustment partially mediate the impact of cross-cultural PsyCap on job performance. In terms of psychological adjustment, this study is one of the initial examinations on its mediating effect on the relationship between cross-cultural PsyCap and job performance.

The results indicate cross-cultural PsyCap can contribute to job performance in direct and indirect ways. The mediation tests support that expatriate cross-cultural PsyCap can positively influence job performance via socio-cultural and psychological adjustment. Hence, I proposed that a higher level of expatriate socio-cultural and psychological adjustment represents the personal resources of expatriates as the degree of adjustment equates to the degree of fit between the expatriate and his or her environment. Accordingly, the mediating mechanism of expatriate adjustment signifies a flow from expatriate personal psychological resources to gain person-environment fit resources to achieve a high standard of performance. Thus, this finding fits with COR theory’s principles and propositions about resource investment and the resource gain spiral.

In sum, my results are consistent with existing findings related to the mediating role of socio-cultural adjustment. My analysis further contributes to the expatriate literature by confirming that psychological adjustment also mediates the relationship between expatriate adjustment’s antecedents and job performance. Theoretically, in the context of expatriation, my findings fit well with and further advance the COR theory.
Chapter 7: Conclusions and implications

This chapter summarizes the conclusions and implications of my research. I present a conclusion of the collective findings of this research with regard to the four research questions. I also explain the strengths and limitations of my research. Finally, the implications for future research and practice are discussed.

7.1. Conclusions on research questions

Throughout the thesis, I have answered the four main research questions put forward in chapter two. The first question queries the relationship between cross-cultural PsyCap and expatriate effectiveness, which includes expatriate adjustment and job performance. Based on the results, expatriates’ cross-cultural PsyCap significantly predicts almost all effectiveness variables, namely, socio-cultural adjustment, psychological adjustment and job performance. These findings demonstrate that cross-cultural PsyCap is crucial to expatriate effectiveness. Cross-cultural PsyCap represents an important dynamic personal resource for expatriates to effectively complete their international assignment. From a resource-based perspective, personal psychological resources enable expatriates to obtain a satisfactory fit between themselves and the work and life environment in host countries. In light of COR theory, cross-cultural PsyCap promotes expatriate adjustment.

The second research question asks about the relationship between two social support types and expatriate adjustment and performance. The results show the two types of social support have different effects on effectiveness variables. Instrumental support is positively related to both socio-cultural and psychological adjustment. Socio-emotional supports are unexpectedly negatively related to expatriates’ psychological adjustment and job performance. Different from the two existing studies on instrumental support (Liu & Shaffer, 2005; Ward & Kennedy, 2001), my research confirms the positive influence of instrumental support on both psychological and socio-cultural adjustment and reaches the same result as the study of Ong and Ward (2005). These findings suggest that social support is a complex construct because the functions differ in terms of different sources, types, measurements and other conditions such as timing.
The third research question invites an examination of the relationship between social support and cross-cultural PsyCap and the role of cross-cultural PsyCap in the relationship between social support and expatriate adjustment. The results show that the two types of social support positively relate to cross-cultural PsyCap. Although socio-emotional support does not have a significantly positive relationship with socio-cultural and psychological adjustment, it influences expatriate adjustment through the mediation of cross-cultural PsyCap. The relationships between instrumental support and expatriate adjustment are also partially mediated by cross-cultural PsyCap. The findings confirmed one support-related corollary of COR theory that social resources can promote personal resources. The findings also reflect the reciprocal relationship between personal resources and social resources which was tested by applying the job resources-demands model (Xanthopoulou et al., 2009). This is the reason cross-cultural PsyCap mediates the relationship between social support resources and expatriate adjustment. The results imply that the significance of cross-cultural PsyCap cannot be overestimated as it directly influences expatriate adjustment and mediates the effect of social support on adjustment outcomes.

The fourth research question relates to the role of expatriate adjustment in the relationships between cross-cultural PsyCap and expatriate job performance. As predicted in the hypotheses, expatriate adjustment partially mediates the linkage between cross-cultural PsyCap and job performance. These findings show that expatriate personal resources, such as cross-cultural PsyCap, facilitate the procurement of higher level of expatriate adjustment which in turn contributes to the achievement of good job performance. The results imply the necessity for expatriates’ psychological and socio-cultural adjustment to be emphasized by both practitioners and researchers, to improve MNCs’ expatriate effectiveness, and to reveal the underlying conceptual mechanism from personal resources to expatriate effectiveness.

7.2. Strengths of the study

The contribution of this study is a confirmation of the impact of social support and cross-cultural PsyCap on expatriate adjustment and job performance and also a thorough examination of the adjustment mechanism from a resource-based perspective in the context of expatriates from a developing country. With regard to exploring the application of cross-cultural PsyCap, my study represents a valuable, if small, step and offers encouragement to continue PsyCap-related research in cross-cultural work settings.
There are four highlights in this study. First, I conducted an adequate and comprehensive literature review and identified a less frequently adopted yet important resource-based approach. By reviewing three antecedents of expatriate adjustment and the relationships between adjustment and job performance in 42 reliable journals, I identified certain gaps in the existing literature in regard to expatriate adjustment and applied the resource-based COR theory to explain expatriate adjustment and its correlated variables. The 42 journals reviewed include the fields of general management, international business, IHRM and cross-cultural management and organizational psychology. As discussed in the literature review, for the most part, the existing expatriate literature is overly reliant on the stress-based perspective to explain expatriate adjustment and other expatriate effectiveness criteria. In light of COR theory, my study confirmed a resourcing mechanism of expatriate adjustment and identified the interplay of different types of resources, such as, social resources and psychological resources, during expatriate assignment.

Second, I conducted a comprehensive quantitative analysis and carefully specified the main formative constructs. Prior to commencing with the main study, I conducted three pilot studies to assure the reliability of the instruments I planned to employ. In the main study, all of the multidimensional and composite constructs were specified as formative constructs or operated as unitary dimensional variables, such as, two dimensions of social support. These formative constructs include socio-cultural adjustment, job performance and cross-cultural PsyCap. Previous studies mainly considered multi-dimensional constructs as reflective constructs (Collier & Bienstock, 2009; Jarvis et al., 2003; Petter et al., 2007). Using SmartPLS, my study specified socio-cultural adjustment, job performance and cross-cultural PsyCap as first-order reflective and second-order formative constructs. Formative constructs and measurement models specified incorrectly could lead to both Type I and Type II errors (MacKenzie et al., 2005; Petter et al., 2007). Also, I acknowledged the two distinct dimensions of social support and employed socio-emotional support and instrumental support as two single independent variables. This measurement of two types of social support contributes to a clearer understanding of the functions of social support with regard to expatriate cross-cultural PsyCap, adjustment, and job performance. Hence, my analysis avoids potential errors of misspecification on multi-dimensional constructs such as social support, socio-cultural adjustment and job performance and contributes to the proper operation of composite variables such as cross-cultural PsyCap.

