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**Abstract**

This study attempted to explore how Asian managers learn differently in accordance with their cultures. For this purpose, a total of 600 managers from Japan, China, and Malaysia were selected, who work for AEON Co. Ltd., a leading Japanese retail firm strategically expanding over Asian countries. Results illustrate that their ways of learning varied with each three countries. Japanese managers showed their preferred ways of learning more towards feeling and reflecting; Chinese managers tended to use thinking and reflecting ways of learning; and Malaysian managers were inclined to thinking and acting modes of learning. Furthermore, in the learning dimension between integration and specialization, Chinese managers were the most balanced learners, Malaysian managers were comparatively placed in the middle, and Japanese managers exhibited the most specialization of their learning orientation. In addition to the investigation about cross-cultural differences in learning styles, this study also examined a change of learning styles in management positions of organizational hierarchy. Results indicate that Japanese and Malaysian managers became more active in learning situations to the extent that their management positions shifted to higher hierarchical ranks, whereas the learning ways of Chinese managers remained stable regardless of their management position.

**Key words:** Managers' learning styles, Asian business, Japanese MNCs

## Introduction

Globalization never stops and has been even amplified in the 21<sup>st</sup> century. While it makes organizations over the world become more similar in the realm of their structure and technology, employees within the organization keep the uniqueness of behavior embedded in their own culture (Child, 1981; Adler & Gundersen, 2008).

Communication patterns (Hall, 1976), leadership processes (Dorfman, Howell, Hibino, Lee, Tate, & Bautista, 1997), negotiation processes (Graham, 1985; Adair & Brett, 2004; Adler & Gundersen, 2008), etc. are culturally contingent behaviors and organizational members use a certain behavioral way and approach that differ with cultures. To learn and acquire those behaviors, learning processes themselves are also thought to rest on cultures.

Learning is an essential human activity through which to create and obtain knowledge for individual as well as collective survival and its development (Kolb, 1984). In the process of socialization, people learn about how to learn by the interplaying with and responding to their surrounding environments like family, school, and job situations, (Kolb & Fry, 1975; Kolb, 1984). A preferred way of learning, that is learning styles, can affect and be affected by the contextual environments and the personality (Cross, 1976; Kolb, 1984). This would suggest that learning styles are influenced by cultures (Hayes & Allinson, 1988). Several studies show that people possess different preferred patterns of learning according to the features of their culture (see, Yamazaki, 2005). For example, a cultural typology of individualism and collectivism involves a learning dimension between action and reflection modes of learning (Auyeung & Sands, 1996; Yamazaki, 2005). As another, Barmeyer (2004) found that French and Quebecois students are more concrete and reflective learners than

German students. However, little research has been made in light of the learning styles of managers (Jackson, 1995) and there is almost no study about the focus on Asian managers, who are considerably important key players for organizational success in Asia. It should be noted that there are three empirical studies of managers' learning styles: a comparative study of UK, India, and East Africa managers (Hayes & Allinson, 1988), that of Japanese expatriates and American counterparts (Yamazaki & Kayes, 2007), and that of Japanese managers and American managers (Yamazaki, Kayes, & Kayes, 2008). All of these studies, however, are founded on a comparison between a limited number of Eastern and Western countries. In the era of globalization, it is crucial to understand Asian managers in more depth and breadth. For this reason, the present study thereby concentrated on three Asian countries: Japan, China, and Malaysia. Our research seeks for answers to the following two research question:

- Is there any difference in learning styles of managers among these three countries?
- Is there any difference in learning styles of managers according to their hierarchical positions?

To find out answers to these two questions, this present study used experiential learning theory conceptualized by Kolb (1984).

### **Experiential learning theory and cultural examination**

Kolb's (1984) theory is continually influential in management learning and education (Kayes, 2002), business school and community (Yuen & Lee, 1994), and cross-cultural studies (Yamazaki, 2005). As an essential feature of his model, concrete human experience forming tacit knowledge is founded at the central role in individual learning processes (Kolb, 1984; Kolb, Boyatzis, & Mainemelis, 2001). When people learn in a learning cycle, this tacit knowledge is then transformed into abstract

knowledge after reflection and conceptualization based on the experience; subsequently, the knowledge is tested by taking action where to lead new experience that requires using sensing and feeling. Kolb's (1984) learning model thereby encompasses into the totality of fundamental human activities: feeling, reflecting, thinking and acting.

His learning theory is also differentiated not only from cognitive learning theories that stress the importance of cognition rather than affection, but also from behavioral learning theories that eliminate subjective experiences in the process of learning (Kolb et al., 2001). This notion is essentially important to investigate cross-cultural differences in learning styles. When people are exposed on a different culture, there are three components of the cultural shock process: affect, behavior, and cognitions, that is, how they feel, act, think, and perceive (Ward, Bochner, & Furnham, 2001). It is indicated that culture has a great effect upon those multi-facets of people, so that learning theories to be used for cross-cultural investigation should not be biased against the accentuation of particular human phenomena in learning processes. In this sense, Kolb's learning model is properly applicable to cross-cultural examination in light of learning styles (Hoppe, 1990).

### **Learning styles**

The learning cycle proposed by Kolb's (1984) learning model consists of two dialectical learning dimensions among four basic modes of learning: concrete experience (CE) = feeling, reflective observation (RO) = reflecting, abstract conceptualization (AC) = thinking, and active experimentation (AE) = acting. One learning dimension represents a dialectical relationship between AC (thinking) and CE (feeling), while the other dimension relates to the one between AE (acting) and RO (reflecting). In accordance with a combination of two learning modes from each of

those two dialectical learning dimensions, his learning theory offers four fundamental styles of learning: the diverging, the converging, the assimilating, and accommodating learning style (Kolb, 1984; Kolb & Fry, 1975).

