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Communication Apprehension when Speaking English (L2): A Case Study of Personnel in an Organization Taking Care of Public Health Located in the Suburb of Bangkok, Thailand

Naruemon Booncherd
Language Institute, Thammasat University, Thailand
ottnaruemon@gmail.com

Sucharat Rimkeeratikul
Language Institute, Thammasat University, Thailand
sucharat59@yahoo.com

Abstract

Communication Apprehension (CA) is a construct that has been studied in many fields. In this study, CA in English (L2) was investigated among personnel in a bureau providing medical services for public. The three main aims of this research were to: (1) compare the personnel CA in L2 (English) with CA in L1 (Thai), (2) determine which demographic data affected their CA in L2, and (3) investigate the ways they cope with their high CA in L2. In order to accomplish the three aims, a mixed-method research study was conducted, starting with a quantitative study done with 92 questionnaires returned from the bureau. T-test analysis and an ANOVA test were applied. The t-test analysis results revealed that there was a significant difference of CA in the personnel of this bureau when using L1 and L2. Moreover, the t-Test also revealed that their CA levels in L1 and L2 were moderate. In addition, the ANOVA test exhibited that the number of years working with the bureau and work position affected their CA in L2 differently. Finally, in-depth interviews were conducted with six people with high and moderate CA. The interviews were transcribed into verbatim transcriptions and coded according to themes on how they coped with communication apprehension in L2. The NVivo 10 software program was used to help check the data's accuracy. The interview results reflected that personnel with high CA in L2 struggled when they had to communicate in English.

Keywords: Communication Apprehension (CA), L1, L2, public health, demographic characteristics, techniques dealt with CA

1. Introduction

Medical treatment in Thailand is one of the most well-known among countries in the ASEAN region both for high technologies and healthcare services such as cancer treatments, cardiology treatments, dentistry and plastic surgery. The Thai government has planned the country to be a hub of medical treatment of the ASEAN region (Yongwikai, 2013). Consequently, this has raised the number of foreign patients who seek the excellent medical treatment in Thailand. In addition, the medical technology coordination among Thailand, neighboring countries and other countries, such as the United States, the United Kingdom, Australia, Japan, India,

China and South Africa, is increasing. As English is used as the primary language in all dimensions of communication, medical professionals have to communicate in English with those patients and medical specialists who support new technologies. To communicate effectively and with accuracy, people in the medical profession or public health area need to reduce their communication apprehension in a second language (Taylor, Nicolle & Maguire, 2013).

1.1 Purposes of the Study

There are a number of people in the public health profession facing the problem of communication apprehension with foreigners in English. They might not know that they have communication apprehension and what the real cause of their problem is. Communication apprehension in a healthcare setting has not been the focus of much research (Booth-Butterfield, Chory & Beynon, 1997). In Thailand, this bureau in the study deals with international organizations such as the World Health Organization (WHO), the Global Fund (GF) and the Center for Disease Control and Prevention, USA (CDC). This bureau obtains new technologies for a certain disease diagnosis from the abovementioned international organizations. Those international organizations transfer the new technologies, diagnosis methods and funding support to the bureau for improving healthcare in Thailand and neighboring countries. English is the primary language used in all kinds of communication.

1.2 Significance of the Study

Personnel of the bureau often deal with a number of foreigners and use English in their regular work. The medical professional staff uses English for communication with foreign specialists or foreign visitors more than the administrative staff. However, the head or supervisor of the administrative staff has opportunities to attend meetings or discussions with foreign visitors from time to time. On the other hand, Thai language is used as the basic language in all kinds of activities in this organization. Therefore, it is impossible for everyone in the bureau to perform in English effectively without worry. Some people are able to speak English with confidence, while others may feel reluctant to express their opinions in English. Thus, most personnel working for this bureau might be more comfortable speaking Thai as a native language than English, which is not often used in their working environment. However, as English is becoming a second language in Thailand, effective English oral communication is important to the bureau staff members (Rimkeeratikul, Zentz, Yuangsri, Uttamayodhin, Pongpermpruek & Smith, 2016). As a result, the main objective of this study was to investigate communication apprehension (CA) and make a comparison of all four dimensions of communication contexts with respect to the bureau personnel, both in Thai (L1) and English (L2), to find out which demographic information is associated with CA and to observe the techniques that bureau personnel use to manage their CA in L2.

The findings of this study may assist people in the public health area to recognize the source of their problems in oral English communication. This issue usually affects their work performance as well as their careers. In the bureau, individual work performance might be improved if the executives of departments understand the CA of their subordinates and help them deal with their communication barriers. With their insight into their subordinates' communication traits incorporated

with the leadership skills they already possess, they can help their organization move toward their desired goals by putting the right man on the right job. Moreover, their subordinates may feel more secure and have a better quality of work life.

1.3 Research Questions

In this research study, the research questions are as follows:

(1) What are the levels of communication apprehension in L1 and L2 of the bureau personnel?
(2) What demographic information is associated with CA in L1 and L2 of the bureau staff members?
(3) What techniques are used by the bureau staff members to cope with CA in L2?

