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Using a Competency Approach to Understand HCN Managers in Asia: A Study of Japanese, Chinese, Malaysian, Thai, and Hong Kong Managers in Japanese MNEs

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Title.

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Abstract

This study examined host country nationals (HCNs) in multinational enterprises (MNEs) through the lens of a competency approach. Participants consisted of 500 managers working for a leading Japanese retail MNE, with 100 each from Japan, China, Malaysia, Thailand, and Hong Kong. The study highlighted three competency variables of those managers for 12 skills: the level of competency demands; that of competencies; and that of adaptation as assessed by the fit between the levels of competencies and the levels of corresponding competency demands. Several similarities and differences in the competency variables of the HCN managers emerged. For example, relationship skills were the most demanded competency for all HCN managers as well as the most developed competency for all manager groups except the Thai. Further, goal-setting skills, while highly demanded, showed low adaptation levels for all groups. The strength of the levels of the three competency variables, however, differed significantly among groups. Based on the empirical evidence obtained from this study, practical implications for HR professionals were discussed.

Key words

Competency approach; host country nationals; Asia business; experiential learning theory

Introduction

Globalization never stops and even further accelerates. It continues to provide new business opportunities and unpredictable risks for multinational enterprises (MNEs) worldwide (Black, Morrison, & Gregersen, 1999). In this era of globalization, an MNE's goal achievement greatly relies on competent managers, who are required to deal with endless challenges and issues efficiently and effectively. Obviously, managers in MNEs have to possess and further develop their managerial knowledge and skills as competencies through the transaction of a series of such challenges and issues in a global setting (McCall & Hollenbeck, 2002; Spreitzer, McCall, & Mahoney, 1997). There have been many studies and findings about expatriate managers within MNE management workforces (Collings, Morley, & Gunnigle, 2008), including those that address the managerial and cross-cultural competencies of expatriate managers (Benson 1978; David 1972; Dinges 1983; Dinges & Baldwin 1996; Yamazaki, 2010; Yamazaki & Kayes 2004). However, the competencies of the two key management workforces–host country nationals (HCNs) and third country nationals (TCNs) –are still undefined and insufficient understood. Therefore, in this study, which uses the lens of a competency approach, the focus is on the managerial competencies of HCN managers working for MNE subsidiaries.

Boyatzis (1982) introduced the term "competency" in his book *The Competent Manager*, which is based on his management study on high performers in both private and public sectors. Since then, competency-based approaches have been popular and used in many aspects of human resource (HR) management (Brownell, 2006; Dubois & Rothwell, 2004; Rodriguez, Patel, Bright, Gregory, & Gowing, 2002; Wickramasinghe & De Zoyza, 2009), including recruitment and selection (Wood & Payne, 1998), HR planning (Spencer & Spencer,

1993), job analysis by competency modeling (Jackson, Schuler, & Werner, 2009; Schippmann et al., 2000), organizational alignment with HR systems (Wickramasinghe & De Zoyza, 2009), performance management (Kochanski & Ruse, 1996), and so forth.

Particularly, competency-based approaches to the domain of management and leadership development are highly effective in creating high-performing people who can potentially drive high-performing organizations (Brownell, 2006; Schippmann et al., 2000). Brownell (2006) noted that the use of competency approaches is one recognized method of achieving the development of the next generation of leaders, which is an important goal of HR professionals and graduate business educators. He proposed a global leadership development program in graduate schools that uses a competency approach. With regard to this management and leadership development perspective, it is crucial, as an initial step, to know which key competencies are required to achieve effective job performance (Wickramasinghe & De Zoyza, 2009). Wickramasinghe and De Zoyza (2009) conducted an empirical study using a sample of 198 managers of a Sri Lankan firm in order to identify which managerial competencies to improve as a foundation of management development. Their research, using a competency approach, showed the following three pivotal variables: the level of competency demands, the level of competencies, and the gap between these two competency variables. This gap seems to be translatable to an index of the degree of managerial adaptation to workplaces (Yamazaki, 2010). The extent of this gap is therefore a useful indicator of not only what competencies managers need to improve for their management development but also of how managers can properly adapt to their workplaces. Consistent with the research done by Wickramasinghe and De Zoyza (2009), this study examined the same competency variables related to HCN managers working for MNEs.

While organizations like MNEs, under globalization, have been becoming more homogenous with regard to structure and technology, their employees tend to possess relatively heterogeneous behaviors, influenced by their own countries' values and culture (Adler & Gundersen, 2008; Child, 1981). Many management behaviors and practices can be seen differently across countries, as exemplified by communication modes (Hall, 1976), leadership styles (Dorfman et al., 1997), learning styles (Yamazaki, 2005), and negotiation techniques (Adair & Brett 2004; Graham 1985). This notion suggests that the kinds and levels of competency demands surrounding HCN managers may vary from one country to others. To the extent that competency demands affect the development of competencies in relation to the demands, the levels of competencies of HCN managers will also differ among countries. By adding this cross-cultural viewpoint, this study will address three research questions as follows:

(1) What competency demands do HCN managers perceive as being important in the workplaces of MNE subsidiaries? Is there any difference in the levels of the competency demands across countries?

(2) What competencies of HCN managers are currently developed in the workplaces of MNE subsidiaries? Is there any difference in the levels of the competencies across countries?

(3) To what extent have HCN managers adapted to the workplaces of MNE subsidiaries? Is there any difference in their levels of adaptation across countries?

Competencies and Competency Models

As the focus on competencies has increased in the industrial and educational world,

several meanings of "competency" have appeared in the workplace learning context (Garavan & McGuire, 2001), and various competency models have been continually developed (Rodriguez, et al., 2001; Schippmann et al., 2000). According to Markus, Cooper-Thomas, and Allpress (2005), there are three distinctive approaches to the definition of competencies: educational standards, behavioral repertoires, and organizational competencies. They illustrated that the educational standards approach defines a competence narrowly as an action or outcome that entails a minimum standard; the behavioral repertoires approach adopted by McClelland and Boyatzis (1980) refers to a competency as an underlying characteristic; and the organizational competencies approach taken by Hamel and Prahalad (1989) highlights core competencies in an organization, such as the collective learning of the organization (Markus, et al., 2005). Although the behavioral repertoires approaches have been criticized for descriptions of competence that are too general and abstract, Boyatzis' (1982) competency model in management has been widely used in the United States and Britain (Sandberg, 2000).

Boyatzis (1982) defines competencies as underlying characteristics that lead to the effective and/or high job performance that is distinguished from average job performance. A competency includes an individual's knowledge, motive, traits, self-image, social role, or skill (Boyatzis, 1982). Spencer and Spencer (1993) similarly define of a competency as comprising five types of underlying characteristics, among which knowledge and skill competencies are visible and comparatively easy to develop; motive and trait competencies are invisible and central to personality and so remain stable and difficult to develop; and self-concept competencies relate to values and attitudes and are moderately open to influence (Spencer & Spencer, 1993). Any competency model adopted by organizations needs to include a simple

list of clear, desirable competencies (Markus, et al., 2005) that involve underlying characteristics, especially focusing on behaviors that produce high performance in a job (Wickramasinghe & De Zoyza, 2009). This notion indicates that competency models are largely composed of knowledge and skill competencies that can be trained and developed in organizations.

Just as there exist three approaches to the competency definition, competency models can be classified into three forms. Mansfield (1996) discussed that three types of competency models in terms of how they are created. The first type is the single-job competency model, which describes particular behaviors for key job requirements of a specific job (Mansfield, 1996). A competency model that is made through the work-oriented approach (Sandberg, 2000) is consistent with this first model. The second type represents the one-size-fits-all competency model that is usually built by selecting concepts from individual job competency models and the literature relevant to competency models and that includes a set of competencies for a broad range of jobs (Mansfield, 1996). This model is generally applicable to a variety of jobs and is analogous to a generic competency model mentioned by Spencer and Spencer (1993). The generic model is not designed to fit a specific position, but it is used to establish a foundation for comparison between groups (Spencer & Spencer, 1993). The third type is the multiple-job competency model, which integrates the approaches used to build the above two models (Mansfield, 1996). This integrative method can be seen as similar to the multimethod-oriented approach referred to by Sandberg (2000). The multi-job competency model is usable for a targeted group or for individuals with several different jobs and positions, rather than for single jobs or all jobs in general (Mansfield, 1996).

The type of competency model applied depends on the objectives. As discussed

earlier, the present research focuses, in part, on comparisons between HCN managers among different countries. In this respect, a generic competency model or a one-size-fits-all model is thought to be the most appropriate for understanding similarities or differences of the competencies of HCN managers across countries.

Work-Adaptation Overseas Using a Competency Approach

As the research questions show, one of the investigations relates to the levels of adaptation of HCN managers to workplaces in MNE subsidiaries. Adaptation, in general, is defined as the changes of individuals in response to environmental demands (Berry, 1997, 2005). Because an individual is always connected with an environment (Lewin, 2007), he or she interacts with the demands of that environment. In this respect, adaptation can be seen as the way in which individuals are suited to meet the demands of environments. With regard to work transitions, adaptation to a job or position involves components of three human activities: affection, cognition, and behaviors (Ashford & Taylor, 1990). Because skills are individual's behaviors, the behavioral aspect of adaptation can be explained by the manner in which individual skills are properly fitted to the environmental demands. Furthermore, in light of the relationship between the skills and the environments, Fleishman (1982) discussed the abilities requirement approach, in which specific environments are described by their skill demands. This notion suggests that the fit between individuals and their environments represents that between skills and skill demands (Boyatzis & Kolb, 1991).