The diverging learning style develops CE (feeling) and RO (reflecting) modes of learning. This style of learning requires using imagination abilities and appreciation of different values and various meanings grasped through sensing or feelings. Opposite to the diverging style, the converging learning style emphasizes with AC (thinking) and AE (acting) modes. This style of learning involves individual decision making, managing tasks and goals logically, and concentrating on issues and their practical resolutions.

The assimilating learning style specializes in AC (thinking) and RO (reflecting) modes. This learning style strengthens the capabilities of gathering and organizing abstract information developing a conceptual model or theory. Finally, the accommodating learning style in contrast with the assimilating style requires using CE (feeling) and AE (acting) modes. Its strong abilities concern learning from hands-on experiences, by making a trial-and-error approach, and by taking actions and initiatives. Figure 1 describes Kolb's learning model.

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Insert Figure 1 about here

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Experiential learning theory also proposes another angle of individual learning. People usually develop first with two particular learning modes, staying at one of four leaning styles described above and then they limit ways of individual learning (Mainemelis, Boyatizs, Kolb, 2002; Gypen, 1980). Learning styles remain relatively

stable (Keefe, 1974); however, when people are exposed to certain environments demanding their undeveloped modes of learning, they start to adaptively develop such undeveloped learning modes. Consequently, their learning styles shift from the specialization of two learning modes to the integration of three or four modes, becoming more adaptive flexible to surrounding environments (Mainemelis et al., 2002).

Kolb's (1984; Mainemelis et al., 2002) learning theory argues that the integration of learning modes requires people to keep a balance in one or both of the two dialectical learning dimensions occurring a tension between one learning mode and the other in them. For instance,

If a person preferred to use CE (feeling) and AE (acting) and then developed undeveloped RO (reflecting) demanded by environments where this person is situated, he or she would come to employ three learning modes of CE (feeling), AE (acting), and RO (reflecting) in learning processes. Because of the integration between AE and RO modes of learning, this person is assumed to become more flexibly adaptive into a balanced learning style of such a dialectical learning dimension. Hence, the balanced learning styles represent to the integrated learning orientation, while the imbalanced styles relate to the specialized learning direction.

### **Cross-cultural learning**

The past research discovered a difference in learning styles between the West and the East countries. In Western culture, the action mode is more valued and dominates the reflection mode in society, whereas Eastern culture more emphasizes the reflection mode, which is required in disciplines of yoga or Zen (Kolb, 1984). Western world also has a strong emphasis on logic and rationality (Nugent, 1981) that is exemplified in the mode of AC (thinking), while Eastern societies are assumed to



appreciate the value of group orientation and human relationship that is connection with the CE (feeling) learning mode. There is an obvious contrast within the two dialectical learning dimensions between Western and Eastern culture. This perspective received theoretical as well as empirical supports from the past studies using a sample of Japanese as a representative of Eastern culture (see, Yamazaki, 2005; Yamazaki & Kayes, 2007; Yamazaki et al, 2008). While we know such a clear contrast of learning styles between the Eastern and the Western countries, a question is still unanswered as to whether people of Eastern countries such as Japan, China, and Malaysia employ similar learning styles as a whole of the Eastern countries.

For this question, the present study will first pay an attention to the previous cross-cultural study conducted by Yamazaki (2005), discussing a conceptual similarity between Hofstede's cultural dimensions; especially, individualism-collectivism and uncertainty avoidance dimensions, and Kolb's learning styles. Within Asian countries, there are the variations of cross-cultural values in Hofstede's dimensions, which possibly lead to cross-cultural differences in learning styles. Secondly, Confucian ethics that creates a moral discipline in a Hofstede's cultural dimension (Hofstede & Bond, 1988) seems to play an important role in understanding an aspect of learning styles among Asian countries. This study will thereby examine such a value by the connection between Confucian ethics and power distance.

In light of individualism-collectivism of Hofstede's cultural dimension, Yamazaki (2005) hypothesized that interdependent-self (Markus & Kitayama, 1991), that is individualism, people will learn using the two learning modes of CE (feeling) and RO (reflecting), and that independent-self (Markus & Kitayama, 1991), that is collectivism, people will learn by the two learning modes of AC (thinking) and AE

(acting). As the other Hofstede's dimension, strong avoidance is related to RO (reflecting), while weak uncertainty avoidance is linked with AE (acting) (Hoppe, 1991; Yamazaki, 2005). Hofstede (2003) showed that Japan, China, and Malaysia are categorized as all collectivistic cultures, though China and Malaysia is a stronger orientation towards collectivism than Japan. The scores of individualism-collectivism indexes of Japan, China, and Malaysia are 46, 20, and 26 respectively. Some cross-cultural researchers also found that Japanese culture is typical of independent-self (Markus & Kitayama, 1991) or collectivism (Trinadis, 1995). According to these findings as to this cultural dimension, Japanese, Chinese, and Malaysian people may tend to learn through CE (feeling) and RO (reflecting) modes of learning.