Third, as I conducted this research in an under-researched and difficult-to-access context:
Chinese expatriates who are working in various host countries, I contribute to the expatriate literature by broadening the research context of Chinese expatriates and providing insights about the adjustment behaviours of expatriate from emerging MNCs. Contextualization is crucial to studies on international management (Michailova, 2011). With respect to expatriate study, data access to MNCs is typically relatively challenging especially in the unique cultural and institutional contexts such as those of China. To approach the participants I utilized my Chinese schoolmate network. Most of the expatriate participants are technological or marketing managers and worked in more than 56 countries. The diversified host environments allowed the results to reflect a more comprehensive landscape with regard to expatriate assignments. Additionally, the 212 expatriates in my sample worked in varied industries which enabled the study to be more representative. My study is distinct from the limited existing studies research related to Chinese expatriation. For instance, Selmer and his colleagues surveyed only those mainland Chinese expatriates who had worked in Hong Kong in the early 2000s (Selmer et al., 2000a, 2000b, 2002; Selmer et al., 2003); Shen and his colleagues only conducted research on human resources management and expatriate performance (Shen & Darby, 2006; Shen & Edwards, 2004; Shen & Jiang, 2011). This study, as one of the most current studies on Chinese expatriates working in a range of host countries, initially investigates the emerging construct, cross-cultural PsyCap, and its impact on adjustment and performance.

Finally, my study provides significant results regarding the correlation of cross-cultural PsyCap with social support and expatriate effectiveness variables. This study represents an initial examination of the construct of cross-cultural PsyCap in the expatriate context and all hypotheses have been significantly supported. Hypothesis 1a, 1b, and 4a, 4b, 4c confirms the significantly positive relationship between social support resources and expatriate effectiveness variables. Hypotheses 5a-5d and 6a, 6b reveals the resource mechanisms during expatriate adjustment in which cross-cultural PsyCap either mediates or initiates the resource mechanisms of expatriate adjustment. Considering that I adopted sound and comprehensive statistical analyses, the results might provide important light for future examination of psychological and social resources and expatriate effectiveness.

7.3. Limitations of the study

Whilst offering an initial examination of the impact of the two social support types and composite cross-cultural PsyCap on expatriate adjustment and job performance in the context
of Chinese expatriates through a resource-based perspective, my study is subject to some limitations. First, the sample size does not allow for a more comprehensive analysis. The 212 respondents represent only an eligible sample size for the requirements of structural equation modelling. Some proposed relationships might have been more significant if the sample size had been larger. Actually, expatriate managers are difficult to approach since they are busy during expatriation and there is no incentive for taking the survey. To gain the necessary access to collect data, I worked hard and did my best to take advantage of my schoolmate network and personal contacts to approach Chinese MNCs. From 2011 to 2013, it took over one and a half years to contact target MNCs and participants. As a result, the sample size of my study is the largest in the existing expatriate literature related to Chinese expatriation.

My study has a measurement limitation due to the items utilized to measure expatriate adjustment constructs. For instance, to measure psychological adjustment, I employed the 12 items of the General Health Questionnaire (Goldberg, 1972). Although the 12-item scale has been widely utilized as an instrument for tapping psychological depression, only a few studies have utilized this scale to gauge expatriate psychological adjustment (Selmer, 1999c). Although the overall reliability seemed to be acceptable (Cronbach’s α = 0.74), it was necessary to drop several items which had low eight negative loading during PLS analysis. Hence, the measurement of psychological adjustment might to some degree impact the final result. Also, I utilized another widely recognized socio-cultural adjustment measurement, the 14-item scale Black (1988). Even so, this scale does not capture some potential dimensions of adjustment: affective adjustment, behaviour adjustment and cognitive adjustment (Haslberger et al., 2013). To maintain consistency with the existing expatriate literature, I utilized the widely-accepted adjustment instruments (Black, 1988; Selmer, 1999c) and did not employ the alternative adjustment measurement developed by Ward and Kennedy (1999) which contains 29 items related to sojourners’ cognition and behaviours. As this socio-cultural adjustment scale has been mainly employed in the study of sojourner or student rather than expatriate groups, I did not adopt it. Hence this is a potential limitation. The main potential limitations may include: 1) the three dimensions of socio-cultural adjustment overlap in some aspects yet do not identify other important elements of adjustment, such as cognition and feeling, 2) distinct redundancy exists in the items of interaction and the work adjustment items and 3) there are seven general adjustment items and only four work adjustment items and three interaction adjustment items (Thomas & Lazarova, 2006). Therefore, this study has
not been successful in avoiding the main drawbacks arising from the 14-item adjustment measurement of Black (1988).

Cross-sectional and self-reported data is another possible limitation of this study. As I was unable to collect longitudinal data or data from different sources, I employed cross-sectional data through self-reported surveys. Consequently, common method bias could be a potential threat to the reliability of the results. Two precautions were taken to minimize the effect of common method variance, as recommended by Podsakoff et al. (2003). One was that dependent and independent variables were separated into different sections of the survey, the other was to mix the question order in all of the scales. Following the suggestion by Lindell and Whitney (2001) and Malhotra, Kim, and Patil (2006), Harman’s one-factor test and marker variable test were also conducted to examine the level of common method bias and proved that it is not a main concern in this study. In addition, cross-sectional data is unable to detect the adjustment process in a longitudinal way. For example, it is ideal to have the investigation on cross-cultural PsyCap at time one and expatriate adjustment and job performance at time two. In this way, the predicting and mediating mechanisms can be better justified. Since cross-section and self-reported data might have technological impact on the results especially for the hypothesized mediating effects, a longitudinal study with data from multiple sources may offer more interesting and insightful results in future studies.

7.4. Implications for future research

This section discusses the implications of my analysis for future research in the area related to social support, cross-cultural PsyCap, expatriate adjustment and job performance. They relate to expatriate research, research on cross-cultural PsyCap, research on social support, research context and research method.