The behavioral aspect of adaptation also indicates that a competency based approach can be used to understand adaptation when skill competencies are focused. When the competency approach is applied to adaptation investigations, adaptation can correspond to the fit between competency demands and the competencies that accord with such demands.

Because competency models consist of a set of skill competencies, they are suitable for analyzing the fit between those two competency variables and can therefore be used to show the behavioral adaptation of HCN managers to MNE subsidiaries.

This study seeks to answer the research questions that involve three competency variables of HCN managers by enlisting experiential learning theory (Kolb, 1981, 1984; Kolb & Fry, 1975). Kolb's learning theory provides a robust and important lens (Yamazaki & Kayes, 2007) through which to view HCN managers' developed competencies, competency demands, and adaptation, as well as with which to conduct the operationalization of constructs in line with the competency approach discussed above. His learning theory also provides the basis for the Learning Skills Profile (LSP) (Boyatzis & Kolb, 1991, 1995, 1997), which is used to measure levels of competencies, levels of competency demands, and levels of adaptation. The LSP is an instrument of Kolb's learning skills model, which is conceptually based on the experiential learning theory and is characterized as a generic competency model. Before further discussion, it will be useful to briefly describe Kolb's experiential learning theory.

Experiential Learning Theory

Experiential learning theory describes Kolb's integration and development of the experiential works of Dewey, Lewin, Piaget, James, and Freire (Kolb & Kolb, 2005). It has greatly influenced a wide range of disciplines, especially with regard to management development (Reynolds, 1997), management learning (Kayes, 2002), business education (Duff & Duffy, 2002), and cross-cultural and expatriate learning (Yamazaki & Kayes, 2004, 2007). Kolb's learning theory reflects the wholeness of human learning activities through four basic learning modes–feeling, reflecting, thinking, and acting–each of which plays an

important role in learning processes (Kolb, 1984). The uniqueness of this theory is its stress on the necessity of human experiences in learning cycles (Mainemelis, Boyatzis, & Kolb, 2002). Combinations of two different learning modes characterize the four fundamental learning styles: accommodating, diverging, assimilating, and converging (Kolb, 1984).

This theory also proposes a learning-skills model that is composed of 12 learning skills conceptualized in relation to the four learning modes (Kolb & Kolb, 2005; Mainemelis et al., 2002). While learning styles correspond with more general competencies used to create knowledge and skills, learning skills represent more situational and specific competencies used to perform a variety of jobs effectively (Boyatzis & Kolb, 1991, 1995; Kolb, 1984). This perspective suggests that Kolb's learning skills model is a generic competency model that can be usefully applied to different jobs and various groups to compare them.

The 12 learning skills are classified according to the four learning modes of Kolb's learning theory as follows. The feeling mode of learning relates to the domain of interpersonal skills–leadership, relationship, and helping (Boyatzis & Kolb, 1995; Kolb, 1984; Rainey, Hekelman, Galazka, & Kolb, 1993). The reflecting mode of learning is linked with the perceptual skills of sense making, information gathering, and information analysis. The thinking mode of learning is associated with the analytical skills of theory building, quantitative analysis, and technology. Finally, the action mode of learning involves the behavioral skills of goal setting, action, and initiative. Figure 1 shows Kolb's learning skills model.

Insert Figure 1 about here

Methods

Research Context and Site

This study focused on Asia not only because very little competency research on Asia has previously been done (Wickramasinghe & De Zoyza, 2009) but also because Asian-Pacific regions are now more important for global business and economy than in the past. For those reasons, the data was collected from managers of a Japanese MNE, which has been strongly and steadily deploying in Asian markets according to its expansion strategy.

The Japanese MNE that participated in this study is a huge, successful retail firm, headquartered near Tokyo. Its main line of business is operating large shopping centers, supermarkets, home centers, convenience stores, drugstores, financial services, and so on. It has 169 affiliated companies worldwide, primarily in Asia, and it has been expanding its business into Asia's emerging countries and regions including China, Malaysia, Thailand, and Hong Kong, where many HCN managers work for its subsidiaries. Consequently, this Japanese MNE provides a good source for sampling for a competency analysis that includes comparative studies among HCN managers in various countries and regions.

Sample

The sample for this study consisted of 500 managers of the aforementioned Japanese MNE, with 100 managers each from Japan, China, Hong Kong, Malaysia, and Thailand. Table 1 summarizes demographic characteristics of the participating managers of each country and region as well as those of the entire sample of 500 managers. As Table 1 shows, on average, the Japanese managers were the oldest, the Hong Kong and Thai managers were the next oldest, and the Chinese and Malaysian managers were the youngest. With regard to gender, a majority of management position in Japan was male, while that in China, Honk Kong, Malaysia, and Thailand was female. In those countries and region, retail businesses

such as shopping centers or supermarkets may be generally more open to women managers than in Japan. As shown in Table 1, Japanese managers had the longest work experience at this Japanese MNE followed by Hong Kong and Thai managers. Chinese and Malaysian managers had the shortest amount. This is because the Japanese MNE expanded its business in China and Malaysia more recently than in the other countries and region. Japanese managers had held least working experience in the other companies in the past, Malaysian and Thai managers had held the next least, and Chinese and Hong Kong managers had most worked for organizations other than the Japanese MNE. Finally, as shown in Table 1, the distribution of management positions varied slightly among the group.

Insert Table 1 about here

Sampling Procedures

Survey packets were given to potential participants through the internal delivery service of the stores of the Japanese MNE in Japan, China, Hong Kong, Malaysia, and Thailand. A total of 1,440 packets were sent to those areas, and 1,111were returned with an overall response rate of 77.2%. Of the 1,111 returned questionnaires, 114 questionnaires were eliminated because they were incomplete or incorrectly completed. Consequently, 997 questionnaires usable for this study remained. To study Japanese managers, a total of 480 survey packets were distributed, and 272 were returned for a response rate of 56.7%. This low rate might have mainly resulted from miscommunication with the MEN's stores about the instruction of how they handle the survey packets. Of the 272 returned questionnaires, 26 were discarded for the above reasons, leaving 246 usable questionnaires. For Chinese managers, a total of 370 survey packets were distributed to the MNE's stores in China, and

347 were returned for a rate of 93.8%, which 325 were usable. For Hong Kong managers, a total of 150 survey packets were sent to Hong Kong stores of this MNE, and 140 were returned for a rate of 93.3%; 18 were eliminated and122 were usable. For Malaysian managers, a total of 300 survey packets were sent to the MNE Malaysia, and 213 were returned for a rate of 71.0%. This relatively low response rate might have resulted from a concurrency with Ramadan, the fasting month for Muslims in Malaysia. Of the 213 returned questionnaires, 31 were eliminated, leaving182 usable ones. Finally, for Thai managers, a total of 140 survey packets were distributed to the MNE Thailand and 137 returned for a rate of 97.9%. Of those questionnaires, 15 were unusable, resulting in 122 valid questionnaires.

To maintain the statistical assumption of homogeneity in the analysis of variance (ANOVA), this study established a balanced sample of participants from Japan, China, Hong Kong, Malaysia, and Thailand by randomly selecting 100 cases from each of those research sites to create a final sample of 500 managers.

Measures

To analyze the levels of competencies, levels of competency demands, and levels of adaptation for the 500 managers, the LSP (Boyatzis & Kolb, 1991, 1995, 1997) was utilized. The LSP was designed to examine the levels of 12 learning skills, namely leadership, relationship, helping, sense making, information gathering, information analysis, theory building, quantitative analysis, technology, goal setting, action, and initiative (Boyatzis & Kolb, 1991, 1995, 1997). The LSP consists of 72 items. Each of the 72 items represents a certain skill or activity. The 72 items are part of 12 separate 6-item scales that correspond to the 12 learning skills. In its original format, the LSP uses a card-sort method in which persons divide the 72 cards, each with a different item, into seven groups, according to their individual

skill levels, with a range from 1 to 7 as follows: 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 performer 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. The level of each of the 12 learning skills is shown by the total score of the 6 items that relate to the learning skill. The level of one learning skill thereby ranges from a minimum of 6 to a maximum of 42.

Because the card-sort method requires giving detailed instructions on how to adequately place each card, the original format was revised for this study, and a 7-point Likert-type scale was adopted to allow participants to give their responses more easily. Cronbach's alpha for internal reliability coefficients for the total sample of this study (N = 500) varied from 0.83 to 0.90, with an average of 0.87, which exceeded the minimum standard of 0.70 suggested by Nunnally (1978).

