An exploration of speaking-in-class anxiety with Chinese ESL learners

Barley Mak*

Department of Curriculum and Instruction, Faculty of Education, The Chinese University of Hong Kong, China

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Abstract

This article reports the findings of a study investigating factors contributing to the speaking-in-class anxiety of a group of 313 Chinese ESL first-year university students in Hong Kong. Results using the Foreign Language Classroom Anxiety Scale (FLCAS) of Horwitz et al. reveal five factors leading to the group’s speaking-in-class anxiety. The five factors, identified by factor analysis, include: speech anxiety and fear of negative evaluation; uncomfortableness when speaking with native speakers; negative attitudes towards the English classroom; negative self-evaluation; and fear of failing the class/consequences of personal failure. In addition, survey results show that speaking in front of the class without preparation, being corrected when speaking, inadequate wait-time and not being allowed to use the first language in a second language class were also identified by the respondents as important factors leading to speaking-in-class anxiety. The article concludes with pedagogic implications, for second/foreign language teachers when attempting to create a low-anxiety classroom.

Keywords: Speaking-in-class anxiety; Chinese ESL learners; Hong Kong university students

1. Introduction and background

This section provides the background to an investigation into the anxieties of Hong Kong Chinese students of spoken English. Scovel (1978: 134) defines anxiety in language learning as ‘a state of apprehension, a vague fear’. Given that learners’ feelings about learning affect their ability to learn, research evidence reveals that one of the most important affective variables in the process is anxiety (Brown, 1987; Chastain, 1976; MacIntyre and Gardner, 1991). Hurd (2007: 488) believes that ‘language anxiety has become central to any examination of factors contributing to learning process and learner achievement’ while Arnold and Brown (1999) believe that anxiety in language learning may possibly be the most pervasive obstruction to the learning process.

Aida (1994), Cheng (1994) and Gregersen (2003) have established a negative association between anxiety and second/foreign language performance (in this article, second language or L2 is used to refer to both second and foreign languages). However, the elements of causation between them are not clear (MacIntyre, 1995; Sparks and Ganschow, 2007).

* Tel.: +852 2609 6912 ; fax: +852 3163 4205.
E-mail address: barleymak@cuhk.edu.hk.

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1.1. Anxiety and speaking-in-class anxiety

Speaking in class is probably the most frequently cited concern of anxious second language learners (Aida, 1994; Liu and Jackson, 2008; Mak and White, 1997). Horwitz et al. (1986) call second language performance anxiety ‘communication apprehension’. There is plenty of research to evidence this phenomenon: Kleinmann (1977) found her Spanish and Arabic EFL students’ oral performance was positively related to anxiety while Bailey’s (1983: 67) students cited ‘the stressful, competitive nature of oral public performance’ as the major source of anxiety in their SL classrooms; American university students of Spanish reported oral presentations, role plays and charades as their most anxiety-provoking language activities (Koch and Terrell, 1991); Price’s (1991) American students of French reported speaking in the foreign language created the greatest anxiety while Samimy and Tabuse (1992) found that speaking anxiety was one of the most important factors in determining the oral performance of American university students of Japanese.

Horwitz et al. (1986) were the first to carry out a detailed examination of the dynamics of foreign language anxiety by creating and using the Foreign Language Classroom Anxiety Scale (FLCAS). Young (1990), following Horwitz, developed a questionnaire to examine more systematically the types of in class, speaking-oriented practices that evoke anxiety from language students.

Research into language anxiety was first carried out largely with English-speaking learners of Indo-European languages (e.g. Kleinmann, 1977), and, later, Japanese (e.g. Aida, 1994) mainly in the United States with high-achieving students (e.g. Aida, 1994; Saito et al., 1999).

