

## L2 CMC Motivation in Task-based Computer-mediated Communications

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### Abstract

The Internet and new technologies have enabled easy implementation of cross-cultural communications, which has also led to new trends in L2 learning. Studies of computer-mediated communication competence are rich in content, but discussions regarding L2 language learning are rare. In recent theoretical discussions, Media factors, Message factors, Contextual factors including cultural background and Function of CMC, had correlatively influenced the Outcome of CMC interactions. However, the popularity of cross-cultural collaborative learning in English highlights the need for more attention to the possible ways to assess L2 learning via computer-mediated communication. In this study, second language CMC motivation (L2 CMC Motivation) serves as a major factor, corresponding with other factors in a cross-cultural, web-based activity oriented for English learning. This study emerged from a larger research project in which a L2 learning activity involving participants from Taiwan and Japan had exchanged ideas using a web platform communication tool established by Nicenet organization. The purpose of this paper is to understand how other factors involved in CMC interactions would correlate with L2 CMC Motivation on the side of Taiwanese students. Items adapted from Spitzberg's (2006), were blended in a survey (Cronbach's  $\alpha = .902$ ) to understand the correlation between the three factors to the major one L2 CMC Motivation. The results showed that the above four factors were strongly correlated. Among Message factors, expressiveness is especially related to L2 CMC Motivation. Regarding contextual factors, Patterns of behavior and Function also had significant influence on L2 CMC Motivation.

**Keywords:** computer-mediated communication competence (CMCC), CMC Motivation, L2 learning, cross-cultural, web-based

### Background

Developed under the notion Globalization and enabled by the advance of new technologies, applications of technological communications for collaborative learning projects for educational purpose are now popular and prevalent. Teleconferencing, email system, social network, Line and many other application tools enable synchronous and asynchronous computer-mediated communications (CMC) for computer users. These web-based activities are believed to support student learning and develop better skills in a wide array of areas (Kozma, 2003) including cross-cultural encounters, intercultural competence, communicative competence and developing cultural awareness. Cross-cultural communications are usually conducted via English, the language served as either a mother tongue or the second language for an increasing growing population. As a matter of fact, the learning of English could be seen as one of the major purposes of the use of CMC for a great amount of English as second language learners. When a non English native CMC user is proficient and expressive in the language he uses, other achievements can be examined. Likewise, if a non English native CMC user's English level is low, or the motivation to use or to learn English is not strong, it would influence his CMC motivation. In other words, for non English native users, CMC Motivation should be discussed together with L2 Motivation in any CMC-based project. Motivation for learning English had hardly been discussed along side with Motivation for CMC.

This study discussed how Motivation for learning English (L2 Motivation) would influence a person's asynchronous communications in a task-based activity. The research questions are:

1. What is the relation between L2 Motivation and CMC Motivation? How do we combine items from the two to examine L2 CMC Motivation?
2. Combining L2 Motivation and CMC Motivation, how would the L2 CMC Motivation influence other factors included in a computer-mediated communication competence (CMCC) model, in a task-based situation?
3. How are International Attitudes related to L2 CMC Motivation?

### **Theoretical Framework**

This study examines related theoretical background and blended items from Brian Spitzberg's Computer-mediated Communication Competence (2006, 2007, 2009) Model (CMCC Model) and Japanese scholar Yashima Tomoko's (2004, 2006) discussions on L2 Willingness to Communicate (L2 WTC).