The other Hofstede's cultural dimension, uncertainty avoidance, makes a distinctive contrast among three countries: Japanese is very strong uncertainty avoidance orientation, while Chinese and Malaysian hold a cultural value of weak uncertainty avoidance. The scores of this dimension of Japan, China, and Malaysia are 92, 38, and 36 respectively. These results will enable us to posit that Japanese are likely to use the RO (reflecting) mode of learning. This learning tendency of Japanese is a consistent to the one illustrated in the connection with the individualism-collectivism dimension. However, the weak uncertainty avoidance culture of Chinese and Malaysian are supposed to learn through the AE (acting) mode of learning. As we discussed earlier, the collectivism culture tends to lead its people to use the RO (reflecting) mode of learning, this perspective makes a conflict in both Chinese and Malaysian people in light of the learning dimension of AE (acting) and RO (reflecting). As a consequence, Chinese and Malaysian possibly learn using both modes of AE (acting) and RO (reflecting) equally by keeping a balance between these two modes.

Hofstede and Bond (1988) argue with results of the Chinese value survey that certain Confucian values emerge in accordance with which pole people stay at a Hofstede's cultural dimension. Hofstede (1991) discusses that the large power distance countries correlated to factors of the Chinese value survey indicate a moral discipline of 'moderation, following the middle way' (p.162). Although this view directly concerns an allocation of power and status in organizational hierarchy, there is a virtue of moderation in life by Confucian ethics in which people should work and study hard but not spend too much (Hofstede, 1991). This notion of moderation may result in a resolution of a dialectical tension made in ordinary life and is thought to be applicable to learning situations in which people don't take an extreme position. That is, the large power distance cultures under Confucian countries are an association of maintenance of a balanced learning style. Hofstede (1991) shows such that: Malaysia got the highest score of 104 and becomes the largest power distance culture; China received the score of 80 and belongs to the large power distance culture; but the score of Japan is 54 and is placed in the relatively middle between the large and the small power distance. These results will make it possible to assume that Malaysian and Chinese people tend to use a learning strategy to keep a balance in the two dialectical learning dimensions: the AC (thinking) and the CE (feeling) modes of learning, and the AE (acting) and the RO (reflecting) ones. Taken together, the following hypotheses will be created regarding learning styles of Japanese, Chinese, and Malaysian managers:

**Hypothesis 1:** Japanese managers will rely on more the CE (feeling) and the RO (reflecting) modes of learning than Chinese and Malaysian managers.

**Hypothesis 2:** Chinese and Malaysian managers will be more balanced and less specialized in the two learning dimensions than Japanese managers.

## **Managerial learning**

Experiential learning theory posits that contextual environments like job demands and requirements develop learning modes with which people can properly respond to and deal with such environments (Kolb, 1984). Career advancement in which people are promoted to a management position requiring management skills develops certain learning modes (Kolb, 1984). Although management positions may need multiple competencies in organizations, managers would have to take an active orientation towards goals as to the implementation of plans and have to deal with the concrete situations of managing people. In this regard, the accommodating learning style is required which develops the CE (feeling) and the AE (acting) modes of learning. In a study about engineering professionals and social workers made by Gypen (1980), managers in the line of engineering career where abstract conceptualization (AC) and active experimentation (AE) are dominant learning modes show a strong progression towards concrete experience (CE) and reflective observation (RO), while they further strengthen the AE mode of learning. Similarly, Gypen's (1980) study also presents that the managers of social work usually requiring the CE and RO modes of learning newly develop the AC and AE modes that can be thought to be not dominant in a career of non managerial position of social workers. His study suggests that the AE (acting) mode of both career paths is essential in common to be developed for requirements of management positions, while the CE mode of learning is important for them in such a way that managers must manage immediate, concrete circumstances where people are situated.

In comparison of the cross-cultural learning styles, Eastern people are considered to be more reflective on their learning situation in general. In this sense, their

undeveloped learning modes would be the AE (acting) mode of learning; thus, Asian managers will have to more develop the AE mode. As a consequence, the third hypothesis will be created as follows:

**Hypothesis 3:** Asian managers will shift their learning styles more towards the AE (acting) mode of learning if they take an upper management position.

## **Methods**

### *AEON Co., Ltd.*

This study utilized a research of 'New Leadership in Japan and Asia under Globalization' as an IUJ Research and Education Program supported by International University of Japan (IUJ). Under this platform program, AEON Co. Ltd. was asked and agreed to participate in this leadership research including cross-cultural learning style investigation of the present study. AEON is a leading, successful retail firm, whose headquarters is located near a Tokyo area. Its revenue was 5,167 million yen in the fiscal year of 2007, which is the second largest to Seven & I Holdings in Japan. AEON's main line of business includes the operation of gigantic shopping centers, supermarkets, home centers, convenience stores, etc. Under globalization, AEON holds 169 affiliated companies, 11,034 stores, and 241,129 employees over the world. AEON has a further expansion strategy in Japan and Asian emerging countries including Malaysia, Thailand, China, and Taiwan. Because of its focus on Asian countries, AEON is considered to be an adequate company to be selected as an organizational source for sampling of this study.

### *Samples*

A total of 600 Asian managers of Japan, China, and Malaysia were used for learning style analyses in this study: the number of each country's manager was 200

equally. An average age of Japanese managers is 41.95, that of Chinese managers is 30.76, and that of Malaysian managers is 32.72. This illustrates that the sample of Japanese managers are much older than those of the other two nationals. In addition, a gender ratio of Japanese managers: male=76.5% vs. female=23.5%, is different from that of both Chinese and Malaysia managers: male=42.5% vs. female=57.5% and male=41.0% vs. female=59%). Japanese organizations may still remain male domination on management positions. Conversely, Chinese and Malaysia ones can be seen as slightly female advantages to take management as to retail industries. Because of approximate 10 years older of the average age, Japanese managers hold longer working experiences at AEON: 206.90 months (17 years). Chinese and Malaysian managers, however, possess much shorter working experiences at AEON: that is, Chinese managers have 69.37 months (6 years) and Malaysian managers hold 95.07 months (8 years). In light of career transitions over organizations, only 34.0% of Japanese managers have other organizational experiences. In contrast, 71.5% of Chinese managers and 54.5% of Malaysian managers experienced other organizational life before working for AEON. These data suggest that AEON China and Malaysia may use a selection strategy to hire persons with organizational experience, in comparison with AEON Japan. Finally, management positions of participants slightly differ among Japan, China, and Malaysia: a percentage of store and vice store managers is 8.0%, 10.5%, and 12.9% respectively; that of line managers is 17.0%, 36.5%, and 39.0%, and that of assistant line managers is 75.0%, 53.0%, and 49.0%. Demographic characteristics of the managers of three countries are summarized in Table 1.

