문화적 다양성이 가상조직의 성과에 미치는 영향

Impact of Culture on Virtual Teams' Performance

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요 약

국경을 넘어선 가상조직이 증가함에 따라 가상조직의 성과향상에 문화적 다양성이 미치는 영향도 점점 중요해지고 있다. 문화적 다양성은 조직 내 창의성을 향상시키기도 하지만, 조직원 간의 상호간에 문제를 발생시켜 성과에 부정적 영향을 주기도 한다. 따라서 본 연구는 문화적 다양성이 가상조직의 성과에 미치는 영향을 실증적으로 분석하고자 했다. 실험과 설문을 통해 검증한 본 연구의 결과에 따르면, 문화적 다양성은 조직 내 갈등과 혼돈을 초래해 결과적으로 조직의 성과에 부정적인 영향을 끼치는 것으로 나타났다. 본 연구는 문화적 다양성과 갈등, 혼돈, 그리고 성과 간의 관계를 실증적으로 분석한 최초의 연구라는 점에서 그 의의를 찾을 수 있겠다.

키워드 : 가상조직, 문화적 다양성, 갈등, 혼돈, 조직성과

I. Introduction

The proliferation of information technology (IT) and the globalization of the work environment have led to the development of entirely new ways of interaction among people, relationship management, knowledge and expertise sharing, and coordination of joint activities, one of which is called the virtual team (Paré and Dubé, 1999). The virtual team can be defined as "a group of people who interact through interdependent tasks guided by a common purpose that works across space, time and organizational boundaries with links strengthened by webs of communication technologies" (Lipnack and Stamps, 1997). Since virtual teams are not bounded by geographical dimensions, any person from any part of the world can be part of the team. A negative consequence is that cultural differences among members could affect the performance of the team (Carmel), although both physical and spatial limitations can be overcome.

Despite the importance of culture, research on virtual teams has mainly focused on the communication and technological aspects of the team or a specific characteristic of it such as trust (Zigurs, 2003; Massey *et al.*, 2001; Paré and Dubé, 1999; Lipnack and Stamps, 1997). There has been little empirical research on the relationship between culture and virtual teams' performance. Hence the primary focus of our study is the impact of culture on virtual teams'

† This paper was supported by Samsung Research Fund, Sungkyunkwan University, 2008.

performance. Our research questions are:

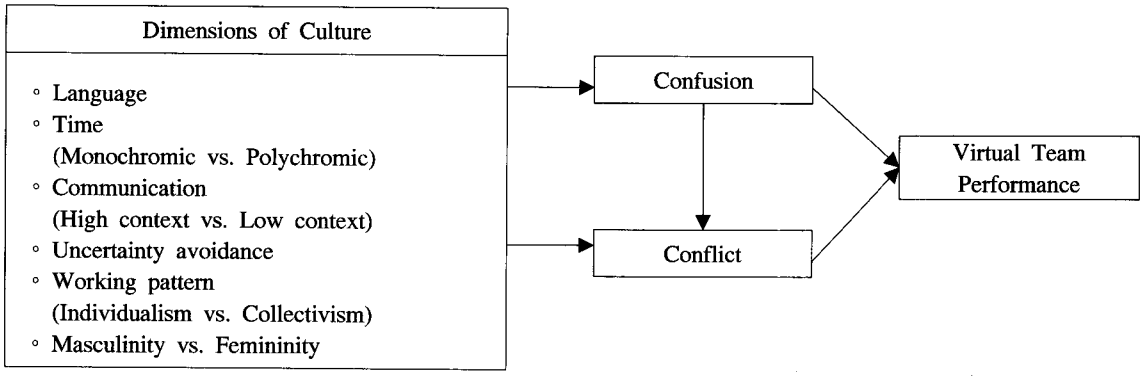
- *Is a virtual team's performance affected by the cultural differences within it?*
- *What kinds of cultural factors are there in a virtual team and how do they affect the team's performance?*

Ⅱ. Cultural Challenges Facing Virtual Teams

As we have discussed, virtual teams are often more diverse than conventional teams are, with members representing not only different technical specialties but different cultures, languages and organizational allegiances (Fisher, 1998). Difference in culture often results in different perceptions, norms and behaviors among members, which can undermine the performance of the virtual team in two general ways.