Given that earlier studies were conducted in the United States, it would seem worthwhile to consult studies of other ethnic groups of language learners in different learning contexts. Sila (2010), investigating foreign language anxiety in Turkish adolescent students, found that anxiety exists in the receptive skills at beginner level but that, as levels of proficiency increase, anxiety emerges in the productive skills. In the context of non-USA studies of Chinese learners of English, Mak and White (1997) noted that Chinese learners of English as a second language (ESL) in New Zealand, experienced greater speaking-in-class anxiety than their American counterparts. In Mainland China, Liu and Jackson (2008) noted that ESL learners who participated in inter-personal conversations exhibited speaking-in-class anxiety. In the context of non-USA studies, Yan and Horwitz (2008) identified 12 major thematic affinities (variables) with Chinese FL learners: regional differences; language aptitude; gender; foreign language anxiety; language learning interest and motivation; class arrangements; teacher characteristics; language learning strategies; test types; parental influence; comparison with peers and achievement.

It is possible that these findings may be specific to Chinese students of English. Given the American education system’s emphasis on self-expression, there is evidence that Chinese students focus more on listening, rote memorisation and teacher instructions (e.g. DeHaan, 2006; Kember and Gow, 1989; Levinsohn, 2007; Li, 2007). As American foreign/second language students’ responses cannot be automatically equated with Chinese students, the present study thus focuses on the speaking-in-class anxiety of Chinese ESL learners in Hong Kong. Some of the areas that emerged from qualitative feedback from respondents, beyond those encompassed by Horwitz’s model, and their implications for learners and teachers were identified as wait-time (the length of time that the teacher is normally prepared to wait for a student to respond to a question or prompt before selecting another student to answer the question or moving on), insufficient time for preparation before speaking in class, being corrected in class, and not being allowed to use the L1 (Butzkamm, 2003; Copland and Neokleous, 2010; Macaro, 2005). These issues are discussed below in the context of speaking anxiety and their implications for pedagogic practice not only in Hong Kong but also in other countries.

1.2. Impact of ESL speaking-in-class anxiety on Hong Kong students

Hong Kong has a nine-year free and compulsory education system (6 primary + 3 secondary years) although most students complete five years of secondary education and many progress for a further 2 years to prepare for university entrance, similar to the British system. The system will change in 2012 to a 6 + 3 + 3 system with one examination at the end of 12 years. To compensate for the loss of one year, tertiary education will move from 3 years to 4 years.

Based on the 2006 census, (Hong Kong conducts a census every 5 years) the population is 95% Chinese with 91% using Cantonese as their L1 and a further 6% claiming they could speak it (Census and Statistics Department, 2007). English, one of two official languages, is considered an important curriculum element although Liu and Littlewood (1997) reveal that Hong Kong’s students have few opportunities to speak English in class. English in Hong Kong has
an ‘input-poor environment’ where most communication both in and outside the English classroom is in the L1 (Kouraogo, 1993), a major factor contributing to students’ poor English performance and speaking-in-class anxiety.

This paper identifies speaking-in-class anxiety as an important factor in student attitudes to English. This existing classroom anxiety is exacerbated by Hong Kong’s public examinations in English where the examination’s oral component requires role plays, discussion of a topic, oral presentations and participation in group discussions. Thus, existing speaking-in-class anxiety mounts as students practice their speaking skills in class when preparing for public examinations (Walker, 1997; Fung, 2005; Phillips, 2005).

In 2004, concern about low standards of speaking proficiency in English in Hong Kong led to calls for ways to reduce Chinese ESL students’ speaking-in-class anxiety levels in early Key Learning Stages. When the Territory-wide System Assessment (TSA) was implemented to measure competency in Chinese, English and Mathematics at Primary 3, Primary 6 and Secondary 3 (Grade 9), speaking in English was specifically addressed by the inclusion of group discussion in the English papers. In 2007, 2008 and 2010, results showed that the attainment rate for Secondary 3 students was lower than that achieved by Primary 3 and 6 students (Hong Kong Examinations and Assessment Authority, 2009). Comparative figures for 2009 are not available because the TSA was cancelled because of the H1N1 Swine Influenza outbreak. One reason for the poorer speaking results may be that adolescence, and its concomitant self-consciousness, contribute to Secondary 3 student anxiety (Ollendick et al., 1994). Sila (2010) noted that when called upon to demonstrate productive skills, older adolescents in Turkey feel more anxious than their younger peers.

