

[DOI: 10.20472/IAC.2018.935.029](https://doi.org/10.20472/IAC.2018.935.029)

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A CAUSAL RELATIONSHIP MODEL OF UNDERGRADUATE STUDENTS' WILLINGNESS TO COMMUNICATE ENGLISH

Abstract:

The purpose of this research is to explore the critical factors that affect undergraduate students' Willingness to Communicate in English (WTC). The data was collected from a sample of 416 respondents using a questionnaire to measure attitudes. Data was analysed using SPSS and Mplus 6.12 computer programmes. The findings revealed that students' Perceived Communication Apprehension (PCA) could influence WTC indirectly via Attitude Toward Willingness to Communicate (AWTC) and Perceived Behavioural Control (PBC), whilst WTC was not affected from PCA indirectly via the Subjective Norm (SN). Students were found to be tense and nervous about speaking English with their friends, strangers, and new acquaintance which was associated with a lack of confidence. However, if activities were perceived to be fun students were more willing to communicate. This research is useful for teachers of English as it can increase awareness of the causes and effects of anxiety on students' learning and suggest teaching methodologies that might reduce nervousness and encourage students' willingness to communicate: thereby helping to improve their English oral communication skills.

Keywords:

Willingness to Communicate English, Perceived Communication Apprehension, Attitude Toward Willingness to Communicate, Subjective Norms, Perceived Behavioural Control

JEL Classification: I21

Introduction

In an increasingly globalized and competitive world, the ability to be able to communicate in the English language can provide a significant competitive advantage for a young learner when seeking employment. Several Thai universities have opened international programmes using English as the medium of instruction. Such programmes are popular with students as companies, especially those that are globally based, prefer to recruit students who can speak fluent English. From a business perspective, a company with a significant number of employees, able to communicate in English, has greater potential to grow and expand internationally.

Yet, in Thailand, learning English presents a major challenge for many students. At university level some students are able to master the language, but for the vast majority success eludes them and standards remain stubbornly low. In fact, the English Proficiency Index (EPI) places Thailand 55th out of 60 countries with only Kazakhstan below Thailand in the Asia region (EF, 2012).

The Willingness to Communicate (WTC) in a second or foreign language represents a psychological preparedness for using that language (MacIntyre, 2007). Such preparedness is an important concept in language acquisition and communication theory. MacIntyre and Charos (1996) argue that the primary reason for learning a language is to be able to communicate and that such communication is an indispensable part of language acquisition: whether it is for meeting new people, travelling, experiencing other cultures, or using language in a job.

Long's (1996) 'Interactive Hypothesis' and Swain's (2000) 'Pushed Output' theory, both widely embraced by educators, stress the importance of developing learners' communicative competence and promoting the active use of a second language (L2). However, research of L2 classrooms suggests that learners, particularly those from the Asian region, are unwilling to participate orally (Peng, 2012; Jackson, 2002). Researchers and educators have made considerable efforts to explore why so many learners are unwilling to speak out. A key part of these efforts has been to try to understand and even to predict learners' communicative behaviour by identifying the factors involved. However, most studies have largely neglected the dynamic nature of WTC by treating it as a static trait. Little is known about how learners' WTC fluctuates in different situations and what causes these variations. Most previous studies have focused on learners at university (Jackson, 2002; Kang, 2005; Peng, 2012), but little is known about beginner L2 learners' WTC. Nevertheless, Zhong (2013) found that the learners' WTC and oral communication varied in different situations in L2 classrooms, suggesting that WTC is context-dependent and situational. Interestingly, participants were found to be more involved in communicating with each other during collaborative learning situations.

Zhong (2013) investigated five low-proficiency L2 learners' situational WTC in a New Zealand English as a Second Language (ESL) classroom. Drawing on Ajzen's (1991, 2005) Theory of Planned Behaviour (TPB), Zhong explored factors affecting student's WTC in different situations in L2 classrooms. Zhong's (2013) research results are not generalized, so this study draws upon that research design to further develop and investigates four hundred and sixteen L2 learners' situational WTC in English language classrooms located in Thailand. This study also draws upon Ajzen's (1991, 2005) TPB, by exploring factors that affect students' WTC in collaborative situations in L2 classrooms. The significance of this study is that there is very little research on attitudes and behaviour about WTC in English generally, but in particular in relation to Thai students, so this paper will help fill both gaps.