First, cultural diversity can result in lower performance due to information uncertainty. Employees of different cultural backgrounds tend to hold different sets of values (Simon, 2001), and accordingly, follow different cognitive maps to make sense of the environment and one another (Redding, 1980). As a result, much more information must be processed in the execution of a task simply to allow cooperation to take place in the team (Galbraith, 1977). Moreover, virtual teams rely on computer-mediated communications (CMC), and these do not provide users with rich cues to detect a partner's back channeling behaviors (Nardi and Whittaker, 2002), thus diminishing the information processing capability of virtual team members. As a result, confusion among team members may arise (Caisy *et al.*, 2004), eventually undermining organization performance (Galbraith, 1977).

Second, diverse groups are more likely to have less communication, be less integrated, and subsequently, experience more conflict (Williams and O'Reilly). Diversity can undermine social integration and group identification within a team, not only fueling conflict (Williams and O'Reilly), but also reducing tolerance of conflict (Georgios, 2000). This is because different social categories tend to view each other through the biased lens of stereotypes, and these biases undermine effective group interaction (Williams and O'Reilly). Distributed virtual teams experience even greater task conflict because it is difficult for participants to address disagreement by CMC. For example, passive participants could choose to ignore emails or phone calls and thus thwart the efforts of other participants to resolve the disagreement.



〈Figure 1〉 The research model

Based on information uncertainty and information processing theory, we propose the following model to examine how culture actually affects virtual teams' performance.

Ⅲ. Confusion, Conflict and Virtual Team Performance

Conflict may be defined as "the degree of intense interpersonal and/or intrapersonal dissonance (tension) between two or more interdependent parties based on incompatible goals, needs, desire, values, beliefs and attitude" (Pruitt, 1998; Van de Vliert, 1998; Gudykunst, 1997). If conflicts are not handled properly, they can put a strain on productivity, stability and system adaptability (Gudykunst, 1997). Here, we define a virtual team's performance as the degree of accomplishments by the team, which can be assessed on the basis of its return on investment (ROI) in a management support game. We hypothesize:

Hypothesis 1 : *The greater the conflict is, the worse the virtual team's performance will be.*

Multicultural barriers can increase uncertainty, and hence, confusion in a team's decision making process, which in turn, can result in low performance (Rathnam *et al.*, 1995; Berger, 1967). Besides, cultural difference makes consensus building (Adler, 1991; Loden and Rosener, 1999) and team building difficult. Thus, members in a culturally diverse virtual team experience more confusion, leading to higher conflict and lower performance in the team (Daily *et al.*, 1997). Confusion here is defined as the feeling of not being able to think clearly what to say or do in the virtual team due to information uncertainty (Berger, P., 1967). We hypothesize:

Hypothesis 2 : *The greater the confusion is, the greater the conflict will be in the virtual team.*

Hypothesis 3 : *The greater the confusion is, the worse the virtual team's performance will be.*

Ⅳ. Six Dimensions of Culture

Culture may be defined as the "shared values, beliefs, attitude, expectations and norms found within countries which distinguish them from each other" (Mockler and Dologite, 1997). Many researchers have defined culture in various ways (Mockler and Dologite, 1997; Deal, 1982; Alfons, 1998; Hofstede, 1991), and a basic problem in studying culture is that it is very difficult to measure. Nevertheless, we may consider culture as comprising two aspects: *implicit and explicit.* Implicit culture determines the meaning of life and can be seen as the basic assumptions by which we define the meaning we assign to things around us. They produce norms and values which are in turn manifested in visible artifacts (*explicit culture*) such as music, architecture, food, language, dress, etc. In this study, we focus mainly on the dimensions of explicit culture that have been defined by past research as these can be quantified with greater precision (Ronny, 1996). Seven dimensions of culture may be discerned in the literature (Berger, 1967; Lebra, 1976): language, time, uncertainty avoidance, communication (high context vs. low context), working pattern (collectivism vs. individualism), masculinity (vs. femininity) and power distance. Of the seven dimensions, we forgo power distance in this study as the virtual teams we investigate are very small in size. We discuss the other six dimensions below.