Since no systematic studies of the factors contributing to the speaking-in-class anxiety of Chinese ESL students in Hong Kong exist, it is important an issue worthy of investigation is explored so that data can be available for policy-makers to devise ways of mitigating anxiety while improving students’ oral proficiency. The relationships between speaking-in-class anxiety, wait-time, the use of the first language by Chinese ESL learners and their implications for pedagogy in Hong Kong and elsewhere have not hitherto been explored. They will be explored in this paper. The research question is: What are the factors contributing to the speaking-in-class anxiety of Chinese ESL first-year university students in Hong Kong?

2. Research method

2.1. Participants’s demographic details

Participants were 313 first-year randomly-selected participants from a Hong Kong university taking compulsory English for Academic Purposes Courses. All but 3.4%, who had a variety of equivalent qualifications, met the university language entrance requirement for English and Chinese in public examinations.

2.2. Research design and instrumentation

The research was carried out in three phases: the pilot, the quantitative phase (questionnaires) and the qualitative phase (semi-structured interviews, discussion and participant observation). This paper focuses on the quantitative findings of the study although qualitative data that emerged during the pilot phase affected the eventual creation and design of the questionnaire.

The following paragraphs describe the design of the questionnaire, explain the 33 items constituting Part One, Section A of the questionnaire which replicate those used by Horwitz et al. (1986) in their Foreign Language Classroom Anxiety Scale (FLCAS). The FLCAS was adopted in the development of instruments for the present study since it employs a situation specific approach, an approach which has yielded more meaningful and consistent results than other approaches in second language speaking anxiety studies (e.g. MacIntyre and Gardner, 1991). Part One, Section B is used to describe the additional six questionnaire items that were developed after feedback from the students during the pilot phase of the study. Among the 39 items in Part One of the questionnaire, the majority of the items (28 items) are positively worded; 11 items are negatively worded in order to serve as a crosscheck. Finally, Part Two of the questionnaire consists of 8 items, used for purposes of data triangulation. These too arose from students during the pilot phase.

As summarized above, data collected during the pilot phase, consisting of semi-structured interviews, informal conversational interviews and participant observation, formed the basis for the English language questionnaire. Designed to elicit participants’ speaking-in-class anxiety levels, the items were administered during English classes.
Each item contains a statement intended to elicit factors in ESL speaking-in-class anxiety. In Part One, Section A of the questionnaire, only the first thirty-three items adapted from Horwitz et al. (1986) were included e.g. the terms foreign language and language were changed to English to match the Hong Kong context. Part One, Section B of the questionnaire, items 34—39, included 6 items related to concepts such as wait-time, the use of the first language in the class (Chinese in this context) and error correction. These items, as stated above, were based on information elicited from participants during the pilot phase of the investigation. All three parts of the questionnaire were administered at the same time.

Horwitz et al.’s (1986) well-validated FLCAS is based on an analysis of three potential factors of anxiety, namely communication apprehension, negative evaluation of performance and test anxiety. Their study suggests that language anxiety can be discriminated reliably from other types of anxiety.

The FLCAS’s thirty-three items use a five-point Likert scale. In the present study, the five-point Likert scale was used in the pilot study but as most responses were at the mid point, a four-point scale was adopted for the current study in order to force respondents to commit themselves. Aggregating the ratings on the thirty-nine items in Part one of the questionnaire derived an anxiety score for each participant. The theoretical range for the 33 items of the FLCAS is 33—165 (the 33-item questionnaire with a five-point Likert scale) while the range for Part One Section A of the present study is 33—132 (a 33-item questionnaire using a four-point scale).

Part One section B of the questionnaire (items 34—39), includes the additional questionnaire items administered after student feedback in the pilot phase of the study. These relate to concepts such as wait-time, the use of the first language in the class (Chinese in this context) and error correction. The theoretical range of this part is 6—24 (a 6-item questionnaire with a four-point scale).

