Out-of-class anxiety in a non-English speaking context and its effects on intelligibility and comprehensibility

Jeffrey Dawala Wilang and Wareesiri Singhasiri

King Mongkut's University of Technology Thonburi, Thailand

Using Englishes as a lingua franca ('EsLF') or international language among EFL learners in an out-of-class setting induces anxiety, then debilitates the intelligibility and comprehensibility of speakers. This research project reports the conceptualisation of EsLF anxiety and its effects on intelligibility and comprehensibility, with the participation of 240 Thai and foreign graduate students in universities across Thailand. The Anxiety Scale for Spoken Englishes as a Lingua Franca (ASSELF) was developed and the results were used in an exploration of EsLF anxiety. The scale was validated with exploratory factor analysis (EFA), using principal axis factoring. The analysis indicated a three-factor solution including interlocutor-induced difficulties, language-processing difficulties, and apprehension over interlocutors. Independent samples t test pointed out a significant difference on how EsLF anxiety is experienced by Thai and foreign students. Further, the study examined the relationship of EsLF anxiety and the intelligibility and comprehensibility of international speakers. Correlational relationships revealed that (i) as anxiety increases, intelligibility and comprehensibility decrease; and (ii) as intelligibility increases, so does comprehensibility. Among the three factors of EsLF anxiety, apprehension over interlocutors debilitated the intelligibility of the international speakers significantly. Specific anxiety-provoking situations such as a proficient speaker and a native-like accented speaker are significant sources of unintelligibility and incomprehensibility. The research concludes with a discussion of limitations, and implications for English language education and future research.

Introduction

The *lingua franca* status of English in Thai academic contexts is gaining considerable attention among educators, since a demographic shift in the mobility of students in Asia has lead to a growth in numbers of foreign students enrolled in Thai universities. With English having a significant role in an increasingly *internationalised* academia, the challenges of using it as the main language of communication between Thai and foreign students have become unprecedented. Constructive oral interactions among students (Thai and foreign), could manifest a more positive community, which supports favourable in-class or out-of-class (language) outcomes. However, apprehensions in oral interactions using Englishes (emphasis added to mean English and its variants) as a *lingua franca* may cause negative consequences for word recognition and message comprehension, thereby debilitating successful communication. Continuing research on foreign language anxiety in specific academic contexts, for example, out-of-class, requires more attention.

Prior to the conceptualisation of this study, four students – an Indonesian, two Thais, and a Vietnamese, volunteered to take part in an informal talk out-of-class then share their anxiety provoking experiences afterwards. They identified proficient speakers of English, unknown topic of the talk, mixed nationalities, correctness of pronunciation, unwillingness to communicate by other interlocutors and group talk setting as highly

anxiety-provoking situations. The observed reactions derived from the students were appalling such as self-inhibition, long silence, topic dropping, monosyllabic responses and odd facial expressions. The preliminary observations provided a perspective away from known out-class anxiety-provoking situations among non-native speakers such as conversation with more than one speaker, starting a conversation with a native speaker, answering a lecturer's question, asking advice from a lecturer, and answering a question from an unknown non-native speaker (Woodrow, 2006).

Given the consistent findings on the litany of anxiety-provoking situations in language learning, we hypothesise that the receptive and productive performances of foreign language learners in out-of-class oral interactions provokes anxiety in a country where English is both learnt and used as a foreign language, specifically, Thailand. There is a need to extend foreign language anxiety studies concerning Englishes as a lingua franca or international language (Jenkins, 2009; Nelson, 2011) among local and international students. Similar to the extensive research into anxiety's correlations, this study aimed to explore anxiety's effect on the intelligibility (recognition of words or utterances) and comprehensibility (comprehension of words or utterances) of volunteer international speakers. Exploring anxiety among foreign language (FL) learners (FL covers both second and foreign language learners) in out-of-class oral interactions in non-English speaking contexts, and its relationship to recognition and comprehension of words or utterances, a topic under-researched to date.

Anxiety and out-of-class anxiety in a non-English speaking context

Extensive research has examined general, situation- and skill-specific language anxieties, apprehensions, uneasiness or worries. Recognised as affective filter in second language acquisition (Krashen, 1985), anxiety's interference in language reception, retention and production is high (Aida, 1994; Elkhafaifi, 2005; Horwitz, Horwitz & Cope, 1986; MacIntyre & Gardner, 1994). Worries or apprehensions in listening (Liu, 2016; Vogely, 1998), speaking (Horwitz et al., 1986), reading (Zhang, 2000) and writing (Cheng, 2004; Sellers, 2000) are documented abundantly in language classroom settings. Anxious learners tend to inhibit their participation in interactional settings (Horwitz et al., 1986). Not only in the classroom EFL learners experience those feelings, but whenever English is used to communicate out-of-class (Woodrow, 2006) in native-English speaking countries.