2. Review of Literature

2.1 Conceptualization of CA

Communication Apprehension (CA) is a significant barrier to effective communication. Communication Apprehension (CA) or Communication Anxiety is defined as an individual's level of fear or anxiety associated with either real on anticipated communication with another person or persons (Beatty, McCroskey & Heisel 1998). McCroskey (1970) defines CA as "broadly based anxiety related to oral communication." There are four important categories of communication apprehension as defined by Richmond and McCroskey (1998). They are Trait-like CA, Context-based CA, Audience-based CA and State Anxiety. Trait-like CA was the focus of this research. Trait-like CA as defined by Richmond and McCroskey (1998, p.49) is similar to an actual trait of people, e.g. eye color, height and weight, which cannot be changed. Trait-like CA is an important perception of people toward the four dimensions of communication: interpersonal or dyad communication, small group communication, meetings and public speaking (Daly & McCroskey 1984, p.16).

2.2 Causes of CA

Different types of CA are caused by different factors. Scholars have identified different causes of trait-like CA. According to Pongpun (2012, p.9), "Trait anxiety is explained as a fixed stage of anxiety or a part of a person's personality". Someone with high trait anxiety is presumed to be frightened in communication situations, while a person with state anxiety is likely to be frightened only in specific contexts, such as speaking or interpersonal settings. On the other hand, Beatty et al. (1998) and McCroskey and Beatty (2000) argue that trait-like CA results from biological systems and social learning systems.

Cultural differences are one of the causes of CA (Pribyl, Keaten, Sakamoto & Koshikawan, 1998; Gibson & Zhong, 2005; Anyadubalu, 2010; Croucher, 2013; Taylor et al. 2013). Especially in Thai culture, people focus on relationships with people in the group rather than individual achievement (Williams, Krizan, Logan & Merrier, 2008).

2.3 Effects of CA

Numerous research studies have pointed out that communication apprehension has a considerable influence over an individual's achievement. People with high CA may fear communicating with others (Richmond & McCroskey, 1998). Furthermore, high levels of CA will affect peoples' careers (Winiecki & Ayres, 1999). Russ (2013) states that supervisors who have lower CA seem to be better at making important decisions than supervisors with high CA. Booth-Butterfield et al. (1997) state that people who experience higher trait-like CA will probably communicate less effectively with their health care providers about their health problems. By the same token, if a medical technician is uncomfortable to communicate with the patients, the patients may receive less effective healthcare service.

2.4 CA Measurement

The Personal Report of Communication Apprehension-24 (PRCA-24) was adopted to measure the level of trait-like CA (Richmond & McCroskey, 1998) in the participants. This measurement was developed to measure a common trait of oral communication apprehension of individuals with interlocutors. In addition, the measurement is broadly reliable and valid (Pribyl et al., 2005; Francis & Miller, 2008; Frantz, Marlow & Wathen, 2014). This tool uses self-measurement, employing a 5-point Likert scale to determine the level of apprehension. The total CA scores ranged from 24 to 120; scores above 80 showed a very high level of CA; scores ranging from 51-79 presented moderate CA; and scores below 50 indicated a low level of CA (Richmond & McCroskey, 1998).

2.5 Relevant Studies

McCroskey (1984) states that CA is a cognitive interaction that occurs internally. Fear of communication may lead to physical symptoms such as a stomachache, headache or a rapid heart rate (Hamilton, 2014). In addition, Trait-like CA influences peoples' characteristics. Moreover, family and environment are also the important factors affecting peoples' CA (Richmond & McCroskey, 1998). Demographic characteristics are one of the main factors contributing to high and low CA in people (Beatty et al., 1998). Degner (2010) and Kasemkosin (2012) discovered that title, job differences and the educational background of people were significant factors affecting the CA level. Rimkeeratikul (2017) also determined that the number of years in the monkhood influenced the CA in L2 of Thai Buddhist Monks.

Some people with high CA tend to avoid and withdraw from conversations because they do not want to lose face (Boonsongsup & Rimkeeratikul, 2012; Phillips, 1984). Thai culture has a high degree of power distance; thus, people accept that those with higher status are more powerful than those with lower status (Hofstede & Hofstede (2005). In addition, Anyadubalu (2010) and Knutson, Hwang and Vivatananukul (1995) revealed in their studies that culture was one of the significant factors that increased CA in people. However, some people try to find a solution to deal with their problem by using basic techniques such as preparing information before commencing their talks (Francis & Miller, 2008; Kondo & Ying-Ling, 2004). Furthermore, technologies are one of the significant options to assist people to cope with their CA. Scott and Timmerman (2005) and Leeds and Maurer (2009) state that

people in this century have more choices to select a technology to help them decrease communication apprehension.

In addition, it is important to notice that for people who do not communicate in English regularly with foreigners tend to be with communication apprehension when speaking English (L2) (Jung, & McCroskey, 2004; McCroskey, Fayer & Richmond, 1985; McCroskey, Gudykunst & Nishida, 1985; Öztürk, & Gürbüz, 2014; Richmond, McCroskey, McCroskey & Fayer, 2008; Rimkeeratikul, 2015, 2016; Rimkeeratikul et al., 2016; Tom, Johari, Rozaimi & Huzaimah, 2013).

3. Research Methodology

3.1 Research Design

This research study was a mixed-method design, as this method of analysis increases the reliability and accuracy as well as reduces bias (Dörnyei, 2011). The study investigated CA both in Thai and English contexts with public health providers in the BTB. A t-test was used to compare CA in L1 and CA in L2 among the BTB personnel. After that, ANOVA was applied to determine which demographic factors affected CA in L2 of the participants. In addition, qualitative data analysis was done to obtain more thorough information from the participants.