In Part Two of the questionnaire, participants indicated the degree of anxiety level they experienced when asked to speak in the English class, when insufficient wait-time occurred and when the use of L1 was prohibited. The scale ranges from 1 (very low) to 100% (very high) with intervals of 20%. The higher the percentage, the greater the anxiety. These items were administered at the same time as Part One, Sections A and B.

To test the consistency of participants’ choices and provide triangulation for data reliability, some items, identified as important by participants in the qualitative pilot data were included in both Part One and Part Two of the questionnaire, e.g. speaking without preparation, wait-time and using Chinese in an English class. Table 1 reveals this aspect of the research design regarding triangulation for data reliability.

It should be noted that previous speaking-in-class anxiety studies (for example, Aida, 1994; Horwitz et al., 1986; Liu and Jackson, 2008; Yan and Horwitz, 2008) did not include wait-time and use of L1. These factors were included in Part One Section B and Part Two of the questionnaire because participants identified them, during the pilot, as contributing to speaking-in-class anxiety.

2.3. Data collection procedures

In the pilot, participants found difficulties with a five-point Likert scale in Part One Section A because of mid-point selection. They also had problems making choices in Part One, Section B. Therefore both sections were modified to provide four choices. In the main study, a total of 313 first-year university students filled out the questionnaire in their English lessons.

2.4. Data analysis

The first 33 items in Part One of the questionnaire’s (FLCAS) four-point scale: ‘strongly agree’, ‘agree’, ‘disagree’ and ‘strongly disagree’ and the six items in Part One Section B were given numerical values of 4 for ‘strongly agree’,
3 for ‘agree’, etc. In the analysis, responses of the 11 negatively-worded items were reversed and recoded to ensure that, in all instances, a high score represented high anxiety in the English class. Missing responses were not counted.

As early as the 1960s, factor analysis was employed in language learning studies (e.g. Carroll et al., 1962; MacIntyre and Gardner, 1989, 1991; Pimsleur et al., 1962). They have shown consistently that language anxiety is associated with factors defined by self-rated proficiency, actual proficiency or both with the second language (e.g. Aida, 1994; Gardner et al., 1984; Liu and Jackson, 2008; MacIntyre et al., 1997). As factor analysis is commonly employed in SL anxiety studies and this study aims at investigating factors contributing to speaking-in-class anxiety, factor analysis with varimax rotation was also adopted in the present study. In using Horwitz et al.’s model with students of Japanese, Aida (1994) notes that principal component analysis with varimax rotation was used because of conceptual simplicity and ease of description. The purpose of using this method of data analysis is to reduce data and make interpretation of that data easier.

3. Results and discussion

The Cronbach coefficient alpha referring to the internal consistency (reliability) for the adapted four-point FLCAS (Part One Section A) computed on participants was 0.91, indicating that the internal consistency of the adapted four-point scale FLCAS is satisfactorily reliable. Results showed that the participant mean score was 80.09 for the 33 items using a four-point scale FLCAS (Part One Section A, with a range of 1–132). The figure of 80.09 is very close to the mean of 82.5. As a percentage, 60.7% (80.09/132) is also very comparable to the 61.3% (101.22/165) reported by Truitt (1995) on the speaking-in-class anxiety of Korean students learning English as a second language.

The results of the research are presented here in two segments, 3.1 and 3.2. Segment 3.1 presents and discusses the results of the factor analysis of Part One Section A of the survey which contains items 1–33. Segment 3.2 discusses Part One Section B of the survey — the results of the analysis of items 34–39. To further validate and triangulate the results generated from Part One, results from Part Two, indicating the anxiety that emerged in the eight questionnaire items, will also be discussed.

3.1. Factors contributing to speaking-in-class anxiety identified by factor analysis (items 1–33 of the FLCAS)

In the initial run of rotated component matrix on the first thirty-three items, five factors emerged. Table 2 shows the loadings of variables on factors, communalities, and the percentage of the variance in Part One, Section A of the questionnaire. The names given to the factors described here are those given by the researcher.

