Number 1 August 2007

IRI Working Papers

Japanese Expatriates Adaptation: A Study of Fits between the Skills and the Demands

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Abstract

- This study investigates adaptation of Japanese expatriates (N=215) in relation to current overseas assignment tenure. For comprehensive understanding of their adaptation, Japanese home managers (N=87) and American counterpart managers (N=125) were also used in comparisons.
- The uniqueness of this study is to examine Japanese expatriates' adaptability through analysis to what extent the levels of 12 learning skills are matching with those skills demands.

Key results

Japanese expatriates adaptability increased in accordance with the length of their current overseas assignments in the US, along with the enhancement of their job satisfaction.

Introduction

The rapid expansion of globalization provides multinational corporations (MNCs) with new business opportunities (Black/Morrison/Gregersen, 1999). Asian corporations have been increasingly doing business across borders during the past decades. Of them, Japanese MNCs continues to have a sizable influence upon world economy. Global Fortune 500 in 2006 (Lustgarten/Tkaczyk, 2006) illustrates that 70 Japanese MNCs are listed as the 2nd rank of country after the US, followed by Britain and France. Similarly, 5 Japanese MNCs show up as also the 2nd rank after the US about '2007 All-Stars' for the 50 most admired companies overall (Levenson, 2007).

Regardless of their strong impact on worldwide economy and business, much research of Japanese MNCs abroad has not been done sufficiently in the field of management. Bird and Beechler (1999) argued that a handful of articles on the management of Japanese MNCs operating abroad were presented in leading journals of this area from 1984 through 1994. More recently, Gong (2006) discussed with the research findings from Tung (1982), and Delios and Bjorkman (2000) that Japanese MNCs' subsidiaries have been less examined in business literature in comparison with American and European MNCs. In addition, Chung, Gibbons, and Schoch (2005) found that the nationality of MNCs has a great effect upon information management and management practice. That is, it is significance to study management of a specific country's MNC, rather than in a universalistic approach using wide range of countries, in that overseas management practices and behavior of MNCs may become heterogeneous. Under these circumstances, this study focuses on Japanese expatriate behavior as a micro aspect of Japanese MNCs.

The role of expatriates comes to be more crucial for the success of MNCs (Aycan, 1997). Particularly, the effectiveness of overseas operation of Japanese MNCs may

considerably rest on expatriation strategies. Chung, Gibboons, and Schoch (2005) illustrated that Japanese MNCs greatly execute expatriate transfer to control their overseas subsidiaries. Yoshihara (1996) argued that top management positions at subsidiaries of Japanese MNCs are mostly dominated by Japanese managers: 78% of CEOs is the Japanese national, while 22% is occupied with the local employees. These findings indicate that Japanese expatriates are thought to continually become a central function to manage foreign operations of Japanese MNCs. In consideration of these situations, how Japanese expatriates effectively adapt to foreign subsidiaries is a key and inevitable management issue to Japanese MNCs. This study aims to investigate into Japanese expatriates adaptation to US subsidiaries, with an emphasis on their adaptability according to their current assignment tenure.

Japanese Expatriate Adaptation

Expatriate management literature concentrates on expatriates' adjustment and adaptation in light of individual and psychological well-being (Wong, 2001). Black and Gregersen (1991; Black, 1988, 1990a, 1990b) proposed three distinct components as consequences of expatriate overseas adjustments: general, work, and interactional adjustments. Several studies have supported their model and constructs of expatriate adjustment (Shaffer/Harrison/Gilley, 1999; Takeuchi/Yun/Russell, 2002). Regarding Japanese expatriate adaptation, most studies in that field also have a central focus on important causes of overseas adjustments and adaptation. For example, Black (1990a) showed that five personal dimensions such as: cultural flexibility, social orientation, communication, and conflict resolution are significant connection to psychological adjustment of Japanese expatriates to the US. Black (1990b) also found that motivation, pre-departure knowledge, and work time with westerners are positively related to work adjustment of Japanese expatriates working in the US. In their study in UK, Nicholson and Imaizumi (1993) presented that age, job

performance, and perceived company's purpose are a positive correlation to well-being at work, while pressure on arrival is negative associated with it. More recently, Takeuchi, Yun, and Russell (2002) reported that host language proficiency is positively related to work adjustment of Japanese expatriates in the US, whereas cultural novelty is negatively connected to their adjustment. It is acknowledged that those previous studies provided with rich information about crucial causes and antecedents of adjustment of Japanese expatriates. Like other expatriate adaptation studies, however, very few researches focus on Japanese expatriates adaptability by which to deal with their surrounding environmental demands. In addition, little study involve a question of how Japanese expatriates become adaptable in relation to the length of their expatriate assignments in Japanese MNCs abroad with exception of the study of Takeuchi, Tesluk, Yun, and Lepak (2005). But their study focus is not Japanese expatriate adaptability but their international experiences from integrative aspects.

Research Questions

The present study emphasizes Japanese expatriates' adaptability in an adaptation process. It pays much attention to behavioral development of Japanese expatriates: especially their skills to cope with contextual business presses, and to how such adaptive skills progressively change according to the length of their assignment tenure. For its purpose, this adaptability study stresses analysis of how the levels of learning skills of Japanese expatriates are matched with their skills demands in proportion to their assignment time spent in the US. Hence, this approach concerns more developing behavioral competencies and skill acquisitions by which to meet surrounding environmental demands, being categorized as sociocultural adaptation (Ward/Kennedy, 1999; Ward/Bochner/Furnham, 2001). By using this approach, along with analysis of psychological well-being against overseas assignments, the present study attempts to answer the following two research questions:

- Do Japanese expatriates become more adaptable to the US in accordance with the length of their current assignment tenure with matching the levels of learning skills with those of their skills demands?
- Do Japanese expatriates become more satisfied with their jobs in the US in accordance with the length of their current overseas assignment tenure?

Research Contexts

This study chose American subsidiaries of Japanese MNCs as a research context because of the following two reasons. First, the US is the most influential market of Japanese business and economy: the amount of Japanese foreign direct investment to the US in 2006 is $9,280 million at the ratio of 18% of the total FDI (Tanimura/Ago, 2007). The second reason is a big cultural distance (Babiker/Cox/Miller, 1980; Ward/Bochner/Furnham, 2001) between Japan and the US. Such a huge distance makes Japanese expatriates to have distressed experience and to struggle to adapt to the US. As a consequence, it requires them to learn and develop skills necessary for their effective adaptation. These two cultures are contrasted in several cultural dimensions. For instance, Japanese culture is representative of collectivism or interdependent-self culture, while American one is champion of individualism or independent-self culture (Markus/Kitayama, 1991; Triandis, 1995). As another, Japanese culture is oriented towards strong uncertainty avoidance, but American culture is directed to weak uncertainty avoidance (Hofstede, 1994). On account of the huge cultural distance between Japanese and American culture, Japanese expatriates have intense, disoriented experiences in the US during painful adjustment periods (Linowes, 1993; Hayashi, 1994). Consequently, US culture to Japanese expatriates seems to provide a rich foundation through which to comprehend the adaptability of Japanese expatriates that encounter the substantial cultural disparities.