In order to examine the demand levels of the learning skills, this study also used the LSP of demands (Boyatzis & Kolb, 1997). To measure the demand levels, this instrument uses the same 72 items as the standard LSP, but a different rating system; the range is still from 1 to 7, but 1 = not relevant to my job; 2 = a rarely required skill or activity; 3 = an occasionally 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 were asked to choose the most appropriate response for each skill description. Analogous with the dimension of the level of developed learning skills, the maximum demand level of each learning skill is 42, while the minimum is 6. In this entire research sample (N = 500), Cronbach's alpha remained in the range from 0.79 to 0.87, with an average of 0.83.

The method of assessing the levels of adaptation was made by using the aforementioned two kinds of scores gained through the LSP: the levels of skills and the levels of skill demands. The level of adaptation is calculated by subtracting the score of each of the 12 learning skills from the demands for that learning skill. For example, if a female manager obtained a score of 36 for relationship skills and 40 for relationship skill demands, the level of adaptation of this female manager would be 4 in terms of a job context requiring relationship skills. Furthermore, if a male manager obtained 10 as a result of the subtraction calculation for relationship skills, the male manager would be less adapted than the female because his score (10) is larger than that of the female manager (4). In general, the greater the value after subtraction, the less adapted is the person. This is because the greater value describes the larger difference between the levels of learning skills and those of learning skill demands. In contrast, the smaller the value after subtraction, the more adapted is the person. Additionally, positive values after subtraction indicate under-adaptation, while negative values after subtraction represent over-adaptation.

The LSP and its earlier version, the Executive Skills Profile (Boyatzis & Kolb, 1995), have been used in several recent studies including ones on expatriate adaptation (Yamazaki, 2010); educational program assessment (Boyatzis, Stubbs, & Taylor 2002); testing the psychometric instruments of experiential learning theory (Mainemelis et al. 2002); and development needs evaluation (Rainey et al. 1993).

Translation Procedures

Survey questionnaires used in the present study were translated across four languages: Japanese, Chinese, Thai, and English. All questionnaires were originally written in English, which was applicable to the investigation of Malaysian managers. Further, the

Japanese version of the LSP had been used in past expatriate research (see Yamazaki, 2010); it had been translated into Japanese according to the translation procedures for cross-cultural study proposed by Brislin, Lonner, and Thorndike (1973). Likewise, the same translation procedures were applied to the Chinese and Thai scales in this study; the meanings of the original English and translated Chinese or Thai versions were compared, as were the meanings of the original and back-translated versions.

Results

Competency Demands Perceived by HCN Managers

The first research questions concern the competency demands of HCN managers of MNE subsidiaries. What competency demands do they perceive as being important in their workplaces? Is there any difference in the levels of the competency demands across countries? Table 2 presents the rankings of competency demands of 12 skills, from 1 = the most important skill to 12 = the least important one, in the workplaces of the different groups of HCN managers. Table 3 summarizes the results of the ANOVA with the Bonferroni test including mean scores and standard deviations of the levels of competency demands of the 12 learning skills ranked by the Japanese, Chinese, Hong Kong, Malaysian, and Thai managers.

Insert Tables 2 and 3 about here

As shown in Table 2, all of the Asian managers ranked relationship skills as having the strongest demand, and all but the Japanese managers showed goal setting skills as having the second or third greatest demand. Overall, for the entire sample of 500 managers, the most important three skill demands were relationship, goal setting, and action. Further, excepting once again the Japanese managers, the managers perceived relationship, goal setting, action,

helping, leadership, and initiative as the six most important skill demands. Those highly ranked skill demands are all either interpersonal skill demands or behavioral skill demands. In contrast, the other six skill demands, which consist of three perceptual skill demands and three analytical skill demands, were perceived by these groups as being less important.

Another research question relates to how the levels of competency demands of 12 skills differ among the different groups of Asian managers. As illustrated in Table 3, results of the ANOVA indicated that there was a significant difference in the levels of the 12 skill demands perceived by the managers. As a whole, Malaysian and Thai managers perceived higher levels of skill demands; Japanese and Hong Kong managers assigned them comparatively lower levels; and Chinese managers' rankings of skill demands lay in the middle. For example, with regard to the level of relationship skill demands, that perceived by Japanese managers was the lowest and it was significantly different from that perceived by the other groups of HCN managers. In contrast, there was no significant difference between Malaysian and Thai managers in terms of the levels of the 12 skill demands with the exception of helping. Figure 2 shows the levels of 12 skill demands of all HCN managers.

Insert Figure 2 about here

Competencies Developed by HCN Managers

The second research questions ask about the levels of competencies currently developed by HCN managers. What competencies of HCN managers of MNE subsidiaries are currently developed in their workplaces? Further, is there any difference in the levels of the competencies across countries? Table 4 describes the rankings by HCN managers of the competencies of 12 learning skills from the most developed skill to the least developed. Table

5 shows the results of the ANOVA with the Bonferroni test of the levels of competencies for the 12 learning skills among the Asian managers.

Insert Tables 4 and 5 about here

As illustrated in Table 4, all Asian managers except the Thai indicated that relationship skills were the most developed. Additionally, the rankings among the HCN managers of the fourth to sixth most developed skills were more varied than the corresponding rankings of competency demands. For example, for Japanese managers, leadership, action, and initiative were the fourth, fifth, and sixth most developed skills, respectively, while for Malaysian managers, goal setting, action, and information gathering held these rankings. Overall, for the entire sample of 500 managers, the most developed skills, by rank, were relationship, helping, and action, followed by leadership, initiative, and information gathering. Among the three least developed skills, all groups had two skills in common: theory building and quantitative analysis.

As shown in Table 5, results of the ANOVA indicated that the levels of all 12 skills differed significantly among HCN managers. According to results from the Bonferroni test, for example, the 12 skill levels of Japanese managers were distinctively lower than those of Chinese and Malaysian managers. Also, although helping skills emerged as one of the three most developed skills among all groups of HCN managers, their developed skill levels of helping indicated two different groups, one, with Chinese and Malaysian managers, at a higher developmental level than the other, comprised of Japanese, Thai, and Hong Kong managers. This pattern also emerged for 7 of the other skills: namely, sense making, information analysis, theory building, goal setting, action, and initiative. Consequently, those

results suggest that Chinese and Malaysian managers tend to develop higher competencies than do Japanese, Thai, and Hong Kong managers. Figure 3 shows the levels of competencies of 12 skills for HCN managers.

Insert Figure 3 about here

Adaptation Situation of HCN Managers

The third group of research questions concerns the adaptation levels of HCN managers of MNE subsidiaries. More specifically, to what extent have HCN managers adapted to their workplaces? Further, is there any difference in the adaptation levels across countries? Table 6 shows rankings of the adaptation levels of the HCN managers in terms of each of 12 skill contexts from the lowest adaptation to the highest. The lowest adaptation level translates into the biggest difference between the competency demand level and the competency level, when the former is higher than the latter; in contrast, the highest adaptation level indicates the smallest difference between these two values. Table 7 presents the results of the ANOVA with the Bonferroni test of the adaptation levels in contexts where using 12 skills are required.

Insert Tables 6 and 7 about here

As shown in Table 6, for all Asian managers, one of the three skills associated with the lowest adaptation was goal setting. The other skills associated with the adaptation levels by rank, however, relatively varied among the HCN managers. Overall, for the entire sample of 500 Asian managers, goal setting showed the lowest adaptation level, followed, in order, by relationship, initiative, sense making, action, and leadership.

As shown in Table 7, results of the ANOVA illustrated that the adaptation level of a competency skill significantly differed among the HCN managers. Further, results of the Bonferroni test indicated that all 12 skill adaptation levels of Thai managers were significantly lower than those of the other HCN managers—in other words, Thai managers were the least adapted to their workplaces in terms of using the 12 skills. The results of the Bonferroni test also showed that the adaptation levels of sense making, information gathering, and action skills of Chinese managers as well as those of helping skills of Malaysian managers were significantly higher than those of Japanese managers. Therefore, Japanese managers were less adapted to their workplace in terms of those skills than were Chinese and Malaysian managers. Figure 4 shows the different adaptation levels of the five groups of HCN managers.

Insert Figure 4 about here

In addition to Figure 4, Figures 5(a) through 5(e) depict the adaptation levels of each group of HCN managers individually, to better illustrate how HCN managers of each country are differently situated in terms of competency adaptation. For example, even though there were no significant differences among the adaptation levels of Hong Kong, Chinese, and Malaysian managers, the lines of competency demands and competencies for Chinese and Malaysian managers encompassed a larger area than those for Hong Kong managers. Hong Kong managers, together with Japanese managers, seem to encounter a working environment with fewer competency demands, leading to fewer competency developments, than do Chinese managers and Malaysian managers. With regard to Thai managers, Figure 5(e) clearly shows that there are big differences between their competency demands and their

competencies and so indicates that their adaptation levels for all 12 skills are low.

Insert Figures 5(a), (b), (c), (d), and (e) about here

Discussion

Results of this study indicate that relationship skills were the most demanded and important for the entire sample of Asian managers in their MNE subsidiaries while overall, goal setting and action were the second and third most demanded skills. This result emphasizes the magnitude of relationship skills in Asian workplaces and is consistent with the viewpoint that Asian managers belong to relationship-oriented cultures versus task-oriented ones (Adler & Gundersen, 2008). In addition, relationship skills were ranked as the most developed skills among all but one of the groups of Asian managers. This evidence also strengthens the view that Asian countries are characterized as relationship-oriented.