With regard to theoretical application, my research implies the importance of the resource-based perspective and COR theory in expatriate research. In this study I adopted a resource-based COR theory as the theoretical foundation to explain the relationship between expatriates’ resources and expatriate effectiveness. To develop the resource-based propositions, I introduced cross-cultural PsyCap and expatriate adjustment into the COR resource family to examine the resource mechanisms. Then I turned the traditional stress-buffering theoretical construction into an investigation of the relationships between three
groups of resources including social resources, psychological resource and person-environment fit resources such as expatriate adjustment.

Certainly, the resourcing mechanisms of expatriate adjustment can be further refined and explored in-depth. For instance, I have not examined the impact of stable competencies on dynamic competencies, such as cross-cultural PsyCap and expatriate effectiveness. Examination on both stable and dynamic competencies can be more instructive to capture a comprehensive outlook on the application of varied resources in expatriate assignments. To observe resource mechanisms such as resource gain, loss and preservation, I have demonstrated and argued that COR theory can be utilized as a resource-based approach in expatriate research.

Another matter of relevance to the resource-based perspective and cross-cultural PsyCap is the application of positive psychology in expatriate research. By applying a positive psychological construct from a domestic work setting into the field of international business, I can recommend that expatriate researchers consider the application of positive mind in expatriation. While stress-based models and theories on adjustment offer insights on how expatriates buffer their stress and cope with the strain during international assignments, these models unavoidably suffer negativity bias. The concepts and theories, deriving from the emerging positive psychology movement, would be constructive to understand expatriate adjustment from new and fresh perspectives.

My study significantly extends the empirical research on cross-cultural PsyCap. By investigating the composite cross-cultural PsyCap with two antecedent variables (i.e., socio-emotional support and instrumental support) and three consequence variables (i.e., expatriate socio-cultural adjustment, psychological adjustment and job performance), my analysis contextualizes the construct of PsyCap into cross-cultural circumstance and further enlarges the nomological network of research related to PsyCap and cross-cultural PsyCap. Existing studies have not proposed that expatriate effectiveness variables, socio-cultural adjustment, psychological adjustment and job performance, could be the consequences of PsyCap and cross-cultural PsyCap. Similarly, two social support dimensions have not been empirically examined as the predictors of PsyCap.

Moreover, the composite PsyCap had been specified as a reflective construct. My study identified that it is a first-order reflective second-order formative construct. As such, I measured cross-cultural PsyCap by means of a formative construct, which avoided some of
the limitations of misspecification. In this way, I expand the theories relative to general PsyCap and cross-cultural PsyCap by adding new antecedent and outcome variables, and by expanding the methods to properly measure the composite constructs.

With regard to the antecedents of cross-cultural PsyCap, as I only tested two types of social support, future research could investigate the relationships between other potential determinants especially stable competencies and cross-cultural PsyCap. For example, it would be insightful to investigate the impact of multicultural personality, cultural intelligence or cultural mindfulness on cross-cultural PsyCap. Similarly, detecting the linkage of general PsyCap and cross-cultural PsyCap could also help to understand the nature and features of the construct of PsyCap. Also, it would be useful to examine the impact of an individual’s PsyCap on others’ PsyCap or develop the measurement of a group-level cross-cultural PsyCap. For instance, future research could investigate the relationship of expatriates’ supervisors or colleagues’ cross-cultural PsyCap on expatriates’ cross-cultural PsyCap. In addition, future research could also further examine the impact of cross-cultural PsyCap on other expatriate effectiveness criteria. It would be interesting to know the relationship between cross-cultural PsyCap and expatriate early return intention, job satisfaction, assignment satisfaction, organizational commitment, work engagement, and job involvement.

In addition, I also extend the research on social support in the expatriate literature. The existing research on expatriate adjustment has paid attention to the study of the sources of social support rather than the types or functions of support. By examining socio-emotional and instrumental support in regard to expatriate adjustment and job performance, I separately tested two different types of social support on expatriate effectiveness. Although I derived some unexpected results on the hypothesized relationships between socio-emotional support and expatriate adjustment and job performance, I initially identified three significant effects of social support on expatriate effectiveness. As such, my study widens the knowledge related to the outcomes of social support study especially in the field of expatriate research.

The impact of two social support types on expatriate effectiveness could be further examined. My study documents mixed results in regard to the impact of social support on expatriate adjustment and performance. Future research can further investigate the external validity of the reliability of the measurements of instrumental support utilizing different contexts and approaches. Social support could be more precisely measured to account for both type and source of support to prevent respondents’ misunderstanding of the item meanings (Beehr &
Glazer, 2001). It would also be interesting to know more about the relationships between the sources of social support and the types of social support. Understanding the relationships is beneficial to correctly measure social support. Furthermore, to further understand the role of social support types in expatriation, future study can examine the relationships of these two types of social support and other expatriate related variables such as job satisfaction, early return intention and organizational citizen behaviours.

In terms of research context, the research context can be expanded in the future. Expatriates from developing countries have not received sufficient attention in the existing expatriate literature. By further investigating adjustment and performance behaviours of expatriates from China, my study calls on scholars to give their attention to the new context of the expatriates from developing countries. More such research could further help advance the theoretical understanding of internationalization of MNCs from developing countries. At the same time, it is also helpful to contextualize the available theoretical constructs and models in these new circumstances in order to test or develop the existing theories derived from Western cultures or developed countries.

As this research is an initial test of the hypothesized relationships between two specific expatriate psychosocial resources in a particular context, the results of the study should be viewed with caution in terms of generalizability and should be further verified and strengthened in the future in order to identify whether the results can be replicated and how other conditions affect the results obtained. Though the measurements of all constructs were pre-tested by three pilot studies and validated in the main study, external validity or generalization of the results could be further confirmed by replicating the examination of the hypothesized relationships in other contexts. For example, as the relationship between cross-cultural PsyCap and expatriate adjustment has not been investigated in other contexts, future studies could repeat the examination of this relationship in the context of expatriates either from developed countries or developing countries besides China. Also, future research can investigate the relationships between cross-cultural PsyCap, social support types and expatriate effectiveness in various contexts in order to identify the possible boundaries of this study’s findings.

In terms of research method, I make a contribution to the measurement of formative constructs. As mentioned, multidimensional or composite constructs are generally considered as reflective constructs. By specifying the formative nature of one composite construct,
namely, cross-cultural PsyCap and two multidimensional constructs, specifically, socio-cultural adjustment and job performance, my hope is that I have been able to bring construct specification to the attention of scholars in the field of international business in order to reduce potential errors from possibly incorrectly specifying formative constructs as reflective ones. In addition, in regard to specifying the formative constructs and testing the hypotheses related to the formative constructs I adopted PLS tool, SmartPLS 2.0. In the field of expatriate research, this is one of the initial attempts to utilize the PLS-SEM approach.