Experiential Learning Theory and Learning Skills

Black and Mendenhall (1990, 1991) argued that most academic research in the field of cross-cultural management has not been theoretical. To be harmonized with their views, Deller (1997) pointed out that expatriate management study often faces theoretical and methodological issues when to examine expatriate selection processes. In this respect, it is important to use a social theory for expatriate management studies. To examine the aforementioned research questions, this study tries to apply a learning skill model (Boyatzis/Kolb, 1991, 1995) encompassed into experiential learning theory (Kolb, 1984).

Experiential learning theory theorized by Kolb (1984) has received much attention to scholars not only in the domain of management learning and education (Kayes, 2002) but also in the field of cross-cultural studies (Yamazaki, 2005). This theory reflects the wholeness of human learning activities through feeling, reflecting, thinking, and acting that relate to four learning modes (Kolb, 1984). The uniqueness of this theory stresses the main function of human experience as requisite in the process of learning that lies in the foundation of the four learning modes making the experiential learning cycle (Mainemelis/Boyatzis/Kolb, 2002). A combination of two learning modes leads to the four basic learning styles such as: diverging, assimilating, converging, and accommodating learning styles.

Learning styles entails the four learning modes and relates to generic adaptive abilities to the environment, whereas learning skills conceptualized in Kolb's learning model involve more situational, specific competencies necessary for effective performance on a variety of jobs (Kolb, 1984; Boyatzis/Kolb, 1991, 1995). Learning skills are acquired and developed by learning from experience and result in more variation with intentional individual development to properly fit to environmental domain (Boyatzis/Kolb, 1991, 1995). Several studies have mostly supported both the difference and the connection between

learning styles and learning skills (Boyatzis/Kolb, 1991, 1995; Kolb/Wolfe/Collaborators, 1981; Mainemelis/Boyatzis/Kolb, 2002).

Taxonomy of learning skills as specific adaptive competencies agrees with the descriptions of four learning modes (Boyatzis/Kolb, 1991, 1995). The feeling mode of learning relates to the development of an area of the interpersonal skills such as: leadership skills, relationship skills, and helping skills; the reflecting mode involves the development of an area of the information skills such as: sense-making skills, information gathering skills, and information analysis skills; the thinking mode concerns the development of an area of the analytical skills such as: theory building skills, quantitative analysis skills, and technology skills; and finally, the acting mode encompasses the development of an area of the action skills such as: goal setting skills, action skills, and initiative skills (Kolb, 1984; Boyatzis/Kolb, 1995; Rainey/Hekelman/Galazka/Kolb, 1993). Yamazaki and Kayes (2004) attempted to categorize expatriate and cross-cultural skills essential for successful job performance abroad through a lens of experiential learning theory (Kolb, 1984), and then identified the above four learning skills dimensions, as classification of expatriate skills necessary for the success of expatriate overseas assignments. Figure 1 illustrates the connection between the four learning modes and the learning skill classification that consists of the aforementioned 12 learning skills.

Insert Figure 1 about here

Adaptation, Learning Skills, and Job Satisfaction

Experiential learning describes ‘the central process of human adaptation to the social and physical environment’ and takes places in any human milieu and life stages (Kolb, 1984,

p.31). As a result of adaptation processes, individuals acquire learning skills that are demanded from normative social forces, task demands, or academic discipline pressure (Kolb, 1984). In this respect, adaptability increases when people adequately cope with the environmental press against which to develop learning skills. For example, the study of engineering and social work careers conducted by Kolb and Sims (1981) revealed that engineers and social workers demonstrate different patterns of competencies for their career success and resulted in the development of their adaptability to fit in their own social contexts. From this notion, a form of adaptability and its degree can be translated into a dimension of matches between the level of learning skill development and that of environmental demand in linkage with such a learning skill. When people match the level of the learning skill with that of learning skill demand, on one hand, such a situation is interpreted as that they are properly adaptable to the environmental circumstances (Kolb, 1984). On the other hand, when the level of learning skill is far away from that of learning skill demand, a mismatch occurs, indicating that people are maladapted to the situation. The examination of how well people match the levels of learning skills with those of their skills demands, therefore, is a useful way to investigate adaptability through analysis of the degree of matches between them.

Job satisfaction is an important indicator of expatriate adaptation to foreign operations. In management literature, adaptation refers to a process of individual's learning, acting, and maintaining the individual behaviors that meet environmental demands in a creative manner (Ashford/Taylor, 1990). In their notion, job satisfaction is produced as an outcome of adaptation processes in organizations (Ashford/Taylor, 1990). It is obvious that job satisfaction in cross-cultural work setting is conceptually analogous to work adjustment as one of three distinct products of expatriate adjustments (Black, 1990a, 1990b; Black/Gregersen, 1991). Indeed, Torbiorn (1982) used job satisfaction as an important

outcome in his study of Swedish expatriate adaptation.

Adaptability and job satisfaction examined in this study are theoretically congruent with adaptation variables in the field of cross-cultural psychology. Accumulative studies of cross-cultural adaptation point out two important components of adaptation outcomes: psychological adaptation and sociocultural adaptation (Ward/Kennedy, 1999; Ward/Bochner/Furnham, 2001). Psychological adaptation relates to psychological well-being or satisfaction on transitions in cross-cultural setting; thus, it is to include job satisfaction of those who are transferred to work for subsidiaries abroad. Sociocultural adaptation entails the abilities or competencies acquired for effective interplay with the host environment and can be explained within social skills (Ward/Kennedy, 1999). Hence, sociocultural adaptation also has a theoretical analogy with adaptability in cross-cultural work contexts where to require expatriates to develop learning skills in order to fit in environmental demands. It is reasonable to say that the investigation of those two variables: job satisfaction and adaptability in cross-cultural contexts will make it possible to investigate an aspect of psychological adaptation and that of sociocultural adaptation in cross-cultural psychology.

Hypotheses

Learning from experience is broadly conceived as adaptation to the world (Kolb, 1984). As discussed earlier, people need to develop learning skills to respond to the environmental domain effectively. But skill development is not an overtime product and requires having time and experience to learn for adaptation (Kolb, 1984). In light of expatriate situations, it seems to be logical that expatriates who have spent more time working for overseas subsidiaries will demonstrate greater adaptability to their job settings. In fact, the study about Japanese expatriates' international experience by Takeuchi et al. (2005) confirmed a significantly positive relationship between current assignment tenure and work and general

adjustments. Because the four learning skills areas: interpersonal skills areas, information skills areas, analytical skills areas, and action skills areas, are essential for the success of expatriate overseas assignments (Yamazaki/Kaeys, 2004), expatriates would become more adaptable to the US in proportion to their current assignment periods by developing 12 learning skills listed in the aforementioned skill areas to properly fit to those skills demands. In a context of Japanese expatriates working in the US, the following two hypotheses will be created:

Hypothesis 1:

> Japanese expatriates will become more adaptable to the US in accordance with the length of current assignment tenure by matching the levels of 12 learning skills with those of learning skills demands in linkage with them.