Language : Every culture has a system of language with which people are able to communicate

with one another (Gudykunst, 1997). The most universal language is English and it has its own dynamics. Cultural values can influence the meaning of what we consider as universal terms, e.g., the word 'race' has a meaning in Spain that is totally different from that in the United States. When English is not the first language, even more serious problems arise due to uncertainty, self consciousness and hesitancy. For example, it can be difficult to fully participate in a teleconference when one does not speak the language fluently. As a result, a team may lose vital ideas and information or take a wrong direction. We hypothesize:

Hypothesis 4a : *The larger the difference in language among members is, the greater the conflict will be in the virtual team.*

Hypothesis 4b : *The larger the difference in language among members is, the greater the confusion will be in the virtual team.*

Time (P-time vs. M-time) : Different cultures attach different degrees of importance to time, and so, time takes on different meanings and significance. Time may be typified as polychromatic (P-Time) or monochromatic (M-Time) (Gudyknust *et al.*, 1985). Polychromic time stresses people involvement and transaction completion rather than schedule keeping. Observers of polychromic time may not adhere seriously to the appointments they have made. In contrast, people with a monochromic perspective of time are strict in their observance of time, allowing it to determine their relationship and coordination with others. Observers of P-Time prefer to take up multiple deadlines whereas observers of M-Time prefer to complete the project in hand first before taking up a new one. We hypothesize:

Hypothesis 5a : *The larger the difference in importance given to time among members is, the greater the conflict will be in the virtual team.*

Hypothesis 5b : *The larger the difference in importance given to time among members is, the greater the confusion will be in the virtual team.*

Communication: High-context communication is where "most of the information is either in the physical context or internalized in the person" while low-context is just the opposite; i.e., where "the mass of information is vested in the explicit code" (Hall, 1976). In high-context culture, greater confidence is placed on the nonverbal aspects of communication, and people tend to seek out "social information" (Gudykunst *et al.*, 1986). When individuals' true feelings are involved, people in high-context culture are expected to communicate in ways that "camouflage and conceal speakers' true intentions" (Gudykunst *et al.*, 1988). In contrast, those who use the low-context communication style are expected to communicate in ways that are consistent with their feelings (Hall, 1976). Extending this concept to culturally diverse virtual teams, members of a team may be expected to prefer different communication styles. The difference in style could lead to confusion in the team. Moreover, difference in sensitivity and harmony among members could also lead to conflict. We hypothesize:

Hypothesis 6a : *The larger the difference in communication style among members is, the greater the conflict will be in the virtual team.*

Hypothesis 6b : *The larger the difference in communication style among members is, the greater the confusion will be in the virtual team.*

Working pattern (individualism-collectivism) : Individualism-collectivism is a major dimension of cultural variability identified by theorists across disciplines. Individualism may be defined as "the emotional independence from groups, organizations, or other collectivities" (Hofstede, 1980). In contrast, collectivism may be defined as "a set of feelings, beliefs, behavioral intentions, and behaviors related to solidarity, concern for others, cooperation among members of in-group and the desire to develop a feeling of groupness with other members (Hui, 1988; Karolak, 1998). Members from an individualistic culture form specific friendships whereas members of a collectivistic culture form friendships that are predetermined by stable relationships. The difference in importance given to the group and its goal could contribute to confusion and conflict in a virtual team. We hypothesize:

Hypothesis 7a : *The larger the difference in working pattern among members is, the greater the conflict will be in the virtual team.*

Hypothesis 7b : *The larger the difference in working pattern among members is, the greater the confusion will be in the virtual team.*

Uncertainty avoidance : The dimension of uncertainty avoidance is defined as the degree to which people prefer structured situations to unstructured ones (Hofstede, 1984). People in high uncertainty avoidance culture tend to be expressive or even aggressive; they shun ambiguous situations and expect structure in organizations and relationships to help make events clearly interpretable and predictable (Hofstede, 1991). People in low uncertainty avoidance culture tend to be less expressive and less openly anxious, and even relaxed. Members of low uncertainty avoidance cultures have lower stress levels and weaker superegos and are ready to take more risks. People in high uncertainty avoidance culture resist change, are more anxious, and prefer structured situations. In a culturally diverse virtual team where some members might prefer structured situations while others prefer unstructured ones, the difference in tolerance for ambiguity may contribute to confusion in the team. The difference in anxiety level and in the importance given to discipline among members can also lead to conflict in the team.