Future studies could examine the impact of expatriate cross-cultural PsyCap and social support on expatriate effectiveness in a longitudinal way. As this study is based on a cross-sectional dataset, it has not been possible to dynamically detect the process of expatriate adjustment and the complex underlying resource mechanisms and completely avoid common method bias. In contrast, conducting longitudinal research would reduce common method variance and enhance casual inference (Rindfleisch, Malter, Ganesan, & Moorman, 2008). Although I could not collect longitudinal data due to limited resources, I suggest that future studies consider adopting longitudinal data to measure the impact of social support and PsyCap on expatriate effectiveness. Longitudinal research is appropriate to identify the resourcing process of expatriate adjustment and the interplay mechanisms of different types of resources.

Future examination can validate the measurement of cross-cultural PsyCap and examine more antecedents and outcomes of this psychological resource. To date, the emerging construct cross-cultural PsyCap utilizes two instruments, those developed by Clapp-Smith et al. (2007) and Dollwet and Reichard (2014). Yet none of them has been sufficiently validated. In addition, these two approaches are self-reported scales. As advised by Harms and Luthans (2012), the reliability and validity of PsyCap measurement could be improved by employing other instruments such as implicit measures.

Future study can also consider the further development of the conceptualization and measurement of expatriate adjustment and job performance. In my study expatriate adjustment is operated as a two-dimensional construct including socio-cultural adjustment and psychological adjustment. To avoid overly complicating the research model, the relationship between independent variables and three facets of socio-emotional support has not been tested. As general adjustment, interaction adjustment and work adjustment are distinct socio-cultural adjustment dimensions, it would be interesting to examine separately
their connections with correlated variables. Expatriate adjustment can also be classified by adjustment to affective, behaviour and cognitive facets (Haslberger et al., 2013). Future studies can test the impact of PsyCap and social support on these adjustment dimensions. In terms of expatriate job performance, this study only employed overall job performance. It would be useful to know how PsyCap and social support relate to two sub-dimensions of job performance, namely, contextual performance and task performance.

7.5. Implications for practice

Three main messages deserve the attention of HR managers and expatriates. First, expatriates’ personal resources are predictive in regard to expatriate selection and training. As expatriates’ cross-cultural PsyCap is a dynamic competency, it can be developed by training or learning. The relationship between pre-departure training and cross-cultural PsyCap helps to understand the trainability of PsyCap. In the expatriate selection process, expatriates’ psychological capabilities, especially cross-cultural PsyCap, should be tested. Before and after departure, training programs relevant to positive psychology and cultural knowledge and skills can help expatriates develop their psychological and cross-cultural capital. To improve MNC expatriate effectiveness in the process of expatriate selection and development human resource managers can take this valuable personal psychological resource into account.

In a meta-analytic review in relation to the topic of cross-cultural competencies, Wilson, Ward, and Fischer (2013) found culture-specific factors such as cultural empathy and cross-cultural self-efficacy to be the most significant contributors to socio-cultural adjustment, far stronger than Big Five personalities and other situational factors. Dollwet and Reichard (2014) also compared the predicting power of cultural intelligence and cross-cultural PsyCap, and found cross-cultural PsyCap has more added value than cultural intelligence in predicting socio-cultural adjustment. We can view context-specific cross-cultural PsyCap as a very significant determinant in predicting expatriate adjustment. As such, HR managers can utilize cross-cultural PsyCap as a selection criterion before departure to prevent expatriate ineffectiveness and develop this positive psychological resource to enhance effectiveness after they arrive in host countries.

Expatriate social support may have a mixed effect on expatriate effectiveness. In accordance with my findings, social support seems to have dual character. Whereas instrumental support positively influences expatriate socio-cultural and psychological adjustment, socio-emotional
support negatively affects expatriate psychological adjustment and job performance. It reminds HR managers and parent or subsidiary organizations to make use of proper instrumental support to improve expatriate adjustment. Moreover, HR managers and expatriates’ other stakeholders including family, friends, and host nationals, should take heed of the negative role of socio-emotional support. In order to optimize its potentially constructive function it is necessary to consider the timing, sources, amounts and other relevant conditions before offering socio-emotional support.

Both expatriates’ psychological resources and psychological adjustment deserve much more attention. I have demonstrated the correlations between expatriate cross-cultural PsyCap, psychological adjustment and expatriate job performance. I concluded that psychological adjustment mediates the positive influence of cross-cultural PsyCap on job performance. Without satisfactory psychological well-being, the positive role of psychological resources may be diluted. Accordingly, in predicting job performance, HR managers and expatriates should consider the role of both expatriates’ socio-cultural and psychological adjustment. Although previous research and practice has paid significant attention to socio-cultural adjustment, it has ignored the important role of psychological adjustment. Hence, HR managers and expatriates need to attach more importance to expatriate psychological adjustment as it helps in the understanding of expatriate adjustment and benefits the practice of expatriate management.

In sum, this study has several significant implications for both academic research and management practice. My study is one of the first to examine the impact of expatriates’ socio-emotional, instrumental support and cross-cultural PsyCap on their adjustment and job performance. I have completed this in the context of Chinese expatriation applying a resource-based perspective, COR theory. My study advances the COR theory by conceptualizing expatriate adjustment and cross-cultural PsyCap into the COR theory’s resource family and applying COR theory to explain the resource mechanisms of adjustment. Moreover, my study broadens the context of expatriate research by examining expatriate adjustment and performance in a specific under-researched context, Chinese expatriation. In terms of methodology, I specified the nature of formative constructs, socio-cultural adjustment, job performance and cross-cultural PsyCap, by utilizing partial least square. Furthermore, I adopted a rigorous mediation test tool, SPSS “INDIRECT” bootstrapping to test the mediation effects of cross-cultural PsyCap and expatriate adjustment. In addition, I put forward the examination of the impact of different types of social support on expatriate
adjustment and performance. This significantly enriches the understanding of the function of social support in expatriation. Most importantly, I have introduced the positive construct of cross-cultural PsyCap into an expatriate context and initially applied positive psychology in the field of international management.
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## APPENDICES

### Appendix A: Factor loadings

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<th>Instrumental support</th>
<th>Hope</th>
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<th>Resilience</th>
<th>General adjustment</th>
<th>Interaction adjustment</th>
<th>Work adjustment</th>
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### Appendix B: Factor weights of 2nd formative constructs

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<th>Weights</th>
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</table>