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Insert Table 1 about here

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### *Sampling processes*

Survey packets were administered to potential participants through internal delivery systems of AEON stores in Japan and those of AEON China and Malaysia. In Japan, a total of 500 survey packets were sent to them and 456 survey packets were returned with a response rate of 91.20%. Of the 456 returned questionnaires, 48 were eliminated due to incompleteness, not being followed to an instruction of questionnaires, or part-time status. As a consequence, the number of usable questionnaires was 408. In order to avoid the violation of the statistical assumption of homogeneity of variance of ANOVA, this study set up 200 samples from the three countries equally and then randomly selected 200 Japanese cases through SPSS.

In terms of Chinese managers, a total of 357 survey packets were sent to AEON China and 334 were returned with a response rate of 93.56%. Of the 334 questionnaires, 290 were usable as a result of the elimination of 44 questionnaires that were not completed or followed with the survey instruction. Then, 200 cases were randomly selected through SPSS.

A total of 300 survey packets were delivered to AEON Malaysia and all of them were returned with 100% response rate. Of the 300 questionnaires, 89 participants did not specify their managerial positions which are analyzed in this study. In addition, due to the elimination of other incompleteness in questionnaires, 209 questionnaires were finally usable and then 200 cases from them were randomly selected through SPSS.

### *Instruments*

The Kolb (1999) Learning Style Inventory (LSI) was employed in this study in order to examine learning styles of Japanese, Chinese, and Malaysian managers. This

instrument used a forced-choice way by which to analyze a learning preference in light of four learning modes: CE (feeling), RO (reflecting), AC (thinking), and AE (acting). The LSI is composed of 12 questions. It asks examinees to prioritize four choices concerning the four learning modes. For example, a sample question in the LSI is: "When I learn," and the four alternatives to be ranked are: "I am happy; I am careful; I am fast; and I am logical." These four options relate to the CE mode, the RO mode, the AE mode, and the AC mode respectively. The total of a number ranked from '4 = you learn most' to '1 = you learn least' on each four learning modes illustrates the extent of how much examinees rely upon each of the four different modes of learning. The total scores that are subtracted from one sum to the other in the same dialectical dimension: that is, the value of AC – CE or that of AE – RO, describes a relative preference of examinees between its two dialectical modes. A combination of investigated these two scores leads to which learning style examinees prefer to use.

Furthermore, the LSI is also designed to analyze to what extent an examinee keep balance between two modes of learning in each of the two dialectical learning dimensions: that is, a degree of to a specialization and integration facet (Mainemelis et al., 2002). The absolute value of the scores subtracted from one sum to the other in the same dialectical learning dimension (i.e.,  $|AC-CE|$  or  $|AE-RO|$ ) was adjusted for population variation and showed such a degree of balanced learning tendency (Mainemelis et al., 2002). The absolute value that comes closer to zero describes more balanced, integrated, and learning orientation. Conversely, the absolute value that amplifies away from zero represents less balanced and more specialized learning orientation.

Kolb's learning theory and the LSI have drawn a lot of attention from



interdisciplinary areas (Kolb, et al., 2001). In fact, over 2000 researches, referred articles, and dissertations presented related to learning and education conducted on his theory and the LSI from 1971 to 2008 (Kolb & Kolb, 2008). The third version of the LSI used in the present study makes the changes in psychometrics suggested by the study of Veres, Sims, and Locklear (1991) illustrating that the earlier version of the LSI showed high test-retest reliability.

## **Results**

### *Cross-cultural learning*

The LSI scores obtained from the three countries' managers show their preferred way of learning. Japanese managers as a whole are categorized as the diverging learning style in LSI four regions where their two mean scores of  $AC-CE=-4.05$  and  $AE-RO=3.65$  are placed. Overall Japanese managers tend to have a more preference for the CE (feeling) and the RO (reflecting) modes of learning. Chinese managers received their two mean scores of  $AC-CE=-4.86$  and  $AE-RO=4.18$  that lead to the assimilating learning style in general. They tend to prefer to learn through more the AC (thinking) and the RO (reflecting) modes. Malaysian managers on the whole stay at the LSI region of the converging learning style in that the mean score of  $AC-CE$  was 7.96 and that of  $AE-RO$  was 6.67. Malaysian managers thereby have a learning tendency more towards the AC (thinking) and the AE (acting) modes. Those LSI results indicate that learning styles differ among Japanese, Chinese, and Malaysian managers. In particular, Japanese managers are quite opposite to Malaysian managers in light of learning styles. Figure 2 depicts the locations of three countries' managers in the LSI grid.