Current research validates the view that perceived communication apprehension (PCA) has the potential to predict English as a Foreign Language (EFL) WTC (Öz, Demirezen, & Pourfeiz, 2015). Thus, this study explores the critical factors that affect undergraduate students' Willingness to Communicate English from the perspective of Perceived Communication Apprehension (PCA), Attitude Toward Willingness to Communicate (AWTC), Subjective Norms (SN), Perceived Behavioural Control (PBC), and Willingness to Communicate (WTC). This research is useful in that it will help English lecturers improve their undergraduate students' English oral communication skill following the significant factors identified in the results of this study.

Literature Review

Willingness to Communicate English

The concept of WTC was originally developed by researchers studying first language (L1) communication, but was later extended as a significant issue in the learning a second or foreign language (Baghaei, 2012; Lee and Ng, 2009; Maftoon and Ziafar, 2013; Oz, 2014; Pattapong, 2010; Suksawas, 2011). WTC can be defined as the tendency to initiate communication and a personality trait that is unchanging over time or in different situations (McCroskey and Baer, 1985; McCroskey and Richmond, 1991). Studies in Second Language Acquisition (SLA) describe WTC as predictable from two variables: learners' Perceived Communication Competence and Communication Anxiety (MacIntyre, Clément, Baker, & Conrod, 1998; Yashima, 2002, 2009). Thus, high levels of Perceived Competence when mixed with low levels of anxiety leads to greater WTC which, in turn, generates more frequent communication in L2 or EFL. Other factors found to correlate with, or effect WTC, are motivation (Hashimoto, 2002; Yashima, 2002), gender, age (MacIntyre, Baker, Clément, & Donovan, 2002), attitudes toward the international community (Yashima, 2002; Yashima, Zenuk-Nishide, & Shimizu, 2004) and personality (MacIntyre & Charos, 1996).

MacIntyre, Clément, Baker and Conrod, (2001) examined the dynamic nature of WTC and found that when outside the classroom it was social support from friends that influenced WTC. Clément, Baker and MacIntyre, (2003) discuss how the frequency and

quality of exposure to a second language has an effect on WTC through the mediation of L2 confidence. Many original studies relied on quantitative data, but more recent studies used qualitative methods to explore the situational nature of WTC. Kang (2005) used class observations, interviews and stimulated recall to collect qualitative data on four Korean L2 learners. Kang found that that excitement, responsibility, and security all interact with the variables of topic, interlocutors, and conversational context to determine learners' situational WTC. The work of Cao and Philp (2006) found that a group's cultural background could also affect WTC. Cao writing in 2011 found that individual, linguistic and environmental dimensions had joint effects on the situational WTC in L2 classrooms. Peng (2012) used an ecological perspective to identify six factors the underlie classroom WTC; learner beliefs, motivation, cognitive factors, linguistic factors, affective factors, and the classroom environment. From these studies the situational nature of WTC has become clearer however, more research could improve the understanding of the conditions and factors for changes to learners' WTC.

Perceived Communication Apprehension (PCA)

Communication apprehension (CA) is connected to the feeling of anxiety an individual has when communicating. Barraclough, Christophel and McCroskey (1988, p. 188) define CA as "an individual's level of fear or anxiety associated with real or anticipated communication with another person or persons". McCroskey (1997) adds to this by describing CA as having trait-like characteristics. Other research on CA has revealed that people who have high levels of fear or anxiety about communicating tend to avoid or withdraw from it altogether (Dörnyei, 2005; MacIntyre & Charos, 1996). CA is negatively correlated with language achievement and WTC (McCroskey & McCroskey, 2002). Interestingly, current research suggests that Perceived Communication Apprehension (PCA) might be able to predict EFL WTC (Öz et al., 2015).

H₁. Perceived communication apprehension directly affects willingness to communicate in English.

In 2013 Zhong used the Theory of Planned Behaviour (TPB) in a qualitative attitude-behaviour to study the WTC of a small group of students. Zhong found that whilst TPB might provide a starting point for attitude-behaviour research, it requires additional variables to improve the sufficiency of the respective models. Ajzen (1991) also states that TPB allows for the use of additional variables to strengthen the ability to explain certain behaviours. Hence, this study will build upon Zhong's work by further investigating the relationship between PCA and TPB.