### **Brian Spitzberg's CMCC Model**

Spitzberg (2006, 2009) proposed various individual differences that moderate CMC uses and outcomes. In the CMCC model proposed in 2006, Spitzberg measured the potential infinitely complex of a person's computer-mediated communication competence in which CMC Knowledge and CMC Motivation predict achievement in the usage of CMC. A person needs to be motivated, alongside with sufficient knowledge, to conduct actual utilization of CMC (Perse and Ferguson 2000). CMC Motivation can be indexed by a range of constructs such as willingness to use technologies for communication, openness to new technologies, gratification, online apprehension and communication apprehension. CMC Motivation would also be influenced by personality traits and other social cultural contexts. Even though based on a broad cluster of constructs, CMC Motivation, to Spitzberg, is the most important role in actual utilization of online communication and is defined as the ratio of approach to avoidance attitudes, beliefs, and values in a given CMC context. Except that, a person has to have good skills to perform online communication. In a CMCC model, Motivation, Knowledge and Skills will further be interfered with the Media and Message Factors in the process of communications, to lead to a person's Competence. CMC Skills are manifested on the following areas: Attentiveness can be displayed through a variety of tactics, including the degree of message content, use and appropriateness of questions, social support and comforting sophistication of message content, and politeness and appropriateness of message content. Composure can be displayed through avoiding cues of uncertainty, such as linguistic qualifiers used in message content, the proportion of valenced opinion expression of message content, the directive or imperatives used relative to inquiries, the use of compliance-gaining tactics, and task or topical redirection and topic initiation. Coordination can be displayed through the deft management of the number of messages, the length of messages, the rapidity of response, and the content and task relevance of response. Expressiveness can be displayed through the use of emotion and similar paralinguistic features of message content, the use of humor, and even the depth and breadth of self-disclosure (Castella et al., 2000; Whitty, 2003).

### **Tomoko Yashima L2 Willingness to Communicate**

Tomoko Yashima (2002, 2004) built his L2 WTC theory on Peter Macintyre and Richard Clément (1998, 2002, 2003, 2007) in which variables influencing a person's WTC in second language is presented in a heuristic model. Examining the motivation for communication in the usage of second language in Japanese context, Tomoko hypothesized a series of variables related to cross-cultural situations which he termed as International Posture. The items included for the measurement of International Posture are Intercultural Friendship Orientation in Learning English, Interest in International Vocation/Activities, Interest in Foreign Affairs, and Intergroup Approach Avoidance Tendency. As for the utilization of second language, two items, Motivational Intensity and Desire to Learn English, had been used in Yashima's investigation of Japanese students' willingness to communicate using English. The path from L2 competence to WTC, and from

International Posture to WTC, were significant, with lower level of anxiety, positive attitude toward intercultural communication or international interest, and perception of L2 communication competence, all led to a higher level of WTC.

### **Blending models in a Survey**

This survey is designed to detect the Motivation using second language for online communication. The blending of Spitzberg's CMC Motivation and Yashima's L2 WTC is the crucial part of this survey. This part has been given the name *L2 CMC Motivation*. *CMC Skills*, with constructs proposed in Spitzberg's CMCC model, had been created into items in a given CMC context. The researchers want to understand if the path from *CMC Skills* to *L2 CMC Motivation* is significant. If significant, which construct included in *CMC Skills* has the most significant influence on *L2 CMC Motivation*. *Media Factor* had also been examined in terms of richness, interactivity, speed, accessibility and level of social presence (Spitzberg 2006, 2009). The reason of including the *Media Factor* in this survey is to understand if the choice of media would affect *L2 CMC Motivation* particularly because the current experiment is task-based. Participants had not been given any freedom on the choice of the communication tool, and this might influence *CMC Motivation*. Nine items were included to examine the correlation between *Media Factor* and *L2 CMC Motivation*. Besides, Yashima's consideration for specific items included in International Posture had also been included, termed *Attitudes toward Online Cultural Exchange*, for the path from attitudes toward cross-cultural interaction is significant to *L2 CMC Motivation*. Eight items were included in *Attitudes toward Online Cultural Exchange* and had also been revised in the given CMC context.

#### *L2 CMC Motivation*

In order to fathom willingness to communicate via computer-mediated communication utilizing English, items included in CMC Motivation and L2 Learning Motivation were blended for the part L2 CMC Motivation. Six items were included with consideration of Desire to learn English, anxiety toward using English online, communication apprehension via English, online apprehension, satisfaction from the use of CMC to learn English, openness to the learning of English via computer technologies.

#### *CMC Skills*

Items of skills included in CMCC model had been revised to be in a given CMC context that fits the task. Expressiveness, Attentiveness, and Coordination were constructs included to exam participants' online communication skills in the task-based situation.

#### *Media Factor*

We had chosen a free, non-beneficial online classroom called Nicenet ([www.nicenet.org](http://www.nicenet.org)) for cross-cultural communication between participants of the two countries. Nine items included in the survey were created to understand how *Media Factor* would influence *L2 CMC Motivation* in the given context.