Note: ***: T > 2.58 = P < 0.01
Appendix C: SPSS output of mediation tests

C1. Mediation test result for Socio-emotional support -> Cross-cultural PsyCap -> Socio-cultural adjustment

Run MATRIX procedure:

*******************************************************************************
Preacher and Hayes (2008) SPSS Macro for Multiple Mediation
Written by Andrew F. Hayes, The Ohio State University
http://www.comm.ohio-state.edu/ahayes/
*******************************************************************************

Dependent, Independent, and Proposed Mediator Variables:
DV = Socio-cultural adjustment
IV = SEmSup (socio-emotional support)
MEDS = PsyCap

Statistical Controls:
CONTROL = Timespent, Language, Experience, Gender, Age

Sample size = 212

IV to Mediators (a paths)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coeff</th>
<th>se</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
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<td>4.6863</td>
<td>.0000</td>
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</table>

Direct Effects of Mediators on DV (b paths)

<table>
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<th>Coeff</th>
<th>se</th>
<th>t</th>
<th>p</th>
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Total Effect of IV on DV (c path)

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Direct Effect of IV on DV (c' path)

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Partial Effect of Control Variables on DV

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Model Summary for DV Model

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*******************************************************************************
BOOTSTRAP RESULTS FOR INDIRECT EFFECTS

Indirect Effects of IV on DV through Proposed Mediators (ab paths)

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<th>Bias</th>
<th>SE</th>
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206
Bias Corrected and Accelerated Confidence Intervals
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Bias Corrected Confidence Intervals
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Percentile Confidence Intervals
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Level of Confidence for Confidence Intervals: 95
Number of Bootstrap Resamples: 5000

----------------- NOTES -----------------
------ END MATRIX ------

C2. Mediation test result for Socio-emotional support -> Cross-cultural PsyCap -> Psychological adjustment

Run MATRIX procedure:

Preacher and Hayes (2008) SPSS Macro for Multiple Mediation
Written by Andrew F. Hayes, The Ohio State University
http://www.comm.osu.edu/ahayes/

Dependent, Independent, and Proposed Mediator Variables:
DV = Psychological
IV = Socioemotional
MEDS = Crosscul

Statistical Controls:
CONTROL= Timespen
                      Langua_1
                      Experien
                      Gender_A
                      Markerag

Sample size
212

IV to Mediators (a paths)
<table>
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<tr>
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<th>p</th>
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<td>.0668</td>
<td>4.6863</td>
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Direct Effects of Mediators on DV (b paths)
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Total Effect of IV on DV (c path)
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Socioemo  .1306  .0706  1.8498  .0658

Direct Effect of IV on DV (c' path)

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Partial Effect of Control Variables on DV

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Model Summary for DV Model

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BOOTSTRAP RESULTS FOR INDIRECT EFFECTS

Indirect Effects of IV on DV through Proposed Mediators (ab paths)

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<th>Boot</th>
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<th>SE</th>
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Bias Corrected and Accelerated Confidence Intervals

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Bias Corrected Confidence Intervals

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Percentile Confidence Intervals

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Level of Confidence for Confidence Intervals:

95

Number of Bootstrap Resamples:

5000

******************************************************************************

NOTES

------ END MATRIX ------

C3. Mediation test result for Instrumental support -> Cross-cultural PsyCap -> Socio-cultural adjustment

Run MATRIX procedure:

******************************************************************************

Preacher and Hayes (2008) SPSS Macro for Multiple Mediation

Written by Andrew F. Hayes, The Ohio State University

http://www.comm.ohio-state.edu/ahayes/

For details, see Preacher, K. J., & Hayes, A. F. (2008). Asymptotic

and resampling strategies for assessing and comparing indirect effects
in multiple mediator models. Behavior Research Methods, 40, 879-891.

******************************************************************************
Dependent, Independent, and Proposed Mediator Variables:
DV = Sociocul
IV = Instrume
MEDS = Crosscul

Statistical Controls:
CONTROL= Timespen
Langua_1
Experien
Gender_A
Markerag

Sample size
212

IV to Mediators (a paths)
\[
\begin{array}{cccc}
\text{Coeff} & \text{se} & \text{t} & \text{p} \\
\text{Crosscul} & .3072 & .0657 & 4.6800 & .0000 \\
\end{array}
\]

Direct Effects of Mediators on DV (b paths)
\[
\begin{array}{cccc}
\text{Coeff} & \text{se} & \text{t} & \text{p} \\
\text{Crosscul} & .5321 & .0584 & 9.1078 & .0000 \\
\end{array}
\]

Total Effect of IV on DV (c path)
\[
\begin{array}{cccc}
\text{Coeff} & \text{se} & \text{t} & \text{p} \\
\text{Instrume} & .3140 & .0650 & 4.8325 & .0000 \\
\end{array}
\]

Direct Effect of IV on DV (c' path)
\[
\begin{array}{cccc}
\text{Coeff} & \text{se} & \text{t} & \text{p} \\
\text{Instrume} & .1505 & .0578 & 2.6048 & .0099 \\
\end{array}
\]

Partial Effect of Control Variables on DV
\[
\begin{array}{cccc}
\text{Coeff} & \text{se} & \text{t} & \text{p} \\
\text{Timespen} & .0238 & .0579 & 0.4115 & .6811 \\
\text{Langua_1} & .1234 & .0569 & 2.1666 & .0314 \\
\text{Experien} & .0055 & .0564 & 0.0979 & .9221 \\
\text{Gender_A} & -.0741 & .0564 & -1.3135 & .1905 \\
\text{Markerag} & .0001 & .0595 & 0.0013 & .9990 \\
\end{array}
\]

Model Summary for DV Model
\[
\begin{array}{cccccc}
R\text{-sq} & \text{Adj R\text{-sq}} & \text{F} & \text{df1} & \text{df2} & \text{p} \\
.3931 & .3723 & 18.8767 & 7.0000 & 204.0000 & .0000 \\
\end{array}
\]

BOOTSTRAP RESULTS FOR INDIRECT EFFECTS

Indirect Effects of IV on DV through Proposed Mediators (ab paths)
\[
\begin{array}{cccc}
\text{Data} & \text{Boot} & \text{Bias} & \text{SE} \\
\text{TOTAL} & .1635 & .1643 & .0008 & .0435 \\
\text{Crosscul} & .1635 & .1643 & .0008 & .0435 \\
\end{array}
\]

Bias Corrected and Accelerated Confidence Intervals
\[
\begin{array}{cccc}
\text{Lower} & \text{Upper} \\
\text{TOTAL} & .0841 & .2560 \\
\text{Crosscul} & .0841 & .2560 \\
\end{array}
\]