H₂. Perceived communication apprehension directly affects attitude toward behaviour.

H₃. Perceived communication apprehension directly affects subjective norms.

H₄. Perceived communication apprehension directly affects perceived behavioural control.

Attitude toward Behaviour (ATB), Subjective Norms (SN), Perceived Behavioural Control (PBC)

This study has utilised TPB to investigate WTC, but with additional variables. The whole set of variables, including those of TPB, are as follows:

Attitudes towards behaviour (AB) refers to the behaviour beliefs of an individual that influence their behaviour and their evaluation of that behaviour (Fishbein & Ajzen, 1975). The belief component includes a person's knowledge and perceptions about certain behaviours. Such attitudes are an important consideration as they have been shown in previous studies to influence the motivation of learners' communication behaviour (McCroskey & Richmond, 1987; Zhong, 2013).

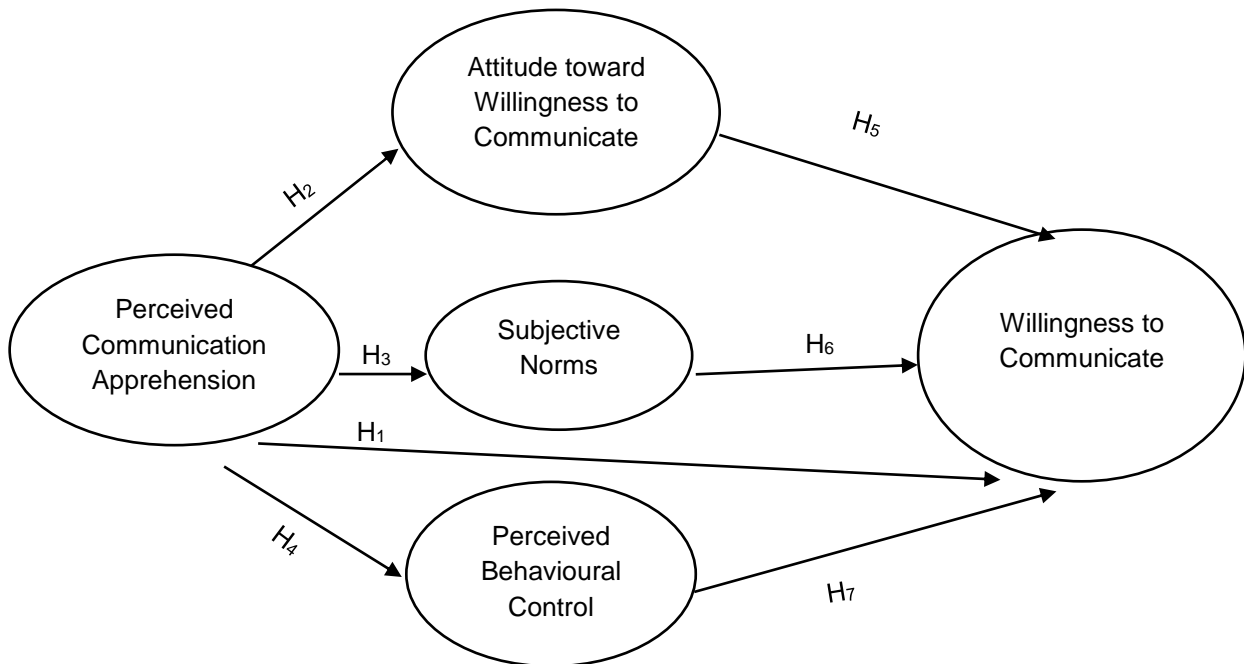
Subjective Norms (SN) are normative beliefs, which is a subjective norm or social pressure. SN relates to the perceived expectations of the important people close to a person and how motivated they are to comply with such expectations (Fishbein & Ajzen, 1975). Normative beliefs suggest that pressure from peers, family members, neighbourhood, teachers, school, community and society have a positive effect on communication behaviour. Many studies confirm the correlation between normative beliefs and WTC in English (Hashimoto, 2002; Yashima, 2002; Yashima et al., 2004; Zarrinabadi, 2014; Zhong, 2013).