Several factors relating to in-class language learning settings have been identified using differing instruments such as the following: Horwitz et al.'s (1986) Foreign Language Classroom Anxiety Scale (FLCAS), Elkhafaifi's (2005) Foreign Language Listening Anxiety Scale (FLLAS), Woodrow's (2006) Second Language Speaking Anxiety Scale (SLSAS), among others. These settings are English as a second language (e.g., Woodrow, 2006; Mak, 2011), English as a foreign language (e.g., Matsuda and Gobel, 2004; Wilang, 2015; Zhang, 2013), multilingualism language learning (e.g., Thompson and Lee, 2013), and less-commonly taught languages known as LCTLs (e.g., Al-Saraj, 2014; Elkhafaifi, 2005; Horwitz et al., 1986). Factor dimensions were preferred given the increasing list of anxiety-provoking situations among foreign and second language learners. Among Spanish learners, Horwitz et al. (1986) in their seminal paper reported three factors including communication

apprehension, test anxiety and fear of negative evaluation. Aida's (1994) duplication of the study among Japanese language learners yielded four factors, namely: speech anxiety and fear of negative evaluation, fear of failing the class, comfortableness in speaking, and negative attitudes toward the class. Among Thais, Yaikhong and Usaha (2012) reported four anxiety factors in public speaking classes, namely communication apprehension, text anxiety, fear of negative evaluation and comfort in using English. Among non-native preservice teachers, using English in class is the influential anxiety factor besides selfconfidence and class preparation (Yoon, 2012). Beyond in-class factors are cognitive processing dimensions, for instance, input-processing-output (MacIntyre & Gardner, 1994) and decoding skills (Zhang, 2013). Skill-specific linguistic abilities were identified, for example, familiarity with English grammar and vocabulary (Batiha, Noor & Mustaffa, 2014; Matsuda & Gobel, 2004). Beliefs and attitudes were also recognised, such as selfbeliefs (Zhang, 2013), negative self-evaluation, and negative attitudes (Mak, 2011). Although it is given that anxiety undeniably exists in in-class settings and in various factors, current research has not firmly established out-of-class anxiety among English language learners in a non-English speaking context.

Anxiety and its effects on performance variables

As previously noted, foreign language anxiety has been known to have a debilitating effect on foreign language learning. This can be found in various language performances such as cognition (e.g. MacIntyre & Gardner, 1994), listening (e.g. Baran-Lucarz, 2013; Elkhafaifi, 2005; Kim, 2000), reading (e.g. Zhang, 2004), writing (e.g. Cheng, 2004), speaking (e.g. Mak 2011); other variables such as motivation (e.g. Liu, 2012), autonomy (e.g. Ozturk & Gurbuz, 2013); age (e.g. Ay, 2010); proficiency (e.g. Liu, 2006). In China, Liu (2012) reported that learner anxiety has significant and negative relationship to motivation (r = .51, p = <.01, n = 150), autonomy (r = .31, p = <.01), listening (r = .38, p = <.01) and reading (r = .37, p = <.01). Phillips (1992) found negative correlations between foreign language anxiety and oral performance (r = .40, p = <.01, n = 44), length of communication unit (r = .44, p = <.02, n = 44), number of target structures used (r = .39, p = <.01). In Thailand, Anyadubalu's (2010) study showed a negative relationship between foreign language anxiety and performance in English language (r = .28, p = <.01, n = 318). Among teacher trainees in Poland, Szyszka (2011) found students with higher levels of foreign language anxiety indicated lower pronunciation competence (r = .54, p = <.01, n = 48).

Unlike in-class performance variables, relationship between intelligibility of English varieties and individual learner differences (e.g. language anxiety) in the use of English as an international language has been gauged by Matsuura (2007) among Japanese EFL students using a 15-item scale adapted from MacIntyre and Gardner's (1994) three-stage anxiety model. Similar to those correlational studies discussed above, anxiety negatively correlated with the intelligibility of US English (r=-.287, p=<.01).

Understanding anxiety in using Englishes as a lingua franca among students is crucial to knowing deeper insights on unintelligibility and/or incomprehensibility of spoken words. Intelligibility, in the present study, follows Smith and Nelson's (1985) three-level

framework of intelligibility - *intelligibility* as word and utterance recognition, *comprehensibility* as words and utterance meaning; and, *interpretability* as understanding of meaning behind an utterance.

Research design

The primary purpose of this paper is to provide empirical data on EsLF anxiety, referred to as out-of-class specific anxiety provoking situations arising from the use of Englishes as a lingua franca in a non-English speaking context (Wilang & Singhasiri, 2017). Specifically, this paper answers the following questions: (1) To what extent do Thai and foreign students experience anxiety out-of-class? (2) Do out-of-class anxiety-provoking situations present a valid and measurable construct of anxiety? (3) Are there differences on the factors of anxiety among Thai and foreign students? (4) Is there a relationship between anxiety and the intelligibility and comprehensibility of spoken Englishes?

Participants

Using convenience sampling, the study recruited 240 graduate students (Thai students, n=134; foreign students, n=106) enrolled in Thai universities. Foreign students are from Afghanistan, Bangladesh, Bhutan, Bulgaria, Cambodia, China, France, Germany, Greece, India, Indonesia, Iran, Laos, Malaysia, Myanmar, Nepal, Philippines, South Korea, Sri Lanka, Sudan, and Vietnam. The participants have varying English language backgrounds based on the role of English in their respective countries of origin. For example, speakers in Malaysia use English as a second language (ESL) while speakers in Thailand use English as a foreign language (EFL).