Hypothesis 8a : *The larger the difference in uncertainty avoidance among members is, the greater the conflict will be in the virtual team.*

Hypothesis 8b : *The larger the difference in uncertainty avoidance among team members is, the greater the confusion will be in the virtual team.*

Masculinity vs. femininity : Masculinity and femininity refer to gender roles, not physical characteristics. Traditionally, the masculine role is assigned the traits of assertiveness, competition and toughness, and the feminine role the traits of orientation to home, children and people, and tenderness (Hofstede, 1984). In masculine cultures, such traditional distinctions are strongly maintained while feminine cultures tend to collapse the distinctions and overlap gender roles (both men and women). Traditional masculine work goals include earnings,

recognition, advancement and challenge. Traditional feminine work goals include good relations with supervisors, peers and subordinates; good living and working conditions; and employment security. When a team includes members with these two opposite cultural affiliations, conflict would arise. However, unlike difference in the other cultural dimensions we have discussed, difference in the masculinity-femininity dimension may not lead to confusion. This is because the information processing capability of members could remain unscathed despite the conflicting masculinity/femininity cultural outlook they hold. We hypothesize:

Hypothesis 9 : *The larger the difference in the behavioral pattern of male or female among members is, the greater the conflict will be in the virtual team.*

V. Analyses and Findings

To empirically test the hypotheses developed, we conducted an experiment and then a survey based on the experiment. The experiment and survey both involved the same 32 first-year undergraduates of different nationalities, namely Chinese, Indian, Malaysian and Singaporean, from a prestigious university in Singapore. An equal number was chosen from each nationality. We chose the four nationalities as they have been found to have different scores for the various cultural dimensions (Hofstede, 1991). We chose to study first-year students as the foreigners among them would have just arrived in Singapore, reducing any discrepancy that could be caused by prolonged stay on foreign soil. Another requirement was that all subjects must be computer literate and had experience using the Internet. This was to ensure that the subjects had substantial knowledge about the technology to be used for virtual interaction.

For the experiment, the students were divided into eight groups consisting of four members each. In the first four groups, students of different nationalities were randomly grouped together to form an experimental group. The remaining four groups had members of the same nationality, thus, acting as a control group. The subjects were asked to play 'MAGNUS', a management support game developed in the university. Since all the students were freshmen, all of them could be assumed to have relatively the same knowledge about management decisions. In the game, they were asked to assume the role of a manager of a company and decide on the following:

- *Pricing and marketing strategy to sell companies' products in different areas:* Teams were asked to decide on the price of their product in conjunction with the amount of money they wanted to spend on its marketing in each area.
- *Production level that they thought feasible for the next round:* If production was more than what they could sell in each round, the team would end up with inventory. That meant additional handling cost, which would decrease ROI. Cost of labor and construction was also involved in increasing or decreasing production.

In each round, the teams were further given various environmental factors that might affect demand in the next round. Altogether, each team competed in four areas and four rounds of games were played. Everyone in a team had the power to input a decision. Finally, software calculated the ROI for each team based on the products sold. To minimize discrepancies due to differences in communication software, each team member was asked to interact in the virtual environment using MSN messenger. No other information apart from the email address