Hypothesis2:

> Japanese expatriates will become more satisfied with their jobs in the US in accordance with the length of current assignment tenure.

Research Methods

Sampling procedures

In order to identify and select research samples, this study utilized *The Directory of Japanese-Affiliated Companies in the USA and Canada* (2002, 1999) published by JETRO. Data collection was concentrated on the Midwestern US to obtain a number of samples that were a comparatively homogeneous line of business. Data collection was conducted during 12 consecutive weeks and had three phases: 1) a first contact and visit, 2) a confirmation by telephone, and 3) a data collection visit.

Japanese MNCs that decided to participate in this research received the sufficient number of survey packets for their Japanese expatriates. The survey packet was composed of

a cover letter, a consent document for participation in this study, a set of instruments, and a return envelope. In the second phase, the author phoned Japanese managers who were responsible for this research three to five days before the due date for the data collection. The aim of this telephone was to make sure that the collection date was still good for them. If inconvenient, the collection date was adjusted. Finally, the author visited them again on the due date and received the sealed envelopes including answered questionnaires and consent documents.

Samples

The sample was kept within Japanese expatriates who had been transferred from Japan to the US for overseas assignments and who had never worked abroad as expatriates before. Japanese businesspersons with short business trips to the US; Japanese workers who were hired as local staff in the US; and Japanese expatriates who had experienced foreign assignments in the past were excluded. The reason of this exclusion, especially the third one, is that previous international work experience tends to affect expatriate adaptation (Takeuchi et al., 2005). It seems that expatriates with previous overseas work experience have already learned about how to adapt to foreign countries. A total of 410 Japanese expatriates from 44 Japanese MNCs received this survey packet. Of the 410 expatriates, 267 filled out questionnaires with consent documents correctly. The present study then eliminated 52 completed survey packets due to their previous international work experience. Consequently, the final number of usable samples was 215.

To examine Japanese expatriates' adaptability in relation to current assignment tenure, this study separated the sample of 215 Japanese expatriates into three groups based on the length of their assignment time spent in the US: to wit, the first cohort with less than two years; the second cohort with two to less than four years; the third cohort with four years or

over. This grouping by two years duration was used by Surdam and Collin's (1984) study of international students' cultural adaptation in the US and the number of three groups in use remained within the range of three to five groups applied in previous empirical studies of experiential learning theory.

Instruments

Learning skills. The Learning Skills Profile was designed to investigate the level of skill development in the aforementioned12 learning skills using 72 items, each of which describes to a specific skill or activity (Boyatzis/Kolb, 1991, 1995). This instrument originates in a card-sort method by which participants are asked to classify 72-item cards into seven categories that represent to their skill level in a range from 1 to 7: 1 = no skill or experience in this area; 2 = now learning this skill or activity; 3 = can do this with some help or supervision; 4 = a competent performance in this area; 5 = an above average performer in this area; 6 = an outstanding performer in this area; and finally, 7 = a leader or creator in this area. For example, when you get a card showing 'building team sprit', then you will categorize its skill into No. 6, if you think that your level of this skill corresponds to an outstanding performer. Each of 12 learning skills is composed of 6-item cards; thus, the maximum developmental level of each learning skill is 42, while the minimum one is 6. In order to reduce complexity of a process of answering to this instrument and to administrate a sampling procedure of data collection easily, this study applied to a conventional one instead of this card-sort format. This revised method employs paper sheets showing 72 items with the blank box next to each skill or activity description. In replace of sorting those cards, participants are asked to write the appropriate number from 1 to 7 in such a blank box as the method of a 7-point Likert scale.

The seventy-two items form 12 six-item scales that accord with the 12 learning skills such as: leadership skills, relationship skills, helping skills, sense-making skills, information

gathering skills, information analysis skills, theory building skills, quantitative analysis skills, technology skills, goal setting skills, action skills, and initiative skills. Boyatzis and Kolb (1991) reported internal reliability coefficients of the 12 six-item scales using Cronbach's alpha in a sample of 236 adults: 205 MBA students and 31 middle and first level managers, ranging from 0.62 to 0.92, with an average of 0.78. Almost consistent with their report of the internal reliability, Cronbach's alpha in the sample of this study of Japanese expatriate (N = 215) varied from 0.79 to 0.89 with a fairly increase in its average of 0.85. This increase of Cronbach's alpha may be partially ascribed to the relative homogeneity of sample (Smith, 1990). The detailed Cronbach's alpha in this research on Japanese expatriates showed leadership skills = 0.88; relationship skills = 0.87; helping skills = 0.81; sense-making skills = 0.85; information gathering skills = 0.79; information analysis skills = 0.88; theory building skills = 0.88; quantitative analysis skills = 0.84; technology skills = 0.81; goal setting skills = 0.89; action skills = 0.81; and initiative skills = 0.89. Those statistics of learning skills exceeded the minimum standard of 0.70 suggested by Nunnually (1978).

Learning skills demands. In order to examine the levels of learning skills demands, this study also used a format of the Learning Skills Profile but the one to measure those demands levels, consisting of 72 items with adjusting a statement of each number from 1 to 7: 1 = no relevant to my job; 2 = a rarely required skill or activity; 3 = a sometimes required skill or activity; 4 = a regularly used skill or activity; 5 = an important skill or activity; 6 = an essential skill or activity; and finally, 7 = a top priority activity. Participants are asked to write the most appropriate number ranging from 1 to 7 into the blank box next to each skill description. Like in the dimension of developmental level of learning skill, the maximum demand of each learning skill represents 42, whereas the minimum one shows 6. In this research sample (N = 215), Cronbach's alpha remained in a range from 0.74 to 0.90 with its

average of 0.82. Cronbach's alpha of each learning skill is as follows: leadership skills = 0.81; relationship skills = 0.82; helping skills = 0.80; sense-making skills = 0.85; information gathering skills = 0.74; information analysis skills = 0.82; theory building skills = 0.83; quantitative analysis skills = 0.84; technology skills = 0.90; goal setting skills = 0.83; action skills = 0.80; and initiative skills = 0.85.

Adaptability. A method to measure the degree of adaptability: that is, how well the level of learning skill matches with that of learning skill demand is to subtract scores of learning skills from those of learning skills demands concomitant with them. The greater values of the subtraction are interpreted as less adaptability because of the bigger difference between those two levels. In contrast, the fewer values of the subtraction towards a zero are translated as more adaptability on account of the smaller difference between them. Positive values of the subtraction represent under-adaptability, while negative values describe over-adaptability.