As Table 2 shows, factor analysis with varimax rotation identified 5 major factors contributing to students’ ESL speaking-in-class anxiety. The names allocated to the five factors are those created by the researcher.

Factor one contains fifteen items with examples such as ‘I never feel quite sure of myself when I am speaking in my English class (item 1)’ and ‘It embarrasses me to volunteer answers in my English class (item 13).’ This factor is named speech anxiety and fear of negative evaluation because items loaded on this factor covered both of these aspects. Analysis indicates that speech anxiety and fear of negative evaluation are not wholly independent concepts.

The second factor, with items 8, 11, 14 and 32, is called uncomfortableness when speaking with native speakers. Examples are ‘I would not be nervous speaking English with native speakers (item 14)’ and ‘I would probably feel comfortable around native speakers of English (item 32).’

With three items (5, 6 and 17), factor three is categorised as negative attitudes towards the English class e.g. ‘It wouldn’t bother me at all to take more English classes (item 5)’ and ‘I often feel like not going to my English class (item 17).’

Factor 4’s two items (7 and 23), entitled negative self-evaluation, are ‘I keep thinking that the other students are better at English than I am (item 7)’ and ‘I always feel that the other students speak English better than I do (item 23).’

Factor five includes three items (10, 15 and 22) and is called fear of failing the class/consequences of personal failure. Examples are ‘I worry about the consequences of failing my English class (item 10)’ and ‘I get upset when I don’t understand what the teacher is correcting (item 22).’

Table 3 presents the ranking of the mean of each of the 33 items (the same as Horwitz et al.’s FLCAS, 1986). The situations/activities described in items with a mean above 2.5 are regarded as comparatively more anxiety-provoking than those with a mean below 2.5.
The mean scores range from 2.11 for item 12 (In English class, I can get so nervous I forget things I know) to 2.81 for item 10 (I worry about the consequences of failing my English class). The mean scores of thirteen items are above the mean (2.5), ranging from 2.54 to 2.81, implying that these thirteen items provoke higher ESL speaking-in-class anxiety levels than the other twenty items.

The means of items 11 (2.76), 14 (2.63), 8 (2.61) and 32 (2.57), labelled discomfortableness when speaking with native speakers (factor 2) are all above the mean while the means of items 7 (2.6) and 23(2.59) labelled as negative self-evaluation (factor 4) are also above the mean, meaning that these items are more anxiety provoking than other items. In factor five, fear of failing the class/consequences of personal failure, items 10 (2.81) and 15 (2.58) score above the mean.

These five factors account for 54.5% of the total variance for the solution. This means that using varimax rotation in the analysis of data in the FCLAS (Part One Section A) revealed its underlying components — a five factor solution. Factor one, speech anxiety and fear of negative evaluation is the most important factor contributing to second language learning speaking-in-class anxiety. The five factors contributing to ESL speaking-in-class anxiety are presented below in level of importance:

**Table 2**

The loadings of variables on factors, communalities, and percent of the variance in Part One Section A of the questionnaire.

<table>
<thead>
<tr>
<th>Label</th>
<th>Speech Anxiety and Fear of Negative Evaluation</th>
<th>Uncomfortableness when speaking with Native Speakers</th>
<th>Negative Attitudes towards the English Class</th>
<th>Negative Self-evaluation</th>
<th>Fear of Failing the Class/Consequences of personal failure</th>
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</thead>
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<td>9.9</td>
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<td>% of total variance accounted for by the solution</td>
<td>54.5</td>
<td>54.5</td>
<td>54.5</td>
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</tr>
</tbody>
</table>

a Factor loading means correlation between the item and factor. The maximum is 1 (highly correlated), the minimum is 0 (no relation). 0.5 is used as a cutoff for the inclusion of items in interpretation for the factor. Loading means how much that factor can explain for the variance of that item.

b Among the 5 factors, they account for 54.5% of total variance for the solution. For each of the factors, the % of variance is shown. The higher the % of variance, the more important that factor accounts for the solution.

c The proportion of the variance of the ith item contributed by the factors is called the ith item. h^2 means the variance accounted by the 5 factors, the higher the value, the more suitable the factor chosen.
3.2. Factors contributing to speaking-in-class anxiety as identified by items 34–39 in Part One, Section B of the questionnaire

Items 34–39 emerged as a result of student feedback from the pilot study. They were considered important enough to be included in Part One Section B of the questionnaire. Here, they are analysed and their means identified in the same way as the other 33 items in Table 3. Table 4 ranks the means of items 34–39.

