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Multiple intelligences and the success of expatriation: The roles of contingency variables

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Although, prior studies have discussed how the various intelligences of expatriates (IQ – intellectual intelligence, CQ – cultural intelligence, and EQ – emotional intelligence) could contribute to their success on foreign assignments, they tend to discuss each of these separately. By asserting that all of these intelligences operate within expatriates simultaneously, this study then examines how they contribute to the success of expatriation. Moreover, this work also investigates under what conditions multiple intelligences can magnify their effects. By adopting a qualitative study approach including, in-depth interviews of experts, employers and expatriates, this study reveals that the use of multiple intelligences is contingent upon expatriates' commitment toward the organization, social support, functional interaction, and assignment tenure.

Key words: Cognitive intelligence, emotional intelligence, cultural intelligence, social supports, commitment, functional interaction, assignment tenure.

INTRODUCTION

Sending employees on long-term foreign assignments is crucial for multinational firms (Shaffer et al., 2006), and such a decisions require considerable attention, as the costs related to expatriation are around 5 to 6% of the total headcount costs in a global firm (ECA International, 2007). When an assignment fails, the early return of a single expatriate can cost such organizations in the range of from one-quarter to more than one million US dollars (Mervosh and McClenahan, 1997). Furthermore, expatriate failure also leads to considerable personal costs for the employees concerned, including loss of self-esteem, self-confidence, negative reflections on performance, and diminished reputation, as well as reduced motivation and willingness to support other expatriates (e.g., Bhaskar-Shrinivas et al., 2005; Suutari and Brewster, 2003). One of the major reasons for these failures is that expatriates are unable to adjust themselves to the host country's environment (e.g., Caligiuri, 2000; Shaffer and Harrison, 1998). Low cultural adjustment is also associated with poor performance abroad (e.g., Kraimer et al., 2001; Mol et al., 2005). Based on these factors, this study determines the success of expatriation based on both the level of cultural adjustment and performance of expatriates in the country they are assigned to.

Many variables have been proposed by previous studies

to determine the success of expatriation, such as personality (e.g., Holopainen and Bjorkiman, 2005; Shaffer et al., 2006), cross-cultural training (e.g., Caligiuri et al., 2001; Puck et al., 2008), and international experience (e.g., Takeuchi et al., 2005), among others. This study focuses on the role that intelligence plays in the success of expatriation. Despite the fact that intelligence has been shown to play an important role in predicting job performance in domestic settings, only a few studies have been conducted using intelligence as a predictor of success in a expatriate context (Mol et al., 2005). Among others, Lubinski (2004) has argued that cognitive intelligence (IQ) can enhance the ability of expatriates to learn in different environments and thus results in better cross-cultural adjustment. Lii and Wong (2008) reported that emotional intelligence (EQ) contributes to the level of expatriate cultural adjustment. Chandrasekar (2006) contended that cultural intelligence (CQ) factors, such as higher cultural sensitivity and flexibility, can enable expatriates to adapt to new cultural surroundings. However, to the best knowledge of the author, there are no studies that have attempted to link the three types of intelligence, IQ, EQ, and CQ, to expatriation phenomena, even though the review study of Mol et al. (2005) indicated that each intelligence, to various degrees, determines the success

of expatriation. Therefore, some research questions remain unanswered: What are the roles of these intelligences (IQ, EQ, and CQ) on the success of expatriation? Do multiple intelligences substitute for each other? Under what conditions are these intelligences effective with regard to enhancing the success of expatriation? How do companies employ multiple intelligences in the selection of potential expatriates to ensure the success of expatriation? Based on the above questions, this study purposely examines the roles of these intelligences (IQ, EQ, and CQ) on the success of expatriation. Specifically, this study examines whether these three intelligences substitute for or complement each other. Moreover, this study explores the conditions that facilitate the contribution of multiple intelligences to the success of expatriation. As a consequence, implications for managers with regard to how to enhance the success of expatriation using multiple intelligences will be presented. Future research directions will also be offered in this study.

LITERATURE REVIEW

Intelligences

Schmidt and Hunter (2000) defined intelligence as the “ability to grasp and reason correctly with abstractions (concepts) and solve problems,” and equated the terms intelligence and general intelligence on the basis of precedent, using the terms interchangeably. However, following Cote and Miners (2006), this study disagrees with this approach, because the definition in Schmidt and Hunter (2000) cannot be easily applied to specific content domains, such as cognition, emotion, and culture, and thus their concept of intelligence does not always correspond to general intelligence. In the context of expatriation, this study asserts that human intelligence is multidimensional, and three dimensions that are crucial for the success of expatriation are cognitive intelligence - IQ (Lubinski, 2004; Mol et al., 2005), emotional intelligence - EQ (Cote and Miners, 2006; Lii and Wong, 2008), and cultural intelligence - CQ (Earley and Ang, 2003; Earley and Peterson, 2004). However, these three intelligences should be positively associated, because they are subsumed under general intelligence.

Cognitive intelligence represents the specialization of general intelligence in the domain of cognition in ways that reflect experience and learning about cognitive processes (Schaie, 2001; Brody, 2004). Compared to other intelligences, IQ has received a considerable amount of interest and study in the domain of psychology for over 100 years (Lubinski, 2004). Although there are exceptions, different psychologists have reached a consensus that cognitive abilities are organized hierarchically. Carroll's (1993) hierarchical model identifies cognitive intelligence by placing general intelligence at its vertex with three strata. Snow (1991, 1994, 1996) corroborated

This hierarchical structure through multidimensional scaling and also found three content domains, including quantitative/numerical, spatial/mechanical, and verbal/linguistic. In summary, this study defines expatriate IQ as intelligence in the domain of cognition that reflects experience and learning related to quantitative/numerical, spatial/mechanical, and verbal/linguistic domains. Emotional intelligence (EQ) can be conceptualized as the ability to grasp and reason correctly with emotional abstractions (emotional concepts) and to solve emotional problems (Cote and Miners, 2006). Goleman (1997) defined EQ as a person's ability to read and respond to the affective states of culturally similar others and to self-regulate emotion. According to Mayer et al. (2004), EQ consists of four emotional skills and abilities: The ability to perceive emotion, to use emotion to facilitate thought, to understand emotion, and to manage emotion, while Davies et al. (1998) proposed that EQ has four abilities: Self-emotional appraisal, others' emotional appraisal, regulation of emotion, and use of emotion. The last concept has been used by Wong et al. (2004) to develop research items for EQ in an Asian context. This study defines EQ by following the definition that was proposed by Cote and Miners (2006), and asserts that EQ has four dimensions (Davies et al., 1998; Wong et al., 2004).