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Insert Figure 2 about here

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Results of the ANOVA test illustrated that three countries' managers significantly differ in both dialectical learning dimensions: the mean scores of AC-CE ( $F=66.21$ ;  $d.f.=2, 597$ ;  $p<0.01$ ) and those of AE-RO ( $F=4.46$ ;  $d.f.=2, 597$ ;  $p<0.05$ ). Results of Bonferroni post hoc test showed that the mean scores of AC-CE of Japanese, Chinese, and Malaysian managers are significantly different from each other. In the dialectical dimension of the AC (thinking) and the CE (feeling) learning modes, Japanese managers are the most concrete and the least abstract, Chinese managers are in the middle, and Malaysian managers are the most abstract and the least concrete. With regards to the other dialectical dimension of the AE (acting) and the RO (reflecting) modes of learning, results of Bonferroni test showed that Japanese managers are significantly different from Malaysian managers. But there are no statistical difference in that dimension between Chinese managers and the both of Japanese and Malaysian managers. It is meant that Japanese managers are more reflective and less active than Malaysian managers.

Hypothesis 1 explains that Japanese managers will rely on more the CE (feeling) and the RO (reflecting) modes than Chinese and Malaysian managers. As described above, Japanese managers are completely contrasted with Malaysian managers in terms of both dialectical learning dimensions as well as learning styles. LSI results of Chinese managers have made more complexity for comparative study of the three countries' managers. Chinese managers are quite different from Japanese managers in the dialectical learning dimension of the AC (thinking) and the CE (feeling) modes; however, Chinese managers are less abstract and more concrete than Malaysian

managers. In addition, regarding the other learning dimension, Chinese managers are not statistically different from Japanese and Malaysian managers. Because of all of those results, Hypothesis 1 received partially accepted. Table 2 shows the ANOVA test results and the Bonferroni test results.

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Insert Table 2 about here

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Hypothesis 2 concerns the difference in balanced or specialized learning styles among Japanese, Chinese, and Malaysian managers, saying that Chinese and Malaysian managers will be more balanced and less specialized in the two learning dimensions than Japanese managers. Results of the ANOVA test illustrate that the absolute mean scores of  $|AC-CE|$  are significantly different among them ( $F=90.83$ ;  $d.f.=2, 597$ ;  $p<0.01$ ) and those of  $|AE-RO|$  are also significantly differentiated ( $F=38.78$ ;  $d.f.=2, 597$ ;  $p<0.01$ ). Furthermore, results of Bonferroni test showed that Chinese and Malaysian managers are more balanced and less specialized than Japanese managers in terms of the dialectical learning dimension of the AC (thinking) and the CE (feeling) modes of learning. There is no difference between Chinese and Malaysian managers in that learning dimension. In terms of the other dialectical learning dimension, however, results of Bonferroni test indicate that three countries' managers significantly differ from each other. That is, Chinese managers are most balanced and least specialized, Malaysian managers are placed in the middle between Chinese and Japanese managers, and Japanese managers are least balanced and most specialized. Because of those results about the balance and specialization of learning styles among them, Hypothesis 2 was largely accepted. Table 3 shows the results of ANOVA and Bonferroni tests.

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Insert Table 3 about here  
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### *Managerial learning*

The third hypothesis involves a relationship between learning styles of managers and hierarchical management positions. It predicts that Asian managers will shift their learning styles more towards the AE (acting) mode of learning if they take an upper management position. Thus, an analysis about this hypothesis focuses on the dialectical dimension of the AE (acting) and the RO (reflecting) modes of learning. The overall number of each three managerial positions of 'Store/Vice Store Managers', 'Line Managers', and 'Assistant Line Managers' in the samples of AEON corresponds to 61, 185, and 354 respectively. The Store/Vice Store Managers take the uppermost hierarchical position in the each store or branch of AEON for which they usually hold a full responsibility. The Line Managers are placed at the middle managerial positions where to have a responsibility for operational functions in the store. The Assistant Line Managers support to their Line Managers supervising them. Because the number of samples of management positions is varied, the test of homogeneity of variances of ANOVA was conducted. Results of its test present that 1.40 of the Levene statistic is insignificant ( $p>0.05$ ); therefore, this examination does not violate this ANOVA assumption.

The LSI scores obtained from the three management positions tell us that the entire learning style of the 61 Store/Vice Store Managers represents to the converging style (AC-CE=3.97 and AE-RO=9.13); that of 185 Line Managers describes the assimilating style (AC-CE=4.74 and AE-RO=5.25); and that of 354 Assistant Line

Managers corresponds to the diverging style (AC-CE=1.79 and AE-RO=3.86). Results of the ANOVA test about the entire 600 Asian managers illustrated that the mean scores of AE-RO are significantly different among the three management positions ( $F=6.44$ ;  $d.f.=2, 597$ ;  $p<0.01$ ). Results of the Bonferroni test showed that the Store/Vice Store Managers significantly differ from their subordinates of the Line Managers and the Assistant Line Managers. It is interpreted that the whole group of Store/Vice Store Managers is more active than that of the Line Managers and that of the Assistant Line Managers. Table 4 depicts the results of the ANOVA and the Bonferroni tests.

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Insert Table 4 about here  
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As a result of the three countries' learning styles, Japanese, Chinese, and Malaysian managers considerably vary across culture so that the present study further tested the third hypothesis according to the three countries. The entire group of Japanese managers is classified as the diverging learning style. Of 200 Japanese managers, 16 managers take the position of Store/Vice Store management, 34 managers have a responsible as Line management, and 150 managers are classified as Assistant Line management. No violation of the assumption about homogeneity of variance about the samples occurred in the AE-RO learning dimension (the Levene statistic=0.70,  $p>0.05$ ). Results of the ANOVA test showed that there is a significant difference in that dialectical dimension among the three managerial positions of Japanese managers: the mean score of AE-RO of Store/Vice Store Managers is 10.63; that of Line Managers is 6.65; and that of Assistant Line Managers is 2.22. According to results of the Bonferroni test, the Store/Vice Store Managers are significantly more active learners than the

Assistant Line Managers, while the difference is insignificant between the Store/Vice Store Managers and the Line Managers as well as between the Line Managers and the Assistant Line Managers. Those results suggest that Japanese managers tend to change their learning styles more towards the AE (acting) mode of learning if they take an upper management position. Hence, Hypothesis 3 was accepted in terms of Japanese managers.