Perceived behavioural control (PBC) relates to control beliefs. According to Bandura (1998) control beliefs are an individual's sense of self-efficacy. Ajzen's 2005 research found that an individual's control beliefs influence PBC which directly and indirectly affects behaviour through behavioural intention. McCroskey and Richmond (1987) discuss how an individual's perception of their communication competence has an impact on WTC. Barraclough et al. (1988, p. 188) explain that "it is what a person thinks he/she can do, not what he/she actually could do, which impacts the individual's behavioural choices". Therefore, an individual's unwillingness to communicate may be attributed to a lack of linguistic self-confidence and also communicative competence. Current research (Ghonsooly, Khajavy, & Asadpour, 2012; Hashimoto, 2002; Öz et al., 2015; Zhong, 2013) supports the concept that perceived communicative competence has the potential to predict WTC.

H₅. Attitude toward Willingness to Communicate directly affects Willingness to Communicate in English.

H₆. Subjective Norms directly affect the Willingness to Communicate English.

H₇. Perceived Behavioural Control directly affects the Willingness to Communicate English

Figure 1: Conceptual framework

Research Methodology

Sampling method and data collection

A pilot test was conducted on a convenience sample of 30 undergraduate students to clarify the wording and improve the actual participant's understanding of the questions. Multiple stage stratified random sampling was used to select the 450 participants to complete the final version of the questionnaire. The questionnaires were distributed as hard copies as this method achieves a relatively high response rate when compared to online questionnaires (Szolnoki & Hoffmann, 2013). For multivariable studies, Hair, Black, Babin and Anderson (2010, pp. 102) state that the proportion between samples and observed variables should be at least 5: 1. There were 54 observed variables for this study and as 416 validated questionnaires were used for data analysis the proportions recommended by Hair et al. were achieved.

Measurements

The survey instrument developed for this research consists of three parts. The first part of the questionnaire contains questions about demographic variables, such as gender, study year, and a self-evaluation of English ability. The second part utilises adapted items from the work of Baghaei (2012) that measured perceived behavioural control (PBC). There was 1 latent variable and 12 questions in part two which were measured using a 10-point scale ranging from 0 to 10. For part 3, there were 4 latent variables and 42 questions, all the items used in this study were measured using 5-point Likert-type

scales ranging from strongly disagree = 1 to strongly agree = 5. The questions for part 3 were developed by reference to the works of the following researchers; 9 WTC items were adapted from Baghaei, (2012), 9 PCA items from MacIntyre, Baker, Clément, & Donovan, (1998), MacIntyre & Clément, (1996) and Yashima, (2002), 15 AWTC items and 9 SN items to measure from Gardner, (1988) and Gardner & Lysynchuk, (1990).

Data analysis

The statistical package for social sciences (SPSS) was used for the descriptive and inferential analyses to provide respondents' profiles and the Cronbach's Alpha reliability scores. The data from the pre-test was used to measure the reliability of research instruments. The Cronbach's alpha score for the latent variables was 0.961 which exceeded the benchmark of 0.7 (Nunnally and Bernstein, 1994), thereby suggesting a good level of internal consistency of the factor analysis (Hair, Anderson, Tatham, & Black, 2002). A confirmatory factor analysis (CFA) was performed to empirically evaluate the construct validity of the developed components model. In part 3, there were 4 latent variables from 42 questions (observed variables) these were reduced to 32 questions for the construct validity. After CFA, the proposed hypotheses were tested utilizing a structural equation modelling (SEM) approach. The Mplus 6.12 computer program was used to test the proposed hypotheses as shown in Table 1.

Results

Table 1: Hypotheses test from H₁-H₇

Hypotheses	Relationship between latent variables	Factor			Results
		β	SE	t	
H ₁	PCA → WTC	-0.024	0.083	-0.285	Not supported
H ₂	PCA → AB	0.211	0.080	2.627*	Supported
H ₃	PCA → SN	-0.061	0.086	-0.710	Not supported
H ₄	PCA → PBC	0.533	0.058	9.251**	Supported
H ₅	AB → WTC	0.330	0.080	4.104*	Supported
H ₆	SN → WTC	0.272	0.080	3.373*	Supported
H ₇	PBC → WTC	0.361	0.089	4.071*	Supported