In 2003, Earley and Ang proposed a cultural intelligence (CQ) approach to capture the capability to adapt across cultures and suggested that it reflects a person's capability to gather, interpret, and act upon these radically different cues to function effectively across cultural settings or in a multicultural situation. There are three core elements of CQ, namely metacognition and cognition (thinking, learning, and strategizing), motivation (efficacy and confidence, persistence, value congruence and affect for the new culture), and behavior (social mimicry, and behavioral repertoire) (Ng and Earley, 2006). The cognitive facet refers to the information-processing aspects of intelligence, and it is conceptualized using the self-concept theory (Earley, 2003). The second facet of CQ refers to its motivational aspect. Cultural intelligence reflects self-concept and directs and motivates adaptation to new cultural surroundings (Earley and Peterson, 2004). The behavioral aspect of CQ suggests that adaptation is not only knowing what to do and how to do it (cognitive) and having the motivation to carry it out, but also having the response needed for a given situation in one's behavioral repertoire. Thus, CQ reflects a person's ability to acquire or adapt behaviors appropriate for a new culture (Earley and Peterson, 2004).

RESEARCH METHODS

Since a very limited number of studies have focused on the combined effects of IQ, EQ, and CQ on the success of expatriation, this study uses the grounded theory approach (Glaser and Strauss, 1967) which stresses the “emergence” of theory derived directly from data rather than forcing the theory into predefined categories

(Glaser, 1992; Stern, 1994). The theory thus evolves during the research process itself, and is a product of the continuous interplay between analysis and data collection (e.g., Glaser and Strauss, 1967; Suddaby, 2006). There were two stages to this study: First, a literature review and in-depth interviews with experts were conducted. General questions were asked regarding the roles of multiple intelligences on the success of expatriation. These expert interview processes were iterated until the constructs for the effects of expatriate intelligences were clearly identified. Based on the results of the expert inter-views, a semi-structured in-depth interview questionnaire was developed for use in the second stage.

In the second stage, field studies were conducted by interviewing experts, employers of expatriates, and expatriates from diverse cultures with the intention to provide a comprehensive overview regarding the proposed research questions. The informants were encouraged to elaborate on themes that they felt were integral to their perceptions of how expatriates use their intelligences to become successfully adjusted to and perform well in host countries. In this stage, sampling was conducted openly with as wide a cross section of expatriates and employers as possible in terms of age, occupation, past experience, educational background, and so forth. All interviews took from one to two hours. All the conversations were recorded, and transcribed interviews were coded, read in detail several times, and analyzed using constant comparative analytic techniques (Glaser and Strauss, 1967). Feedback was obtained from three informants to improve the factual and historical accuracy of the coding process. The following general questions were used at the beginning of the interviews:

1. How would you describe the role of intellectual intelligence in expatriation?
2. How would you describe the role of cultural intelligence in expatriation?
3. How would you describe the role of emotional intelligence in expatriation?
4. To what degree do these intelligences complement or substitute for each other during expatriation?
5. Among the three intelligences, which plays the most important role in the success of expatriation?
6. Under what conditions are these intelligences effective in enhancing the success of expatriation?

A number of follow-up questions evolved during the interview process. The questions are:

1. How would you specify the different roles of multiple intelligences on different stages of expatriation? Which particular intelligence plays the major role with regard to different stages of expatriation?
2. How would you describe the particular intelligences required for different jobs? How can they influence the success of expatriation?
3. How would you describe the role of different social support structures for multiple intelligences on the success of expatriation?
4. Do you feel that the commitment of an expatriate to an organization could magnify the effects of intelligences on the success of expatriation?

This study included subjects with diverse backgrounds in order to examine the issues in more detail and from a broader perspective. To provide confidentiality, actual names were not used in the data. The first group was experts regarding expatriation, and included two professors who were willing to share their opinions. The second group consisted of the CEO of a Taiwanese company that frequently sends employees to more than 80 countries in which the firm has branches. The final group consisted of employees who are currently expatriates (six informants) or who have been expatriates within the last three years (three people). The former expatriates were included as it was felt that they could provide a better overview regarding the overall experience. For example, prior to his

position as a professor, Informant #1 was a manager and a team leader in different countries, such as Indonesia and Japan, over a time spanning between six months to one year in each instance. Informant #8 received her master's degree in Taiwan, but has currently been working in New York, USA, for more than two years. Table 1 provides the characteristics of the subjects used for this first-year study.

QUALITATIVE FINDINGS AND DEVELOPMENT OF PROPOSITIONS

Roles of intellectual intelligence (IQ)

In the case of intellectual intelligence, Informant #1 pointed out that companies normally screen their employees based on intellectual intelligence (IQ). There are several criteria used to assess this, such as GPA or other academic records. In other words, IQ is not a crucial consideration for potential employees being expatriated, because earlier the screening procedures have already taken it into account. The following is an excerpt from his interview transcript:

“Normally in my company, employees have been strictly selected before they are recruited. They have normally graduated from national universities in Taiwan. Thus, their IQ is high, and they have no problem with IQ. In the case of a very important leadership position, IQ should be considered very seriously. There is also a high level of concern about IQ in the case of people who serve in a position requiring negotiation”.

This perspective was also validated by Informant #3. She pointed out that her company considers IQ before hiring someone as an employee. As a consequence, she believes that IQ is not a main focus when choosing a candidate for expatriation to one of her foreign branches. Moreover, Informant #2 argued that companies should send expatriates who have adequate knowledge related to their particular job. He stated that expatriates act as ‘knowledge ambassadors’ and are responsible for transferring and absorbing new knowledge and skills from a host country. This perspective was also similar to that of Informant #4, who pointed out that IQ (knowledge and skills) is the basic thing that expatriates should have in order to perform well during their expatriation. Without adequate knowledge and skills, which are mostly represented by IQ, expatriates might thus not perform to the standard desired by their companies.

Roles of cultural intelligence (CQ)

Most of the informants agreed that cultural intelligence plays a prominent role during expatriation. Informant #11 stated that having ideas about why people behave and think differently is a good starting point from which to effectively work with people from different cultures. She

Table 1. Characteristics of Informants.