Results indicate that enough wait-time helps lower the ESL speaking-in-class anxiety of participants because the mean for item 37 of 3.02 (When I am given enough time to think of the answer, I feel more confident to speak in an English class) is the highest of all 39 items.

Four items (35, 36, 37 and 39) out of the six added by the researcher for the present study have a mean higher than 2.5, revealing important aspects of speaking-in-class anxiety for Chinese ESL learners of English. In addition to item 37, they are: item 35 (I start to panic when I have to speak in front of the class without preparation in English class.)
To further validate and triangulate the results generated from Part One, when asked to speak in English in an English class, participants were asked in Part Two to indicate anxiety when eight different kinds of activities or behaviour occurred. The scale ranges from 1 (very low) to 100% (very high) with intervals of 20%. Table 5 presents the means of speaking-in-class anxiety levels in Part Two.

Results in Part Two show that the most anxiety-provoking items are: speaking with exposure to others; and short wait-time (the mean for ‘when the teacher is assessing you when you speak’ = 72.9; ‘when speaking in front of the class’ = 72.2 and ‘when given a short time to think about the answer before speaking in class’ = 69.1.)

These findings are consistent with those in Part One because fear of negative evaluation and speech anxiety also emerged as one of the five factors contributing to second language learning speaking-in-class anxiety in the present study. Short wait-time is also a factor of ESL speaking-in-class anxiety. In Part One of the questionnaire, results indicate that participants feel that enough wait-time helps lower their speaking-in-class anxiety. This perception is verified by the high mean of 3.02 for item 37 ‘When I am given enough time to think of the answer, I feel more confident to speak in an English class’.

The mean of item 35 (I start to panic when I have to speak in front of the class without preparation in English class) is 2.52, slightly above the mean of 2.5, implying that this item provokes higher speaking-in-class anxiety level when compared to other items with a mean below 2.5. These findings are also confirmed in part two of the questionnaire.

Items 9 (I start to panic when I have to speak without preparation in English class) and 33 (I get nervous when the English teacher asks a question which I haven’t prepared in advance) are similar in nature. Item 35 (I start to panic when I have to speak in front of the class without preparation in English class) goes beyond items 9 and 33 as the participants had to ‘speak in front of the class’ without preparation.

The finding that feeling exposed when speaking provokes higher speaking-in-class anxiety is similar to that of Young (1990) as well as Mak and White (1997). However, results in the present study go further by confirming that speaking in front of the class in a second/foreign language classroom without preparation is the most speaking-in-class anxiety-provoking factor.

The present study reveals that although error correction by teachers as part of the learning process is considered normal, correction by peers or teachers when speaking is regarded as anxiety-provoking when the highlighting of learner mistakes is used to elaborate teaching points.

Table 4
Ranking of the means of items 34–39 in Part One Section B of the questionnaire.

<table>
<thead>
<tr>
<th>Item No</th>
<th>Statement</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>37</td>
<td>When I am given enough time to think of the answer, I feel more confident to speak in an English class.</td>
<td>3.02</td>
</tr>
<tr>
<td>39</td>
<td>If my English teacher allows me to use Chinese at times, I feel more comfortable volunteering answers in class.</td>
<td>2.76</td>
</tr>
<tr>
<td>36</td>
<td>I will speak more in class if my classmates do not laugh at my mistakes.</td>
<td>2.74</td>
</tr>
<tr>
<td>35</td>
<td>I start to panic when I have to speak in front of the class without preparation in English class.</td>
<td>2.52</td>
</tr>
<tr>
<td>38*</td>
<td>I feel relaxed when speaking English with friends I know.</td>
<td>2.20</td>
</tr>
<tr>
<td>34*</td>
<td>I like my English teacher to correct me once I make a mistake.</td>
<td>2.04</td>
</tr>
</tbody>
</table>

* Item with negative loading.