Although goal setting skills are more task oriented than are relationship skills, the results of competency demand rankings show that most Asian managers need goal setting skills in order to perform effectively in their workplaces. It may be suggested that a task-oriented management style, appearing in the form of demand for goal setting skills, has penetrated and been established in Asian countries. Consequently, Asian managers in MNE subsidiaries are most likely required not only to build good relationships with others but also to establish proper performance goals in their workplaces.

With the exception of the Japanese managers, all the Asian managers exhibited greater competency demands for the interpersonal competency skills (i.e., leadership, relationship, and helping) and the behavioral competency skills (i.e., goal setting, action, and initiative) than the perceptual competency skills (i.e., sense making, information gathering,

and information analysis) and the analytical competency skills (i.e., theory building, quantitative analysis, and technology). This empirical finding is congruent with Goleman's (1998) theory of emotional intelligence, in which work-related success hinges less on analytical capabilities and more on interpersonal understanding. Furthermore, this study confirmed that the effective performance of Asian managers is more dependent on behavioral competencies than on perceptual ones.

Implications for HR Professionals for Common Competency Development

The competency approach employed in this study yields practical proposals to HR professionals about management development in the following three domains: common competency development across HCN managers, specific competency development of certain HCN managers, and expatriate development for parent country nationals (PCNs).

The current situation, especially the demand for competency in goal setting, creates a new, shared challenge for Asian managers. The present study showed that the developmental level of goal setting skills did not meet its strong demand level; adaptation for goal setting among HCN managers in Asia was low. It seems critical to train and develop competency in goal setting in all HCN managers. Because of its common challenge to all Asian managers, HR professionals charged with managing the global workforce need to take an active role in planning and implementing an effective training program that focuses on goal setting skills across Asian countries. In the course of the training program, HR professionals at company headquarters (HQ) as well as those at each MNE subsidiary will need to assess the developmental level of goal setting skills of HCN managers for better performance and adaptation.

Implications for HR Professionals for Specific Competency Development

This study also showed that, with the exception of goal setting skills, there was relatively wide variation in the rankings of adaptation levels of the 12 skill contexts from one HCN country or region to another. Again, Figures 5(a) through 5(e) describe the adaptation levels of HCN managers for different groups by using two lines, one that shows the levels of competency demands perceived by HCN managers and one that shows the levels of competencies currently developed by them. Because of those differences in the adaptation situations among the groups of HCN managers, a central focus on the key competencies for the more effective performance of HCN managers is essentially entrusted to each Asian country or region. In this respect, domestic HR professionals of MNE subsidiaries should engage and stress the particular competencies that their HCN managers need to develop further, or even plan and execute a developmental program relating competencies for their own HCN managers.

Japanese HR professionals, for example, need to train their local managers in competency skills such as action, goal setting, and sense making. Similarly, HR professionals of Hong Kong subsidiaries should provide their HCN managers with training courses that improve goal setting, relationship, and sense making. The HR professionals of Thai subsidiaries will have to enhance the overall competency levels of their HCN managers by applying a comprehensive training and development program that covers all 12 skills. As shown in Figure 5(e), for Thai managers there were big gaps in all 12 skills between the levels of competency demands and the levels of those competencies. In contrast with the low adaptation levels of Thai managers, there were relatively smaller gaps between the two competency-related levels of Chinese and Malaysian managers. In this case, HR professionals of Chinese or Malaysian subsidiaries need to focus more on the management and leadership

development of their HCN managers by assigning developmental assignments requiring much higher levels of competencies than their present jobs.

Implications for HR professionals of the HQ for Expatriate Competency Development

HR professionals at HQ who are responsible for the global workforce play an important role in training expatriates for better adaptation to foreign countries. The approach used in this study could also benefit the competency development of expatriates by identifying which skills are most demanded, and to what extent, in a certain country. By applying this competency approach, the HR professionals can identify a difference in the specific competency demand level between PCN managers and HCN managers. Then, the HR professionals may need to focus on certain stronger competency demands to adequately develop competencies of potential PCN expatriates. Assuming that Japanese managers in this study may become potential PCN expatriates who will be transferred to Chinese subsidiaries, it can be noted that in this study there were distinctive differences between Japanese PCNs and Chinese HCNs in terms of the competency demand levels of 7 skills (i.e., leadership, relationship, goal setting, action, initiative, information analysis, and technology), as shown in Table 2. Since those 7 skill demands of Chinese HCN managers outweighed those of Japanese PCN managers, potential Japanese expatriates will need to develop those 7 skills more than the other 5 of the 12 skills so that they can better adapt to Chinese workplaces. Further, the HR professionals could explain specifically to what extent potential Japanese expatriates have to improve certain competencies by showing the competency demand levels of Chinese HCN managers. Figure 6 shows the competency demand levels of Chinese HCN managers, those of Japanese managers, and the competency levels currently developed by Japanese managers.

Insert Figure 6 about here

Conclusions

This study focused on HCN managers of MNE subsidiaries through the lens of a competency approach. It provided empirical evidence of the managers' competency demands, their competencies, and their adaptation situations by employing data from Japanese, Chinese, Hong Kong, Malaysian, and Thai managers of a Japanese MNE strategically expanding in Asia. Needless to say, evidence provided by the competency approach can improve understanding of the similarities and differences of HCN managers in light of those competency variables across countries. Moreover, such evidence can build a foundation for practical implications that entails the competency development of HCN managers and that of PCN expatriates. In this context, HR professionals who engage with the management of global workforces as well as those responsible for domestic HCN managers of MNE subsidiaries will become central players by making use of this competency approach and its subsequent results to increase the effective performance of their workforces under today's globalization.

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Table 1. Demographic characteristics of Japanese, Chinese, Hong Kong, Malaysian, and Thai managers

	ALL managers		Japanese managers		Chinese managers		Hong Kong managers		Malaysian managers		Thai managers	
	(*N* = 500)		(*N* = 100)		(*N* = 100)		(*N* = 100)		(*N* = 100)		(*N* = 100)	
	N	%	*N*	%	*N*	%	*N*	%	*N*	%	*N*	%
Age												
mean	36.6		41.4		32.4		38.6		32.1		37.6	
s.d.	8.1		8.9		6.3		7.7		5.0		6.8	
Gender												
Male	245	49.0%	76	76.0%	46	46.0%	38	38.0%	45	45.0%	40	40.0%
Female	255	51.0%	24	24.0%	54	54.0%	62	62.0%	55	55.0%	60	60.0%
Work experience at this Japanese MNE												
mean (months)	133.6		223.1		84.0		146.2		84.2		130.1	
s.d.	90.9		109.2		38.7		62.1		67.2		81.2	
Work experience at other organizations												
Yes	284	56.8%	25	25.0%	72	72.0%	87	87.0%	42	42.0%	58	58.0%
No	214	42.8%	75	75.0%	28	28.0%	13	13.0%	57	57.0%	41	41.0%
Management positions												
Store manager/vice-manager	61	12.2%	12	12.0%	18	18.0%	9	9.0%	11	11.0%	11	11.0%
Line manager	108	21.6%	19	19.0%	16	16.0%	24	24.0%	36	36.0%	13	13.0%
Assistant line manager	331	66.2%	69	69.0%	66	66.0%	67	67.0%	53	53.0%	76	76.0%

Table 2. Rankings of competency demands perceived by HCN managers

Ranking	All managers $N = 500$	Japanese $N = 100$	Chinese $N = 100$	Hong Kong $N = 100$	Malaysian $N = 100$	Thai $N = 100$
1	Relationship	Relationship	Relationship	Relationship	Relationship	Relationship
2	Goal setting	Helping	Goal setting	Goal setting	Leadership	Action
3	Action	Action	Initiative	Action	Goal setting	Goal setting
4	Helping	Info gathering	Action	Helping	Initiative	Helping
5	Leadership	Goal setting	Leadership	Initiative	Action	Initiative
6	Initiative	Sense making	Helping	Leadership	Helping	Leadership
7	Info gathering	Leadership	Info gathering	Info gathering	Info gathering	Info gathering
8	Sense making	Initiative	Technology	Sense making	Sense making	Sense making
9	Info analysis	Info analysis	Info analysis	Info analysis	Info analysis	Info analysis
10	Technology	Theory building	Sense making	Technology	Theory building	Theory building
11	Theory building	Technology	Theory building	Theory building	Technology	Technology
12	Quant. analysis	Quant. analysis	Quant. analysis	Quant. analysis	Quant. analysis	Quant. analysis

Table 3. Results of the ANOVA with the Bonferroni test of competency demands perceived by HCN managers