Instruments

Anxiety Scale in Spoken Englishes as a Lingua Franca (ASSELF)

As the context of this study has attracted little or no research, ASSELF was developed to examine out-of-class anxiety-provoking situations. The items in the scale are reflective of productive (speaking) and receptive (listening) variables of an interlocutor in lingua franca communicative situations. The internal consistency of the scale in the pilot study is Cronbach alpha .96 and .94 in the final study, both showing high levels of internal consistency. ASSELF consists of 21 items, rated in a 5-point Likert scale: 5 – extremely anxious, 4 – very anxious, 3 – moderately anxious, 2 – slightly anxious and 1 – not at all anxious. Scores on the questionnaire fall into five categories: not anxious (1.0-1.7), slightly anxious (1.8-2.5), moderately anxious (2.6-3.4), very anxious (3.5-4.2), and extremely anxious (4.3-5.0).

Measurement of Intelligibility and Comprehensibility (MICE)

MICE consists of intelligibility and comprehensibility tests. The intelligibility part is a transcription test (Chen, 2011; Ezquerra, 2013; Matsuura, 2007). The speech samples were recorded from three volunteer international speakers from USA, Cameroon and Vietnam. Then native speakers of each country confirmed the authenticity of the audio samples. Each speech contained information about his/her impression of Thailand with an average

length of 55-58 seconds. Pauses were also inserted to provide time for the participants to key-in their answers into the box provided for their answers, to avoid memory load. The results of the tests were used to determine the level of the speakers' intelligibility. Scores for intelligibility fall into three levels: low intelligibility (1.00-1.66), moderate intelligibility (1.67-2.33), and high intelligibility (2.34-3.00).

In the intelligibility test, the participants were asked to transcribe a speech of a certain speaker, which contained information about the speaker's impression of Thailand (see Table 1). Each speaker's utterances were parsed according to meaning-in-context derivations. The scoring of the intelligibility test adopted the exact word count. Misspelt and contracted words, for example, "I'm", written out into two words *I am* are marked as 1 point.

Table 1: Sample utterance of the speaker in the intelligibility test

Speaker	Sample utterance	Number of words
Vietnamese	I'm going to talk about / my impression about Thailand / uh Thai	40 words
speaker	people are very friendly / they are willing to help / even they don't	
_	understand the language / Thai food is not too spicy / as I thought	
	before / before I came to Thailand /	

Like the transcription test, the results of the comprehensibility tests were used to determine the speakers' comprehensibility. The speech samples were continuations of the topics spoken by the same speakers above. The comprehensibility tests contained general questions about (1) the speaker's topic, (2) length of stay in Thailand, (3) profession in Thailand, (4) language difference between Thailand and the speaker's country of origin, and (5) cultural difference between Thailand and the speaker's country of origin (see Table 2 for answers). The inter-rater reliability for scoring the comprehensibility test is kappa = 0.87, which means reliably good (Altman, 1981). Scores for comprehensibility were categorised into three levels similar to that of intelligibility.

Table 2: Sample utterance of the speaker in the comprehensibility test

Speaker	Sample utterance	Answers
Vietnamese	And now I'm going to talk about Vietnam and	(1) Vietnam and Thailand
speaker	Thailand country I have been in Thailand for over two	(2) Over two weeks
_	weeks and I'm studying Master degree in English	(3) Studying master's
	language teaching here uh I think the main difference	degree
	between Vietnamese and Thai language is that the	(4) Reading and Thai
	alphabet is the same in some extent but it's completely	writing system
	different in reading and writing and I think uh uh Thai	(5) Putting hands
	writing system is very difficult for me to learn and	together for greeting
	another different about Vietnamese culture and Thai	
	culture umm in Vietnam we don't have to put your	
	hands together uh to greet somebody else but in Thai	
	you have to yeah I think that is the main difference	

Data collection procedures

The data in the study was collected online at http://202.44.15.6/survey/default.php on December 2014 to April 2015. As the participants are graduate students in *internationalised* universities, only English versions of the survey and the tests were constructed. After the collection of the participants' names, emails and phone numbers, each participant was given a code to access the online survey and tests.

The following steps were followed in the online data collection. First, all participants were asked to enter their assigned access code in the link provided above. Second, they were directed to a page where the overview of the tasks and instructions were detailed. Third, the participants were asked to Reject or Accept their participation after reading the Ethics and Consent Forms. After acceptance, the participants were directed to ASSELF to indicate their anxiety levels when using Englishes as a lingua franca outside the classroom. Fifth, they listened and transcribed (intelligibility test) Speaker 1. Thereafter, the participants continued listening to Speaker 1 and answered the comprehensibility test. After repeating the same process of transcribing speech and doing the comprehensibility test for speakers 2 and 3, the data collection ended with a webpage having the researcher's contact details.