Table 5
Mean of percentages in speaking-in-class anxiety levels in Part Two of the questionnaire.

<table>
<thead>
<tr>
<th>Item No</th>
<th>Teacher behaviour or classroom activities</th>
<th>Mean (out of 100)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Anxiety level when speaking in front of the class.</td>
<td>72.2</td>
</tr>
<tr>
<td>2</td>
<td>Anxiety level when speaking in a group of 3 - 4 people in class.</td>
<td>33.6</td>
</tr>
<tr>
<td>3</td>
<td>Anxiety level when speaking in a pair in class.</td>
<td>27.8</td>
</tr>
<tr>
<td>4</td>
<td>Anxiety level when given a long time to think about the answer before speaking in class.</td>
<td>32.7</td>
</tr>
<tr>
<td>5</td>
<td>Anxiety level when given a short time to think about the answer before speaking in class.</td>
<td>69.1</td>
</tr>
<tr>
<td>6</td>
<td>Anxiety level when the teacher is assessing you when you speak.</td>
<td>72.9</td>
</tr>
<tr>
<td>7</td>
<td>Anxiety level when your classmates are assessing you when you speak.</td>
<td>67.9</td>
</tr>
<tr>
<td>8</td>
<td>Anxiety level when you are allowed to use some Chinese in an English class.</td>
<td>26.1</td>
</tr>
</tbody>
</table>
The mean of 2.76 for item 39 (If my English teacher allows me to use Chinese at times, I feel more comfortable to volunteer answers in class) indicates that being allowed to use the L1 at times lowers speaking-in-class anxiety. These results are confirmed by findings identified in part two.

To summarise, the factors contributing to second language learning speaking-in-class anxiety identified in the study are:

- speech anxiety and fear of negative evaluation;
- uncomfortableness when speaking with native speakers;
- negative attitudes towards the English class;
- negative self-evaluation;
- fear of failing the class/consequences of personal failure;
- speaking in front of the class without preparation;
- being corrected when speaking;
- inadequate wait-time;
- not being allowed to use the first language in a second/foreign language class.

The most important factor contributing to ESL speaking-in-class anxiety identified in the present study is ‘speech anxiety and fear of negative evaluation’ accounting for 20.4% of the variance. Speech anxiety and fear of negative evaluation are identified in some studies as separate factors leading to second language learning speaking-in-class anxiety (for example, Horwitz et al., 1986; Liu and Jackson, 2008; MacIntyre and Gardner, 1989). In the present study, however, the label of ‘speech anxiety and fear of negative evaluation’ is given to factor one because items included in this factor indicate a student’s apprehension about speaking in an English class (items 9 and 33) and fear of embarrassment when negatively evaluated by others (items 13 and 31).

Although it may appear initially that two separate concepts exist (speech anxiety and fear of negative evaluation), they are, in fact, linked. They overlap and are not wholly independent of each other. It can be asserted that they are probably two labels describing one phenomenon in a language-learning situation. This assertion is supported by MacIntyre and Gardner (1991), who report that McCroskey’s (1984) Personal Report of Communication Apprehension Scale as well as Watson and Friend’s (1969) Fear of Negative Evaluation measure loaded on the same factor.