Competency Demands		Interpersonal Skills						Perceptual Skills						Analytical Skills						Behavioral Skills					
		Leadership		Relationship		Helping		Sense making		Information gathering		Information analysis		Theory building		Quantitative analysis		Technology		Goal setting		Action		Initiative	
	N	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.
All managers	500	29.6	5.6	31.5	5.2	29.9	5.4	28.3	5.4	28.9	5.5	27.2	5.7	26.3	6.2	25.9	6.4	26.6	6.3	30.2	5.4	30.1	5.4	29.5	5.5
Japanese	100	26.7	4.9	29.2	5.2	28.8	5.3	26.9	5.0	27.4	5.0	24.9	4.9	24.5	5.1	23.8	5.3	24.5	5.5	27.2	4.6	27.9	4.7	26.5	4.8
Chinese	100	29.8	4.6	31.5	4.1	29.2	4.2	27.8	4.9	28.7	4.9	27.9	4.8	26.2	5.4	26.1	5.8	27.9	4.7	30.6	4.3	29.9	4.7	29.9	4.0
Hong Kong	100	27.5	5.3	31.2	4.8	28.0	5.4	27.0	5.3	27.2	5.3	24.3	6.4	23.3	6.7	22.8	7.0	23.6	6.6	28.6	4.9	28.2	5.2	27.6	5.4
Malaysian	100	32.1	5.3	32.5	5.4	30.1	5.7	30.2	5.2	30.5	5.5	29.7	4.8	28.4	5.8	28.4	5.3	28.4	6.3	31.8	5.5	31.3	5.4	31.6	5.4
Thai	100	32.1	5.4	33.2	5.6	33.0	5.2	30.0	5.7	30.5	5.7	29.4	5.4	29.3	5.9	28.3	6.6	28.5	6.4	33.0	5.5	33.0	5.2	32.1	5.4
F value		24.1**		9.2**		14.2**		8.2**		8.8**		22.3**		19.1**		17.9**		15.6**		22.4**		18.7**		23.9**	
df		4, 495		4, 495		4, 495		4, 495		4, 495		4, 495		4, 495		4, 495		4, 495		4, 495		4, 495		4, 495	
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.
Japanese vs. Chinese		-3.1*	0.7	-2.3*	0.7	-0.4	0.7	-0.9	0.7	-1.3	0.7	-3.0*	0.7	-1.8	0.8	-2.3	0.9	-3.5*	0.8	-3.4*	0.7	-2.0*	0.7	-3.4*	0.7
Japanese vs. Hong Kong		-0.9	0.7	-2.0*	0.7	0.9	0.7	-0.1	0.7	0.2	0.7	0.6	0.7	1.2	0.8	1.0	0.9	0.8	0.8	-1.4	0.7	-0.3	0.7	-1.1	0.7
Japanese vs. Malaysian		-5.4*	0.7	-3.3*	0.7	-1.7	0.7	-3.3*	0.7	-3.0*	0.7	-4.8*	0.7	-3.9*	0.8	-4.6*	0.9	-3.9*	0.8	-4.6*	0.7	-3.5*	0.7	-5.1*	0.7
Japanese vs. Thai		-5.4*	0.7	-4.1*	0.7	-4.1*	0.7	-2.7*	0.7	-3.1*	0.7	-4.5*	0.7	-4.8*	0.8	-4.5	0.9	-4.1*	0.8	-5.8*	0.7	-5.2*	0.7	-5.6*	0.7
Chinese vs. Hong Kong		2.2*	0.7	0.3	0.7	1.3	0.7	0.8	0.7	1.5	0.7	3.5*	0.7	3.0*	0.8	3.3*	0.9	4.3*	0.8	1.9	0.7	1.7	0.7	2.4*	0.7
Chinese vs. Malaysian		-2.3*	0.7	-1.0	0.7	-1.3	0.7	-2.3*	0.7	-1.7	0.7	-1.8	0.7	-2.2	0.8	-2.3	0.9	-0.5	0.8	-1.3	0.7	-1.5	0.7	-1.7	0.7
Chinese vs. Thai		-2.3*	0.7	-1.7	0.7	-3.7*	0.7	-1.7	0.7	-1.7	0.7	-1.6	0.7	-3.1*	0.8	-2.2	0.9	-0.6	0.8	-2.4*	0.7	-3.1*	0.7	-2.2*	0.7
Hong Kong vs. Malaysian		-4.5*	0.7	-1.3	0.7	-2.6*	0.7	-3.2	0.7	-3.2*	0.7	-5.3*	0.7	-5.1*	0.8	-5.6*	0.9	-4.8*	0.8	-3.2*	0.7	-3.2*	0.7	-4.0*	0.7
Hong Kong vs. Thai		-4.6*	0.7	-2.0	0.7	-5.0*	0.7	-2.6*	0.7	-3.2*	0.7	-5.1*	0.7	-6.0*	0.8	-5.5*	0.9	-4.9*	0.8	-4.4*	0.7	-4.8*	0.7	-4.6*	0.7
Malaysian vs. Thai		0.0	0.7	-0.8	0.7	-2.4*	0.7	0.6	0.7	0.0	0.7	0.2	0.7	-0.9	0.8	0.1	0.9	-0.1	0.8	-1.2	0.7	-1.7	0.7	-0.5	0.7

*$p < 0.05$; **$p < 0.01$

Table 4. Rankings of competencies currently developed by HCN managers

Ranking	All managers $N = 500$	Japanese $N = 100$	Chinese $N = 100$	Hong Kong $N = 100$	Malaysian $N = 100$	Thai $N = 100$
1	Relationship	Relationship	Relationship	Relationship	Relationship	Helping
2	Helping	Helping	Action	Helping	Leadership	Action
3	Action	Info gathering	Helping	Action	Helping	Relationship
4	Leadership	Leadership	Info gathering	Leadership	Goal setting	Leadership
5	Initiative	Action	Initiative	Initiative	Action	Initiative
6	Info gathering	Initiative	Goal setting	Info gathering	Info gathering	Goal setting
7	Goal setting	Goal setting	Leadership	Goal setting	Initiative	Info gathering
8	Sense making	Sense making	Technology	Sense making	Info analysis	Sense making
9	Info analysis	Technology	Sense making	Info analysis	Sense making	Info analysis
10	Theory building	Info analysis	Info analysis	Quant. analysis	Technology	Theory building
11	Technology	Theory building	Theory building	Theory building	Theory building	Quant. analysis
12	Quant. analysis	Quant. analysis	Quant. analysis	Technology	Quant. analysis	Technology

Table 5. Results of the ANOVA with the Bonferroni test of competencies currently developed by HCN managers

Competencies		Interpersonal Skills						Perceptual Skills						Analytical Skills						Behavioral Skills					
		Leadership		Relationship		Helping		Sense making		Information gathering		Information analysis		Theory building		Quantitative analysis		Technology		Goal setting		Action		Initiative	
	N	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.
All managers	500	26.6	6.0	28.0	5.3	27.4	5.1	25.0	5.8	26.1	5.5	24.8	5.9	24.1	6.2	23.5	6.4	24.1	6.7	25.9	5.8	26.9	5.4	26.2	5.5
Japanese	100	24.2	5.9	26.1	4.6	25.5	5.0	23.4	5.3	24.7	5.0	23.3	5.1	22.8	5.4	21.9	5.4	23.3	6.1	23.6	5.2	24.2	4.7	23.9	5.2
Chinese	100	27.9	5.8	30.1	4.6	29.0	4.3	26.8	5.6	28.6	4.8	26.7	5.5	25.6	5.9	25.6	6.2	26.9	5.8	28.1	5.4	29.6	4.6	28.5	4.5
Hong Kong	100	25.9	5.1	27.8	4.5	26.5	4.7	24.3	5.1	25.4	4.8	23.6	5.7	22.4	5.9	22.6	5.6	22.3	6.3	24.9	4.9	26.1	4.7	25.7	4.8
Malaysian	100	30.0	6.0	30.1	5.4	30.0	5.2	28.2	5.9	29.2	5.2	28.4	5.6	27.6	6.8	27.0	6.3	28.2	5.8	29.4	5.7	29.2	5.8	29.1	5.6
Thai	100	24.9	5.2	25.2	4.7	26.0	5.1	22.4	5.0	22.9	5.0	22.1	5.1	22.0	5.2	20.0	5.8	19.8	5.9	23.7	5.2	25.2	4.8	23.9	5.4
F value		17.9**		26.3**		15.2**		20.1**		29.0**		23.6**		17.2**		22.9**		33.1**		24.8**		24.3**		23.4**	
df		4, 495		4, 495		4, 495		4, 495		4, 495		4, 495		4, 495		4, 495		4, 495		4, 495		4, 495		4, 495	
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.
Japanese vs. Chinese		-3.7*	0.8	-4.0*	0.7	-3.5*	0.7	-3.4*	0.8	-3.9*	0.7	-3.4*	0.8	-2.8*	0.8	-3.7*	0.8	-3.6*	0.8	-4.4*	0.7	-5.4*	0.7	-4.6*	0.7
Japanese vs. Hong Kong		-1.6	0.8	-1.7	0.7	-0.9	0.7	-0.9	0.8	-0.7	0.7	-0.3	0.8	0.4	0.8	-0.7	0.8	1.0	0.8	-1.3	0.7	-1.9	0.7	-1.9	0.7
Japanese vs. Malaysian		-5.8*	0.8	-4.8*	0.7	-4.2*	0.7	-4.8*	0.8	-4.5*	0.7	-5.2*	0.8	-4.8*	0.8	-5.1*	0.8	-4.9*	0.8	-5.7*	0.7	-5.0*	0.7	-5.2*	0.7
Japanese vs. Thai		-0.7	0.8	0.9	0.7	-0.5	0.7	1.0	0.8	1.8	0.7	1.1	0.8	0.8	0.8	1.8	0.8	3.5*	0.8	-0.1	0.7	-1.0	0.7	0.0	0.7
Chinese vs. Hong Kong		2.1	0.8	2.3*	0.7	2.6*	0.7	2.6*	0.8	3.2*	0.7	3.1*	0.8	3.3*	0.8	3.1*	0.8	4.6*	0.8	3.1*	0.7	3.5*	0.7	2.7*	0.7
Chinese vs. Malaysian		-2.1	0.8	-0.8	0.7	-0.7	0.7	-1.4	0.8	-0.6	0.7	-1.8	0.8	-2.0	0.8	-1.4	0.8	-1.3	0.8	-1.3	0.7	0.4	0.7	-0.6	0.7
Chinese vs. Thai		3.1*	0.8	4.9*	0.7	3.0*	0.7	4.4*	0.8	5.7*	0.7	4.5*	0.8	3.6*	0.8	5.5*	0.8	7.1*	0.8	4.4*	0.7	4.5*	0.7	4.6*	0.7
Hong Kong vs. Malaysian		-4.1*	0.8	-3.1*	0.7	-3.3*	0.7	-3.9*	0.8	-3.8*	0.7	-4.8*	0.8	-5.2*	0.8	-4.4*	0.8	-5.9*	0.8	-4.4*	0.7	-3.1*	0.7	-3.3*	0.7
Hong Kong vs. Thai		1.0	0.8	2.6*	0.7	0.5	0.7	1.9	0.8	2.5*	0.7	1.5	0.8	0.3	0.8	2.5*	0.8	2.5*	0.8	1.2	0.7	0.9	0.7	1.8	0.7
Malaysian vs. Thai		5.1*	0.8	5.7*	0.7	3.7*	0.7	5.8*	0.8	6.3*	0.7	6.3*	0.8	5.6*	0.8	6.9*	0.8	8.4*	0.8	5.7*	0.7	4.0*	0.7	5.2*	0.7