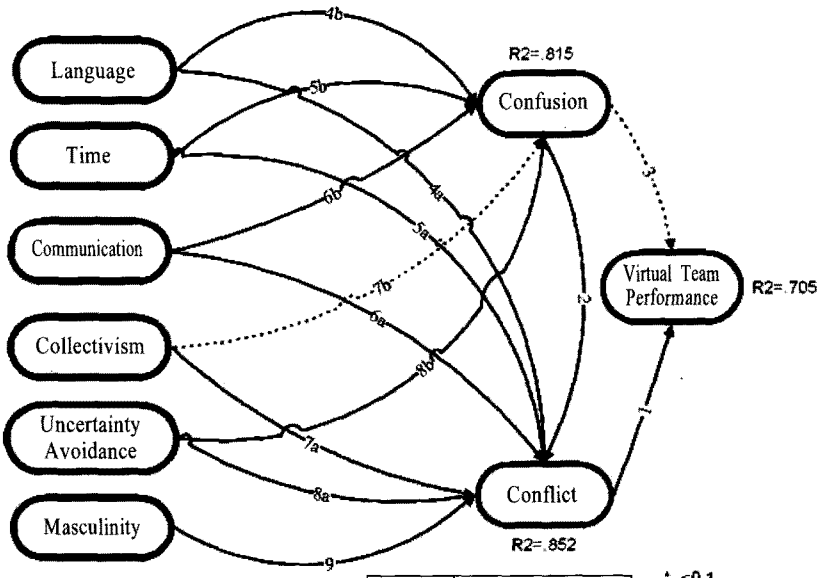
〈Table 1〉 Survey instruments

Construct	Survey Items	Source
Language	It used to take lot of time to make other group members understand my idea because of the different fluency levels in English among the members.	(Burner *et al.*, 2002)
	I think that different levels of vocabulary among members lead to information distortion.	
	I feel uncertain, self-conscious or hesitant when using English as it is a second language.	
Time	I prefer to stick to deadlines.	(Burner *et al.*, 2002)
	I always spare enough time to complete my tasks.	
	I generally have time under control and manage it as a resource.	
	I like to plan my activities by the clock.	
	I always prefer taking multiple deadlines at one time rather than focus on one project at a time.	
	I am often juggling my time between too many things	
	"So many projects to do, so little time," this saying applies very well to me.	
	I try to finish projects fast because I have other projects to do as well.	
Uncertainty Avoidance	I think that a good job is one where what is done and how it is to be done are generally clear.	(Burner *et al.*, 2002)
	I think that it is important to have requirements and instructions spelled out in detail so I know what I am expected to do.	
	I prefer to tackle a simple problem than to solve a complicated one.	
	I like teams where I know most of the people more than ones where all or most of the people are complete strangers.	
Communication	I avoid eye contact when I communicate with others.	(Burner *et al.*, 2002)
	I convey difficult messages to others indirectly.	
	When pressed for my opinion, I respond with another question.	
	I use silence to avoid upsetting others when I communicate.	
Collectivism	I prefer to work with others, rather than working alone.	(Burner *et al.*, 2002; Lending and Slaughter, 1999)
	I am willing to make sacrifices for the sake of the team's well-being.	
	I think that there is more to gain and less to lose for people to work and discuss in groups.	
	As a member of a group, I prefer to pursue the group's success.	
Masculinity	I think that the dominant values in society are material success and progress.	(Burner *et al.*, 2002)
	I look for advancement to higher job levels.	
	I prefer to get the recognition I deserve when I do a job.	
	I am ambitious and tough.	
Conflict	I used to dislike interacting with certain group members.	(Burner *et al.*, 2002)
	I feel that there used to be disagreement among group members on certain key issues.	
	Sometimes, group members would prevent me from doing things I wanted to do.	
	I used to spend much time dealing with critics in the group.	
	Sometimes, I would be tensed and frustrated after group discussions.	
Confusion	I feel that all the information I received from my various team mates confused me.	(Burner *et al.*, 2002)
	I think that the more we discussed, the harder it was to choose the best solution.	
	I feel that sometimes it was difficult to choose which way to proceed with.	
	I think there were so many variables to decide that I became confused.	
Performance	I feel that my group delivered the task with full satisfaction.	(Burner *et al.*, 2002)
	I feel that my group members were competent in the decision.	
	The experiment was very satisfactory from my perspective.	
	I think we achieved what we had aimed for.	

was provided to the team members. Also, some of the discussion was supervised by one of the authors to ensure that face-to-face communication between team members was controlled for. After the experiment, a survey was conducted on their experience in the game.