3.2 Participants

A total of 129 staff members of the Bureau of Tuberculosis of the Department of Disease Control, Ministry of Public Health was the sample of this study. The sampling procedure in this study was one of the non-probability sampling strategies – convenience or opportunity sampling. It is the most popular procedure in L2 research (Dörnyei, 2007 p.98). In addition, the population and sample of this study were the same. The personnel in the BTB held a variety of positions such as medical officers, registered nurses, medical technologists, medical scientists, medical lab technicians, pharmacists, pharmacy technicians, radiological technologists, radiographer technicians, public health officers, social workers, public relations officers, administrative officers including personnel officers, finance/accounting officers, computer technical officers, statisticians, policy and planning analyst officers and general administrative officers.

3.3 Research Instruments and Data Analysis

This study utilized two research instruments to answer the three research questions. The first research instrument was a questionnaire containing four parts: (1) demographic information; (2) the Personal Report of Communication Measurement (PRCA-24) when using L1 (Thai); (3) the Personal Report of Communication Measurement (PRCA-24) when using L2 (English); and (4) name and contact details of the participants. The Personal Report of Communication Measurement (PRCA-24) was used to measure the oral communication apprehension of the participants. The PRCA-24 was developed by McCroskey (1978) and is a well-known and reliable research instrument to measure trait-like communication apprehension (Klopf & Cambra, 1983; McCroskey, Beatty, Kearney & Plax, 1985). The PRCA-24 used in this study was translated into Thai language and back translation was done by two bilingual English instructors at the Language Institute, Thammasat University,

Bangkok, Thailand. Construct validity when used with Thai people has already been verified (Rimkeeratikul, 2008). The PRCA-24 contains 24 statements regarding different communication dimensions composed of interpersonal conversations, group discussions, meetings and public speaking. A 5-point Likert scale with ratings ranging from 1 (Strongly agree) to 5 (Strongly disagree) were used measure the levels of CA.

In the questionnaire, there were instructions describing how to complete it. Also, there was a statement indicating that their responses would be treated as confidential and be used for academic purposes only.

Descriptive statistics of the percentage, frequency mean and SD were employed to analyze the demographic information such as age, gender, education, job, and years of working with the bureau. T-test analysis was used for comparing CA in L1 and L2 in each dimension of communication. One-way ANOVA was used to compare CA in L1 and L2 with the demographic data such as age, educational background, work position and working experience.

The second research instrument was interview questions. The interviewees were asked to answer two main questions: the first question was "How do you feel when speaking English with foreigners?". The second question was either "If you are confident, what makes you feel so?" or "If you are not confident, how do you cope with that feeling?". The participants who attended the interview sessions were selected based on their high and moderate CA scores on the PRCA-24. Additionally, these participants were willing to provide information to the researcher. There were six interviewees that agreed to answer the two main questions. The data analysis of the qualitative research referred to the model of Creswell (2014). The interview data were transcribed into verbatim transcriptions (Vågan, 2009). After that the data were categorized into themes. Computer-aided qualitative data analysis (CAQDA) was employed to support the accuracy of the data. In this study, the NVivo 10 software program was utilized to transform the data by using the frequency of words from the interview sessions to pictures (Bandara, 2006).

3.4 Procedure

To start collecting the data, the researcher asked for cooperation from the director of BTB to conduct the research study with BTB personnel. A pilot study was conducted with 20 participants out of 129 BTB staff members, which equates to 16%. After that, the researcher distributed the questionnaire to 109 staff members of the BTB and received the completed questionnaires on the next day. All in all, 92 copies of completed questionnaires were returned, representing an 84% return rate. The participants rated their apprehension with the PRCA-24 in the four communication dimensions using a 5-point Likert scale. Furthermore, the Statistical Package for the Social Sciences program (SPSS) version 17 was utilized to compute the demographic data as well as compare the CA levels of the participants.

After obtaining 92 completed questionnaires, the researcher personally made appointments with the six interviewees. These interviewees were willing to give their names and contact details to the researcher for conducting face-to-face interviews. Each interview session took 10-15 minutes to complete. There were four interviewees with a moderate level of CA in L1 and two interviewees with high levels of CA in L1. Two of them had a medium level of CA in L2 and four of them had

high levels of CA in L2. The interviews were done based on the two questions as mentioned above, mainly focusing on their feelings and the methods they used to cope with their communication apprehension.

4. Results

The results of this study are divided into two parts. The results are reported according to the three research questions.

4.1 Results from the Quantitative Method of the Study

The answers to the first two research questions were obtained through the quantitative method, using t-test and ANOVA, respectively. CA in L1 and L2 were investigated. The data obtained were analyzed using SPSS. Table 1 reveals that the majority (91.30%) of the bureau personnel possessed moderate CA (51-79) when they communicate in Thai. Also, most of them (79.3%) had moderate CA (51-79) when they use English.

Table 1. Percentage and Frequencies of Participants' CA Level in L1 and L2

CA scores	**L1 (Thai)**		**L2 (English)**	
	Frequency	**Percent**	**Frequency**	**Percent**
Below 50 (Low CA)	2	2.20	0	0
51-79 (Moderate CA)	84	91.30	73	79.30
Over 80 (Very High CA)	6	6.50	19	20.70
Total	**92**	**100.00**	**92**	**100.00**

Table 2 shows a comparison of the overall mean scores of CA in L1 and L2 among the BTB personnel. The total CA mean score in L2 (71.04) was significantly higher than the total CA mean score in L1 (66.22). In addition, it was found that the four dimensions of CA in L2 were significantly higher than all of the four dimensions of CA in L1. The significance level was set at $p \leq 0.05$.