Two hundred Chinese managers as a whole are categorized as the assimilating learning styles. The number of Store/Vice Store Managers is 21, that of Line managers is 73, and that of Assistant Line Managers is 106. Results of test of homogeneity of variances showed no violation about this assumption among these samples (the Levene statistic=2.21,  $p>0.05$ ). A mean score of AE-RO of Store/Vice Store Managers is 5.14, that of Line Managers is 4.03, and that of Assistant Line Managers is 4.08. In accordance with results of ANOVA test, the mean scores of AE-RO among these three types of managers were insignificant ( $F=0.16$ ; d.f.=2, 197;  $p>0.05$ ). It is suggested that Chinese managers may tend to remain relatively stable in the hierarchical managerial positions. As a consequence, Hypothesis 3 received reject about Chinese managers.

Finally, the group of 200 Malaysian managers was examined, exhibiting their preferred way of learning as the converging learning style. Of them, 24 managers are categorized as Store/Vice Store Managers, 78 managers are Line Managers, and 98 managers are Assistant Line Managers. Homogeneity of variance test resulted in no violation regarding an assumption about ANOVA test (the Levene statistic=0.02,  $p>0.05$ ). The LSI scores of the AE-RO learning dimension described 11.63 of the Store/Vice Store Managers, 6.14 of the Line Managers, and 5.79 of the Assistant Line Managers. Results of ANOVA test illustrated that there is a significant difference among

these three managerial groups ( $F=3.43$ ;  $d.f.=2, 197$ ;  $p<0.05$ ). Results of Bonferroni test explained that Store/Vice Store Managers are significantly more active learners than the other two managerial groups. In addition, there is no significant difference in the AE-RO learning dimension between the Line Managers and the Assistant Line Managers. Overall, it is meant that if Line Managers and Assistant Line Managers are promoted to the uppermost position of Store/Vice Store Managers in their store, they will tend to shift their learning orientation more towards the AE (acting) mode of learning. Because of these results about Malaysian managers, Hypothesis 3 received support.

In sum, the entire group of 600 Asian managers was tested in light of the relationship between their learning tendency and their hierarchical management positions, whose results supported the third hypothesis. Close examinations about Japanese and Malaysian managers also resulted in support of this hypothesis, but the results about Chinese managers rejected it. Tables 5-a, 5-b and 5-c describe results of ANOVA and Bonferroni tests regarding three countries' managers in relation to their hierarchical management positions.

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Insert Tables 5-a, 5-b, and 5-c about here

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## **Discussion**

This study has confirmed that the learning styles of Asian managers vary across cultures. Japanese managers tend to learn through the CE (feeling) and the RO (reflecting) modes of learning that lead to the creation of the diverging learning style. Chinese managers have a tendency more towards the AC (thinking) and the RO

(reflecting) modes generating the assimilating learning style. Malaysian managers are likely to learn using the learning modes of the AC (thinking) and the AE (acting). Furthermore, Chinese managers become most balanced in the learning dimension between integration and specialization. Malaysian managers are considered to be relatively balanced in comparison with Japanese managers, who exhibit the most specialization of their learning orientation.

Cross-cultural differences in learning styles of managers are a source of generation of external tensions between two or more groups of nationals: as a result, complexity, confusion and conflicts may occur in the organization abroad. In the age of globalization, we cannot escape from those situations where to hold various cultural background employees in the organization. It will be essentially important to know how MNCs should strategically turn disadvantages into competitive advantages for their success. In this case, Japanese MNCs possess this kind of opportunity. For example, Japanese managers are completely opposite to Malaysian managers in light of learning styles in the two dialectical learning dimensions. A bicultural group consisting of Japanese and Malaysian managers, if diverging and converging learning styles are mixed together, may perform better a mono-cultural group only including homogeneous learning styles of either Japanese or Malaysian managers. Adams, Kayes, and Kolb (2005) discussed that the one group comprising heterogeneous learning styles performed better than the four groups including homogeneous learning styles. Cross-cultural synergies (Adler & Gundersen, 2008) may be derived from the bicultural teams of Japanese and Malaysian managers in Japanese MNCs.

Chinese managers are the most balanced learners in both dialectical learning dimensions. Balanced or integrated learners have advantages of adaptive flexibility in



learning environmental situations (Mainemelis et al., 2002). Thus, Chinese managers may be able to flexibly adapted to various job situations which to demand them to deal with. In addition, Kayes (2001) discussed that the teams made up of balanced learning styles of its members show better performance than the teams including similar learning styles. This suggests that it may be better to make a group consisting of Chinese managers who have balanced learning styles, rather than a group that includes those Chinese managers and some other nationals who hold specialized learning styles. Furthermore, although China is a group oriented country, Chinese managers may be able to make a better decision individually. Because those who possess balanced learning styles generate a creative tension internally, their decisions possibly appear to reflect with various perspectives, if they must decide individually. This is a similar effect to US managers whose culture is strong individualism (Yamazaki, et al., 2008). MNCs may rely on Chinese managers on this regard.