Informants category	Informant characteristics
Experts	
Informant #1	Age 60, male, Taiwanese, professor, former expatriate
Informant #2	Age 35, male, Indian, professor, expatriate
User of expatriates	
Informant #3	Age 53, female, Taiwanese, CEO
Expatriates	
Informant #4	Age 41, male, Taiwanese, former expatriate
Informant #5	Age 37, female, Taiwanese, former expatriate
Informant #6	Age 29, male, Canadian, former expatriate
Informant #7	Age 36, female, Myanmar, expatriate
Informant #8	Age 30, female, Philippines, expatriate
Informant #9	Age 37, male, Taiwanese, expatriate
Informant #10	Age 31, male, Vietnamese, expatriate
Informant #11	Age 34, female, Thai, expatriate
Informant #12	Age 38, male, Indonesian, expatriate

Note: Pseudonyms are used for informants for purposes of confidentiality.

stated her perspective as follows:

“I believe that to work effectively with other people from totally different cultures, expatriates should prepare themselves by understanding those cultures. This understanding could serve as a good starting point before collaboratively working with people from different cultures in the most effective manner possible”.

In addition to understanding why people behave differently, Informant #10 proposed that doing what local people do in their daily lives could close the gap between the home and host cultures. His statement was as follows:

Originally, I never pray in the temple because I do not believe in God. However, when I saw my co-workers praying, sometimes I joined them. Maybe by doing this, I let them know that I embrace their culture, even though I still do not believe in God and other superstitious things. Starting from that moment, my relationships with local people got better, and I was able to do my job more effectively.

Similarly, Informant #6 agreed that practicing the local culture of could help him to work more closely and effectively with his local co-workers. During his assignments in Japan and Taiwan, he often went to have a drink with his co-workers and joked around with them. Even though sometimes he wanted to miss such after work meetings, he believed these practices could in some way make his job easier. Interestingly, Informant

#12 also pointed out that the working culture in Taiwan is totally different to that of Indonesia. In the first three months of his assignment, he was surprised to experience a 12-hour, 7-day work week. After that period, he voluntarily continued this work schedule, and his local coworkers tended to appreciate his willingness to work as hard as they did.

Roles of emotional intelligence (EQ)

Informant #5 confirmed that emotional intelligence (EQ) was also crucial during her short assignment in Thailand. During her first three-month assignment, she needed to overcome certain negative emotions with regard to being away from her family. At the same time, she also needed to correctly manage her emotions when she interacted with coworkers from totally different cultures, and always assumed that her local coworkers were nice people. She believed that by making this effort, she was able to manage her feelings whenever she had difficulties during her expatriation. Informant #8 also concurred with this statement, which she expressed as follows:

“Being away from my loving family is one of the biggest issues I have to deal with during my assignment. I do not feel that I can show my weaknesses (homesickness) to my coworkers, even though sometimes they notice it. Moreover, even though having new friends or colleagues is exciting, sometimes it is also troublesome. I have to *adapt my emotions in order to not be easily misunderstood, especially because most of my co-workers grew*

up in backgrounds that were different from mine”.

Informant #3 also raised similar issues. She pointed out that sending expatriates who are emotionally stable could help guarantee the success of expatriation. She understands that expatriates face a number of different pressures during their assignments, and dealing with these successfully requires certain personal characteristics. In a similar manner, Informant #7 agreed that emotional intelligence is crucial in an expatriation assignment. She further commented that being away from one's family might influence someone's emotions. She felt that the situation is to be the most difficult when expatriates have to deal with very different cultures, which intensifies the pressures that they face. She also confirmed that expatriates with a high EQ might be expected to perform well during their overseas assignment.

Relative importance of expatriates' intelligences in the success of expatriation

Some informants proposed that multiple intelligences (IQ, CQ, and EQ) play simultaneous roles on determining the success of expatriation, because each type of intelligence has a different role. Informant #1 illustrated that in the selection process, his former company simultaneously considers all the intelligences that candidates have. The reason for this is that each type of intelligence has its own use during expatriation, and he explained this, as follows:

“We normally consider these three intelligences together with the expatriate's professional expertise. For example, if we need to send an engineering manager to a specific country, we first of all select 5 to 10 candidates who are qualified. After that, we consider and evaluate their IQ, CQ, and EQ and make a ranking for these candidates. We then select 3 to 5 candidates to talk with and evaluate their family situations before deciding who should be sent. Therefore, the above three intelligences serve as criteria that operate in parallel to professional expertise in the decision who will be sent on such assignments”.

A similar opinion was also given by Informant #2, who felt that these intelligences could not be separated to determine the success of expatriation because they are interdependent upon each other.

It depends on the situation and individuals or group we are dealing with, and we cannot specify which sort of intelligence is superior or inferior. Rather, in order to fulfill the desired outcome, intelligence may be considered as an interdependent aspect in which the target group is considered with regard to whether it will be an individual or group that the expatriate is going to deal with.

There is an extensive body of evidence showing that scores on cognitive ability tests predict a wide array of criteria, ranging from job and school performance to mastery of everyday tasks that involve active information processing (e.g., Neisser et al., 1996; Schmidt and Hunter, 1998) and various other important social outcomes (Herrnstein and Murray, 1994; Jensen, 1998). As proposed by Lubinski (2004), coping with life requires the continuous development of new skills, so cognitive intelligence for mastering new content—and new relationships—are required. By using similar logic, this study expects that expatriates' cognitive intelligence can facilitate their ability to learn in different environments. Using their cognitive ability, expatriates can learn easily and rationalize what is required in a given situation in order to better adjust to a new environment.

Templer et al. (2006) indicated that motivational CQ, one dimension of CQ, has a significant influence on cross-cultural adjustment. Ang et al. (2004) also indicated that the motivational dimension has a significant influence on general adjustment. Since these studies only used one factor of CQ, it is necessary to test the influence of the other two dimensions of CQ on work adjustment, as originally proposed by Earley and Ang (2003). The degree of adjustment could be led by the efforts of expatriates to conceptualize their assignment through self-concept (cognitive CQ), which is directed by the motivation to adapt to new cultural surroundings (motivational CQ). The degree of adjustment appears to be higher when an expatriate has the ability to acquire or adapt behavior appropriate for a new culture (Earley and Peterson, 2004). Referring to the definition of cultural intelligence proposed by Earley and Ang (2003), the two CQ predictors referenced above are close to the definition of cultural intelligence. Thus, when expatriates have higher capability to adapt across cultures, they tend to have higher performance (Lee and Sukoco, 2009).