Table 2. Results of Comparison of Mean Scores in CA in L1 and CA L2

Dimension *N = 92*	**CA in L1**		**CA in L2**		***t***	**Sig.**
	Mean	**SD**	**Mean**	**SD**		
Interpersonal Conversations (Dyad)	16.29	3.47	17.77	4.18	-3.50	.01
Group Discussions	16.80	2.64	17.85	1.66	-3.18	.02
Meetings	16.28	3.37	17.62	4.10	-3.40	.01
Public Speaking	16.84	3.50	17.80	4.22	-2.87	.05
Total	66.22	9.09	71.04	11.96	-4.57	.00

$p \leq 0.05$

To answer the second research question, t-test analysis and One-way Analysis of Variance (ANOVA) were employed to compare the demographic data and CA in

L1 and L2. The results did not show any significant differences between gender, education, position, length of working years and overseas experience in terms of the effect on CA in L1. However, they indicated a difference in CA in L2 with regard to work position and the number of years of working as shown in Tables 3-6.

Table 3 illustrates the results from ANOVA analysis. It revealed that the bureau staff members with different positions had significantly different CA in L2 ($p \leq 0.05$).

Table 3. Results of ANOVA Analysis of Total CA in L2 Score with Different Positions

Position	CA Score Minimum	CA Score Maximum	Mean	SD	F	Sig.
Doctor	67	85	76.00	12.73	2.48	.05
Nurse	54	104	67.90	11.01		
Medical Technician	54	88	66.19	9.37		
Public Health Officer	52	108	72.33	14.35		
Administrative Officer	56	106	75.29	11.49		
Total	52	108	71.04	11.96		

Note: Levene statistics = 0.568, p = 0.69

Table 4 shows the results from post-hoc analysis, which indicated that there were two positions that had significantly different CA in L2. First, administrative officers had a significantly higher score than nurses ($p \leq 0.03$). Second, administrative officers had a significantly higher score than medical technicians ($p \leq 0.01$).

Table 4. Post-hoc Analysis of Total CA in L2 with Different Positions

	Position	Position	Mean Difference	Std. Error	Sig.
LSD	Doctor	Nurse	8.10	8.60	.35
		Medical Technician	9.81	8.57	.26
		Public Health Officer	3.67	8.67	.67
		Administrative officer	.71	8.45	.93
	Nurse	Doctor	-8.10	8.60	.35
		Medical Technician	1.71	3.62	.64
		Public Health	-4.43	3.76	.24
		Administrative officer	-7.39	3.32	.03*
	Medical Technician	Doctor	-9.81	8.57	.26
		Nurse	-1.71	3.62	.64
		Public Health	-6.14	3.72	.10
		Administrative officer	-9.10	3.28	.01*

	Position	Position	Mean Difference	Std. Error	Sig.
LSD	Public Health Officer	Doctor	-3.67	8.64	.67
		Nurse	4.43	3.76	.24
		Med Tech	6.14	3.72	.10
		Administrative officer	-2.96	3.43	.40
	Administrative Officer	Doctor	-.71	8.45	.93
		Nurse	7.40	3.32	.03*
		Medical Technician	9.10	3.28	.01*
		Public Health	2.96	3.43	.40

**Level of Significance p ≤0.05*

Table 5 shows the results from ANOVA analysis. The bureau personnel with different years of working had significantly different CA in L2 ($p \leq 0.01$).

Table 5. Results of ANOVA Analysis of Total CA in L2 Scores with Different Number of Years of Working

Year(s) of Working	CA Score Minimum	CA Score Maximum	Mean	SD	F	Sig.
Less than 1	56	88	73.40	12.06	3.87	.01
1-5	60	108	77.17	10.59		
6-10	52	72	64.67	7.48		
More than 10	54	106	68.90	12.18		
Total	52	108	71.04	11.96		

Note: Levene statistic = 0.572, p = 0.635

As shown in Table 6, post-hoc analysis revealed that the two groups of the bureau personnel with a different number of years of working had different CA in L2. First, staff who had worked with the bureau from 1 to 5 years had significantly higher scores than those who had worked with BTB from 6 to 10 years ($p \leq 0.01$). Second, personnel who worked with the BTB from 1 to 5 years had a significantly higher score than those who worked with the bureau for more than 10 years ($p \leq 0.01$).

Table 6. Post-hoc Analysis of Total CA in L2 with Different Number of Years of Working

Year(s)	Year(s)	Mean Difference	Std. Error	Sig.
Less than 1	1-5	-3.77	4.33	.39
	6-10	8.73	5.25	.10
	More than 10	4.50	3.96	.26
1-5	Less than 1	3.77	4.33	.39
	6-10	12.51	4.49	.01*
	More than 10	8.27	2.88	.01*
6-10	Less than 1	-8.73	5.25	.10
	1-5	-12.51	4.49	.01*
	More than 10	-4.23	4.14	.31
Over 10	Less than 1	-4.50	3.96	.26
	1-5	-8.27	2.88	.01*
	6-10	4.23	4.14	.31

**Level of Significance $p \leq 0.05$*

4.2 Results from Qualitative Method of the Study

The results from the qualitative study help give a clearer picture concerning the problems and techniques the bureau personnel used to deal with communication apprehension in L2. The participants in the interviews had high and moderate levels of CA in L1 and L2. There were six interviewees who agreed to attend the interview sessions. They had different ages, positions and the number of years of working in the bureau. These interviewees had experience attending meetings or participating in English communication situations. Based on their answers, the interview descriptions were transcribed manually and arranged into themes (Seidman, 1998).