The Learning Skills Profile and its earlier version, the Executive Skills Profile (Boyatzis/Kolb, 1995), have been used in several recent studies such as: educational program assessment (Boyatzis/Stubbs/Taylor, 2002; Ballou/Bowers/Boyatzis/Kolb, 1999); testing the psychometric instruments of experiential learning theory (Mainemelis el at, 2002); development needs evaluation (Rainey et al, 1993); and physician career development (Smith, 1990). Especially, the study of Rainey et al (1993) drew a conclusion that the Executive Skills Profile in use of statements of skill demands concomitant to those skills can characterizes the skills and the skills demands of a sample of family medicine faculty. The results of their study showed that perceived skills demands were higher than perceived skills, particularly in the areas of interpersonal and action skills.

Job satisfaction. An adjusted short form of the job satisfaction scale made by

Brayfield and Rothe (1951) was utilized to measure the job satisfaction of Japanese expatriates for this study. Their job satisfaction scale is introduced and well discussed in the book of “Handbook of Research Design and Social Measurement” written by Miller (1991). Their instrument was a 5-point Likert type scale of 18 items designed to evaluate overall job satisfaction rather than specific aspects of job satisfaction, to be applicable to a wide variety of jobs, and to be sensitive to variations in attitude. This scale has been applied in several studies of job satisfaction (Brayfield/Wells/Strate, 1957; Ewen, 1967; Price, 1972).

Because the present study needed to assess job satisfaction of Japanese expatriates in the U.S., their original job satisfaction instrument has to be adjusted in order to fit the research context while keeping its desirable attributes. This adjustment was done by the replacement of ‘job’ or ‘work’ in the original to ‘overseas assignment’ for Japanese expatriates. For example, the original says that ‘I feel fairly well satisfied with my *job*’, while its revision shows that ‘I feel fairly well satisfied with my *overseas assignment*.’ In addition, 18 items of the job satisfaction scale in original had to be reduced to form a shorter assessment tool in consideration of the whole workload of answering questionnaires to be done by the Japanese expatriates in the sample. Consequently, an adjusted short version of the job satisfaction scale consisted of six items. In the sample of Japanese expatriates (N=215), Cronbach’s alpha of this 6-item job satisfaction scale showed 0.86, indicating that this instrument also met with the minimum standard of 0.70 (Nunnally, 1978).

Demographic characteristics. Research participants self-reported demographic characteristics such as: current assignment tenure; overseas study experience; marital and family status; organizational job functions; gender; and age.

Translation procedures. In order to avoid misunderstanding information written in the survey packet and to reduce workloads of research participants, all questionnaires together

with a cover letter and a consent document were translated into Japanese according to translation techniques for cross-cultural study recommended by Brislin, Lonner, and Thorndike (1973). The techniques conducted in this study involved comparing the meaning between the original and translated version as well the meaning between the original and back-translated version.

Results

Table 1 shows the demographic characteristics and descriptive statistics of Japanese expatriates used in this study, including industries and organizational demographics. The table illustrates that 98% of participants worked in manufacturing, and 77% were employed in the corporate size between 100 and 999 employees. An average of their current overseas assignment tenure was 42.5 months (approximate 3.5 years). Almost all participants (96%) had no experience of studying at schools abroad. All subjects were composed of male Japanese expatriate, most of whose ages were ranged from 30 to 50 years old.

Insert Table 1 about here

Tables 2-(a) summarizes descriptive statistics and correlations between current assignment tenure and adaptability with job satisfaction, while Table 2-(b) and 2-(c) describe relationships between the assignment tenure and learning skills and learning skills demands respectively. As shown in Table 2-(a), the current assignment tenure was significantly, negatively related to all skills ($p<0.01$) excluding helping skills ($p>0.5$), and it was significantly, positively associated with job satisfaction ($p<0.01$). The negative correlation of adaptability indicates that the values of subtraction of the levels of learning skills from those of learning skills demands decreased in proportion to the length of assignment time of

Japanese expatriate spent in the US. That is, it can be interpreted that Japanese expatriates increased their adaptability by fitting the levels of 11 learning skills to those of 11 learning skills demands except helping skills. Additionally, Table 2-(b) shows that current assignment tenure was significantly, positively correlated with all learning skills without information analysis skills ($p<0.1$) and technology skills ($p>0.1$). Results of the learning skills suggest that most learning skills were developed over time excepting these two skills. Interestingly, Table 2-(c) illustrates that the degrees of the learning skills demands were not significantly associated with the length of assignment tenure excepting helping skills. Such results suggest that the levels of most skills demands perceived by Japanese expatriates were consistent regardless of their assignment tenure.

Insert Tables 2-(a), 2-(b), and 2-(c) about here

Table 3 shows descriptive statistics of adaptability of three cohorts: the first cohort with less than 2 years (N=80), the second cohort with 2 to less than 4 years (N=66), and the third cohort with 4 years or over (N=69), and also reports ANOVAs including results of Bonferroni test. The table reveals significant differences in adaptability between three cohorts regarding nine learning skills such as: leadership ($p<0.01$), relationships ($p<0.01$), sense-making ($p<0.05$), theory building ($p<0.05$), quantitative analysis ($p<0.05$), technology ($p<0.05$), goal setting ($p<0.01$), action ($p<0.05$), and initiative ($p<0.05$). Adaptability of two learning skills: information gathering and information analysis made marginal difference among the three cohorts ($p<0.1$). Adaptability of helping skills, however, did not differentiate between those three cohorts. Subsequently, results by Bonferroni test illustrate that the first cohort was discriminated from the third cohort concerning the adaptability relevant to those

above-mentioned nine learning skills. Adaptability of information gathering skills and information analysis skills made, again, a marginal difference between the first and the third cohorts ($p<0.1$). Those results suggest that the third cohort is the most adaptable in the US, whereas the first cohort is the least adaptable with regards to the aforementioned nine learning skills. To be harmonized with the results from ANOVA with Bonferroni test, Figure 2 visually depicts differences in adaptability among three cohorts: the top line represents the first cohort adaptability, the middle line describes the second cohort adaptability, and bottom line shows the third cohort adaptability. The higher points towards six in this graph show the less adaptability, while the lower points to zero represent the greater adaptability. A score of below zero, the one like the skills of information analysis is interpreted as that the third cohort overdeveloped such skills against the skills demands. Consequently, the examination of this figure shows that third cohort is the most adaptable; the second cohort is next; and the first cohort is the least. Additionally, Figure 2 suggests that all of three cohorts are the most adaptable to a context where to require the skills of information analysis, while they are the least adaptable to a situation demanding action skills.

Hypothesis 1 predicts that Japanese expatriates will become more adaptable to the US according to their current assignment tenure by enhancing their adaptability to environment requiring 12 learning skills. In overall, results of the correlation analysis and ANOVA, and those of the examination of Figure 2 partly support Hypothesis 1.