Cote and Miners (2006) suggested that when people have the ability to grasp and reason correctly with emotional abstractions and can solve their emotional problems, they tend to have higher performance. While their study used domestic settings, this finding may be extended to an expatriate context. Foreign assignments will create many emotional problems, particularly when expatriates have different perspectives from their local counterparts. The ability to manage emotions internally and externally leads expatriates to have better cultural adjustment (Lii and Wong, 2008) and will accordingly lead to better performance. In summary, the review paper of Mol et al. (2005) demonstrated that expatriates', emotional, and cultural intelligences determine the level of their cultural adjustment and performance. Therefore, the following proposition is developed:

P₁: Expatriates' intelligences (IQ/EQ/CQ) have a positive influence on (a) their cross-cultural adjustment and (b) their performance.

Moderating variables of the proposed relationships

To provide a comprehensive view of the issues raised in this study, subjects were also asked under what conditions or for which individuals the effects of multiple intelligences might be moderated with regard to cultural adjustment and performance. In general, the informants argued that the roles of multiple intelligences are contingent upon the duration (stages) of expatriation. Informant #3 believed that in the beginning, CQ and EQ play a crucial role during expatriation. In this stage, expatriates experience euphoria and culture shock, and during this process, also having to deal with their emotions regarding being away from friends and family. Moreover, expatriates must deal with new cultures which may be vastly different from their own. In the acculturation stage, expatriates have adjusted their emotions and cultures. In this stage, Informant #3 proposed that expatriates have no difficulties relating to the new environment and new colleagues and feel like they are at home. Thus, IQ will play a prominent role in the success of expatriation. The knowledge and skills of the individuals concerned will determine how they deal with their working assignment. Similar perspectives were also expressed by Informant #5, who suggested that EQ and CQ played the main roles during the initial period of his expatriation, but as time went by, his IQ began to determine his performance. This view supports that of Informant #7, which is stated as follows:

“At the beginning of expatriation, my emotions were mixed, from sadness associated with being away from my family to being excited about having experience in the new culture. Under these circumstances, I think EQ would prove important for me to manage my emotions. Moreover, understanding other cultures is also a good starting point from which to show that we care and respect others, which will ease relationship transitions. These new relationships, at the beginning of expatriation, could compensate for the feeling of homesickness. Once I adjusted, my knowledge and skills had similar roles to the one they played in my own country. At that point, the only way to perform well required using my knowledge to finish my job”.

In addition, Informant #1 also stated that CQ and EQ have important roles in the initial expatriation period. As time goes by, expatriates' CQ gradually improves, and other intelligences will play a more important role. Similarly, Informant #11 also noted that CQ plays a prominent role at the beginning of an overseas assignment. This study defines assignment tenure as the cumulative period of time that an expatriate has been assigned in a particular country, and thus this definition mainly emphasizes the time component (e.g., Goodman et al., 2001; Shaffer et al., 1999). This study focuses on past and present tenure in a particular country, because they are more

likely to influence employees' current attitudes and behaviors (Takeuchi et al., 2005). As proposed by Hofstede and Hofstede (2005), the longer an assignment tenure is, the better expatriates will adjust in a host country due to greater familiarity with the general environment. As a consequence, a level of performance comparable to that in the home country can be expected when they an employee has enough tenure in a particular country.

In the early period of assignments abroad, expatriates face considerable uncertainty about many different aspects of both life and work. In the meantime, they are likely to acquire information which via their CQ that enables them to function more effectively in the new environment. EQ will also facilitate the learning of new cultures as a result of an individual having the ability to better understand colleagues' emotions in the new workplace. With prolonged exposure to the nuances of the host culture and local coworkers, expatriates are likely to become more familiar with the general surroundings and accumulate some knowledge regarding the local environment, thus becoming better adjusted. With regard to work-related adjustment, time spent undertaking an assignment is also important. Longer tenure increases opportunities for expatriates to learn appropriate work behaviors and to learn how to interact with local coworkers through direct as well as vicarious modeling (Bandura, 1997). As a consequence, expatriates will have more time to get to know local co-workers, which will facilitate work adjustment and result in better performance in the workplace. In addition, an extended period of time may be required before expatriates are fully accepted by their peers and develop good working relationships with them (Hofstede, 1980). Consistent with existing research, this study proposes that the effects of CQ and EQ on cultural adjustment and performance will be magnified in the early assignment tenure of expatriates. As time goes by, the role of IQ will replace the dominant roles of CQ and EQ in determining the level of expatriation success. Based on this, the following proposition is developed:

P₂: The positive influences of EQ and CQ on (a) cross-cultural adjustment and (b) performance will gradually decrease, while the influence of IQ remains constant.

The informants stated that the use of multiple intelligences depends on the type of job assigned, particularly with regard to the need to interact with other people. Informant #9 argued that different jobs have different requirements. For example, someone in a sales position will interact with many people from different cultures. In the case of these expatriates, CQ and EQ have important roles with regard to the success of expatriation. However, when someone has been assigned to R&D or an accounting position, they do not need to interact with many people. As a consequence, their IQ will have a

more prominent role in the success of their expatriation. As Informant #9 stated:

“As a sales manager, I have to deal with people from diverse backgrounds and cultures. Thus, in the initial period of assignments, I forced myself to understand why local people (co-workers or customers) behave like they do. Moreover, I have had to adapt my interpersonal skills, such as the method in which I approach customers, in order to close deals. When I have gained sufficient understanding related to the host culture, I am able to start using my knowledge and skills related to marketing to further advance my performance”.

A similar opinion also voiced by Informant #7, who stated that each job requires particular intelligences if it is to be carried out successfully. When she was assigned as a medical doctor, her CQ and EQ mostly facilitated the success of her assignment. However, when she was recently moved to the R&D department, her duty was mainly to be responsible for her own projects. As a consequence, her IQ determined the success of her assignment. Similarly, as a finance manager in China, Informant #11 emphasized the importance of understanding the local culture and managing her emotions at the beginning of her assignment. When she finally felt “tuned in” to the local environment, then her knowledge related to finance had a more prominent role. Using work role transition research, Fenner and Selmer (2008) argued that a specific set of tasks and duties performed by expatriates are crucial determining their cultural adjustment (Dawis and Lofquist 1984; Nicholson, 1984). In contrast to that research, this study merely focuses on the level of interaction that expatriates will have in their assignment. This concept originates in the work of Szilagyi and Holland (1980), who concluded that functional interaction may influence the level of social density in the workplace, particularly with regard to interaction among employees. This study conceptualizes functional interaction as the specific tasks and duties that expatriates need to perform, whether it includes interaction with colleagues, customers, or other stakeholders of the companies abroad. When the assigned tasks require expatriates to interact with many people, the level of social density tends to be high (Szilagyi and Holland, 1980), which increases the importance of the roles of EQ and CQ relative to IQ.