The interviewees were asked two major questions – "How do you feel when speaking with foreigners?" The first answer led to the second question – "If you are confident, what makes you feel so?" or "If you are not confident, how do you cope with that feeling?" In the second question, the interviewees were asked how they coped with their apprehension.

NVivo 10 software program assisted the researcher to generate the frequency of words used in the interview sessions. Figure 1 presents the most frequently used words found in the interview, which was "English". This study is related to communication apprehension in English; as a result, English was often mentioned.

As shown in figure 1, "English" is the biggest letter in the figure. This means that "English" was the most often mentioned in the transcription. The next words found were "answer", "feel", "know" and "prepare", respectively.

Figure 1: 3D Word Cloud of Word Frequency

Figure 2 exhibits the mind map of word frequency related to the word "Prepare". Most interviewees stated that the primary technique they used in their working life to overcome their communication apprehension was preparation. They need time for preparation before commencing their talks in both Thai and English contexts. This figure shows the relevant sentences and words linked to the word "Prepare".

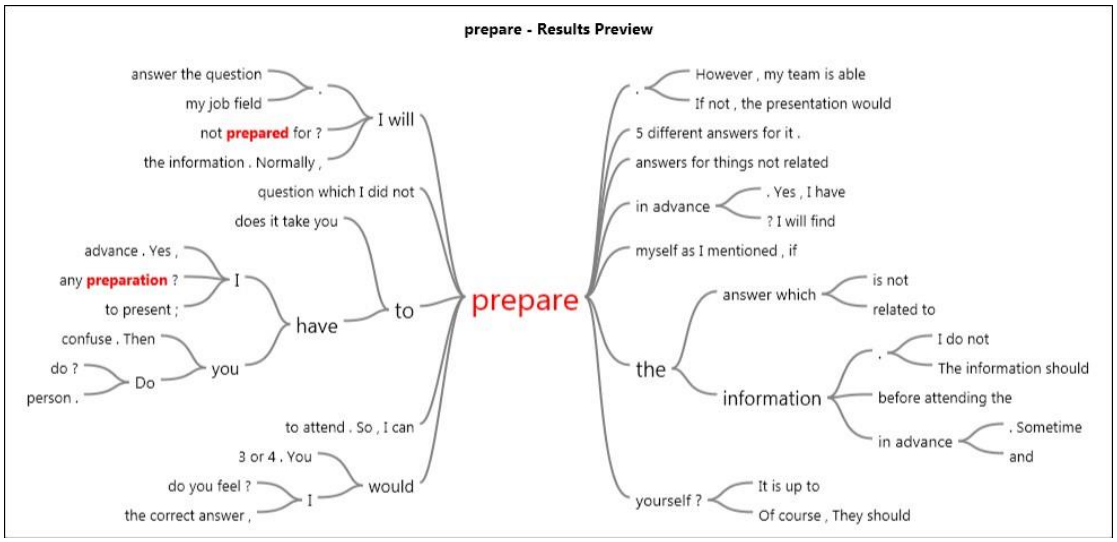

Figure 2: Mind Map of the Frequency of "Prepare"

Based on the transcription from the interviewees' responses, the results from qualitative analysis showed the four main techniques the interviewees used to reduce their CA in L2. The answers were grouped using the thematic technique, and the strategies applied to cope with their communication apprehension when they use English are as follows.

1. Preparation

The primary technique used by both high CA level and moderate CA level interviewees in English communication was "preparation". The interviewees need time for preparing the relevant information as well as practicing before giving a presentation or talk.

2. Collecting information about the issues

The second technique was used by interviewees who could not answer questions in meetings or presentations. This technique was used by people with both a moderate level of CA and a high level of CA.

They mentioned that:

"*If I cannot answer all (issues), I will list those issues and let them know that I will find out the answer from the people working on this*…"

"…*I will keep those issues and send them the feedback later or ask their contact details to send them the answer*."

3. Getting assistance from others

The third technique was used by people with moderate and high levels of CA. When they found themselves in a situation where they could not answer questions or did not understand questions asked in English, they would request their team to help them or use a translation application from the Internet.

4. Avoidance/Withdrawal

The last technique was used by people with a high level of CA only. Since they felt uncomfortable to communicate with foreigners in English in every dimension, they chose to avoid or withdraw from that situation. If they knew in advance that they had to participate in an English communication situation or meeting with foreigners, they would refuse to attend.

5. Discussion and Conclusion

The research results revealed that most BTB personnel had moderate CA in L1 and L2. Moreover, regarding the t-test results, their CA in L2 was higher than CA in L1. This was probably because BTB staff had fewer opportunities for face-to-face communication with foreigners. In their working environment and daily life they always communicate with Thais; thus, CA in L1 was not their communication issue. This result is similar to the study of McCroskey et al. (1985b) and Rimkeeratikul (2017), which found that people were willing to communicate in their own language but more apprehensive when speaking English. It may be presumed that there was less emphasis for BTB personnel to communicate in English, and their routine tasks did not involve communication in English. Therefore, when they need to use English,

they might feel anxious and uncomfortable. Additionally, personnel in some positions have to deal with foreigners regularly, such as medical doctors and medical scientists/medical technicians; most of those positions were found to have low scores of CA in L2.