Data analysis

Data were computed using SPSS. Scores were analysed in terms of mean and standard deviation to know the anxiety levels of the students – Thai and foreign. Then, an independent samples t test was used to ascertain the differences in how Thai and foreign students experience out-of-class anxiety. The results of ASSELF were subjected to exploratory factor analysis using principal axis factoring as it was easier to interpret the relationships of the observed variables. Finally, correlational analysis was performed to explore the relationships between and among the factors of anxiety, intelligibility and comprehensibility.

Results and discussion

Research question 1: To what extent do Thai and foreign students experience anxiety in out-of-class settings?

Among Thais (mean=66.48, SD=15.54) and foreign students (mean=61.93, SD=16.26), the *means of scores* (see Table 3) shows a moderate level of anxiety in most anxiety provoking situations in an oral interaction out-of-class. It is interesting to note two highly anxiety provoking situations among Thais, 7. *Interlocutor speaks fast* and 9. I cannot understand the meaning behind an utterance, both with mean=3.55. Both groups are slightly anxious with 6. The Interlocutor speaks a non-native accent (mean=2.55, SD=.072) and 18. The Interlocutor corrects my utterances (mean=2.55, SD=.073).

To understand more about anxiety-provoking situations, an independent samples t test (refer to Table 4) was performed to ascertain the differences between Thai and foreign

Table 3: Anxiety scale of spoken Englishes as a lingua franca

		Tha	ai stude	ents	Fore	ign stu	dents
	Item: Anxiety provoking situation	(n = 134)	(n = 106)
		Mean	SD	Level	Mean	SD	Level
1	The interlocutor is a proficient speaker of	3.03	1.15	MA	2.62	1.25	MA
	English.						
2	The interlocutor speaks a native-like accent.	2.87	1.21	MA	2.66	1.22	MA
3	My accent is difficult for the interlocutor to	3.15	1.11	MA	3.16	1.06	MA
	understand.						
4	I cannot decode the interlocutor's	3.49	0.95	MA	3.20	1.14	MA
	words/phrases.						
5	I am not familiar with the interlocutor's	3.02	1.08	MA	3.00	0.99	MA
	accent.						
6	The interlocutor speaks a non-native accent.	2.58	1.19	SA	2.51	1.02	SA
7	The interlocutor speaks fast.	3.55	1.14	VA	3.02	1.09	MA
8	There are more than two or more	3.03	1.14	MA	2.40	1.14	MA
	interlocutors.						
9	I cannot understand the meaning behind an	3.55	1.07	VA	3.14	0.96	MA
	utterance.						
10	I don't know the word(s) for saying	3.17	1.02	MA	3.19	1.00	MA
	something.						
11	The interlocutor asks me a question where I	3.26	1.20	MA	3.14	1.10	MA
	am not prepared to answer.						
12	I don't know the answer to a question.	3.37	1.14	MA	3.15	1.19	MA
13	I am not familiar with the interlocutor's	3.30	1.02	MA	3.05	1.13	MA
	words/phrases.						
14	I am not familiar with the topic of the	3.20	1.00	MA	3.16	0.98	MA
	discourse.						
	It is my turn to speak.	3.05	1.21	MA	2.68	1.24	MA
	I cannot use the word(s) correctly.	3.02	1.02	MA	3.01	1.01	MA
17	The interlocutor shows some sign(s) such as	3.39	1.14	MA	3.29	1.01	MA
	facial expression to make me						
	uncomfortable.						
18	The interlocutor corrects my utterance(s).	2.52	1.14	SA	2.59	1.11	SA
19	The interlocutor asks me difficult	3.35	1.08	MA	3.06	1.11	MA
	question(s).						
20	The interlocutors talks about specific	3.02	1.10	MA	2.66	1.17	MA
	topic(s).						
21	The interlocutor seems unwilling to	3.44	1.14	MA	3.14	1.21	MA
	communicate.						

SA – slightly anxious; MA – moderately anxious; VA – very anxious

students' experiences in out-of-class anxiety. Results show that there was a statistically significant difference in anxiety experienced by Thai and foreign students, t(238)=-2.207, p=0.028. These results suggest that Thais (mean=66.48, SD=15.54) experience more anxiety-provoking situations than foreign students (mean=61.93, SD=16.26) in an out-of-class setting.

	Equality of		Levene's test for equality of variances			t test for equality of means			
	variances	F	Sig.	t	df	Sig. (2-tailed)	Mean diff.	Std. error diff.	
EsLF	Assumed	1.479	.225	-2.207	238	.028	-4.55111	2.06255	
anxiety	Not assumed			-2.195	220,666	.029	-4.55111	2.07342	

Table 4: Independent samples *t* test of the three factors

It is important to highlight the significant difference in how the Thai and foreign students experienced out-of-class anxiety by first looking at the descriptive analysis of the specific anxiety-provoking situations in ASSELF. Among Thais, fast speech and understanding meaning behind an utterance are considered as the most anxiety provoking situations. It suggests that pace of speech plays a vital role in the recognition of words and understanding the message of an utterance. Additionally, it makes sense to get worried on understanding meaning behind an utterance as spoken Englishes entail language variations in lexis, lexical stress, pragmatics, semantics, discourse structure, among others (Pickering, 2006). Although fast speech is highly anxious situation among Thais, it is not surprising to have it unloaded in the factor analysis. This is attributed to the fact that out-of-class oral interactions can be negotiated, for example, by asking the speaker to speak slower. Unlike a fast speaker, understanding meaning behind an utterance requires higher cognitive processing as well as background and cultural knowledge to understand the talk.