* $p \leq .05$, ** $p \leq .01$

Table 2: Demographics of Respondents

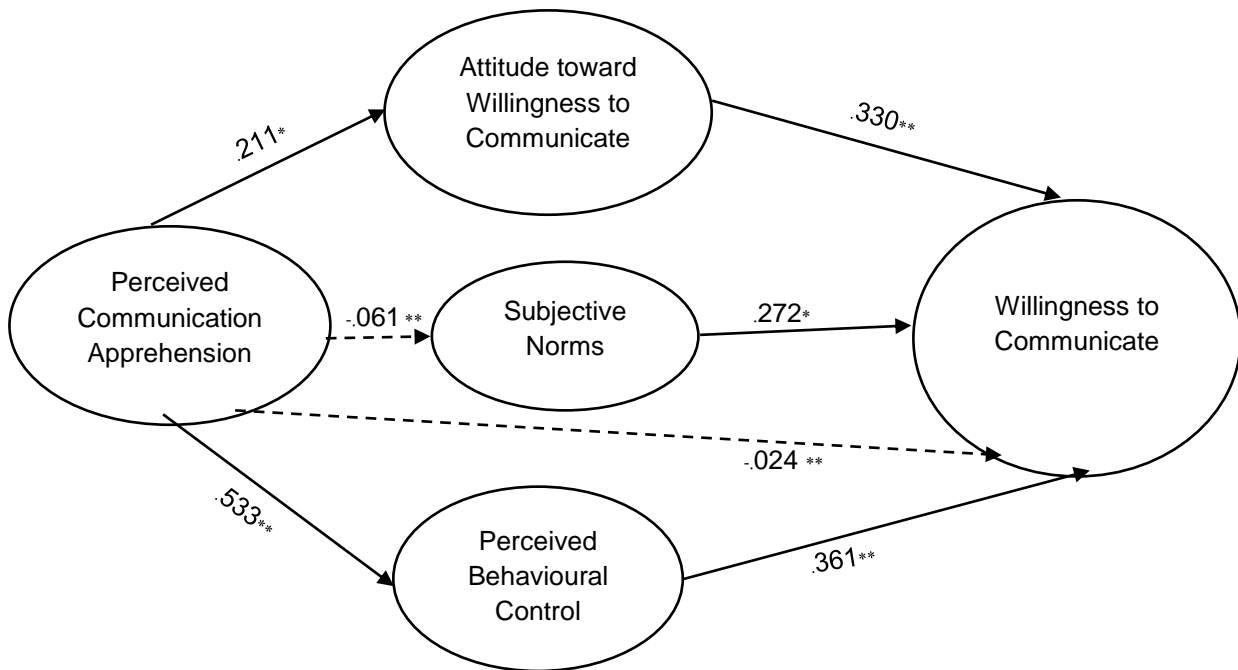
Categories	Items	Number of responses	Percentage of responses (%)
Gender	Male	191	45.9
	Female	225	54.1
Year of study	1 st	88	21.2
	2 nd	167	40.1
	3 rd	145	34.9
	4 th	16	3.8
English language proficiency	Very good	10	2.4
	Good	45	10.8
	Fairly good	51	12.3
	Average	188	45.2
	Poor	122	29.3

Table 3: Factor loadings among observed and latent variables

Items	Descriptive	Factor			R ²
		β	SE	t	
Observed Variable					
PCA10	I am tense and nervous while participating in group discussions in English.	0.683	0.045	15.131	0.466
PCA11	Engaging in a group discussion in English with new people makes me tense and nervous.	0.614	0.051	12.090	0.377
PCA13	While participating in a conversation in English with a new acquaintance, I feel very nervous.	0.683	0.044	15.414	0.466
PCA14	Ordinarily, I am very tense and nervous in conversations in English.	0.800	0.036	22.410	0.639
PCA16	Certain parts of my body feel very tense and rigid while giving a presentation in English.	0.633	0.048	13.096	0.400
PCA18	While giving a presentation in English I get so nervous, I forget facts I really know.	0.608	0.051	11.959	0.370
AWTC19	I like speaking English.	0.769	0.041	18.987	0.592
AWTC20	Speaking English is fun.	0.838	0.034	24.731	0.702
AWTC21	Being able to speak English often makes me happy.	0.763	0.039	19.377	0.581
AWTC22	Being able to speak English gives me a feeling of success.	0.552	0.055	10.060	0.305
AWTC25	I speak English because I want to communicate with foreigners.	0.380	0.066	5.763	0.145
AWTC26	Speaking English is important to me because I want to make friends with foreigners.	0.462	0.061	7.594	0.213
AWTC27	Speaking English is important to me because I might study overseas.	0.499	0.058	8.556	0.249
AWTC28	Speaking English is important to me because I might need it later for my job.	0.443	0.064	6.919	0.196
SN34	My parents think I need to speak English to be well-educated.	0.468	0.063	7.410	0.219
SN36	My parents encourage me to practice my English speaking as much as possible.	0.695	0.047	14.872	0.483