Insert Table 3 and Figure 2 about here

Hypothesis 2 shows that Japanese expatriates will increase job satisfaction in accordance with the length of their assignment tenure spent in the US. As reported in Table 3,

results of ANOVA illustrate that there are significant distinctions in job satisfaction between three cohorts ($p<0.01$). Bonferroni test shows that the first cohorts and the second ones were significantly different from the third cohort. It is meant that the third cohort was more satisfied with their jobs in the US than the first and the second. Consistent with the results of correlation examination between current assignment tenure and job satisfaction ($p<0.01$), results of ANOVA with Bonferroni test support Hypothesis 2.

Two Exploratory Studies

This study further will explore the following two questions through which to deepen to understand the adaptability of Japanese expatriates in the US. The first exploratory question sought to determine how the levels of learning skills of the first cohort with the least experience in the US environment are close to those of Japanese managers working in Japan as their home country. The levels of learning skills cannot be dramatically changed within two years after Japanese expatriates are transferred from Japan to the US. Because of their inexperience of overseas assignment, Japanese expatriates with the first cohort are assumed to possess the similar developmental levels of learning skills to those of Japanese home managers. If the skills levels of the first cohort were significantly lower than those of Japanese home managers, this study might be flawed against the sample.

The second exploratory question is raised to understand to what extent Japanese expatriates: the entire group and each of three cohorts differ from American counterpart managers in terms of adaptability. Because American counterpart mangers compared with Japanese expatriates work in the majority of their cultural contexts in the US, the Americans are thought to more fit in their environment demanding learning skills. These two comparative studies will provide more comprehensive understanding of Japanese expatriate adaptability.

Procedures and sample of Japanese home managers

To explore the further examination, the author then asked a manufacturing plant of a world class Japanese company, located in a rural area of Japan, which produces electronic and communication appliances as consumer products. A plant manager agreed with this research extensive to investigation of all employees in that plant and appointed a HR manager as the administrator in charge of this study. The Learning Skills Profile by which to measure the levels of 12 learning skills was also used in this further study. Of the 330 employees that received survey packets, 282 returned completed questionnaires, for a response rate of 85%. Eighty seven participants were ranked at a management position from a senior to a junior level, and were analyzed for this further study. Table 4 describes demographic characteristics of the sample of only Japanese home managers. They were all male with an average age of 44.6 years old and had spent an average of 301.1 months (approximate 25 years) with variation of job functions in the company.

Insert Table 4 about here

Results of comparisons with Japanese home managers

Table 5 focus on the results of the independent t test between Japanese home managers (N=87) and Japanese expatriates with the first cohort (N=80) that holds the assignment tenure of less than 2 years. The results show that there were two learning skills that significantly differentiate between the two groups. One is that the level of information analysis skills of Japanese managers was lower than that of the first cohort ($p<0.05$), and the other is the higher level of technology skills of Japanese mangers ($p<0.05$). Results largely support that Japanese expatriates with less than 2-year tenure have similar developmental

levels of learning skills in comparison with Japanese home managers excluding these two skills. As a consequence, this further empirical study made a confirmation of the assumption that Japanese expatriates who have spent in the US for less than 2 years are likely to possess the similar developmental levels of most learning skills to those levels of Japanese home managers.

Insert Table 5 about here

Procedures and sample of American counterpart managers

The second exploratory study concerns a comparison with American counterpart managers working for subsidiaries of Japanese MNCs. For this second further investigation, the author returned to the Japanese MNCs that participated in the original study and asked 8 Japanese MNCs with the medium to large organizations that positively supported the previous research to participate a further study. Six Japanese MNCs agreed with the participation of this second exploratory study. The participating Japanese MNCs were administered the survey packets including the same questionnaires in English version. This study targeted US managers only. Of 165 American counterpart managers, 125 completely filled out all necessary questions and returned them to the author through who were internally in charge of this study in each 6 Japanese MNCs. A response rate was 76%. Table 6 shows demographic characteristics of the sample of only American counterpart managers. All participants in this sample came from manufacturing Japanese MNCs with 100 to 1000 employees. An average tenure of participants with their present Japanese MNCs was 65.7 months (approximate 5.5 years). The subjects were mostly male (74%). In comparison to the sample of Japanese expatriates as well as that of Japanese home managers, the sample of American counterpart

managers was more diverse in terms of gender.

Insert Table 6 about here

Results of comparison with American counterpart managers

Tables 7 and 8 emphasize a comparison between Japanese expatriates and American counterpart managers with regards to adaptability and job satisfaction. Table 7 compares entire Japanese expatriates (N=215) with American counterpart managers (N=125) using the independent t test, whereas Table 8 compares each of three cohorts of Japanese expatriates with American counterpart managers applying the ANOVA and Bonferroni tests.

As illustrated in Table 7 that concerns entire Japanese expatriates, there were significant distinctions about the adaptability of 5 learning skills such as: leadership ($p<0.01$), helping ($p<0.01$), theory building ($p<0.01$), quantitative analysis ($p<0.01$), and initiative ($p<0.01$); there were marginally differences in 2 learning skills of sense-making ($p<0.1$) and information gathering ($p<0.01$); however, there were no differences in the rest of 5 learning skills. Results of the t test indicate that American counterpart managers were more fitted to US subsidiaries of Japanese MNCs than entire Japanese expatriates in terms of the 5 learning skills with the significance, and show that the Americans were relatively more adaptable to working places where to require using sense-making skills and information gathering skills, than were Japanese expatriates. Table 7 also illustrates that job satisfaction made a significant difference between the Japanese and the Americans: that is, American counterpart managers were more satisfied with their jobs than entire Japanese expatiates.

The subsequent examination entails analyzing four groups: American counterpart managers plus three cohorts of Japanese expatriates. Table 8 reports a summary of results of

ANOV with Bonferroni test in part, showing that there were significant differences in adaptability of most learning skills excepting the skills of information analysis, and in job satisfaction. Results of Bonferroni test comparing the Americans and each of three cohorts illustrate that the first cohort was less adaptable than American counterpart managers regarding the working environment in which to demand 7 learning skills ($p<0.05$) such as: leadership, relationships, helping, sense-making, theory building, quantitative analysis, and initiative, and one learning skill with the marginal level ($p<0.1$) that corresponds to the skills of information analysis. The second cohort was relatively less adaptable compared with the Americans on account of adaptability of three learning skills ($p<0.05$): leadership, helping, and quantitative analysis. The third cohort held the almost same adaptability as American counterpart managers, the adaptability level of quantitative analysis was a marginal difference ($p<0.1$). In terms of the close examination of job satisfaction, results of Bonfferoni test show that the first and the second cohorts had significantly lower levels of job satisfaction than American counterpart managers ($p<0.05$), whereas the third cohort had no difference in job satisfaction level compared to the Americans. In overall, these results from the second exploratory study would create a proposition as follows: Japanese expatriates as a whole are comparatively less adaptable than American counterpart managers, but Japanese expatriates who have spent more than 4 years inclusive demonstrate very similar adaptability to the US subsidiaries requiring learning skills and have much the same level of job satisfaction compared to the Americans.