Research question 2: Do anxiety-provoking situations in an out-of-class interaction present a valid construct of anxiety?

The data was initially submitted to principal axis factoring to measure sampling adequacy based on Kaiser-Meyer-Olkin, which revealed KMO = .943, indicating a sample adequacy (Field, 2012) and Barlett's test of sphericity, which yielded a chi-square value of 2720.046 (p<.05) showing sufficiently large data for factor analysis. To compute the correlations between factors, the oblique rotation (Promax) was used for factor rotation as it allowed correlations between factors and as it was easier to interpret. To support the objectivity of exploring a good-fit model for EsLF anxiety, the following were considered: Kaiser's (1960) eigenvalue greater than 1, Cattell's (1966) scree test, and the cumulative variance above 60% (Hair, Anderson, Tatham & Black, 1995). Also, correlation coefficient is set at .40, higher than .32 as a rule of the thumb cited by Tabachnick and Fidel (2001).

Factor solutions were repeated five times to find a suitable solution. Items that were unloaded and cross-loaded were eliminated. For example, the three items *non-native accent*, *my turn to speak* and *interlocutor corrects my utterance* were unloaded due to less than .30 correlation coefficients. The items *The interlocutor talks about specific topics* and *The interlocutor speaks fast* were unloaded in the primary factor loading. The last item *I cannot use the words correctly* has been cross-loaded into two factors and so it was eliminated. The removal of the items strengthened the reliability of the 15 remaining items for further analysis.

The first latent factor (refer to Table 5) comprising seven items reflected anxiety-provoking situations associated with the interlocutor's acts including questioning, facial expressions, and willingness to communicate. Thus, Factor 1 is labelled as "Interlocutor-induced difficulties". The five items representing Factor 2 (refer to Table 5) involves difficulties in decoding words, comprehending meanings, familiarity and accentedness of speech, and inability to say a word for something. Therefore, it is named as "Language-processing difficulties". Lastly, Factor 3 (refer to Table 5) is known as "Apprehension over interlocutors" as the items were based on the proficiency of the interlocutors, native-accented speaker, and the number of interlocutors. Cronbach's alpha indicated .92, well above Nunnally's (1978) .70 threshold. Further reliability analysis using Cronbach's alpha if item deleted showed .92 (rounded numbers of >5) showing no substantial change if an item is deleted.

Table 5: Summary of oblique rotation results

- Item		Factors		
		1: Interlocutor-	2: Language-	3: Apprehension
		induced	processing	over
		difficulties	difficulties	interlocutors
12	Don't know the answer to a question	.90		
19	Asks me a difficult question	.73		
13	Not familiar with the words	.68		
11	Not prepared to answer a question	.65		
21	Unwilling to communicate	.60		
14	Not familiar with topic of discourse	.55		
17	Show some facial expressions	.49		
4	Cannot decode the words		.77	
3	Difficult to understand my accent		.61	
9	Cannot understand the meaning		.54	
10	Don't know the words for saying		.54	
	something			
5	Not familiar with accent		.42	
1	Proficient speaker			.86
2	Native-like accent			.75
8	More than two interlocutors			.58

Table 6: Correlations of the three factors

	1: Interlocutor-	2: Language-	3: Apprehension
Factor	induced	processing	over
	difficulties	difficulties	interlocutors
Interlocutor-induced difficulties	1.00		
Language-processing difficulties	.72**	1.00	
Apprehension over interlocutors	.61**	.62**	1.00

Correlation significant at p=.01**

Further, Table 6 indicates significant positive correlations between the three-factors, with "Interlocutor-induced difficulties" and "Language-processing difficulties" (r=.72, p=<0.1),

"Interlocutor-induced difficulties" and "Apprehension over interlocutors" (r=.61, p=<0.1), and "Apprehension over interlocutors" and "Language-processing difficulties" (r=.62, p=<0.1).

The most important factor contributing to EsLF anxiety identified is *Interlocutor-induced difficulties*, amounting for 48.90% of variance. Items such as 17, 19 and 21 are listener-induced anxiety situations while 11, 12, 13, and are self-induced anxiety situations. In out-of-class interactions, the acts of speaker and the listener create difficulties that induce anxiety-provoking situations. The second factor is *Language-processing difficulties* with 7.67% of variance. Items 4, 9 and 10 involve cognitive loads while items 3 and 5 are worries on accent's effects on the recognition or comprehension of words or utterances. Lastly, *Apprehension over interlocutors* gained 6.18% of variance, including items such as *proficient speaker* (1), *native-like accent* (2), and *more than two interlocutors* (8). The total variance is 62.75%.

The r indicated that the three factors are highly correlated measuring various constructs of EsLF anxiety. The reliability tests have indicated the following Cronbach alphas: the model at .92, *Interlocutor-induced difficulties* at .88, *Language-processing difficulties* at .81, and *Apprehension over interlocutors* at .81, suggesting that the items in the model and the factors have relatively high consistencies.