The survey instruments were developed based on a review of prior literature <Table 1>. The multiple-item method was used, where each item was measured with a five-point Likert scale from 'Strongly Disagree' to 'Strongly Agree'. The main focus of the questionnaire was to find the cultural difference among members and whether it led to any confusion or conflict among them. The ROI value of each team was used as the dependent variable while the values from the survey were used as independent variables.

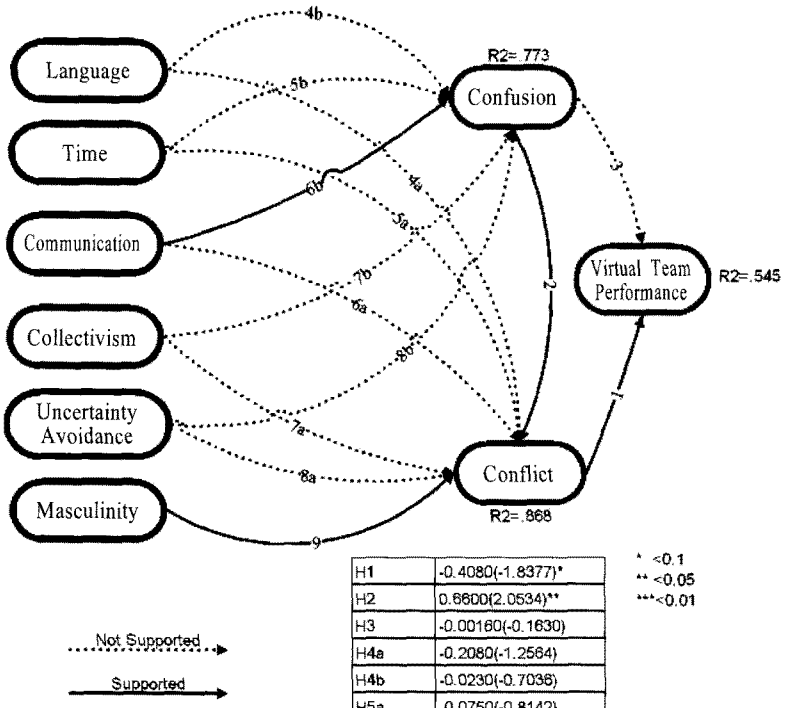
With an adequate measurement model, we tested our hypotheses with PLS-Graph Version 3.00, a Structural Equation Modeling technique. We chose PLS as it makes minimal demands in terms of sample size for the validation of a model compared to alternative structural equation modeling techniques



H1	-0.8780(-3.4822)***
H2	0.4690(3.2886)***
H3	-0.0850(-1.3799)
H4a	0.3400(2.5012)**
H4b	0.1970(1.9504)*
H5a	-0.1190(-2.3232)**
H5b	-0.5470(-2.7998)**
H6a	-0.1040(-1.6695)*
H6b	0.2320(1.9718)**
H7a	-0.3150(-2.0613)**
H7b	0.0460(0.6527)
H8a	0.7830(4.2918)***
H8b	-0.9870(-4.619)***
H9	0.2770(2.0719)**

* <0.1
** <0.05
***<0.01

〈Figure 2〉 Results for the Experimental Group



H1	-0.4080(-1.8377)*
H2	0.6600(2.0534)**
H3	-0.00160(-0.1630)
H4a	-0.2080(-1.2564)
H4b	-0.0230(-0.7036)
H5a	-0.0750(-0.8142)
H5b	0.0830(-0.9664)
H6a	-0.0220(-0.5547)
H6b	0.6540(1.9563)*
H7a	-0.2890(-1.3511)
H7b	-0.1540(-1.1521)
H8a	0.5430(1.5679)
H8b	-0.0250(-0.8814)
H9	0.6830(2.0181)**

* <0.1
** <0.05
*** <0.01

〈Figure 3〉 Results for the Control Group

(Chin, 1998). The results of the analysis are summarized in <Figure 2> and <Figure 3>, which also show path coefficients and t-values.