Insert Tables 7 and 8 about here

Discussions and Implications

This study largely confirmed a significant, positive relationship between overseas assignment tenure of Japanese expatriates and the degree of their adaptability with emphasis on analysis between the levels of learning skills and those of learning skills demands. It also substantiated a significant linkage between the assignment tenure and with job satisfaction. The present study would result in a conclusion that Japanese expatriates will become largely adaptable to the US according to their current overseas assignment tenure and that they will become more satisfied with their jobs in the US in proportion to that tenure.

Of 12 learning skills about adaptability, however, only the adaptability of helping skills had no significant or marginally significant association to Japanese expatriates' assignment tenure. One possible explanation, technically, would be a significant increase in helping skills demands in accordance with the length of assignment time spent in the US ($p<0.05$), while the other learning skills demands were indifferent to that tenure, as illustrated in Table 2-(c). Japanese expatriates who have less experience in the US: that is, the first cohort may not tend to be socially aware of what help is actually needed for others during less than 2 years when to undergo a culture shock. When Japanese expatriates have spent more time and experience in the US, they may increase social awareness that is a crucial factor of competent leaders' components (Goldman/Boyatzis/McKee, 2002). As a promising study, it is important to explore how the assignment tenure and experience of Japanese expatriates influence social awareness that includes perceiving help demands for others in cross-cultural work settings.

Japanese MNCs are considerably dependent upon expatriates to control their foreign subsidiaries (Chung/Gibboons/Schoch, 2005), suggesting that they need to manage and develop Japanese expatriates for the effectiveness of foreign operations. One effective way of expatriate management and development involves increasing essential skills for foreign

operation prior to actual overseas assignments. This study empirically made a confirmation of the assumption that the developmental levels of most learning skills of Japanese expatriates who had spent for less than 2 years in the US were similar to those of Japanese home managers. Although many Japanese MNCs understand the magnitude of developing management skills of expatriates to prepare them for the increased responsibilities for overseas assignments (Tung, 1987), expatriates development in Japanese MNCs may still have a great room to be necessarily improved through management and development trainings during their working for domestic jobs. As a practical implication, it is therefore suggested that Japanese MNCs should more concentrate on the development in 12 learning skills of future Japanese expatriates or young executives before their expatriate assignments for success.

There is no guideline or rule of the assignment posting periods and such periods may depend upon the overseas strategy of MNCs in each country (Mead, 1994). While there is a perspective that the longer assignment tenure makes the greater risk that expatriates become native identifying with local norms (Brooke/Remmers, 1970), the shorter assignment tenure may give expatriates a fewer chance to develop important capabilities for their effective performance and successful results. This study provides a useful insight about the length of Japanese expatriates' assignment tenure. The adaptability of the third cohort of Japanese expatriates: the group with the tenure of 4 years or over was relatively similar to that of American counterpart managers, including job satisfaction levels. That is, it can be said that those Japanese expatriates have become successfully adaptable to the US business context where their counterpart managers seem to perform adequately to respond to subsidiary needs. If Japanese MNCs wish to expect the greater performance of Japanese expatriate, they should strategically allow the expatriates to stay in the same subsidiary for at least 4 years when their

adaptability becomes very close to that of their counterpart managers. This view appears to be consistent and supportive to Japanese MNCs' expatriate strategy in terms of overseas assignment tenure: the average of which is 4.67 years (Tung, 1987).

Finally in this session, Stening and Hammer (1992) argue that the cultural background of expatriates may be more important to affect cross-cultural adaptation than country-specific environment. In this sense, it is crucial to examine each country's expatriates regarding adaptation processes comprehensively. The present study focused on Japanese expatriates to deepen to understand their adaptability from various aspects. This study, however, employed the sample composed of Japanese expatriates who mostly engaged in manufacturing industries in the US Mid-western area. The sample provided a benefit for the elimination of demographic variations as potential errors, while it became biased against the population. Other industry areas, locations, and countries must be examined for generalization against the population of Japanese expatriates.

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Table 1 *Demographic characteristics and descriptive statistics of Japanese expatriates*

	No. of participants	(%)
Type of Industry		
Manufacturing	211	98
Shipping	4	2
Location		
Rural	103	48
Suburb	112	52
Total Employees		
22 - 99	12	6
100 - 999	166	77
1000 - 1500	37	17
Current Assignment Tenure (months)	mean:	42.5
	s.d.:	40.7
Overseas Study Experience		
Experienced	9	4
No experienced	206	96
Accompany by Family		
Married with Family	158	74
Married without Family	38	18
Single	19	9

	No. of participants	(%)
Job Functions		
Managing entire firm	21	10
Division/Plant management	15	7
Production/System control	40	19
Engineering/Design/Research	76	35
Purchasing	9	4
Accounting/HR/General admi.	16	7
Sales/Marketing	38	18
Age		
20-29	11	5
30-40	107	50
41-50	67	31
51-	30	14
Gender		
Male	215	100
Female	0	0

Table 2-(a) *Correlations between current assignment tenure and 12 learning skills adaptability*

	N	Interpersonal skills area of adaptability						Information skills area of adaptability						Analytical skills area of adaptability						Action skills area of adaptability						Job Satisfaction	
		Leadership		Relationship		Helping		Sense making		Information gathering		Information analysis		Theory building		Quantitative analysis		Technology		Goal setting		Action		Initiative			
		mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.
		3.4	5.1	2.0	4.7	1.5	4.1	2.2	4.7	2.0	5.0	0.9	4.8	1.3	4.7	1.8	4.7	2.6	5.2	2.0	4.7	4.1	4.7	2.8	4.6	21.2	4.7
Current assignment tenure	215	-0.24**		-0.25**		-0.09		-0.18**		-0.21**		-0.18**		-0.18**		-0.18**		-0.18**		-0.19**		-0.18**		-0.20**		0.31**	

**p<0.0

Note: negative values indicate that the longer current assignment tenures, the more the matches between the levels of learning skills and those of demands.