In the validation of EsLF anxiety, other deleted items in the factor analysis are non-native accent (6), correction of an utterance (18), word-use (16), speaker-turn (15) and specific topics (20). Out-of-class interactions do not force interlocutors to respond to questions or queries, do not require target vocabulary to use, topics of discussions are general in nature, native-like pronunciation or accent is not necessary, and correction related to language use is unlikely to happen. Sustained conversation presupposes a friendly atmosphere. If correction occurs, interlocutors may consider it as a learning process. Under the circumstances in the study, ASSELF is revealing a valid construct of anxiety in out-of-class settings. Previous studies suggested that language anxiety is context-bound (Bjorkman 2013; Kim 2010) generating specific anxiety provoking situations in using Englishes as a lingua franca.

Research question 3: Are there differences on the factors of EsLF anxiety among Thai and foreign students?

Independent samples t test results show that there was a statistically significant difference concerning Apprehension over interlocutors (refer to Table 7), with t(238)=-3.188, p=0.002. It means that Thais (mean=2.98, SD=.96; overall mean=66.48, SD=15.54) are more anxious than foreign students (mean=2.56, SD=1.06; overall mean=61.93, SD=16.26) regarding Apprehension over interlocutors. Further, Table 6 shows that there were no significant differences among the two groups with regards to Language-processing difficulties (Thais, mean=3.28, SD=.77 and foreign students, mean=3.14, SD=.81) and Interlocutor-induced difficulties (Thais, mean=3.28, SD=.82 and foreign students, mean=3.08, SD=.87).

	Equality of			est for ariances	<i>t</i> -te	est for equal	ity of me	eans
	variances	F	Sig.	t	df	Sig. (2-tailed)	Mean diff.	Std. error diff.
Apprehension over	Assumed	4.643	.032	-3.188	238	.002	-4.1969	.13166
interlocutors	Not assumed			-3.151	314.135	.002	-4.1969	.13320
Language-processing	Assumed	.283	.596	-1.351	238	.178	-13.869	.10264
difficulties	Not assumed			-1.343	220.035	.181	-13.869	.10325
Interlocutor induced	Assumed	.960	.328	-1.812	238	.071	20025	.11052
difficulties	Not assumed			-1.799	219.031	.073	20025	.11129

Table 7: Independent samples *t* test of the three factors

Identified factors of EsLF anxiety revealed a statistically significant difference on Apprehension over interlocutors between the two groups – Thais experiencing higher anxiety concerning situations including a proficient speaker, native-like accented speaker, and having more than two interlocutors. This could be explained by the status of English in the students' respective home countries. Students from Malaysia and the Philippines use English as a second language compared to a foreign language status of English in Cambodia, China, Indonesia, Iran, Laos, Thailand, Vietnam, among others. The status of ESL in the above countries generally recognises English as one of the official languages and it is widely used as a language of instruction in schools – from primary to university settings. On the contrary, there is no official government recognition of English in EFL countries. In Thailand's mainstream education, the core subjects, except English, are taught in Thailanguage. Apart from language policies, foreign students admitted in Thailand are required to attain a certain level of English language proficiency. Previous research suggest that low anxiety students are likely to exhibit higher language skills (Liu, 2006).

Research question 4: Is there a relationship between EsLF anxiety and the intelligibility and comprehensibility of spoken Englishes?

As a whole, the *mean of scores* for intelligibility and comprehensibility show *moderate levels*. Separately, the Vietnamese speaker is *moderately* intelligible as compared to the American and Cameroonian speakers, both receiving *low* levels of intelligibility. Concerning comprehensibility, the Vietnamese and the American speakers are *moderately* comprehensible. Meanwhile, the Cameroonian is the *least* comprehensible speaker.

Table 8: Correlations of EsLF anxiety, intelligibility and comprehensibility

	EsLF anxiety	Intelligibility	Comprehensibility
EsLF anxiety	1.00		
Intelligibility	13*	1.00	
Comprehensibility	07	.81**	1.00

Correlation significant at *p=<.05; **p=<.01

Table 9: Correlations between factors of EsLF anxiety, intelligibility and comprehensibility

	Intelligibility	Comprehensibility
Apprehension over interlocutors	20**	15*
Language-processing difficulties	12	06
Interlocutor-induced difficulties	09	02

Correlation significant at *p=<.05; **p=<.01

Table 10: Correlations between anxiety provoking situations, intelligibility and comprehensibility

	Anxiety provoking situations	Intelligibility	Comprehensibility
1	Proficient speaker	r =19**	r =15*
2	Native-like accent	r =18**	r =14*
3	Difficult to understand my accent	r =08	r =06
4	Cannot decode the words	r =11	r =07
5	Not familiar with accent	r =06	r =00
8	More than two interlocutors	r =14*	r =10
9	Cannot understand the meaning	r =13*	r =12
10	Don't know the words for saying something	r =08	r =01
11	Not prepared to answer a question	r =05	r =05
12	Don't know the answer to a question	r =06	r =04
13	Not familiar with the words	r =14*	r =07
14	Not familiar with topic of discourse	r =02	r =03
17	Show some facial expressions	r =02	r =06
19	Asks me a difficult question	r =09	r =01
21	Unwillingness to communicate	r =06	r =02