When expatriates are required to have a higher level of interaction with local co-workers, such as in a production department, or they need to communicate extensively with local customers, such as in a sales department, or if they must have good relationships with local government, such as in a public relations department, they have to rely on their CQ and EQ to accomplish their jobs. Similarly, CQ and EQ will facilitate expatriates' adjustment to their work -place and their general environment, as well as their interaction with locals. On the other hand, when

expatriates are appointed to accounting or R&D departments that require less interaction with local people, the necessary levels of CQ and EQ will be lower. However, since these jobs mostly rely on expatriates' expertise, IQ will be more crucial with regard to determining the level of adjustment and job performance. Based on this, the following proposition is developed:

P₃: The positive influences of EQ CQ on (a) cross-cultural adjustment and (b) performance will be strengthened when the expatriates are assigned to a job that requires more interaction with people, while the effects of IQ remain constant.

The informants suggested that expatriates' commitment toward their organization could determine ‘for whom’ the effects of intelligences on the success of expatriation could be leveraged. As Informant #3 suggested, no matter how intelligent expatriates are, when they have less commitment to their work, they will not reach the optimum level of adjustment or performance during their expatriation. The following is her opinion regarding the issue:

“Even though intelligences are important during expatriation, I have personally experienced that when expatriates have high commitment to my organization, they tend to adjust easily to their new environments. Moreover, their performance will be as good as in their home country. One of my former employees is excellent in terms of IQ. His interpersonal skills are also satisfactory, and he easily adjusted to the new environment he was placed in. However, since his heart did not belong to my company, his performance was average. When he had enough contacts, he left for a higher position in another company”.

Informant #4 also provided an employee's perspective. During his expatriation, he dedicated his time and attention to his duties, and by doing this, he felt that he could easily accept the differences between his home and host country. In a similar manner, Informant #12 agreed that commitment to his organization boosted his performance during his assignment. He realized that the cost of being expatriated was high for both himself and his company. Thus, the only way to justify these costs was to adjust to the new environment as soon as possible, so that he could meet his own expectations and those of his company and family. Another perspective was provided by Informant #8, who confessed that whenever she feels that she is less attached to her company, her performance tends to reduce, and she begins to look for new jobs in her home country online. On the other hand, when she realizes that a job in another company would not be as good as her current one, her performance improves. She further confessed that such improvements are based on the fact that she expects her

company will prolong her assignment, because she generally enjoys working abroad.

There are multiple definitions and conceptualizations of the construct of organizational commitment. Porter et al. (1974) defined it as the strength of individuals' identification with and involvement in a particular organization. This definition is employed in this study with the specific context of expatriate commitment toward an organization. Current research supports the multidimensionality of expatriate commitment (Fields, 2002), and it consists of three distinct themes, including affective, normative and continuance commitment (e.g., Meyer and Allen, 1991, 1997). Affective commitment is an 'employee's liking for an organization including identification with involvement in the organization', normative commitment is 'the feeling of obligation to continue employment', while continuance commitment indicates the awareness of the employee that are related to the 'costs associated with leaving the organization' (Fields, 2002: 43).

This study posits that the effects of the three types of intelligences on cross-cultural adjustment will be strengthened when the expatriates have high commitment to their job. When the expatriates have high normative commitment, they tend to have feelings of obligation to continue employment because they already are engaged to a certain degree in some of the costs related to an intention to return home (Florkowski and Fogel, 1999; Yao and Wang, 2006). In other words, expatriates will explore more possibilities for making an adjustment to a new environment, regardless of their level of intelligence. Moreover, when the expatriates have high affective commitment, they will identify themselves with the organization (Meyer and Allen, 1991, 1997). A similar logic could also be applied to continuance commitment (e.g., Fields 2002; Manion, 2004). Since a foreign environment is different from domestic settings, this study asserts that commitment should be contingent on the relationship between intelligence and performance. Based on that, the following proposition is developed.

P₄: The positive influence of intelligences (IQ/EQ/CQ) on (a) cross-cultural adjustment and (b) performance will be strengthened when the expatriates have high rather than low organizational commitment.

Expatriation assignments currently provide fewer and fewer opportunities for candidates to bring their families, unless the position is high enough or stationed in the new environment for more than three years. This condition was also confirmed by Informant #3, who stated that sending expatriates with their family is a double-edged sword. On one hand, it can help the expatriates adjust easily to a new environment. However, despite the additional costs that have to be paid by the company, families usually do not have enough commitment to extend their stay overseas. As a result, they have a greater likelihood of not adjusting to a new environment.

In a similar manner, Informant #11 provided his perspective, as follows:

Family is very important in supporting people when they going through tough times. When you feel alone or not accepted, at least you know you belong to a group of people, your family. The feeling of being accepted as a person and accepted by society gives strength to people. Supervisors at work are also important, as they can give guidance about how to adjust to fit into the new environment. Supervisor's tolerance, guidance and initial support are very important for a new expatriate, especially during the early stages of expatriation. A supervisor is the most influential person giving positive or negative impressions regarding the new place. Formal and informal social organizations are also one of the factors that influence the success of expatriation. For example, socialization among expats or family members of the expats from the same country can be beneficial, since they can share information and give guidance and tips to newcomers, among other types of support.

In a summary, most of the informants agree that receiving social support, either from their family, organization, or managers, can leverage the effects of their intelligence on their adjustment and performance. However, when the expected social support is not available, the positive effects of their intelligence on adjustment and performance tend to be weakened.

Among the most prominent stress factors that expatriates struggle with is the 'loss of social support provided by their organization, family and friends' (Harvey, 1995: 226). Expatriated families are coping with not only the loss of close family and friends, but also with being deprived of the entire community at their home base. Copeland and Norell (2002: 255) identified social support as a 'buffer against stress and a positive association of emotional well-being'. Albrecht and Adelman (1987: 19) defined social support as the "communication between recipients and providers that reduces uncertainty about the situation, the self, the other, or the relationship, and functions to enhance a perception of personal control in one's life experience". This study expects that the support provided by organizations, supervisors (Kraimer and Wayne, 2004; Takeuchi et al., 2009), and family members (Harvey, 1998) are particularly important to expatriates. Therefore, this study adopts organizational support, leadership support, and spousal support as three dimensions of social support.