*$p < 0.05$; **$p < 0.01$

Table 6. Rankings of adaptation levels of HCN managers

Ranking	All managers $N = 500$	Japanese $N = 100$	Chinese $N = 100$	Hong Kong $N = 100$	Malaysian $N = 100$	Thai $N = 100$
1	Goal setting	Action	Goal setting	Goal setting	Initiative	Goal setting
2	Relationship	Goal setting	Leadership	Relationship	Goal setting	Technology
3	Initiative	Sense making	Initiative	Sense making	Action	Initiative
4	Sense making	Helping	Relationship	Action	Leadership	Quant. analysis
5	Action	Relationship	Info analysis	Info gathering	Sense making	Relationship
6	Leadership	Info gathering	Technology	Initiative	Relationship	Action
7	Info gathering	Initiative	Sense making	Leadership	Quant. analysis	Info gathering
8	Helping	Leadership	Theory building	Helping	Info gathering	Info analysis
9	Technology	Quant. analysis	Quant. analysis	Technology	Info analysis	Theory building
10	Quant. analysis	Theory building	Action	Theory building	Theory building	Leadership
11	Info analysis	Info analysis	Helping	Info analysis	Helping	Sense making
12	Theory building	Technology	Info gathering	Quant. analysis	Technology	Helping

Table 7. Results of the ANOVA with the Bonferroni test of adaptation levels of HCN managers

Adaptation		Interpersonal Skills						Perceptual Skills						Analytical Skills						Behavioral Skills					
		Leadership		Relationship		Helping		Sense making		Information gathering		Information analysis		Theory building		Quantitative analysis		Technology		Goal setting		Action		Initiative	
	N	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.
All managers	500	3.1	5.6	3.5	5.7	2.5	5.8	3.3	5.8	2.7	5.8	2.4	5.7	2.3	5.9	2.4	6.2	2.5	6.3	4.3	5.8	3.2	5.5	3.3	5.8
Japanese	100	2.4	5.3	3.1	5.4	3.3	5.7	3.5	5.7	2.8	5.6	1.6	5.3	1.7	5.1	1.9	5.7	1.2	5.1	3.6	5.6	3.7	5.0	2.6	5.1
Chinese	100	1.8	4.4	1.5	4.3	0.2	3.3	1.0	4.1	0.2	2.9	1.2	5.0	0.6	4.1	0.5	3.9	1.0	4.0	2.5	3.7	0.2	3.1	1.5	3.7
Hong Kong	100	1.7	4.4	3.4	4.6	1.5	4.6	2.7	4.8	1.9	5.1	0.8	5.0	0.9	4.9	0.2	5.4	1.4	5.0	3.7	4.9	2.1	4.4	1.8	4.7
Malaysian	100	2.1	5.5	1.6	5.1	0.8	6.0	2.0	5.5	1.3	4.9	1.2	4.7	0.8	5.7	1.4	4.8	0.2	5.1	2.5	5.4	2.2	5.8	2.5	5.7
Thai	100	7.2	6.5	8.1	6.4	6.9	6.4	7.2	6.5	7.6	6.7	7.1	5.8	7.3	6.7	8.2	6.9	8.8	7.6	9.3	6.3	7.8	5.7	8.2	6.6
F value		19.9**		26.3**		26.3**		19.4**		30.6**		28.3**		27.7**		36.8**		41.0**		29.7**		34.4**		27.7**	
df		4, 495		4, 495		4, 495		4, 495		4, 495		4, 495		4, 495		4, 495		4, 495		4, 495		4, 495		4, 495	
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.
Japanese vs. Chinese		0.6	0.7	1.7	0.7	3.1	0.7	2.5*	0.8	2.6*	0.7	0.4	0.7	1.1	0.8	1.4	0.8	0.2	0.8	1.1	0.7	3.4*	0.7	1.2	0.7
Japanese vs. Hong Kong		0.8	0.7	-0.3	0.7	1.8	0.7	0.8	0.8	0.9	0.7	0.9	0.7	0.8	0.8	1.7	0.8	-0.2	0.8	-0.1	0.7	1.6	0.7	0.8	0.7
Japanese vs. Malaysian		0.3	0.7	1.5	0.7	2.5*	0.7	1.5	0.8	1.5	0.7	0.4	0.7	0.9	0.8	0.5	0.8	1.0	0.8	1.1	0.7	1.5	0.7	0.1	0.7
Japanese vs. Thai		-4.8*	0.7	-5.0*	0.7	-3.7*	0.7	-3.7*	0.8	-4.8*	0.7	-5.7*	0.7	-5.6*	0.8	-6.3*	0.8	-7.6*	0.8	-5.7*	0.7	-4.2*	0.7	-5.6*	0.7
Chinese vs. Hong Kong		0.1	0.7	-2.0	0.7	-1.3	0.7	-1.7	0.8	-1.7	0.7	0.4	0.7	-0.3	0.8	0.3	0.8	-0.3	0.8	-1.2	0.7	-1.8	0.7	-0.4	0.7
Chinese vs. Malaysian		-0.3	0.7	-0.2	0.7	-0.6	0.7	-1.0	0.8	-1.1	0.7	-0.1	0.7	-0.2	0.8	-0.9	0.8	0.8	0.8	0.0	0.7	-1.9	0.7	-1.1	0.7
Chinese vs. Thai		-5.4*	0.7	-6.6*	0.7	-6.7*	0.7	-6.2*	0.8	-7.4*	0.7	-6.1*	0.7	-6.7*	0.8	-7.7*	0.8	-7.7*	0.8	-6.8*	0.7	-7.6*	0.7	-6.8*	0.7
Hong Kong vs. Malaysian		-0.4	0.7	1.8	0.7	0.7	0.7	0.8	0.8	0.6	0.7	-0.5	0.7	0.1	0.8	-1.2	0.8	1.2	0.8	1.2	0.7	-0.1	0.7	-0.7	0.7
Hong Kong vs. Thai		-5.5*	0.7	-4.6*	0.7	-5.5*	0.7	-4.4*	0.8	-5.7*	0.7	-6.6*	0.7	-6.4*	0.8	-8.0*	0.8	-7.4*	0.8	-5.6*	0.7	-5.8*	0.7	-6.4*	0.7
Malaysian vs. Thai		-5.1*	0.7	-6.4*	0.7	-6.1*	0.7	-5.2*	0.8	-6.3*	0.7	-6.1*	0.7	-6.5*	0.8	-6.8*	0.8	-8.5*	0.8	-6.8*	0.7	-5.7*	0.7	-5.7*	0.7

Negative values indicate that the longer the current assignment tenures, the more is the correspondence between the levels of learning skills and skills demands.