Correlation significant at *p = <.05; **p = <.01

The results in Table 8 display a significant negative correlation between anxiety and intelligibility (r = -.13, p = <.05) and negative correlation between anxiety and comprehensibility (r = -.07, ns). The relationship between intelligibility and comprehensibility is a statistically significant positive correlation (r = .81, p = <.01). Table 9 shows significant negative correlations between *Apprehension over interlocutors* and intelligibility (r = -.20, p = <0.1) and comprehensibility (r = -.15, p = <.05). Five items in Table 10, proficient speaker (r = -.19, p <.01), native-like accent (r = -.18, p <.01), number of interlocutors (r = -.14, p <.05), cannot understand the meaning (r = -.13, p <.05) and not familiar with the words (r = -.14, p <.05) are predictors of *un*intelligibility. Two items including proficient speaker (r = -.19, p <.01) and native-like accent (r = -.18, p <.01) are strong predictors of *in*comprehensibility.

All the findings suggest that EsLF anxiety plays an important role in the intelligibility and comprehensibility of Englishes regardless of the origin of the speaker. EsLF anxiety, an out-of-class situation-specific anxiety, supports the consistent debilitating findings between foreign language anxiety and various in-class performance variables; and presently, the intelligibility and comprehension of spoken words and utterances of the American, Cameroonian and Vietnamese speakers. Additionally, the significant negative

correlations between EsLF anxiety and intelligibility lend support to Matsuura's (2007) findings about anxiety impeding the intelligibility of US English and HK English among Japanese EFL learners. Accordingly, *Apprehension over interlocutors* debilitates the intelligibility and comprehensibility (except 8) of the speakers (refer to Table 9). The correlational results of the items provide the most concrete anxiety-provoking situations where language teachers need to de-escalate in in-class language activities to avoid the observed reactions in the preliminary study - self-inhibition, long silences, topic dropping, and monosyllabic responses.

Conclusion and implications

This exploratory study on EsLF anxiety provides a newer perspective on how anxiety research can be extended, based on language use, users and settings. Moreover, the present research has also put forward a new correlational framework by using intelligibility and comprehensibility as performance variables, away from classroom-based tests. Findings indicated negative correlations between anxiety and intelligibility, and anxiety and comprehensibility, but a positive correlation between intelligibility and comprehensibility. Further analysis revealed the three factors of anxiety out-of-class. *Interlocutor-induced difficulties* covers anxiety provoking situations such as questioning, facial expressions and willingness to communicate; *language-processing difficulties* concerns decoding of words, comprehending meanings, among others; and *apprehension over interlocutors* pertains to proficiency of the interlocutors, accentedness of speech, and the number of interlocutors. Although there is a difference on how anxious the Thai and foreign students may be in out-of-class settings, both groups are provoked by a proficient speaker and a native-accented speaker, resulting in *un*intelligibility and *in*comprehensibility.

The impact of anxiety-provoking situations as shown in the results of the study should be taken into consideration in the language classroom as millions use Englishes as the main language of communication, specifically, the community of peoples in the Southeast Asian region. The existence of EsLF anxiety, which debilitates the intelligibility and comprehensibility of the speakers must be given importance in language learning, similar to that of standard varieties of English. It is suggested that exposure to Englishes, most importantly on accentedness or pronunciation, to improve intelligibility and comprehensibility should be incorporated in the language curricula.

Implications for language education

Anxiety as a factor in *un*intelligibility is a serious issue in language education as intelligibility of spoken words or utterances precedes comprehensibility (Nelson, 2011). The importance of raising awareness of *accentedness of speech* by various speakers must be given a high importance in the EFL/ESL classroom. In fact, accent-related items in ASSELF were found to be reliable underlying components of the two factors - *language-processing difficulties* and *apprehension over interlocutors*. Further findings of the study support the demand for language educators to adopt progressive views on the teaching of English*es* in the classrooms. The benefits for the language learners can be high, with their exposure to varieties of English spoken worldwide being like an antidote for anxiety arousals in the

situations, "They are not familiar with the interlocutor's accent"; "The interlocutor speaks a native-like accent"; or their "accent is difficult for the others to understand". When language learners are exposed to Englishes, they will also be accustomed to cultures where perceptions on how other interlocutors "show some facial expressions or unwillingness to communicate" could be due to cultural sensitivities. By understanding the culture of the language speakers, language learners become more intuitive on what non-verbal acts would mean when they are in real communicative situations with other speakers of Englishes – native or non-native.

Implications for research

It will be interesting for future studies to explore intergroup EsLF anxiety differences by considering adequate sample size, current language proficiency levels, and exposure to English language, among other topics. Since the number of foreign students is limited in the current study, future studies may seek a larger sample size and include undergraduate students. In addition, changing the context of the study, for example, exploring undergraduate students' out-of-class anxiety may yield different results from the present study. Other studies may use ASSELF in other lingua franca out-of-class academic contexts such as on less-commonly taught languages, ESL, EAP, among others. In the same vein, the *Measurement of Intelligibility and Comprehensibility* of Englishes may be modified to suit the framework under study. It is recommended to use qualitative methods (Kayaoglu & Saglamel, 2013), for examples, individual interviews, focus group interviews, open-ended questions or video recordings to identify possible gaps in ASSELF in a particular setting or context (see Wilang & Singhasiri, 2017).