This study explains that Asian managers, especially Japanese and Malaysian managers, will be getting more active learners if their managerial positions are advanced in the organizational hierarchy, though Chinese managers are exception to this proposition. Active orientation in Western cultures is generally an important value, and this orientation also comes to crucial in the Eastern organization in management. If Japanese or Malaysian employees wish to be promoted to upper management positions in MNCs, they will need to become more active under a general organizational circumstance where reflective behaviors are valued.

It is very important to understand cross-cultural differences in learning styles. This study used only a sample of AEON managers devoted to a large-scale retail business in light of Japan, China, and Malaysia. In order to generalize a type of their

learning styles, examination of other corporations and other industries are essential.

Furthermore, Japan, China, and Malaysia are only a part of Asian countries. In this regard, a promising study should deal with other Asian countries and more importantly, the one should examine learning styles of other countries beyond Asia.

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Table 1: Demographic characteristics of Japanese, Chinese, and Malaysian managers

	Japanese managers		Chinese managers		Malaysian managers	
N	200		200		200	
Age						
mean	41.95		30.76		32.72	
s.d.	9.04		4.99		4.95	
Gender						
male	153	(76.5%)	85	(42.5%)	82	(41.0%)
female	47	(23.5%)	115	(57.5%)	118	(59.0%)
Working experience at AEON						
mean (months)	206.90		69.37		95.07	
s.d.	104.39		40.09		73.44	
Working experience at other organizations						
yes	68	(34.0%)	143	(71.5%)	109	(54.5%)
no	132	(66.0%)	57	(28.5%)	91	(45.5%)
Management positions						
store/vice store managers	16	(8.0%)	21	(10.5%)	24	(12.0%)
line managers	34	(17.0%)	73	(36.5%)	78	(39.0%)
assistant line managers	150	(75.0%)	106	(53.0%)	98	(49.0%)

Table 2: Results of the ANOVA and the Bonferroni tests about learning styles of three countries' managers

	N	AC-CE		AE-RO		Learning styles as a whole
		mean	s.d.	mean	s.d.	
Japanese managers	200	-4.05	14.86	3.65	13.48	Diverging
Chinese managers	200	4.86	8.01	4.18	8.13	Assimilating
Malaysian managers	200	7.96	8.19	6.67	10.05	Converging
F value		66.21**		4.46*		
d.f.		2, 597		2, 597		
Boferroni test		m.d.	s.e.	m.d.	s.e.	
Japanese vs. Chinese		-8.91*	1.08	-0.53	1.08	
Chinese vs. Malaysian		-3.10*	1.08	-2.49	1.08	
Malaysian vs. Japanese		12.01	1.08	3.02*	1.08	

\*\* p<0.01; \*p<0.05



Table 3: Results of the ANOVA and the Bonferroni tests about a degree of balanced learning styles of three countries' managers

	N	AC-CE		AE-RO		A degree of balanced learning styles
		mean	s.d.	mean	s.d.	
Japanese managers	200	14.47	8.69	11.72	7.03	Specialization
Chinese managers	200	6.52	4.50	6.48	5.30	Integration
Malaysian managers	200	7.16	5.60	8.36	5.58	Middle
F value		90.83**		38.78**		
d.f.		2, 597		2, 597		
Boferroni test		m.d.	s.e.	m.d.	s.e.	
Japanese vs. Chinese		7.95*	1.08	5.23*	1.08	
Chinese vs. Malaysian		-0.63*	1.08	-1.88*	1.08	
Malaysian vs. Japanese		-7.32*	1.08	-3.35*	1.08	

\*\* p<0.01; \*p<0.05

Table 4: Results of the ANOVA and the Bonferroni tests about learning styles of Asian managers according to their hierarchical management positions

	N	AC-CE		AE-RO		Learning styles as a whole
		mean	s.d.	mean	s.d.	
Store/Vice Store Managers	61	3.97	9.63	9.13	9.81	Converging
Line Managers	185	4.74	10.61	5.25	10.21	Assimilating
Assistant Line Managers	354	1.79	12.84	3.86	11.12	Diverging
F value		3.99*		6.44**		
d.f.		2, 597		2, 597		
Levene statistic		6.37**		1.40		
Boferroni test		m.d.	s.e.	m.d.	s.e.	
Store/Vice vs. Line		-0.77	1.76	3.88*	1.56	
Line vs. Assistant Line		2.94*	1.08	1.39	0.98	
Assistant Line vs. Store/Vice		-2.18*	1.65	-5.27*	1.49	

\*\* p<0.01; \*p<0.05

Table 5-1: Results of the ANOVA and the Bonferroni tests about learning styles of Japanese managers according to their hierarchical management positions

Japanese managers	N	AC-CE		AE-RO		Learning styles as a whole
		mean	s.d.	mean	s.d.	
Store/Vice Store Managers	16	-0.81	11.78	10.63	12.63	Accommodating
Line Managers	34	-3.06	14.51	6.65	12.25	Accommodating
Assistant Line Managers	150	-4.62	15.25	2.22	13.57	Diverging
F value		0.56		3.94*		
d.f.		2, 197		2, 197		
Levene statistic		0.42		0.70		
Bonferroni test		m. d.	s.e.	m. d.	s.e.	
Store/Vice vs. Line		2.25	4.52	3.98	4.03	
Line vs. Assistant Line		1.56	2.83	4.43	2.52	
Assistant Line vs. Store/Vice		-3.81	3.92	-8.41*	3.50	

\*p<0.05

Table 5-2: Results of the ANOVA and the Bonferroni tests about learning styles of Chinese managers according to their hierarchical management positions