The results of the one-way ANOVA test showed that the CA when performing English of the bureau staff members differed regarding the position and years of working. These results are discussed as follows. First, the findings indicated that administrative staff had higher CA than nurses and medical technicians did. It is possible that administrative officers might be more anxious when using English because they do not communicate in English regularly. The study of Degner (2010) revealed that support staff or administrative staff had a higher level of overall communication apprehension compared to other positions. The results of this study also support the study of Kasemkosin (2012), who determined that job title was associated with the level of CA. The bureau personnel who held a junior position or who were not specialists in the medical professional field may not be able to communicate in English with confidence. Additionally, medical professionals may have a better ability to use English in their area of expertise and their knowledge in that field enhances their trustworthiness. People holding a high position in an organization seem to receive recognition among their subordinates. Thai culture, as Hofsteded and Hofstede (2005) mention, has high power distance, so Thai subordinates pay more respect to their supervisors or people holding a higher position, as well as senior people who have been in the organization for a longer period of time (Rimkeeratikul, 2008, 2017).

Furthermore, this research finding is comparable with the study of Knutson et al. (1995), which found that Thais had a higher level of CA than Americans because of cultural differences. Also, Croucher (2013) states that individualism and collectivism are two of the factors influencing CA.

Second, the findings of ANOVA indicated that the number of years of working had a significant influence on CA in L2 of BTB staff members. It is possible that as people who had worked with the bureau for only 1 to 5 years were new to the organization, they might need time to adjust themselves to get used to the new working environment. In addition, using English in attending meetings or expressing opinions may be a barrier to communicating effectively. This result supports the study of Fordham and Gabbin (1996) and Rimkeeratikul (2017), which determined that the year of study in university and the number of years in the monkhood affected CA. Senior people had fewer problems expressing themselves in English. On the contrary, the results of this study contradict the results of the study of Frantz et al. (2005), which determined that there was no significant relationship between year of study in college and CA level. The results of this study were different from the study of Boonsongsup and Rimkeeratikul (2012), which found that people who had lengthy working experience had more CA in L2 than CA in L1.

Nonetheless, the outcome from t-test analysis revealed that there was a significant difference in total CA when the bureau staff members performed face-to-face communication in Thai language (L1) as compared to English language (L2). In each dimension of communication, the results of the comparison revealed that CA in L1 of interpersonal conversations, group discussions, meetings and public speaking was higher than CA in L2. It is interesting to note that the bureau personnel's oral

communication in L2 was impeded under CA in L2. In general, people speaking their native language (L1) and speaking English as a second language (L2) tend to have higher CA in L2. They have less apprehension to speak their mother tongue language, but have more apprehension in a second language (Jung & McCroskey, 2004; McCroskey et al., 1985; McCroskey et al., 1985; Richmond et al., 2008; Öztürk & Gürbüz, 2014; Rimkeeratikul, 2015, 2016; Rimkeeratikul et al., 2016). Also, BTB staff members may have fewer chances to regularly communicate in English with foreigners (Rimkeeratikul et al., 2016). Most people are not anxious to communicate in their native language (McCroskey et al., 1985b; McCroskey et al., 1985c; Öztürk & Gürbüz, 2014; Tom et al., 2013).

However, CA in L2 is a major impediment to effective L2 communication (Anyadubalu, 2010), and the obstacle of oral communication is one of the important issues affecting Thailand's economy, education and society (McCroskey, 1978). It would be advantageous for the staff to improve their English by virtue of the organization providing suitable English training courses. This would not only improve the staff's performance but also enhance the organization's ability to achieve their goals and mission.

Although the quantitative results revealed that most of the personnel of the bureau had a medium level of CA, the qualitative outcome indicated that they were still worried when performing English communication. According to the outcomes from the six interviewees, most people were not comfortable to speak English without preparation or when they did not have enough information. Some of them felt that they could not communicate in English properly since English was not their mother tongue. It is as Tom et al. (2013) found that students were not afraid when speaking their native language, but they were worried that they would make mistakes when speaking other languages. The result of this study is also in line with the study of Öztürk and Gürbüz (2014), which found that students were worried about making mistakes while communicating in English.

In this study, the results showed that only one person enjoyed using English and was willing to speak English with confidence. She stated that speaking with foreigners helped her practice her English accent. This result supports the studies of Matsuoka and Rahimi (2010) and Dong (2014), which found that having the chance to use English helps decrease CA in L2.