*$p < 0.05$; **$p < 0.01$

Figure 1. Kolb's learning skills model

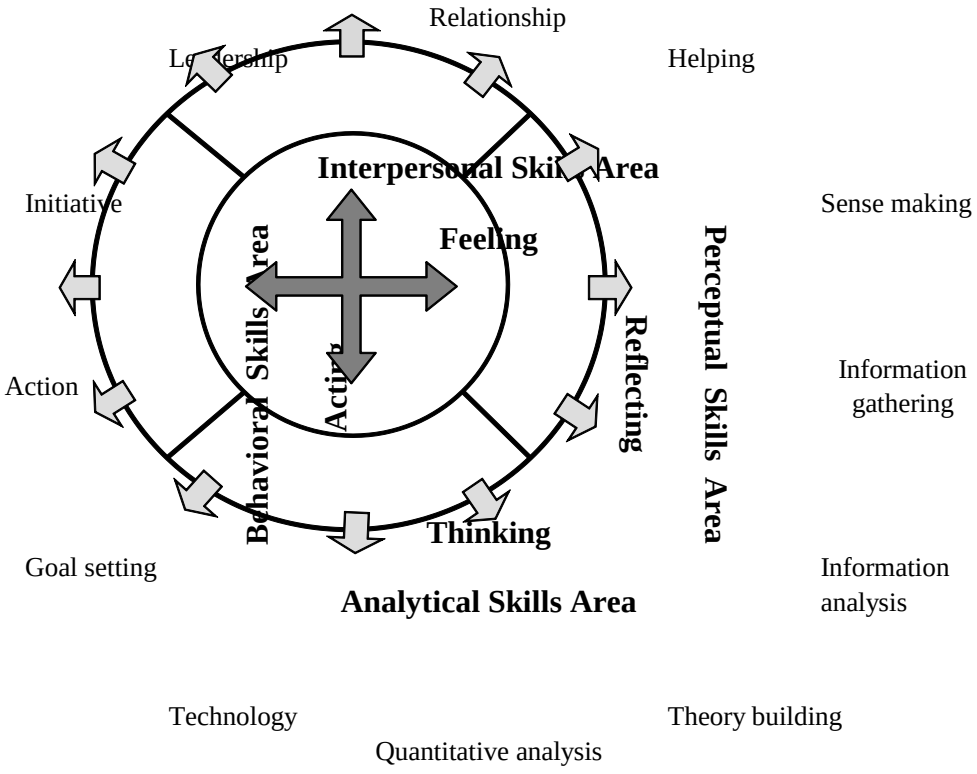


Figure 2. Competency demands perceived by HCN managers

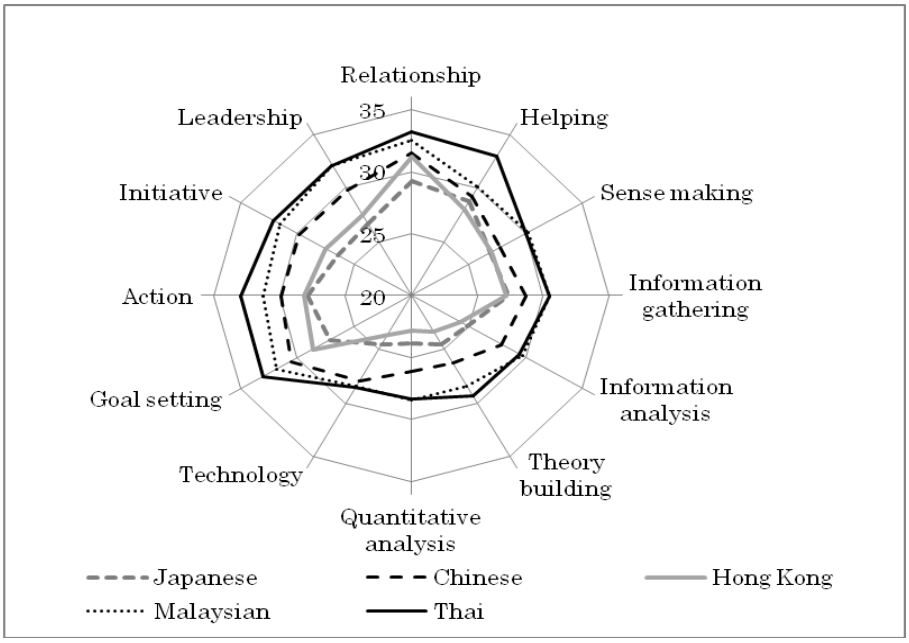


Figure 3. Competencies developed by HCN managers

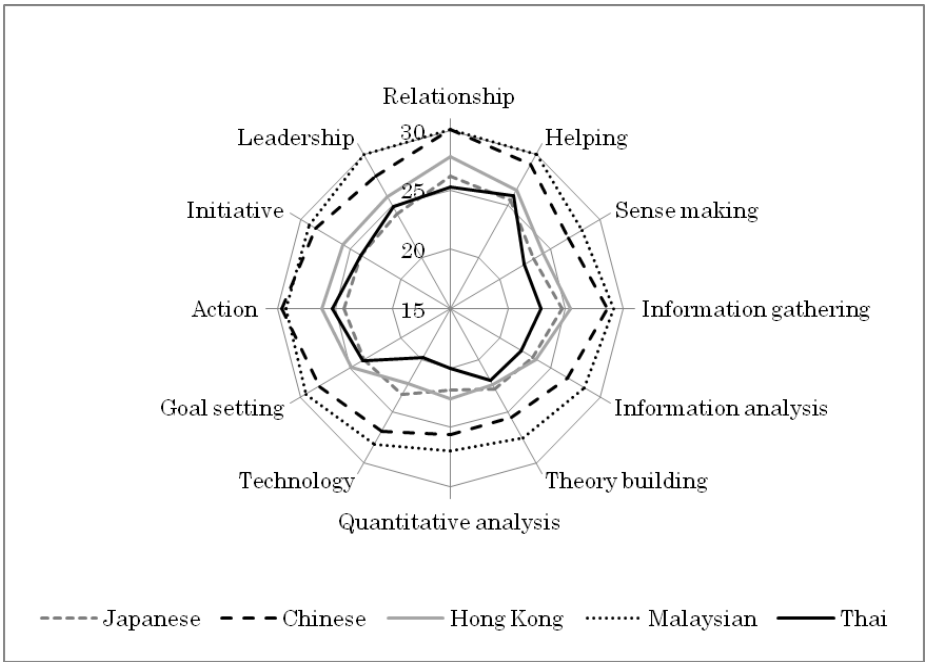
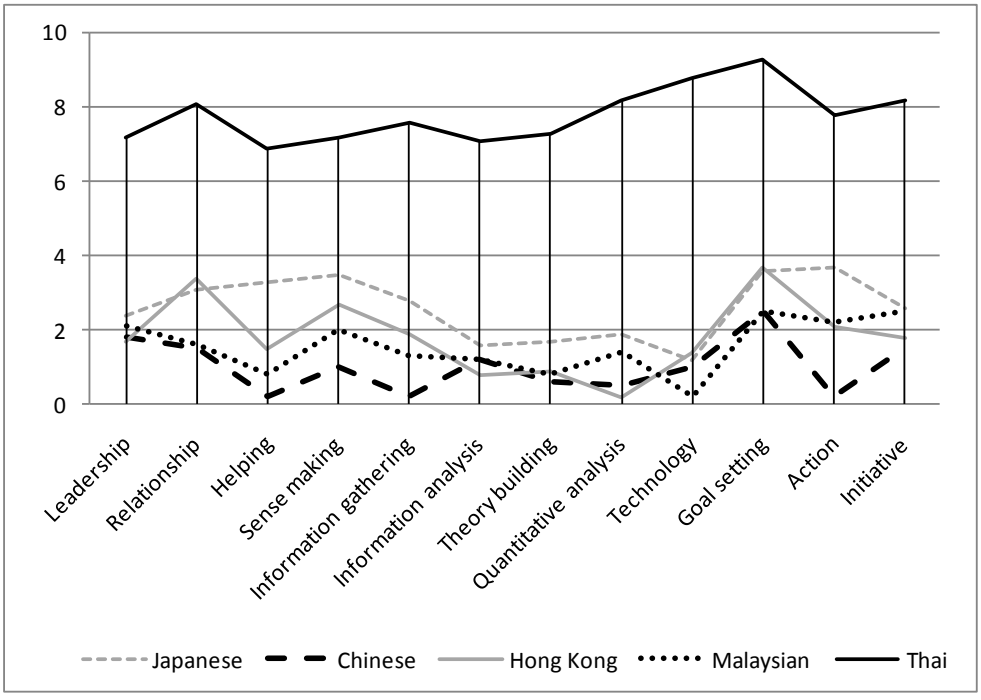


Figure 4. Adaptation levels of HCN managers



Higher scores indicate lower adaptation.