Chinese managers	N	AC-CE		AE-RO		Learning styles as a whole
		mean	s.d.	mean	s.d.	
Store/Vice Store Managers	21	5.43	7.24	5.14	6.00	Assimilating
Line Managers	73	4.99	8.37	4.03	9.22	Assimilating
Assistant Line Managers	106	4.65	7.96	4.08	7.85	Assimilating
F value		0.10		0.16		
d.f.		2, 197		2, 197		
Levene statistic		0.50		2.21		
Bonferroni test		m.d.	s.e.	m.d.	s.e.	
Store/Vice vs. Line		0.44	1.99	1.12	2.04	
Line vs. Assistant Line		0.34	1.22	-0.06	1.25	
Assistant Line vs. Store/Vice		-0.78	1.92	-1.06	1.96	

Table 5-3: Results of the ANOVA and the Bonferroni tests about learning styles of Malaysian managers according to their hierarchical management positions

Malaysian managers	N	AC-CE		AE-RO		Learning styles as a whole
		mean	s.d.	mean	s.d.	
Store/Vice Store Managers	24	5.88	9.14	11.63	9.65	Converging
Line Managers	78	7.90	8.72	5.79	10.15	Assimilating
Assistant Line Managers	98	8.52	7.49	6.14	9.83	Converging
F value		1.00		3.43*		
d.f.		2, 197		2, 197		
Levene statistic		0.20		0.02		
Bonferroni test		m.d.	s.e.	m.d.	s.e.	
Store/Vice vs. Line		-2.02	1.91	5.83*	2.32	
Line vs. Assistant Line		-0.61	1.24	-0.35	1.56	
Assistant Line vs. Store/Vice		2.64	1.87	-5.48*	2.26	

\*p<0.05

Figure 1: Kolb's experiential learning model

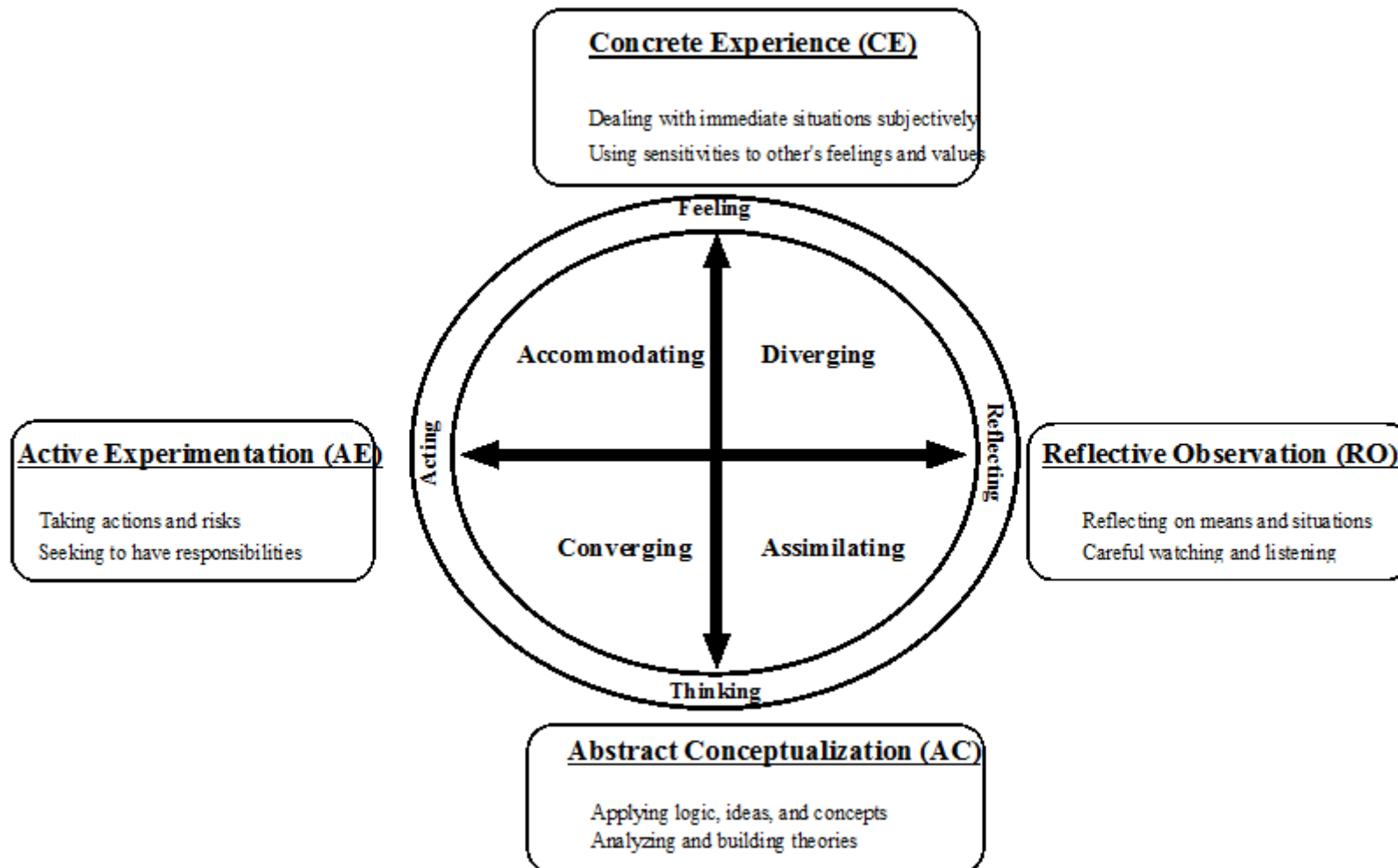


Figure 2: Learning styles of three countries' managers in the LSI grid