The outcomes of the qualitative analyses pointed out that there were four main techniques the interviewees used when performing English communication. The first technique that people with high and moderate CA always used was preparation. This is the primary technique found in many studies that helps people overcome their communication apprehension (Kondo & Ying-Ling, 2004; Francis & Miller, 2008). They also needed time and information for successful communication. The second technique for coping with CA in L2 was collecting information about the issues. In this case, the interviewees did not know how to answer the question because they were not an expert in that field and were attending the meeting on behalf of their supervisor. They tried to solve the problem at that time by finding a solution for themselves by being optimistic. They could make the situation less uncertain and make it a win-win situation by postponing giving the answer. A similar technique was found in the studies of Kondo and Ying-Ling (2004); Dong (2014); and Suwannaset and Rimkeeratikul (2014). The third technique of dealing with CA in L2

of the BTB staff members with moderate and high CA levels was getting assistance from others. This technique included seeking assistance from people and translation applications on the Internet. Most interviewees usually obtained help from their team or the supervisor who attended the meeting or the conference with them. The translation application could reduce the problem of CA in L2. People found this kind of application easier and faster since technology supports peoples' lives as mentioned in the studies of Scott and Timmerman (2005) and Leeds and Maurer (2009). This technique could help them while participating with foreigners, but their English communication could not yet be improved. The last technique found was avoidance/withdrawal, which was used only by the interviewees who had a high level of CA in L2. Berger, Richmond, McCroskey and Baldwin (1998) and Phillips (1984) state that people with high CA tend to avoid communication. Some people end conversations when they have to participate in English conversations. Others refuse immediately if they have to attend an English meeting or conference. Similarly, Kondo and Ying-Ling (2004); Patil and Karekatti (2012); and Suwannaset and Rimkeeratikul (2014) found that people who fear talking with other people tend to avoid or withdraw from the situation. This study also found an unexpected result from one of the interviewees who had worked with the BTB for more than ten years. Her CA scores, both in L1 and L2, were the highest among other interviewees. She said that when she communicated in English, she was not worried and tried to speak English, even though her English was not good. This kind of effect is called overcommunication (Richmond & McCroskey, 1998). This person does not avoid or withdraw from the communication but endures the situation until it is finished (Suwannaset & Rimkeeratikul, 2014).

6. Implications of the study

The results from both quantitative and qualitative parts of this study can assist the bureau staff members and the bureau executives to recognize the factors leading to communication anxiety in English contexts. Also, the ways for them to cope with their CA in L2 were revealed. All in all, the organizational head may gain insight into the feelings of the organization's members when they communicate using the English language. This knowledge can be beneficial for the organization, as it will increase awareness of the staff's English communication problems. Additionally, the human resources department may make use of this information and assign jobs to the right people. The research results can also be useful for the personnel department or the executives of the organization in order to provide appropriate training courses for their staff. The improvement of English proficiency and communication skills is one of the essential factors to enhance the staff's English communication ability, which can lead to effective job performance.

7. Limitations

This study was conducted with the personnel of only one organization taking care of public health in the suburb of Bangkok. The results represent only the problems of people in one organization in a suburban area. This study focused only

on the problem of anxiety in speaking contexts. As a result, if other aspects of communication were investigated, i.e., listening, reading and writing skills, the results might be different.

8. Recommendations for further research

In a wider context, L2 communication apprehension research studies should be conducted with other medical professionals or other careers including other organizations in both the government and private sectors. In addition, the number of participants should be increased for greater generalizability of the research study. Different techniques for coping with CA may be revealed in other studies, which would be of benefit to people who want to overcome their CA in L2.

About the Authors

Naruemon Booncherd is currently working with a private company in Bangkok, Thailand. She graduated with a Bachelor's Degree in Business Administration, majoring in Personnel Management from Burapha University and a Master's Degree in Business Administration from Ramkhamhaeng University. She is graduating from the MA Program in English for Careers, Thammasat University.

Sucharat Rimkeeratikul is an associate professor and the director of the Master of Degree Program in Career English for International Comminication (CEIC) of Language Institute, Thammasat University. She completed her Ph.D. in Interpersonal Communication and Master's Degree in Language and International Trade from Eastern Michigan University, USA. She graduated with a B.A. in English from Liberal Arts, Thammasat University. Her interests involve communication apprehension, anxiety in L2, intercultural communication and ESP.

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APPENDIX

QUESTIONNAIRE
(English Version)

This questionnaire is a part of thesis submitted in partial fulfills of the requirement for a Master's Degree of Arts in English for Careers, Language Institute, Thammasat University. This questionnaire is used to examine whether the personnel of Bureau of Tuberculosis, Department of Diseases Control have a communication apprehension during communication with foreigners. Please read the instructions carefully and answer each question as honestly as possible. Your response will be treated as confidential and be used for the academic purposes only. Thank you for your cooperation in taking time to answer this questionnaire.

These questionnaire is divided into two parts as follows:

Part I: General Information
Part II: The measurement of communication apprehension

Part I: General Information

Please mark (X) in the brackets or fill in the information

1. Gender
   ☐ Male ☐ Female

2. Age
   ☐ Below 25 ☐ 35-44
   ☐ 25-34 ☐ Over 44

3. Education Background
   ☐ Under Bachelor Degree ☐ Bachelor Degree
   ☐ Graduate Degree

4. Current position
   ☐ Medical Officer ☐ Nurse
   ☐ Medical Scientist / Medical Technician
   ☐ Other Officer (Please specify)……..……..…

5. Year(s) of working in Bureau of Tuberculosis
   ☐ Less than 1 year ☐ 1 - 5 years
   ☐ 6 - 10 years ☐ More than 10 years

6. Have you ever been overseas? (If yes, please answer question no. 7. If no, please go to Part II)
   ☐ Yes ☐ No

7. If you have ever been overseas, what was the purpose?
   - ☐ Travelling ☐ Studying
   - ☐ Working ☐ Training / Seminar

8. How long have you been overseas?
   - ☐ Less than one month ☐ 1-6 months
   - ☐ Over 6 months – 1 year ☐ More than 1 year