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Appendix: Anxiety scale for spoken Englishes as a lingua franca (ASSELF)

Dator	hacad	1104001	011
Paper-	nasca	1/6/34	1111

11000	partici	nont
Dear	Daruci	Dani,

This survey attempts to measure y	our anxiety when	Englishes is u	used as the main	n language of
communication outside the classr	oom.			

Country of origin Nationality	

Directions: Encircle the letter of choice which represents the anxiety level you feel when Englishes is used as a lingua franca out of class.

		Items
1. I will be		when the interlocutor is a proficient speaker of English.
a. extremely anxious	b. very anxious	c. moderately anxious d. slightly anxious e. not anxious
2. I will be		when the interlocutor speaks a native-like accent.
a. extremely anxious	b. very anxious	c. moderately anxious d. slightly anxious e. not anxious
3. I will be		when my accent is difficult for the other interlocutor to
understand.		·
a. extremely anxious	b. very anxious	c. moderately anxious d. slightly anxious e. not anxious
4. I will be		when I cannot decode the interlocutor's words/phrases.
a. extremely anxious	b. very anxious	c. moderately anxious d. slightly anxious e. not anxious
5. I will be		when I am not familiar with the interlocutor's accent.
a. extremely anxious	b. very anxious	c. moderately anxious d. slightly anxious e. not anxious
6. I will be		when the interlocutor speaks a non-native accent.
a. extremely anxious	b. verv anxious	c. moderately anxious d. slightly anxious e. not anxious
7. I will be		_ when the interlocutor speaks fast.
a. extremely anxious	b. verv anxious	c. moderately anxious d. slightly anxious e. not anxious
8. I will be		when there are more than two or more interlocutors.
a. extremely anxious	h. verv anxious	c. moderately anxious d. slightly anxious e. not anxious
9. I will be	o. very unaccono	when I cannot understand the meaning behind an utterance.
a. extremely anxious	h very anxious	c. moderately anxious d. slightly anxious e. not anxious
10. I will be	o. very unswons	when I don't know the word(s) for saying something.
a. extremely anxious	h very anxious	c. moderately anxious d. slightly anxious e. not anxious
11. I will be	o. very unsions	when the interlocutor asks me a question where I am not
prepared to answer		when the interlocator asks me a question where I am not
a. extremely anxious		c. moderately anxious d. slightly anxious e. not anxious
12. I will be	o. very unxions	when I don't know the answer to a question.
a. extremely anxious	h very anxious	c. moderately anxious d. slightly anxious e. not anxious
13. I will be	o. very unxions	when the interlocutor uses word(s) or phrase(s) I am not
familiar with.		when the interlocator uses word(s) or phrase(s) I am not
a. extremely anxious	h nom ancious	c. moderately anxious d. slightly anxious e. not anxious
14. I will be	v. very unxious	when I am not familiar with the topic of the discourse.
a. extremely anxious	h nom ancious	c. moderately anxious d. slightly anxious e. not anxious
15. I will be	v. very unxious	when it is my turn to speak.
a. extremely anxious	h warm ann sions	
16. I will be	v. very anxious	c. moderately anxious d. slightly anxious e. not anxious when I cannot use the word(s) correctly.
a. extremely anxious	h warm ann sions	
17. I will be	v. very anxious	c. moderately anxious d. slightly anxious e. not anxious
	1	when the interlocutor shows some sign(s) such as facial.
a. extremely anxious	b. very anxious	c. moderately anxious d. slightly anxious e. not anxious
18. I will be	1 .	when the interlocutor corrects my utterance(s).
a. extremely anxious	b. very anxious	c. moderately anxious d. slightly anxious e. not anxious
19. I will be	7 .	when the interlocutor asks me difficult question(s).
a. extremely anxious	b. very anxious	c. moderately anxious d. slightly anxious e. not anxious
20. I will be	7 .	when the interlocutor talks about specific topic(s).
a. extremely anxious	b. very anxious	c. moderately anxious d. slightly anxious e. not anxious
21. I will be	7	when the interlocutor seems unwilling to communicate.
a. extremely anxious	b. very anxious	c. moderately anxious d. slightly anxious e. not anxious

Jeffrey Dawala Wilang (corresponding author) is a PhD candidate in Applied Linguistics at the School of Liberal Arts, King Mongkut's University of Technology Thonburi (KMUTT), Thailand. His research interests include language anxiety, English as a foreign language and world Englishes.

Email: jeffrey.wil@mail.kmutt.ac.th, jeffzhao0908@gmail.com

Wareesiri Singhasiri is Assistant Professor in the Department of Language Studies, School of Liberal Arts, King Mongkut's University of Technology Thonburi, Thailand. She has a PhD from the University of Essex. Her interests are learning strategies, learning styles and research methodology.

Email: wareesiri.sin@kmutt.ac.th.

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