Bias Corrected Confidence Intervals
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\begin{array}{cccc}
\text{Lower} & \text{Upper} \\
\text{TOTAL} & .0844 & .2565 \\
\text{Crosscul} & .0844 & .2565 \\
\end{array}
\]

Percentile Confidence Intervals
\[
\begin{array}{cccc}
\text{Lower} & \text{Upper} \\
\text{TOTAL} & .0825 & .2545 \\
\text{Crosscul} & .0825 & .2545 \\
\end{array}
\]

Level of Confidence for Confidence Intervals:
95

Number of Bootstrap Resamples:
5000

******************************************************************************

NOTES
******************************************************************************
C4. Mediation test result for Instrumental support -> Cross-cultural PsyCap -> Psychological adjustment

Run MATRIX procedure:

Preacher and Hayes (2008) SPSS Macro for Multiple mediation
Written by Andrew F. Hayes, The Ohio State University
http://www.comm.ohio-state.edu/ahayes/

Dependent, Independent, and Proposed Mediator Variables:
DV = Psychological adjustment
IV = Instrumental support
MEDI = Cross-cultural PsyCap

Statistical Controls:
CONTROL = Timespent, Langua_1, Experien, Gender_A, Markerag

Sample size
212

IV to Mediators (a paths)

<table>
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<tbody>
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Direct Effects of Mediators on DV (b paths)

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Total Effect of IV on DV (c path)

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Direct Effect of IV on DV (c' path)

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Partial Effect of Control Variables on DV

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BOOTSTRAP RESULTS FOR INDIRECT EFFECTS

Indirect Effects of IV on DV through Proposed Mediators (ab paths)

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Crosscul  .1278  .1295  .0017  .0403

Bias Corrected and Accelerated Confidence Intervals

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Bias Corrected Confidence Intervals

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Percentile Confidence Intervals

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Level of Confidence for Confidence Intervals: 95

Number of Bootstrap Resamples: 5000

*****************************************************************

C5. Mediation test result for the linkage of Cross-cultural PsyCap -> Socio-cultural adjustment -> Job performance and PsyCap -> Psychological adjustment -> Job performance

Run MATRIX procedure:

*****************************************************************

Preacher and Hayes (2008) SPSS Macro for Multiple Mediation
Written by Andrew F. Hayes, The Ohio State University
http://www.comm.osu.edu/ahayes/


*****************************************************************

Dependent, Independent, and Proposed Mediator Variables:
DV = Jobperfo
IV = Crosscul
MEDS = Psycholo
Sociocul

Statistical Controls:
CONTROL= Timespen
Langua_1
Experien
Gender_A
Markerag

Sample size 212

IV to Mediators (a paths)

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Direct Effects of Mediators on DV (b paths)

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### Direct Effect of IV on DV (c' path)

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### Model Summary for DV Model

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<th>df1</th>
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**BOOTSTRAP RESULTS FOR INDIRECT EFFECTS**

### Indirect Effects of IV on DV through Proposed Mediators (ab paths)

<table>
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**Bias Corrected and Accelerated Confidence Intervals**

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**Bias Corrected Confidence Intervals**

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**Percentile Confidence Intervals**

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---

**Level of Confidence for Confidence Intervals:**

95

**Number of Bootstrap Resamples:**

5000

---

**NOTES**

END MATRIX

-----
Appendix D: Questionnaire

Social support and psychological capital in expatriation

Queries and Comments please contact:

Gaosheng Liu
Cell (TXT): +64 21 2048388
Email: gaosheng.liu@auckland.ac.nz

Snejina Michailova, PhD
Ph: +64 9 373 7599 ext. 88737
Email: s.michailova@auckland.ac.nz

Department of Management & International Business
The University of Auckland Business School
Private Bag 92019, Auckland 1142 New Zealand
Owen G. Glenn Building, 12 Grafton Road, Auckland Central, New Zealand
INSTRUCTIONS FOR COMPLETING THE QUESTIONNAIRE

The questionnaire contains 3 sections. Please answer honestly and to the best of your knowledge.

SECTION A1: SOCIAL SUPPORT

The following statements are about your current expatriate assignment. Please indicate your level of agreement/disagreement with the following statements.

A1. Somebody shares your good and bad times. 1 2 3 4 5 6
A2. Somebody explains things to make your situation clearer and easier to understand. 1 2 3 4 5 6
A3. Somebody listens and talks with you whenever you feel lonely or depressed. 1 2 3 4 5 6
A4. Somebody visits you to see how you are doing. 1 2 3 4 5 6
A5. Somebody helps you interpret things that you don’t really understand. 1 2 3 4 5 6
A6. Somebody accompanies you to do things whenever you need someone for company. 1 2 3 4 5 6
A7. Somebody accompanies you somewhere even if he or she doesn’t have to. 1 2 3 4 5 6
A8. Somebody gives you some tangible assistance in dealing with any communication or language problems that you might face. 1 2 3 4 5 6
A9. Somebody spends time chatting with you whenever you are bored. 1 2 3 4 5 6
A10. Somebody tells you what can and cannot be done in your host country. 1 2 3 4 5 6
A11. Somebody provides necessary information to help orient you to your new surroundings. 1 2 3 4 5 6
A12. Somebody reassures you that you are loved, supported, and cared for. 1 2 3 4 5 6
A13. Somebody shows you how to do something that you didn’t know how to do.
A14. Somebody helps you deal with some local institutions’ official rules and regulations.
A15. Somebody spends some quiet time with you whenever you do not feel like going out.
A16. Somebody explains and help you understand the local culture and language.
A17. Somebody comforts you whenever you feel homesick.
A18. Somebody tells you about available choices and options.

SECTION A2: CROSS-CULTURAL PSYCHOLOGICAL CAPITAL

Please indicate the extent to which you agree or disagree with the following statements using the scale below from strongly disagree to strongly agree. Also note that cross-cultural experiences are not limited to being in a foreign country. For example, think about cross-cultural interactions you have had in your home country if you have not been in a different country.

A19. There are lots of ways around any problem that I face when in another culture.
A20. When interacting with people from a different culture, and things are uncertain, I usually expect the best.
A21. Even when things are tough, I can perform quite well in other cultures.
A22. When in another culture, I think that I can obtain goals that are important to me.
A23. Generally speaking, I am optimistic expatriate.
A24. I feel confident contributing to discussions about issues when I’m interacting with people from other cultures.
A25. Right now I see myself as being pretty successful when I’m in another culture.