#### *Attitudes toward Online Cross-cultural Exchange*

Constructs proposed in *International Posture* including interest on foreign affairs and culture, international friendship, and time management, were made eight items to examine the correlation between online intercultural interaction and *L2 CMC Motivation*. These items were clustered under the section Attitudes toward *Online Cross-cultural Exchange*.

The reliability of the survey questionnaire is significant high (Cronbach's  $\alpha = .902$ ).

### **Participants and Instructional Design**

Fifty participants, currently university students studying at Chien-kuo Technology University in Central Taiwan, and Kansei Gakuin University, Japan, were recruited for the activity in Fall 2011. Three questions, all globally orientated, had been created by the researchers. The questions were posted online for comments and feedbacks from participants. Participants had to write comments based on one's own thoughts or research, and were required to give at least two feedbacks, one to Taiwanese participant and the other to Japanese participant. The researchers also logged in Nicenet as teachers to give reminder, to supervise the whole communication process, and to make sure a smooth flow on the online interaction. The three questions are:

1. You are both ESL students in the summer intensive program of New York University. You are in the same class and became friends. You decided to take a trip to Miami and on the way there, your wallets were stolen. You have no money, no credit cards, and no cell phones. You are now stranded on the streets.
2. You are both on the committee of the United Nations for the poor. Someone gave your organization a donation of one million dollars. The only requirement is that the money be donated to one country and a particular group. Please research and propose where the money should go.
3. You are both foreign students at Harvard. You are both in the same class. Now, you are both assigned to host a party for the American students at the university. The purpose is for the American students to know more about East Asian cultures. What food will you serve? What program and entertainment will you prepare?

The duration of the English learning, task-based CMC experiment was exactly two months. The survey questionnaire was given to Taiwanese participants only, due to technical difficulty on the side of Japanese participants.

## Results

*CMC Skills*, *Media Factor*, and *Attitudes toward Online Cross-cultural Exchange* were found to be significant to the major factor *L2 CMC Motivation*, with *CMC Skills* to *L2 CMC Motivation* ( $t=.473$   $p=.001$ ), *Media Factor* to *L2 CMC Motivation* ( $t=.452$   $p=.001$ ), and *Attitudes toward Online Exchange* to *L2 CMC Motivation* ( $t=.496$   $p=.000$ ). This means that factors mixing from Spitzberg's and Yashima's models in this survey were significantly correlated to each other. Certain construct in different section had been examined via Regression using SPSS. Results showed that in *CMC Skills*, the construct *Expressiveness* was highly significant to *L2 CMC Motivation*. This means that L2 competence is particularly influential to the expression in written English in computer-mediated communication. Low competence will baffle students in CMC communication, leaving them unable to express clearly. Regarding the section of *Attitudes toward Online Exchange*, there is also one construct which was found to be significantly related to *L2 CMC Motivation*. Considering *International Friendship*, two items "It was difficult for me to interact with Japanese students of another culture" and "I am not sure what to say to Japanese students of another culture using CMC" were significantly related to *L2 CMC Motivation*. However, "I like to discuss things about food, clothing, and tradition with Japanese students using CMC" did not have a significant influence on *L2 CMC Motivation*. This means that participants hold a positive attitude toward international friendship but when it comes to specific cultural exchange context, L2 Motivation will matter.

## Discussion

Using Internet is gradually becoming a prosperous and new sector not only for cross-cultural collaboration but also for the utilization of the learning of English. With the growing demand of studying English in almost every part of this world, and a rapid expansion of the non-native English speaking population, the relation

between English learning and computer utilization will be closer and stronger (Chapelle 2009). A closer examination of Motivation both in CMC and WTC fields seem inevitably and therefore an integration of willingness to communication using English with computer-mediated communication factors appear to be necessary.

It is notable from the results of this study that a combination of constructs from several studies, namely, the study of CMC (Spitzberg 2006, 2009, Tolmie & Boyle 2000), the exploration of L2 WTC, and a close examination of the use of CMC for students in EFL contexts (Yashima 2002, 2004) worked well in a given CMC context. The results drawn from this study indicate that separate factors were significantly correlated to each other, moving toward a much complex measurement of online behavior via English.

Specific items for the measurement of linguistic competence, like writing competence, reading competence and communication competence, can be examined particularly in their relationship to the utilization of CMCC. On the other hand, items included in the measurement of motivation toward international affair can be considered to be combined into L2 CMC Motivation discussed in the current study in further research projects.

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