Social support is believed to be able to reduce the stress associated with working in a new country (Kraimer et al., 2001). It is argued that social support, in terms of supervisor and organizational support, has a positive relationship with expatriate adjustment and performance (e.g., Guzzo et al., 1993; Kraimer and Wayne, 2004). Other scholars also indicated that organizational support is one of the primary factors in predicting expatriate adjustment (Caliguri et al., 1999; Shaffer et al., 1999).

Previous studies have further indicated that, although the influences of expatriate characteristics on expatriate adjustment are apparent, social support can enhance the magnitude of these (Kraimer and Wayne, 2004). Without support from supervisors and organizations, the level of expatriate adjustment may be reduced. Similar logic can also be applied to the idea that the effects of intelligence on expatriate adjustment and performance will be magnified by social support. Regardless of their level of cognitive, emotional, and cultural intelligence, the level of expatriates' adjustment will be enhanced when-ever they receive full support from their organization, leaders, and spouses. Moreover, when the expatriates receive sufficient social support, the effects of intelligence will be amplified with regard to performance. Based on this, the following proposition is developed:

P₅: The positive influence of intelligence (IQ/EQ/CQ) on (a) cross-cultural adjustment and (b) performance will be strengthened when expatriates receive sufficient social support (Figure 1).

RESULTS AND DISCUSSIONS

Based on extensive literature reviews and follow up by in-depth interviews with two experts in international human resources management, one CEO who regularly sends expatriates abroad, and nine expatriates, this study obtained the following results:

First, the interviews revealed that IQ does indeed have a basic role in determining expatriate performance. However, since IQ has been used as a screening element during the recruitment process, the majority of the informants indicated that is not a crucial consideration when determining which employees are suitable for expatriation. However, IQ remains crucial in determining the success of an overseas assignment, particularly with regard to accomplishing the related tasks. Moreover, most of informants agreed that cultural intelligence has a prominent role during expatriation. CQ is a good starting point from which to work effectively with people from different cultures, because it leads to having ideas about why people behave and think differently. In the case of EQ, some informants contended that working abroad is stressful, and dealing with these pressures requires someone who is highly intelligent emotionally. In a summary, the informants agreed that each type of intelligence could contribute to the success of expatriation.

These findings concur with the argument of Lubinski (2004), who suggested that coping with life requires the continuous development of new skills, so it is necessary to have cognitive intelligence in order to master new content and new relationships. Using their cognitive ability, expatriates can learn more easily and evaluate their situation in order to better adjust to a new environment. Moreover, the findings also validate the proposition of

Earley and Ang (2003), in that the degree of adjustment and performance could be higher when expatriates have the ability to acquire or adapt behaviors appropriate for a new culture. Finally, the study confirms the findings of Cote and Miners (2006), in that when people have the ability to grasp and reason correctly with emotional abstractions and can solve their emotional problems, they tend to have higher performance. In the context of expatriation, expatriates who have high EQ can also more easily adjust themselves emotionally to new colleagues and as a result can boost their performance (Lii and Wong, 2008).

The findings imply that managers should provide considerable training for potential expatriates before they are sent abroad, with training that is specifically designed to improve these specific intelligences of particular importance. For example, Bissig and Lustig (2007) and Krause et al. (2006) demonstrated that cognitive training programs can have significant positive effects on both memory and the level of cognitive ability. Slaski and Cartwright (2003) proposed that EQ training could increase EQ levels in domestic settings, and such training could also apply to expatriates. In addition, as discussed by Earley and Mosakowski (2004), CQ can be trained. By having some information about as well as behavioral examples of certain cultures, expatriates can be expected to be more culturally intelligent. This study offers the suggestion that HR managers may want to design special training programs that combine all three dimensions simultaneously, which will enhance the comprehensive perspective of expatriates with regard to the cultural differences they might face in a host country, and help them deal with stress more successfully.

Second, the results of this study reveal that informants have different perspectives regarding the relative importance of intelligence on the success of expatriation. First, informants argued that the roles of multiple intelligences are contingent upon the length of the foreign assignments. The accumulation of knowledge related to a specific country and to the general environment facilitates expatriate adjustment to new environments and generates better performance than is the case with some-one who is newly appointed. Therefore, EQ and CQ are crucial in the initial stage and then their importance gradually decreases, while IQ remains constant as a central contributing factor. Second, the informants asserted that the use of multiple intelligences depends upon the type of job assigned. Specifically, functional interaction may explain the relative importance of the role of each type of intelligence on the success of expatriation. When the expatriates are assigned to a job that requires a high level of interaction with local coworkers or customers, EQ and CQ will have a more prominent role in determining the success of expatriation.

On the other hand, when the level of interaction required is low, IQ will play the dominant role. These findings imply that managers need to provide training related to EQ and CQ for expatriates that are newly

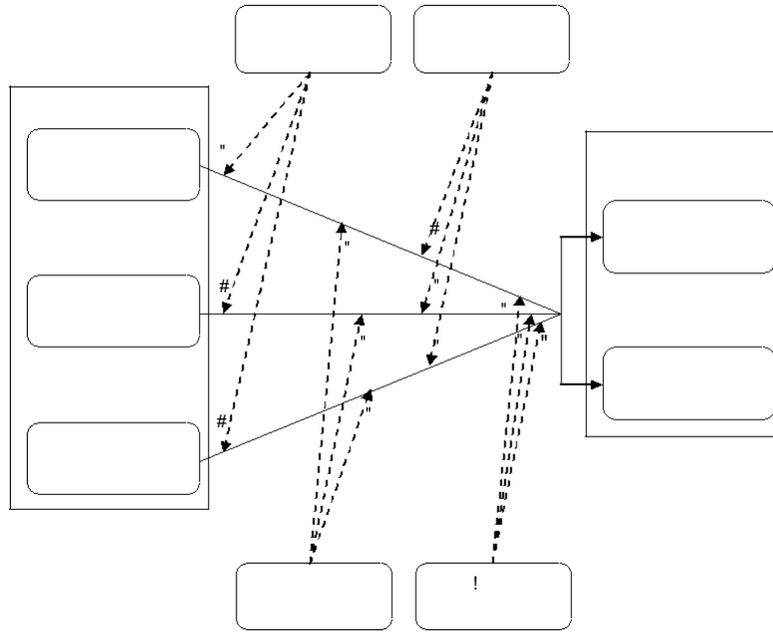


Figure 1. The proposed research model.

appointed to a specific country, and that such training is even more necessary when the nature of the job requires a high level of interaction with local people (coworkers, customers, or government officials).