Based on the results, H1, H2, H4a, H4b, H5a, H5b, H6a, H7a, H8a and H8b are supported. This means different dimensions of culture do influence the level of potential conflict in a virtual team. Also, all the dimensions of culture except collectivism (H7b) influence the confusion level in a virtual team. Furthermore, a higher level of confusion leads to a higher level of conflict in the community, which in turn, hampers the virtual team's performance. However, according to the results, confusion seems to have no direct effect on virtual teams' performance (H3).

VI. Implications for Virtual Teams

The study proves that conflict can be a major hindrance in a virtual team's performance. In the study, conflict is very significant regardless of whether the team is in the experimental group or control group, explaining over 50% of variance in the virtual teams' performance. However, from the difference between

the control group and experimental group in terms of significance of relationships and size of coefficients and R-squares, we can see that cultural difference can cause more serious conflict, which in turn, results in lower performance of the virtual team. The average ROI obtained by the experimental group was 2.7 while that of the control group was 5.9. On the other hand, confusion affects virtual teams' performance only through conflict in both groups. This implies that confusion is not that serious if members in a team could resolve it before it escalates into conflict.

As for the impact of the various cultural dimensions, most of the results are in line with our expectations except for masculinity (H9), impact of communication style on confusion (H6b) and impact of collectivism on confusion (H7b). The other cultural dimensions show their effects on either confusion or conflict, or both, as expected. First, language proves to be a problem. A subject from the experimental group commented:

"Certain words could be used for different expressions in different cultures. This not only led to confusion among team members but also created trouble··· The different levels of fluency among team members also acted like a catalyst in the tension."

The difference in language mastery among members of a team in the experimental group may be traced to their difference in nationality. The difference prevented the exchange of ideas in full confidence, and generated confusion and conflict within the virtual team.

A subject from the experimental group remarked:

"Time was an important factor; it just didn't fit the same way for everyone. Sometimes team members joined the online conversation late, thus creating lots of problems for others. All the ideas had to be repeated and counter-argued again. This irritated me a lot."

In the survey, we focused on how strict people were with their deadlines and whether they preferred to take a single deadline or multiple deadlines at one time. By so doing, we sought to find out the difference in degree of importance they attached to time. We found that the stricter team members were about their deadlines and the more they preferred to focus on the project, the greater the negative impact would be on both confusion and conflict in the team.

A subject from the experimental group stated:

"It would have been so much simpler if everyone clearly stated their ideas. Sometimes I was not really sure of what the other team members really thought about some ideas. They never gave a clear picture of what they thought and what the best decision for the team was."

To check for problems arising from difference in communication style, we examined whether team members were reserved, indirect and sensitive while communicating with their team mates in the survey. In the experimental group, the subjects were of different backgrounds and could therefore have different communication styles. A virtual team drawn from the experimental group could be expected to experience confusion as the members would find it difficult to gauge the true intention of each other. Interestingly, we observed the same result in the control group. The reason may be that a virtual team drawn from the control group also consisted of Asian (Singaporean) students who preferred low-context communication, and although their preference for that style was lower than that of other Asians, it was still significant (Hofstede, 1991). On the other hand, we found a negative relationship between communi-

cation style and conflict level in the team drawn from the experimental group. As discussed, there could be a mix of members who preferred high-context communication over low-context communication and vice versa in a virtual team drawn from the experimental group. As those who preferred low-context communication tried to be sensitive towards their peers' suggestions and maintain harmony, conflict among team members decreased.

Next, under collectivism, we focused on whether each team member preferred to pursue success for their team or their own individual interests. In an apparent indication that collectivism leads to lower conflict in the team, a subject from the experimental group commented:

"I think, as team members became more focused, we were able to give better decision than before."

This result can be credited to a greater focus on the collective goal over individual ones as members of a team in the experimental group strove to overcome the disadvantages they faced because of their difference in nationality. Besides, most subjects in the experimental group came from countries with a low level of individualistic culture. The reason that collectivism did not exhibit any significant effect on the confusion level might be explained by the same token.