Table 2-(b) *Correlations between current assignment tenu*re *and 12 learning skills*

	N	Interpersonal skills area						Information skills area						Analytical skills area						Action skills area					
		Leadership		Relationship		Helping		Sense making		Information gathering		Information analysis		Theory building		Quantitative analysis		Technology		Goal setting		Action		Initiative	
		mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.
		26.4	5.8	27.8	5.0	26.4	4.6	27.1	4.6	25.4	4.9	26.5	5.2	24.9	5.3	23.1	5.5	22.9	5.2	27.3	5.3	26.3	4.8	27.1	5.5
Current assignment tenure	215	0.30**		0.23**		0.24**		0.21**		0.17*		0.13+		0.17*		0.14*		0.06		0.28**		0.21**		0.29**	

** p<0.01; *p<0.05; +p<0.1

Table 2-(c) *Correlations between current assignment tenure and 12 learning skills demands*

	N	Interpersonal skills area of demands						Information skills area of demands						Analytical skills area of demands						Action skills area of demands					
		Leadership		Relationship		Helping		Sense making		Information gathering		Information analysis		Theory building		Quantitative analysis		Technology		Goal setting		Action		Initiative	
		mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.
		29.7	5.7	29.8	4.9	27.9	4.8	29.3	5.0	28.4	5.0	27.4	5.1	26.2	5.3	24.9	5.7	25.5	6.6	29.3	5.1	30.4	4.8	29.9	5.5
Current assignment tenure	215	0.09		-0.01		0.16*		0.02		0.02		-0.04		0.01		-0.01		-0.09		0.11		0.04		0.12	

*p<0.5

Table 3 *Means, standard deviations, and results of ANOVA with Bonferroni test of 12 learning skills adaptability by 3 cohorts*

	N	Interpersonal skills area of adaptability						Information skills area of adaptability						Analytical skills area						Action skills area						Job Satisfaction	
		Leadership		Relationship		Helping		Sense making		Information gathering		Information analysis		Theory building		Quantitative analysis		Technology		Goal setting		Action		Initiative			
		mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.
First cohort (less 2 years)	80	4.7	5.8	3.1	5.0	1.8	4.5	3.1	5.6	2.9	5.4	1.7	5.3	2.3	5.5	3.0	5.5	3.8	5.3	3.3	5.4	5.1	5.1	3.8	5.5	19.6	4.8
Second cohort (2 to less 4 years)	66	3.6	4.5	2.1	4.5	1.8	4.2	2.4	3.9	2.1	4.7	1.1	4.5	1.4	4.4	1.2	4.3	2.4	5.0	1.6	4.4	4.1	4.8	2.7	4.0	21.2	4.6
Third cohort (4 years or over)	69	1.6	4.3	0.5	4.2	0.7	3.5	1.0	4.1	0.9	4.6	-0.1	4.1	0.2	3.8	1.0	3.9	1.4	4.8	0.8	3.8	2.9	3.8	1.7	3.7	23.1	4.2
D.F.		2, 212		2, 212		2, 212		2, 212		2, 212		2, 212		2, 212		2, 212		2, 212		2, 212		2, 212		2, 212		2, 212	
F		7.73**		6.20**		1.59		4.12*		2.81+		2.96+		3.82*		4.06*		4.14*		5.74**		4.51*		4.13*		11.19**	
Bonferroni test		m.d.	s.e.	m.d	s.e.	m.d.	s.e.	m.d.	s.e.	m.d	s.e.	m.d.	s.e.	m.d.	s.e.	m.d	s.e.	m.d.	s.e.	m.d.	s.e.	m.d	s.e.	m.d.	s.e.	m.d.	s.e.
First vs. Second		1.13	0.83	1.03	0.76	0.03	0.69	0.74	0.77	0.77	0.82	0.65	0.78	0.94	0.78	1.75+	0.78	1.34	0.85	1.74	0.77	1.00	0.77	1.12	0.76	-1.59	0.76
First vs. Third		3.32*	0.82	2.65*	0.75	1.09	0.68	2.17*	0.76	1.92+	0.81	1.87+	0.78	2.03*	0.77	1.99*	0.77	2.39*	0.84	2.50*	0.76	2.28*	0.76	2.15*	0.75	-3.53*	0.75
Second vs. Third		2.06	0.86	1.61	0.79	1.06	0.71	1.42	0.80	1.15	0.85	1.22	0.81	1.19	0.81	0.24	0.81	1.05	0.88	0.76	0.80	1.28	0.80	1.03	0.78	-1.94*	0.78

**p<0.01; *p<0.05; +p<0.1

Note(1): smaller mean scores of learning skills show greater adaptability of them. Negative scores indicate over-adaptation.

Note(2): m.d. is short for mean difference, while s.e. is short for standard error.

Table 4 *Demographic characteristics and descriptive statistics of Japanese home managers*

	No. of participants	(%)		No. of participants	(%)
Tenure with Current Corp.			Job Functions		
(months)	mean:	301.1	Manufacturing	41	47
	s.d.:	91.5	Engineering	13	15
			Quality control	8	9
Age	mean:	44.6	Purchasing	8	9
(years)	s.d.:	6.1	Finance & accountings	4	5
			Human resources	3	3
Gender			Supply	10	12
Male	87	100			
Female	0	0			

Table 5 *Mean, standard deviations, and results of the independent t test between Japanese home managers and the first cohort (less 2 years)*

	N	Interpersonal skills area						Information skills area of adaptability						Analytical skills area						Action skills area					
		Leadership		Relationship		Helping		Sense making		Information gathering		Information analysis		Theory building		Quantitative analysis		Technology		Goal setting		Action		Initiative	
		mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.
Japanese home managers	87	25.5	4.9	27.1	5.9	26.1	4.1	25.7	4.5	24.8	4.6	24.0	4.7	23.6	4.8	22.2	4.8	24.2	5.6	25.5	4.2	25.0	3.9	24.9	4.6
First cohort (less 2 years)	80	25.0	6.0	27.2	5.2	25.9	4.4	26.2	4.9	24.8	5.2	25.9	5.6	24.0	5.5	21.9	5.7	22.2	5.3	25.9	5.5	25.4	4.9	25.6	5.5
t		0.61		-0.10		0.27		-0.77		0.04		-2.37*		-0.44		0.38		2.39*		-0.57		-0.68		-0.93	

* $p<0.05$

Table 6 *Demographic characteristics and descriptive statistics of American counterpart managers*

	No. of participatns	(%)		No. of participants	(%)
Type of Industry			Age	mean:	39.0
Manufacturing	125	100	(years)	s.d.:	9.5
Location			Gender		
Rural	72	58	Male	92	74
Suburb	53	42	Female	33	26
Total Employees					
100 - 1000	125	100			
Tenure with Current Corp.					
(months)	mean:	65.7			
	s.d.:	55.3			
Job Functions					
Manufacturing	35	28			
R & D	15	12			
Quality control	20	16			
Purchasing	4	3			
Finance & accountings	26	21			
Human resources	12	10			
Sales	12	10			

Table 7 *Mean, standard deviations, and results of the independent t test between American counterpart managers and entire Japanese expatriates*

	N	Interpersonal skills area of adaptability						Information skills area of adaptability						Analytical skills area						Action skills area						Job Satisfaction	
		Leadership		Relationship		Helping		Sense making		Information gathering		Information analysis		Theory building		Quantitative analysis		Technology		Goal setting		Action		Initiative			
		mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.
US managers	125	0.7	5.7	1.3	5.0	-0.1	5.0	1.2	5.3	0.9	5.8	0.9	5.1	-0.3	5.5	-1.0	6.0	2.5	4.8	2.1	5.3	3.8	5.3	1.0	4.7	23.5	3.9
Japanese expatriates	215	3.4	5.1	2.0	4.7	1.5	4.1	2.2	4.7	2.0	5.0	0.9	4.8	1.3	4.7	1.8	4.7	2.6	5.2	2.0	4.7	4.1	4.7	2.8	4.6	21.2	4.7
t		-4.48**		-1.26		-3.09**		-1.84+		-1.82+		-0.11		-2.81**		-4.41**		-0.14		0.27		-0.55		-3.44**		4.78**	

** p<0.01; * p<0.05; + p<0.1

Note: the higher mean scores of skill items indicates the less adaptability. In addtion, their negative mean scores show over-adaptation.