Fourth, this study reveals that expatriate commitment and social support serve as moderating variables on the effects of multiple intelligences on adjustment and performance. Specifically, informants noted that no matter how intelligent the expatriates are, if they have less commitment to their work, they will not reach the optimum level of adjustment or performance during their expatriation, because, as one informant stated, their heart does not belong to the company. However, when the expatriates are fully committed to a company, the positive effects of their multiple intelligences on adjustment and performance will be boosted. Moreover, most informants agreed that receiving social support, either from their family, the organization, or managers, can leverage the effects of their intelligences on their adjustment and performance. However, when the expected social support is not available, the positive effects of their intelligences on adjustment and performance tend to be weakened.

The findings of this work are consistent with the propositions that were developed in this study. Even though there are no empirical studies that have reported the proposed relationship, this study confirms the ideas of Kraimer and Wayne (2004) that although the influences of expatriate characteristics on expatriate adjustment are apparent, social support can enhance the magnitude of these. Without support from supervisors and organizations, expatriate adjustment may be diminished. A similar logic also can be applied to the idea that the effects of intelligence on expatriate adjustment and performance

will be magnified by social support. Regardless of the level of cognitive, emotional, and cultural intelligence, the level of adjustment will be enhanced whenever expatriates receive full support from their organizations, leaders, and spouses. Moreover, when the expatriates receive sufficient social support, the effects of intelligence on performance will be amplified. In addition, when the expatriates have a high level of commitment to the organization, they tend to have a feeling of obligation to continue employment, because they already engaged to a certain degree in some of the costs related to an intention to return home (Fields, 2002; Meyer and Allen, 1991, 1997). In other words, such expatriates will make more efforts to become adjusted to their new environment, regardless of their level of intelligence. Thus, the level of commitment will moderate the effects of all three intelligences on expatriate adjustment. These findings imply that providing enough social support and increasing expatriates' commitment to their organizations could potentially magnify the effects of their intelligence on the success of expatriation.

Although, this research is not exhaustive in nature, it does examine a subset of possible variables and represents an incremental step toward a better understanding of the complex phenomenon of the roles of multiple intelligences on the success of expatriation. Moreover, this study reveals that insufficient training and certain personality traits have detrimental roles on the development of expatriate intelligences. Finally, this study confirms that commitment and social support may moderate the positive effects of multiple intelligences on adjustment and performance. Although, the results of this study are compelling, several limitations deserve comment, as they

suggest directions for further research. The use of in-depth interviews may need further validation through empirical testing by distributing survey questionnaires to expatriates. Moreover, even though this study tried to have broad coverage by inviting experts, employers, and expatriates, the use of subjects with even more diverse backgrounds might provide more compelling results. Furthermore, since this study adopts a retrospective and cross-sectional research design by examining the three groups on particular issues at one point in time, directional relationships may be not clear. It is thus recommended that future research could be longitudinal in nature to further confirm the findings of this study.