A26. I can think of many ways to reach my goals when I’m a different culture.

A27. I feel confident that I can find my way around in a culture other than my own.

A28. Generally speaking, I am a resilient expatriate.

A29. I can be “on my own” so to speak in another culture if I have to.

A30. I can get through difficult times in another culture because I've experienced difficulty before.

A31. I feel confident analysing an unfamiliar culture to understand how I should behave.

A32. I’m optimistic about what will happen to me in the future as it pertains to interacting with people from cultures other than my own.

A33. Generally speaking, I am a hopeful expatriate.

A34. I approach being in other cultures as if “things will turn out for the best.”

A35. I am confident that I can perform effectively on many different tasks even in other cultures.

A36. I usually manage difficulties one way or another when in another culture.

A37. I always look on the bright side of things regarding what I experience in other cultures.

A38. Generally speaking, I am a confident expatriate.

SECTION B: EXPATRIATE EFFECTIVENESS

This section assesses the effectiveness of your expatriate assignment. Three criteria will be employed to learn the expatriate effectiveness: socio-cultural adjustment, psychological adjustment and job performance.

Section B1: SOCIO-CULTURAL ADJUSTMENT

Please indicate how well you can adjust to the host country and the work setting of the
B1. Living conditions. 1 2 3 4 5 6

B2. Supervisory responsibilities. 1 2 3 4 5 6

B3. Working with host country nationals. 1 2 3 4 5 6

B4. Shopping. 1 2 3 4 5 6

B5. Interacting with host country nationals daily. 1 2 3 4 5 6

B6. Performance standards. 1 2 3 4 5 6

B7. Health care. 1 2 3 4 5 6

B8. Interacting with host country nationals outside work. 1 2 3 4 5 6

B9. Cost of living. 1 2 3 4 5 6

B10. Food. 1 2 3 4 5 6

B11. Speaking with host country nationals. 1 2 3 4 5 6

B12. Entertainment. 1 2 3 4 5 6

B13. Job requirements. 1 2 3 4 5 6

B14. Housing conditions. 1 2 3 4 5 6

Section B2: PSYCHOLOGICAL ADJUSTMENT

Please think about how you have been feeling over the past one month.

B15. Felt you couldn’t overcome your difficulties? 1 2 3 4 5 6
B16. Felt capable of making decisions about things? 1 2 3 4 5 6
B17. Been feeling unhappy and repressed?  1  2  3  4  5  6
B18. Felt that you are playing a useful part in things?  1  2  3  4  5  6
B19. Been able to concentrate on whatever you are doing?  1  2  3  4  5  6
B20. Lost much sleep over worry?  1  2  3  4  5  6
B21. Been thinking of yourself as a worthless person?  1  2  3  4  5  6
B22. Been feeling reasonably happy all things considered?  1  2  3  4  5  6
B23. Been able to enjoy your normal day-to-day activities?  1  2  3  4  5  6
B24. Been able to face up to your problems?  1  2  3  4  5  6
B25. Felt constantly under strain?  1  2  3  4  5  6
B26. Been losing confidence in yourself?  1  2  3  4  5  6
B27. Felt physically and mentally exhausted from your work?  1  2  3  4  5  6
B28. Felt used up at the end of the workday?  1  2  3  4  5  6
B29. Felt fatigued when you get up in the morning and have to face another day on the job?  1  2  3  4  5  6
B30. Felt that working all day is really a strain for you?  1  2  3  4  5  6
B31. Felt burned out from your work?  1  2  3  4  5  6

Section B3: JOB PERFORMANCE

The following statements represent dimensions of your work during your overseas assignment. Please rate how well you have performed relative to other expatriates in your company. Please recall your most recent actual performance evaluation in your current assignment and indicate where that rating would place you relative to your peers.

B32. Meeting job objectives.  1  2  3  4  5  6
B33. Overall job performance.  1  2  3  4  5  6
B34. Meeting performance standards and expectations.  1  2  3  4  5  6
B35. Technical competence.  1  2  3  4  5  6
B36. Meeting specific job responsibilities.  1 2 3 4 5 6
B37. Interacting with host-country co-workers  1 2 3 4 5 6
B38. Establishing relationships with key host-country business contacts.  1 2 3 4 5 6
B39. Adapting to foreign facility’s business customs and norms.  1 2 3 4 5 6
B40. Interacting with co-workers  1 2 3 4 5 6

SECTION C: PERSONAL INFORMATION

C1. Your gender  □ Male  □ Female
   Marital status:  □ Single  □ Married

C2. Your age
   □ < 20  □ 21-30  □ 31-40
   □ 41-50  □ 51-60  □ > 61

C3. What is your highest educational attainment?
   □ High school (and below)  □ Undergraduate and diploma  □ Postgraduate (and above)

C4. Please rate your fluency in each language. 1 = not at all fluent, 5 = very fluent
   a. English ______________________
   b. [OTHER LANGUAGE] ______________________

C5: Do you have previous overseas experience (not including the current one)?
   □ Yes  □ No  If yes, how many years have you spent on the previous experience? ______________________ Years

C6. When did you arrive in your overseas workplace for this assignment? ______________________
   When do you expect to finish this assignment? ______________________

C7. Your position in company ______________________;
   In which country is your subsidiary located? ______________________
C8: Did your company give you cross-cultural training before your arrival in host country (where the subsidiary located)?

☐ Yes    ☐ No

C9: Did your company give you cross-cultural training after your arrival in host country (where the subsidiary located)?

☐ Yes    ☐ No

C10: Did your company employ psychological testing in the process of expatriate selection?

☐ Yes    ☐ No
PARTICIPANT INFORMATION SHEET

Chief Executive Officer or Human Resource Managers (or equivalent)


Name of Researcher: Gaosheng Liu

This is a personal invitation to participate in a research study of the roles of perceived social support, psychological capital and cultural intelligence in expatriation. My name is Gaosheng Liu and I am currently a doctoral student at the Department of Management and International Business, The University of Auckland Business School, New Zealand.

This is a study that is not funded by any external sources. The aim is to examine the influence of expatriate’s psychological capital, social support and cultural intelligence on expatriate effectiveness in the context of Chinese expatriates. The expatriates in your company fit into the criteria of this study and thus I would very much like them to be one of the selected participants.

The study requests your expatriates’ participation in a questionnaire. The questionnaire has six sections and will take approximately 15 minutes to complete. The questions in the questionnaire primarily will ask about expatriates’ perception of the social support, their psychological capital and cultural intelligence, and the effectiveness of their expatriate assignment. The questionnaires will be numbered and a list is maintained to link participants with the questionnaire. I will give the required information to the potential participants in writing, Emails, online survey, or verbally. Please note I will send an invitation to potential participants by Email.