Items	Details	Factor			R^2
		<i>b</i>	<i>SE</i>	<i>t</i>	
SN37	My friends think that speaking English is important.	0.527	0.059	8.966	0.277
SN38	For my friends, speaking English is a sign of being well-educated.	0.434	0.065	6.695	0.188
SN40	My friends encourage me to speak English.	0.720	0.045	15.943	0.518
SN42	My friends have a positive impact on encouraging me to speak English.	0.732	0.043	16.938	0.535
PBC1	Present a talk to a group of strangers.	0.896	0.017	52.106	0.803
PBC2	Talk with an acquaintance.	0.856	0.021	40.363	0.733
PBC3	Talk in a large meeting of friends.	0.816	0.024	34.135	0.666
PBC6	Talk in a large meeting of acquaintances.	0.861	0.020	43.491	0.741
PBC7	Talk with a stranger.	0.837	0.022	37.750	0.700
PBC8	Present a talk to a group of friends.	0.909	0.017	53.585	0.827
PBC9	Talk in a small group of acquaintances.	0.830	0.023	36.158	0.689
WTC5	If I was introduced to a native English speaker, I would be happy to use my ability at English to communicate with them.	0.581	0.053	10.906	0.338
WTC6	I am willing to ask questions, in English, in front of my classmates.	0.650	0.047	13.755	0.423
WTC7	I am willing to express my opinions, in English, in front of my classmates.	0.678	0.044	15.420	0.460
WTC8	I am willing to talk, in English, with my teachers when out of the classroom.	0.674	0.052	13.035	0.454
Latent Variable					
PCA	Perceived communication apprehension	-	-	-	-
AWTC	Attitude toward willingness to communicate	-	-	-	0.044
SN	Subjective norms	-	-	-	0.004
PBC	Perceived behavioural control	-	-	-	0.284
WTC	Willingness to communicate	-	-	-	0.572
$\chi^2 = 446.558$, $df = 410$, $p\text{-value} = 0.103$, $CFI = 0.990$, $TLI = 0.988$, $RMSEA = 0.021$, $SRMS = 0.061$					

The measurement model with 32 indicators and 5 constructs (Figure 2) resulted in a very good overall model fit $\chi^2 = 446.558$, $df = 410$, $p\text{-value} = 0.103$, $CFI = 0.990$, $TLI = 0.988$, $RMSEA = 0.021$, $SRMS = 0.061$. Based on the fit statistics, this study concluded that the measurement model was an adequate measurement instrument for estimated concepts of the structural model. Of the hypotheses on the relationships among the constructs tested in the final model 5 hypotheses (H_2 , H_4 - H_7) were supported and 2 hypotheses (H_1 , H_3) not supported.

Figure 2: Structural Equation Model Test

Discussion

As Zhong (2013) adopted the Theory of Planned Behaviour (TPB) in a qualitative attitude-behaviour study on the Willingness to Communicate English (WTC), this study also utilised TPB to investigate WTC. The results indicate that the relationship among the TPB and WTC constructs are supported (H₅-H₇). The findings also show that Perceived Behavioural Control (PBC) affects students' Willingness to Communicate in English the most ($\beta = 0.361$, $t = 4.071$). The second most significant result was, students' Attitude Towards Willingness to Communicate in English (AWTC) and how it affects their Willingness to Communicate in English ($\beta = 0.330$, $t = 4.104$). The third was Subjective Norms which affects the Willingness to Communicate in English as a result of student' perspectives ($\beta = 0.272$, $t = 3.373$).

The relationship between PBC and WTC was significant (H₇) in this research, thereby supporting previous research (Ghonsooly et al., 2012; Hashimoto, 2002; McCroskey & Richmond, 1987; Öz et al., 2015; Zhong, 2013). The highest factor loading value was in the PBC' indicators, 'to present a talk to a group of friends' (PBC8). Students evaluated themselves as having a low sense of self-efficacy to speak English to a group of their friends. Thus, supporting the work of Christophel and McCroskey (1988), who found an individual's unwillingness to communicate could be attributed to a lack of linguistic self-confidence and also communicative competence.