Table 8 *Results of ANOVA with Bonferroni test between American counterpart managers, the first cohort, and third cohort*

	Interpersonal skills area of adaptability						Information skills area of adaptability						Analytical skills area of adaptability						Action skills area of adaptability						Job Satisfaction	
	Leadership		Relationship		Helping		Sense making		Information gathering		Information analysis		Theory building		Quantitative analysis		Technology		Goal setting		Action		Initiative			
ANOVA test																										
D.F.	3, 336		3, 336		3, 336		3, 336		3, 336		3, 336		3, 336		3, 336		3, 336		3, 336		3, 336		3, 336		3, 336	
F	11.53**		4.41**		4.09**		3.60*		2.76*		1.86		4.93**		9.62**		2.90*		3.49*		2.78*		6.69**		15.59**	
Bonferroni test in part	m.d.	s.e.	m.d	s.e.	m.d.	s.e.	m.d.	s.e.	m.d	s.e.	m.d.	s.e.	m.d.	s.e.	m.d	s.e.	m.d.	s.e.	m.d.	s.e.	m.d	s.e.	m.d.	s.e.	m.d.	s.e.
US managers vs. First cohort	-4.06*	0.75	-1.85*	0.68	-1.92*	0.64	-1.95*	0.70	-1.94+	0.76	-0.86	0.70	-2.56*	0.71	-3.95*	0.75	-1.25	0.71	-1.19	0.70	-1.35	0.70	-2.83*	0.66	3.91*	0.62
US managers vs. Second cohort	-2.93*	0.80	-0.82	0.72	-1.89*	0.68	-1.20	0.75	-1.16	0.80	-0.21	0.74	-1.62	0.76	-2.20*	0.79	0.87	0.76	0.55	0.74	-0.34	0.75	-1.71	0.70	2.31*	0.66
US managers vs. Third cohort	-0.87	0.79	0.80	0.71	-0.83	0.67	0.22	0.74	-0.02	0.79	1.01	0.73	-0.43	0.75	-1.96+	0.78	1.13	0.75	1.32	0.73	0.94	0.74	-0.68	0.69	0.38	0.65

** p<0.01; * p<0.05; + p<0.1

Note: m.d. is short for mean difference and s.e. is short for standard error.

Figure 1 *A learning skill model by experiential learning theory*

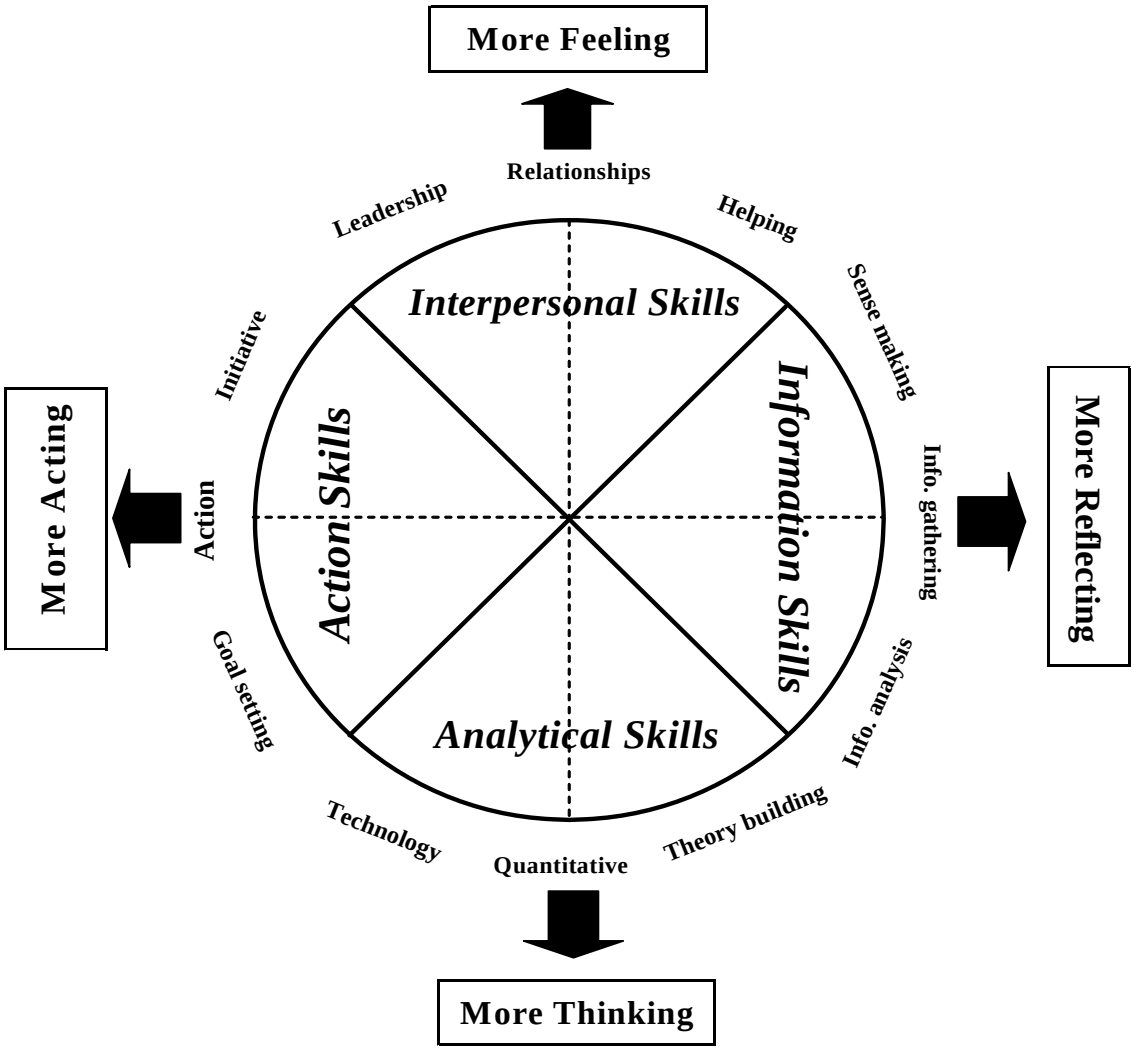

Figure 2 *Adaptability comparisons of three cohorts of Japanese expatriates*