REFERENCES

- Albrecht TL, Adelman MB (1987). Communicating social support: A theoretical perspective, in Albrecht, T.L. and Adelman, M.B., Editors, 1987. *Communicating Social Support*, Sage, Newbury, CA, pp. 18–39.
- Ang S, Van Dyne L, Koh C, Ng KY (2004). The measurement of cultural intelligence. Paper presented at the Symposium of Cultural Intelligence, Acad. Management Meetings, New Orleans.
- Bandura A (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Bhaskar-Shrinivas P, Harrison DA, Shaffer MA, Luk DM (2005). Input-based and time-based models of international adjustment: Meta-analytic evidence and theoretical extensions. *Acad. Manage. J.* 48:257-281.
- Bissig D, Lustig C (2007). Who benefits from memory training? *Psych. Sci.* 18, 720-726.
- Brody N (2004). What cognitive intelligence is and what emotional intelligence is not. *Psych. Inq.* 15, 234–238.
- Caligiuri PM (2000). The big five personality characteristics as predictors of expatriate's desire to terminate the assignment and supervisor-rated performance. *Pers. Psych.* 53, 67-88.
- Caligiuri PM, Philips J, Lazarova M, Tarique I, Burgi P (2001). The theory of met expectations applied to expatriate adjustment: The role of cross-cultural training. *Int. J. Hum. Res. Manage.* 12, 357-372.
- Copeland AP, Norell SK (2002). Spousal adjustment on international assignments: The role of social support. *Int. J. Intercult. Rel.* 26, 255–72.
- Côté S, Miners CTH (2006). Emotional intelligence, cognitive intelligence, and job performance. *Adm. Sci. Quart.* 51, 1–28
- Davies M, Stankov L, Roberts RD (1998). Emotional intelligence: In search of an elusive construct. *J. Pers. Soc. Psych.* 75, 989–1015.
- Earley PC (2003). Redefining interactions across cultures and organizations: Moving forward with cultural intelligence. *Res. in Org. Beh.* 24, 271-299.
- Earley PC, Ang S (2003). *Cultural intelligence: Individual interactions across cultures*. Stanford, CA: Stanford University Press.
- Earley PC, Mosakowski E (2004). Toward culture intelligence: Turning cultural differences into a workplace advantage. *Acad. Manag. Exec.* 18, 151-161.
- Earley PC, Peterson RS (2004). The elusive cultural chameleon: Cultural intelligence as a new approach to intercultural training for the global manager. *Acad. Manage. Learn. Educ.* 3, 100-115.
- ECA International (2007). *Return on investment survey*. London: ECA.
- Fenner Jr. CR, Selmer J (2008). Public sector expatriate managers: Psychological adjustment, personal characteristics and job factors. *Int. J. Hum. Res. Manag.* 19, 1237–1252.
- Fields D (2002). *Taking the measure of work: A guide to validated scales for organizational research and diagnosis*. Sage Publications, Thousand Oaks, CA.
- Florkowski GW, Fogel DS (1999). Expatriate adjustment and commitment: The role of host-unit treatment. *Int. J. Hum. Res. Manag.* 783–807.
- Glaser BG (1992). *Basics of grounded theory: Emergence v forcing*. Mill Valley, California, Sociology Press.
- Glaser B, Strauss A (1967). *The discovery of grounded theory: Strategies in qualitative research*. London: Wiedenfeld and Nicholson.
- Goleman D (1997). *Emotional intelligence: Why it can matter more than IQ*. New York: Bantam.
- Goodman PS, Lawrence BS, Ancona DG, Tushman ML (2001). Introduction. *Acad. Manage. Rev.* 26, 507–511.
- Harvey MG (1995). The impact of dual-career families on international relocations. *Hum. Res. Manage. Rev.* 5(3), 223–44.
- Harvey M (1998). Dual-career couples during international relocation: The trailing spouse. *Int. J. Hum. Res. Manage.* 9, 309-320.
- Hofstede G, Hofstede GJ (2005). *Cultures and organizations: Software of the mind*. McGraw Hill: New York.
- Holopainen J, Björkman I (2005). The personal characteristics of the successful expatriate: A critical review of the literature and an empirical investigation. *Pers. Rev.* 34, 37 - 50.
- Jensen AR (1998). *The g factor: The science of mental ability*. Westport, CT: Praeger.
- Kraimer ML, Wayne SJ. (2004). An examination of POS as a multidimensional construct in the context of an expatriate assignment. *J. Manage.* 30, 209–237.
- Kraimer ML, Wayne SJ, Jaworski RA (2001). Sources of support and expatriate performance: The mediating role of expatriate adjustment. *Pers. Psych.* 54, 71-99.
- Krause DE, Kersting M, Heggstad ED, Thornton GC (2006). Incremental validity of assessment center ratings over cognitive ability tests: A study at the executive management level. *Int. J. Sel. Ass.* 14, 360-371
- Lee LY, Sukoco BM (2010). The effects of cultural intelligence on expatriate performance: The moderating effects of international experience. *Int. J. Hum. Res. Manage.* 21(7), 963-981.
- Lii SY, Wong SY (2008). The antecedents of overseas adjustment and commitment of expatriates. *Int. J. Hum. Res. Manage.* 19, 296-313.
- Lubinski D. (2004). Introduction to the special section on cognitive abilities: 100 Years after Spearman's (1904) "General intelligence, objectively determined and measured. *J. Pers. Soc. Psych.* 86, 96–111.
- Mayer JD, Salovey P, Caruso DR (2004). Emotional intelligence: Theory, findings, and implications. *Psych. Inq.* 15: 197–216.
- Mervosh EM, McClenahan JS (1997). The care and feeding of expats. *Industry Week*, 246, 68-72.
- Meyer JP, Allen NJ (1991). A three-component conceptualization of organizational commitment. *Hum. Res. Manag. Rev.* 1, 61–89.
- Meyer JP, Allen NJ (1997). *Commitment in the workplace*. Sage Publications, Thousand Oaks, CA.
- Mol ST, Born MP, Willemsen ME, Van der Molen H (2005). Predicting expatriate job performance for selection purposes: A quantitative review. *J. of Cross-Cult. Psych.* 36, 590-620.
- Neisser U, Boodoo G, Bouchard TJJr, Boykin AW, Brody N, Ceci SJ, Halpern DF, Loehlin JC, Perloff R, Sternberg RJ, Urbina S (1996). Intelligence: Knowns and unknowns. *Am. Psych.* 51, 77–101.
- Ng KY, Earley PC (2006). Culture and intelligence: Old constructs, new frontiers. *Group Org. Manage.* 31, 4-19.
- Porter LW, Steers RM, Mowday RT, Boulian PV (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *J. Appl. Psych.* 59, 603-609.
- Puck JF, Kittler MG, Wright C (2008). Does it really work? Re-assessing the impact of pre-departure cross-cultural training on expatriate adjustment. *Int. J. Hum. Res. Manage.* 19, 2182 – 2197.
- Schaie KW (2001). Emotional intelligence: Psychometric status and developmental characteristics – Comment on Roberts, Zeidner, and Matthews (2001). *Emotion*, 1, 243–248.
- Schmidt FL, Hunter JE (1998). The validity and utility of selection methods in personnel psychology: Practical and theoretical implications of 85 years of research findings. *Psych. Bull.* 124, 262–274.
- Schmidt FL, Hunter JE (2000). Select on intelligence, in E. A. Locke (ed.), *The Blackwell handbook of organizational principles*. (p. 3–14). Oxford: Blackwell.
- Shaffer MA, Harrison DA (1998). Expatriates' psychological withdrawal from international assignments: Work, non-work, and family influences. *Pers. Psych.* 51, 87-118.

- Shaffer MA, Harrison DA, Gilley KM (1999). Dimensions, determinants, and differences in the expatriate adjustment process. *J. Int. Bus. Stud.* 30, 557-581.
- Shaffer MA, Harrison DA, Gilley KM, Luk DM (2001). Struggling for balance amid turbulence on international assignments: Work-family conflict, support and commitment', *J. Manage.* 27, 99-121.
- Slaski M, Cartwright S (2003). Emotional intelligence training and its implications for stress, health and performance. *Stress Health*, 19, 233-239.
- Snow RE (1991). The concept of aptitude, in R. E. Snow and D. E. Wiley (Eds.), *Improving inquiry in the social sciences*, (pp. 249-284). Hillsdale, NJ: Erlbaum.
- Snow RE (1994). A person-situation interaction theory of intelligence in outline. in A. Demetriou and A. Efklides (Eds.), *Intelligence, mind, and reasoning: Structure and development*, (pp. 11-28). Amsterdam: Elsevier.
- Snow RE (1996). Aptitude development and education. *Psych. Pub. Pol. Law.* 3/4, 536-560.
- Stern PN (1994). Eroding grounded theory, in J. Morse (Ed.), *Critical issues in qualitative research methods*, Newbury Park, California, Sage.
- Suddaby R (2006). What grounded theory is not. *Acad. Manage. J.* 49, 633-642.
- Szilagy AD, Holland WE (1980). Changes in social density: Relationships with functional interaction and perceptions of job characteristics, role stress, and work satisfaction. *J. Appl. Psych.* 65, 28-33.
- Takeuchi R, Tesluk PE, Yun S, Lepak DP (2005). An integrative view of international experience. *Acad. Man. J.* 48: 85-100.
- Takeuchi R, Wang M, Marinova SV, Yao X (2009). Role of domain-specific facets of perceived organizational support during expatriation and implications for performance. *Org. Sci.* 20, 621-634.
- Templer KJ, Tay C, Chandrasekar NA (2006). Motivational cultural intelligence, realistic job preview, realistic living conditions preview, and cross-cultural adjustment. *Group Org. Manage.* 31, 154-173.
- Wong CS, Law KS, Wong PM (2004). Development and validation of a forced choice emotional intelligence measure for Chinese respondents in Hong Kong. *Asia Pac. J. Manage.* 21, 535-559.
- Yao X, Wang L (2006). The predictability of normative organizational commitment for turnover in Chinese companies: A cultural perspective. *Int. J. Hum. Res. Manage.* 17, 1058-1075.