Part II. Personal report of Thai context communication apprehension measurement

Directions: This instrument is composed of statements concerning feelings while communicating with other people. Please indicate the degree to which each statement applies to your first thought and please do this quickly. Please mark (X) in the number to indicate your feeling while you speak **in Thai** in the following situations by marking your level of agreement:

Strongly Agree (1)	Agree (2)	Undecided (3)	Disagree (4)	Strongly Disagree (5)

1.	I dislike participating in group discussions.	1	2	3	4	5
2.	Generally, I am comfortable while participating in group discussions.	1	2	3	4	5
3.	I am tense and nervous while participating in group discussions.	1	2	3	4	5
4.	I like to get involved in group discussions.	1	2	3	4	5
5.	Engaging in a group discussion with new people makes me tense and nervous.	1	2	3	4	5
6.	I am calm and relaxed while participating in group discussions.	1	2	3	4	5
7.	Generally, I am nervous when I have to participate in a meeting.	1	2	3	4	5
8.	Usually, I am comfortable when I have to participate in a meeting.	1	2	3	4	5
9.	I am very calm and relaxed when I am called upon to express an opinion at a meeting.	1	2	3	4	5
10.	I am afraid to express myself at meetings.	1	2	3	4	5
11.	Communicating at meetings usually makes me uncomfortable.	1	2	3	4	5
12.	I am very relaxed when answering questions at a meeting.	1	2	3	4	5
13.	While participating in a conversation with a new acquaintance, I feel very nervous.	1	2	3	4	5
14.	I have no fear of speaking up in conversations.	1	2	3	4	5
15.	Ordinarily I am very tense and nervous in conversations.	1	2	3	4	5
16.	Ordinarily I am very calm and relaxed in conversations.	1	2	3	4	5
17.	While conversing with a new acquaintance, I feel very relaxed.	1	2	3	4	5
18.	I'm afraid to speak up in conversations.	1	2	3	4	5
19.	I have no fear of giving a speech.	1	2	3	4	5
20.	Certain parts of my body feel very tense and rigid while	1	2	3	4	5

Strongly Agree (1)	Agree (2)	Undecided (3)	Disagree (4)	Strongly Disagree (5)

	giving a speech.					
21.	I feel relaxed while giving a speech.	1	2	3	4	5
22.	My thoughts become confused and jumbled when I am giving a speech.	1	2	3	4	5
23.	I face the prospect of giving a speech with confidence.	1	2	3	4	5
24.	While giving a speech, I get so nervous I forget facts I really know.	1	2	3	4	5

Part II. Personal report of English context communication apprehension measurement

Directions: This instrument is composed of statements concerning feelings while communicating with other people. Please indicate the degree to which each statement applies to your first thought and please do this quickly. Please mark (X) in the number to indicate your feeling while you speak **in English** in the following situations by marking your level of agreement:

Strongly Agree (1)	Agree (2)	Undecided (3)	Disagree (4)	Strongly Disagree (5)

1.	I dislike participating in group discussions.	1	2	3	4	5
2.	Generally, I am comfortable while participating in group discussions.	1	2	3	4	5
3.	I am tense and nervous while participating in group discussions.	1	2	3	4	5
4.	I like to get involved in group discussions.	1	2	3	4	5
5.	Engaging in a group discussion with new people makes me tense and nervous.	1	2	3	4	5
6.	I am calm and relaxed while participating in group discussions.	1	2	3	4	5
7.	Generally, I am nervous when I have to participate in a meeting.	1	2	3	4	5
8.	Usually, I am comfortable when I have to participate in a meeting.	1	2	3	4	5
9.	I am very calm and relaxed when I am called upon to express an opinion at a meeting.	1	2	3	4	5
10.	I am afraid to express myself at meetings.	1	2	3	4	5
11.	Communicating at meetings usually makes me uncomfortable.	1	2	3	4	5
12.	I am very relaxed when answering questions at a meeting.	1	2	3	4	5
13.	While participating in a conversation with a new acquaintance, I feel very nervous.	1	2	3	4	5
14.	I have no fear of speaking up in conversations.	1	2	3	4	5
15.	Ordinarily I am very tense and nervous in conversations.	1	2	3	4	5
16.	Ordinarily I am very calm and relaxed in conversations.	1	2	3	4	5
17.	While conversing with a new acquaintance, I feel very relaxed.	1	2	3	4	5

Strongly Agree (1)	Agree (2)	Undecided (3)	Disagree (4)	Strongly Disagree (5)				
18.	I'm afraid to speak up in conversations.		1	2	3	4	5	
19.	I have no fear of giving a speech.		1	2	3	4	5	
20.	Certain parts of my body feel very tense and rigid while giving a speech.		1	2	3	4	5	
21.	I feel relaxed while giving a speech.		1	2	3	4	5	
22.	My thoughts become confused and jumbled when I am giving a speech.		1	2	3	4	5	
23.	I face the prospect of giving a speech with confidence.		1	2	3	4	5	
24.	While giving a speech, I get so nervous I forget facts I really know.		1	2	3	4	5	

To complete the data collection, if possible, please give your name, contact number and email address for more information.
Name……. Telephone number ……
Email…….
Should you have any questions about this questionnaire, please contact the researcher: Ms. Naruemon Booncherd Phone no. 081-812-8824 Email:Naruemon_b@yahoo.com

☺ Thank you for your kind cooperation ☺