"Sometimes, members were not very responsive and used to take everything easy···. This unprofessional handling of tasks troubled me a lot."

To measure the uncertainty avoidance (UA) level among team members in the survey, we focused on how important it was to have structured situations and how aggressive team members were. As we have discussed, people in the high UA category generally prefer structured situations and a disciplined lifestyle whereas people in the low UA category are comfortable with ambiguous situations and are easy going with their work. We can infer from the result that team members in the experimental group tried to achieve more structured situations as part of their strategy to overcome the difference in their nationality, and consequently, they faced less confusion in the team. On the other hand, the high level of anxiety among members due to high UA in the team led to an increase in conflict.

Finally, we found that with both the experimental and control groups, the greater masculinity was in the virtual team, the more conflict would be generated in the team. This relationship may be explained by the fact that the virtual teams in our study had to operate in a competitive situation within limited time. Since each team competed against others in only four rounds of the game, we could assume that the masculine role of competition would prevail over the feminine role of long-term oriented relation building among subjects in both groups. Thus, disagreement within teams in both groups would come into existence, and eventually lead to conflict.

Ⅶ. Conclusion

Despite limitations such as the small sample size, this study contributes to the research on virtual teams and serves to inform practices in companies in three main ways. First, this study empirically proves that conflict is a most critical antecedent of a virtual team's performance, with high R-square values found in both the experimental and control groups. In addition, this research introduces and has empirically tested 'confusion', a new concept based on the information processing theory, and we have demonstrated for the first time the relationships that exist among confusion, conflict and virtual teams' per-

formance. Second, we have identified the effects of various dimensions of culture that can bring about confusion and conflict in virtual teams. The evidence emphasizes the importance of studying virtual teams' performance from the cultural perspective. As more and more organizations cross geographical barriers with the use of advanced telecommunication technologies to face the challenges of the new century, the greater will be the need to look into cross cultural factors that can affect virtual teams' performance.

Third, as our findings show, culture can hamper virtual teams' performance by increasing confusion and conflict among team members. Practitioners, in particular, should try to minimize confusion among members in a virtual team before it culminates into higher conflict because it is much more difficult to resolve conflict in a virtual team than in a face-to-face team. When a team consists of cross-cultural members such as in a global virtual team, the team leader should pay close attention to the confusion and conflict arising from the various dimensions of culture so that the team's performance would not be adversely affected. A company can, for instance, hold social events even by online means so that members can understand each other's differences better. It may also provide a kind of cultural guide so that employees can conduct some sort of role-play workshop to improve their understanding about others' culture. Job rotation and recruitment of people of diverse nationalities would certainly increase employees' direct exposure to other cultures, and subsequently, facilitate understanding among team members of diverse background.

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Information Systems Review
Volume 11 Number 1
April 2009

Impact of Culture on Virtual Teams' Performance

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Abstract

Since 'virtual teams' are not bounded by geographical dimensions, culture becomes an important determinant of their success. Though cultural diversity provides unique opportunities to build up new ideas, it can also create problems in the midst of individual interactions and eventually result in poor performance. With little research on this topic, this study examines the relationship between culture and virtual teams' performance. An experiment was conducted followed by the survey based on subjects' perceptions on the experiment. The results show that cultural diversity has significant impact on virtual teams' performance through confusion and conflict in virtual teams. This study empirically proves the fact that conflict is one of the most critical antecedents of a virtual team's performance with high R-square values in both experimental and control groups. In addition, this research introduces and empirically tests a new construct, 'confusion' which turns out to be also important in the virtual team's performance research, and the relationships among confusion, conflict and the virtual team's performance. Next, the findings confirm the importance of studying virtual teams' performance research from the cultural perspective.

Keywords: Virtual Teams, Culture, Conflict, Confusion, Performance

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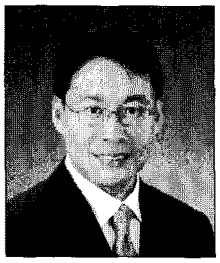

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논문접수일 : 2009년 02월 04일 게재확정일 : 2009년 04월 05일
1차 수정일 : 2009년 03월 22일