The relationship between AWTC and WTC was supported (H₅) which correlated previous study's findings that students' attitude is an important factor in motivating learners' communication behaviour (McCroskey & Richmond, 1987; Zhong, 2013). In

AWTC indicators, 'speaking English is fun' (AWTC20), 'I like speaking English' (AWTC19), 'Being able to speak English often makes me happy' (AWTC21) had the highest factor loadings. This supports the previous research of Fishbein and Ajzen (1975), who found attitude toward behaviour is as function of an individual's beliefs towards behaviour and a subjective evaluation of that behaviour. Therefore, when students evaluate that speaking English is fun and it makes them happy then they might have a willingness to speak English.

The relationship between SN and WTC was supported (H_6) which correlates with previous studies that found students' attitude is an important factor in motivating learners' communication behaviour (McCroskey & Richmond, 1987; Zhong, 2013). In AWTC indicators, 'speaking English is fun' (AWTC20), 'I like speaking English' (AWTC19), 'Being able to speak English often makes me happy' (AWTC21) were all associated with previous studies (Hashimoto, 2002; Yashima, 2002; Yashima et al., 2004; Zarrinabadi, 2014; Zhong, 2013). In SN indicators, 'my friends have a positive impact on encouraging me to speak English' (SN42) and 'my friends encourage me to speak English' (SN40) indicated that students' friends influence their willingness to speak English the most.

The relationship between PCA and WTC was not supported for two hypotheses (H_1 and H_3), but PCA affected Attitude toward Willingness to Communicate English (AWTC) (H_2), and it also affected Perceived Behavioural Control (PBC) (H_4). These findings constituted the new knowledge that PCA affected WTC in an indirect way via AWTC and PBC for undergraduate students. The three PCA indicators, 'I am very tense and nervous in conversations in English' (PCA14: Mean = 2.43), 'I am tense and nervous while participating in group discussions in English' (PCA), and 'while participating in a conversation in English with a new acquaintance, I feel very nervous' (PCA13: Mean = 2.26) indicated that students were tense and nervous to speak English with new acquaintances and in group discussions which was associated with PBC that students were most concerned when speaking to a group of friends (PBC9: Mean = 2.34), and a group of strangers (PBC1: Mean = 2.44). Moreover, 'speaking English is fun' (AWTC20: Mean = 3.71), and 'it makes me happy' (AWTC21: Mean = 3.74) were indicators that considerably concerned students.

These relationship among PCA, AWTC and PBC indicate that students would have the willingness to express their opinions, in English, in front of their classmates (WTC7: Mean = 3.24, which concerned students the most), a group of friends, a group of strangers or acquaintance if they feel that speaking English is fun and it makes them happy without feeling any tension. Conversely, when students are tense and nervous to speak English with their friends, strangers and new acquaintance the mean value of PCA and PBC was lower than the moderated level.

Conclusion

Students' PCA can influence WTC indirectly via AWTC and PBC. WTC was not affected from PCA indirectly via SN. The highest total effect on WTC was PBC. To determine which latent variable indicators students were highly concerned about, this research concluded that students feel tense and nervous to speak English with their friends, strangers, and new acquaintance.

Why are undergraduate students tense and nervous to be willing to speak English with friends, new acquaintance, and strangers? This question is posed from the findings that relate to PCA, AWTC, PBC and WTC. The answer could be suggested by factors that have been found to be correlated with, or effect, WTC. These include motivation (Hashimoto, 2002; Yashima, 2002), gender, age (MacIntyre et al., 2002), attitudes towards the international community (Yashima, 2002; Yashima et al., 2004) and personality (MacIntyre & Charos, 1996). Moreover, Cao (2011) reported that three dimensions (individual, linguistic and environmental), had joint effects on the situational WTC in L2 classrooms. Further studies could add additional variables such as personality, attitudes toward the international community and the self-motivation level of students in order to compare in the causal relationship model of undergraduate students' Willingness to Communicate in English. Such further research could advance the understanding of the conditions and factors to make changes in learners' WTC.

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