Please note that the information provided by your employees in this study will be kept confidential and their participation or non-participation in this study should not affect the employment status in your company. I am not going to use the names of your company and the participants in any publication or report about the research. Also, neither your company nor your employees will be identified in this study. In addition, I will not use audio/videotaping devices to get any recordings.

For writing and publishing purposes, the responses will be aggregated and will be analysed using statistical software by myself. Please be informed that the completed questionnaire will be stored securely at the Department of Management and International Business, The University of Auckland Business School for six years, after which they will be destroyed. The University of Auckland allows six years of data storage for publication purposes. This is a well-established procedure at The University of Auckland and special care is taken to guarantee the confidentiality of the information.
The participants have the right to withdraw from this study at any time. If they consent to participate, they also have the right to withdraw the information that they provide before 30 June 2013. You and the participants may also request a copy of the summary of findings once I have completed and defended my doctoral thesis.

Should you have queries regarding this study, please do not hesitate to contact me.

Email Address: gaosheng.liu@auckland.ac.nz / liugsh.06@sem.tsinghua.edu.cn
Phone Number: 0086-13910338558 (China); 0064-021-2048388 (Auckland).

Alternatively, you may also contact my thesis main supervisor, Professor Snejina Michailova.

Email Address: s.michailova@auckland.ac.nz
Phone Number: +64 9 373 7599 ext. 88737

In addition, you can contact the Head of the Department (Management and International Business), Professor Hugh Whittaker.

Email Address: h.whittaker@auckland.ac.nz
Phone Number: +64 9 373 7599 ext. 83266

Finally, if you have any concerns of an ethical nature regarding this study, you can contact the Chair of The University of Auckland Human Participants Ethics Committee at +64 9 373 7599 ext. 87830.

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON FOR 3 YEARS. REFERENCE NUMBER: 2011 / 7532
PARTICIPANT INFORMATION SHEET

Expatriates


Name of Researcher: Gaosheng Liu

This is a personal invitation to participate in a research study of the roles of perceived social support, psychological capital and cultural intelligence in expatriation. My name is Gaosheng Liu and I am currently a doctoral student at the Department of Management and International Business, The University of Auckland Business School, New Zealand.

This is a study that is not funded by any external sources. The aim is to examine the influence of expatriate’s psychological capital, social support and cultural intelligence on expatriate effectiveness in the context of Chinese expatriates. You fit into the criteria of this study and thus I would very much like you to be one of the selected participants.

The study requests your participation in a questionnaire. The questionnaire has six sections and will take approximately 15 minutes to complete. The questions in the questionnaire primarily will ask about your perception of the social support, your psychological capital and cultural intelligence, and the effectiveness of your expatriate assignment. The questionnaires will be numbered and a list is maintained to link participants with the questionnaire. I will give the required information to the potential participants in writing, Emails, online survey, or verbally.

Please note that all your responses in this study will be kept confidential from your employer. The Chief Executive Officer or human resource managers (or equivalent) of your company will provide you with the assurance that your participation or non-participation in this study should not affect your employment status in your company. I am not going to use your name in any publication or report about the research. Also, neither you nor your employer will be identified in this study. In addition, I will not use audio/videotaping devices to get any recordings.

For writing and publishing purposes, the responses will be aggregated and will be analysed using statistical software by myself. Please be informed that the completed questionnaire will be stored securely at the Department of Management and International Business, The University of Auckland Business School for six years, after which they will be destroyed. The University of Auckland allows six years of data storage for publication purposes. This is a well-established procedure at The University of Auckland and special care is taken to guarantee the confidentiality of the information.

You have the right to withdraw from this study at any time. If you consent to participate, you also have the right to withdraw the information that you provide before 30 June 2013. You may also request a copy of the summary of findings once I have completed and defended my doctoral thesis.

Should you have queries regarding this study, please do not hesitate to contact me.

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APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON FOR 3 YEARS. REFERENCE NUMBER: 2011 / 7532
Appendix F: Consent forms

CONSENT FORM
Expatriates
THIS FORM WILL BE HELD FOR A PERIOD OF 6 YEARS


Name of Researcher: Gaosheng Liu

I have read the Participant Information Sheet; have understood the nature of the research and why I have been selected. I have had the opportunity to ask questions and have them answered to my satisfaction.

I agree to take part in this research.

I know that this questionnaire will take around 15 minutes of my time.

I understand the information that I provide will be kept confidential and may be used for publication purposes.

I understand that the Chief Executive Officer or human resource managers (or equivalent) of my company provide me with the assurance that my participation or non-participation in this study should not affect my employment status in my company. I know that the researcher is not going to use my name in any publication or report about the research. Also, both I and my employer will not be identified in this study.

I understand that I am free to withdraw participation at any time, and to withdraw any data traceable to me up to 30 June 2013.

I understand that an electronic copy of the summary of findings will be sent upon request to my Email box in December 2013.

I understand that data will be kept safely at The University of Auckland, held for analysis for six years, after which they will be destroyed.

Name ___________________________

Signature ________________________
APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON 31-Aug-2011 FOR 3 YEARS. REFERENCE NUMBER: 2011 / 7532
CONSENT FORM
Chief Executive Officer or Human Resource Managers (or equivalent)
THIS FORM WILL BE HELD FOR A PERIOD OF 6 YEARS


Name of Researcher: Gaosheng Liu

I have read the Participant Information Sheet; have understood the nature of the research and why the expatriates in my company have been selected.

I agree that the expatriates in my company take part in this research.

I know that this questionnaire will take around 15 minutes of the participants' time.

I understand the information that the expatriates provide will be kept confidential and may be used for publication purposes.

I agree that the expatriates' participation or non-participation in this study should not affect their employment status in my company. I know that the researcher is not going to use the names of my company and the participants in any publication or report about the research. Also, I understand that both my company and my employees will not be identified in this study.

I understand that the expatriates in my company are free to withdraw their participation at any time, and to withdraw any data traceable to them up to 30 June 2013.

I understand that an electronic copy of the summary of findings will be sent upon request to the participant’s Email box in December 2013.

I understand that data will be kept safely at The University of Auckland, held for analysis for six years, after which they will be destroyed.

Name ___________________________

Signature ___________________________

Date ___________________________

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE
ON 31-Aug-2011 FOR 3 YEARS. REFERENCE NUMBER: 2011 / 7532