Figure 5(a). Adaptation situation of Japanese managers

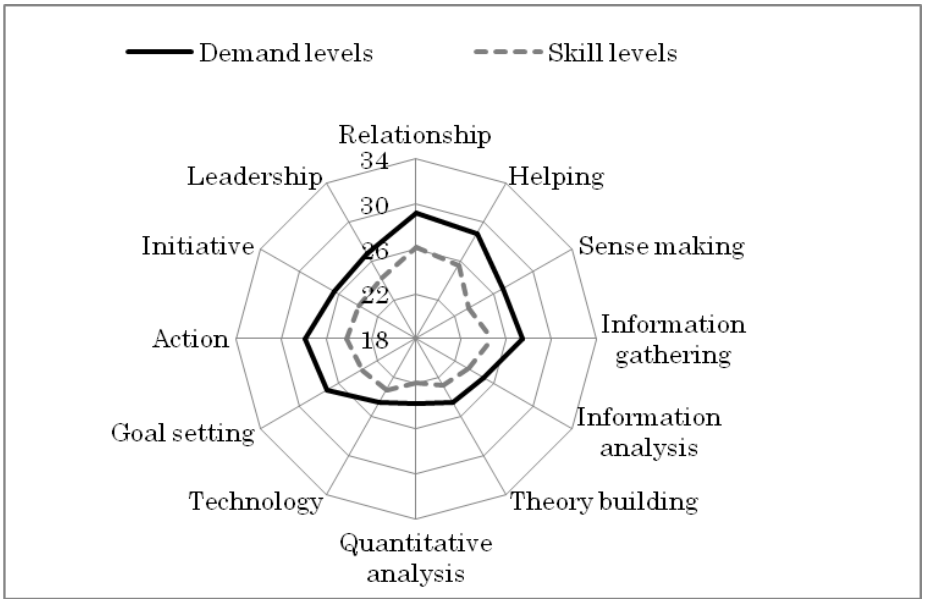


Figure 5(b). Adaptation situation of Chinese managers

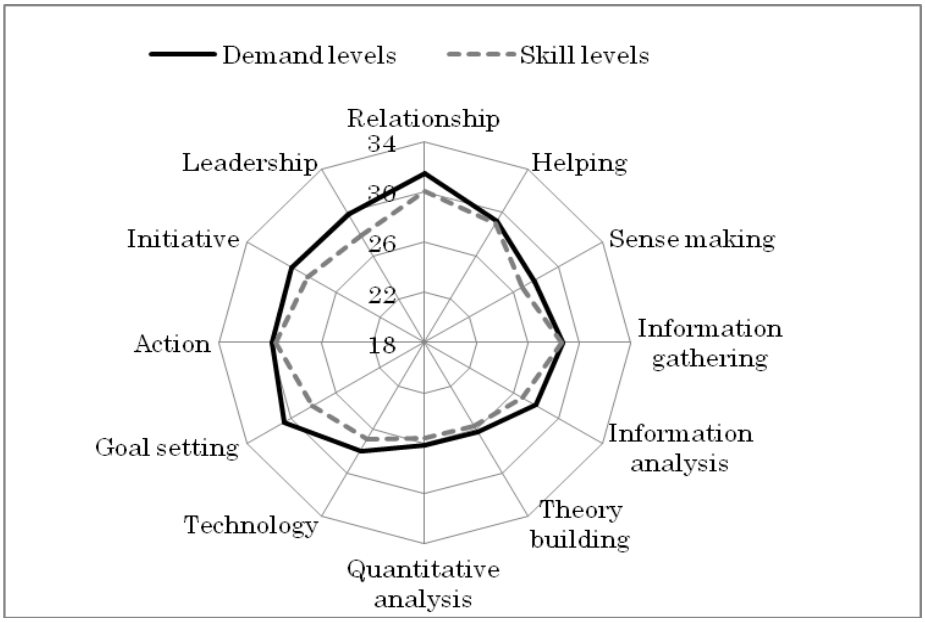


Figure 5(c). Adaptation situation of Hong Kong managers

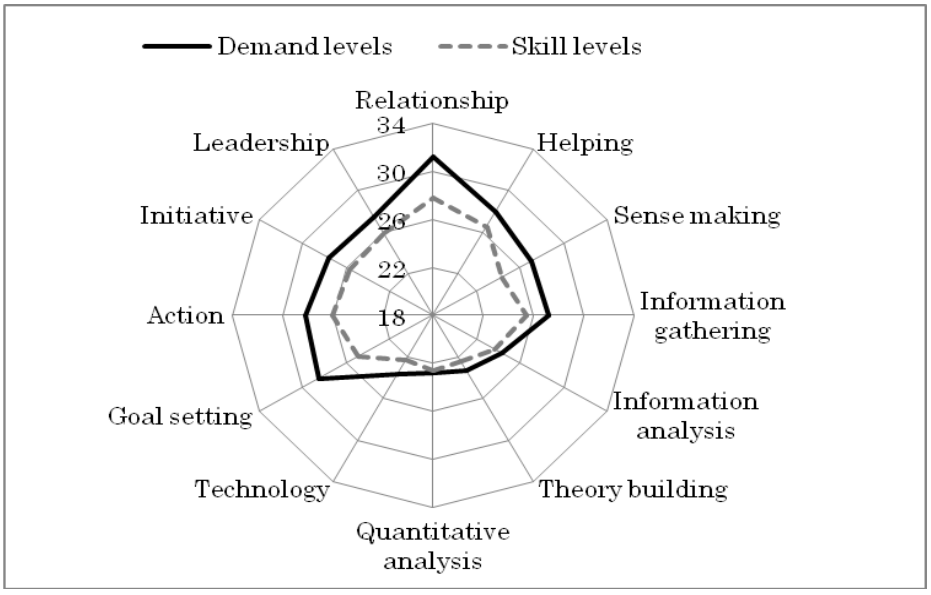


Figure 5(d). Adaptation situation of Malaysian managers

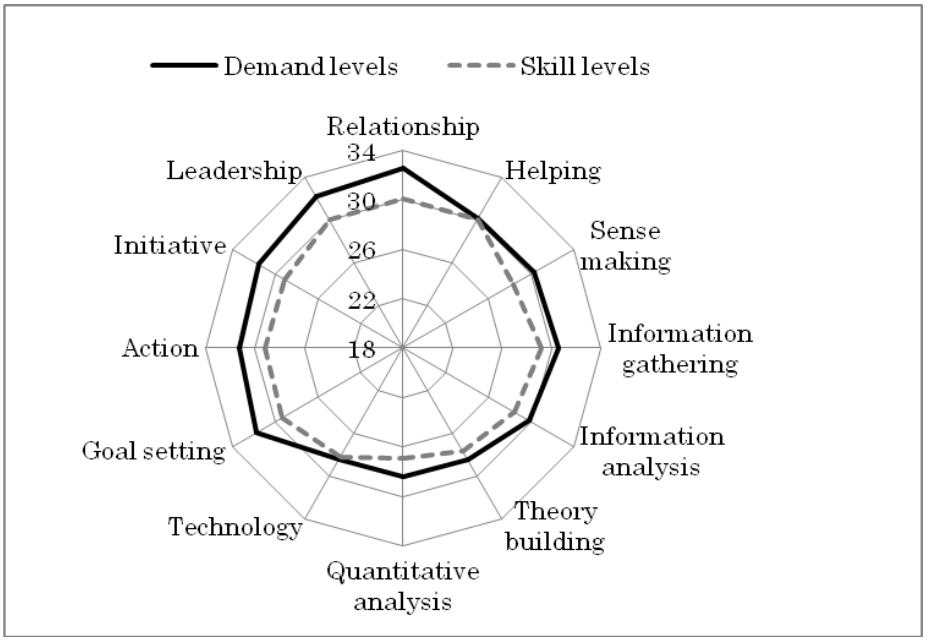


Figure 5(e). Adaptation situation of Thai managers

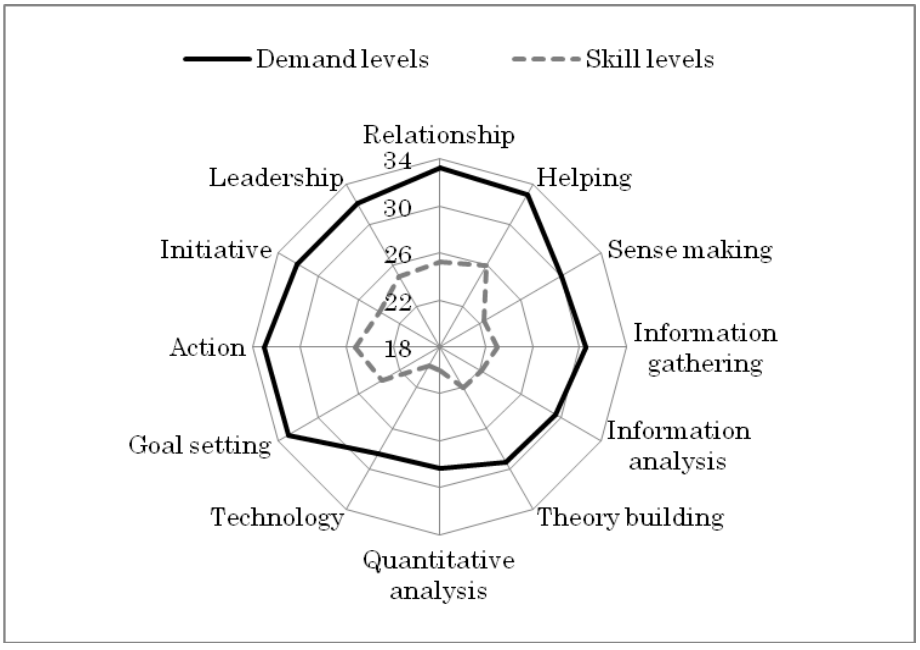


Figure 6. Japanese PCNs competency levels and Chinese competency demands