Of the 15 items in the factor entitled speech anxiety and fear of negative evaluation (items 27, 3, 9, 31, 4, 33, 12, 13, 19, 24, 26, 29, 16, 1, and 20) that account for 20.4% of the variance, thirteen also load on the same single factor (speech anxiety and fear of negative evaluation) in Aida’s study. Item 19 in the present study is classified by Horwitz et al. (1986) as ‘test anxiety’ and does not load on any factors in Aida (1994). This is unsurprising as item 19 can indeed be classified as ‘test anxiety’ or ‘fear of negative evaluation’, depending on the participants’ viewpoint. Item 26 (I feel more tense and nervous in my English class than in my other class) loads on the factor ‘fear of failing the class/consequences of personal failure’ in Aida’s (1994) study. It is just as likely, it can be argued, that participants’ anxiety is aroused by ‘fear of failing the class/consequences of personal failure’ or ‘fear of negative evaluation’, depending on the participants’ view of item 26.

Four items (32, 14, 11 and 8) in the factor entitled uncomfortableness when speaking with native speakers account for 11.3% of the variance and are negatively associated with factor two. All items except item 8 (I am usually at ease during tests in my English class) load on the same factor, using the same label, in Aida’s (1994) study. Though this factor is not the second, but the third most important factor with a variance of 5.6% in Aida’s (1994) study, the results in the two studies are comparable and indicate that speaking with native speakers provokes speaking-in-class anxiety in SL/FL learners.

Item 8 (I am usually at ease during tests in my English class) loads on ‘speech anxiety and fear of negative evaluation’ in Aida’s (1994) study and is categorised as test anxiety by Horwitz et al. (1986) as well as Liu and Jackson (2008). The difference in category labels can be accounted for because the contacts/communications between participants in the present study and native speakers of English usually happen in the classroom when the native speaker is both teacher and assessor, making it difficult to specify whether the speaking-in-class anxiety is aroused by test anxiety as suggested by Horwitz et al. (1986) and Liu and Jackson (2008) or feeling uncomfortable speaking with native speakers of English as suggested in the present study.

Three items (17, 5 and 6) load on the factor negative attitudes towards the English class, accounting for 9.95% of variance. Item 5 is negatively associated with this factor. Items 5 (It wouldn’t bother me at all to take more
English classes) and 17 (I often feel like not going to my English class) also load on the factor with the same label in Aida’s (1994) study (with a variance of 4.7%). Item 6 (During English class, I find myself thinking about things that have nothing to do with the course) is categorised by Horwitz et al. (1986) as ‘test anxiety’ while items 5, 6 and 17 are unloaded in Liu and Jackson (2008).

MacIntyre and Gardner (1991) as well as Aida (1994) state that students’ attitudes towards a new language can be affected by their previous learning experiences. This study confirms their findings but also provides evidence that students’ negative attitudes towards the language class can contribute to their overall levels of second/foreign language anxiety.

Two items (23 and 7) load on the fourth factor, negative self-evaluation, accounting for 6.7% of the variance. Both items are categorised by Horwitz et al. (1986) as ‘fear of negative evaluation’ and load on Aida’s (1994) factor ‘speech anxiety and fear of negative evaluation’. The difference in terms of labels is not surprising because it can be argued that ‘negative self-evaluation’, identified in the present study, can be a sub-category within the concept ‘fear of negative evaluation’ used in other studies.

The fifth factor, fear of failing the class/consequences of personal failure, includes three items (10, 15 and 22) accounting for 6.2% of the variance. Item 22 (I don’t feel pressure to prepare very well for English class) is negatively associated with factor five. Both items 10 (I worry about the consequences of failing my English class) and 22 load on the factor with the same label in Aida’s (1994) study. Item 15 (I get upset when I don’t understand what the teacher is correcting) which does not load on any factors in Aida’s study, is categorised as ‘fear of negative evaluation’ in Horwitz et al. (1986), implying that ‘fear of failing the class/consequences of personal failure’ can be part of Horwitz’s ‘fear of negative evaluation’. The participants in the present study, however, are very much concerned about the consequences of failing English. Indeed, passing the English course is a prerequisite for graduation.

Horwitz et al. (1986) and Liu and Jackson (2008) have identified test anxiety as a component of second/foreign speaking-in-class anxiety. Results in the present study, however, do not support this. The findings of the present study are similar to the results of some anxiety studies e.g. Aida (1994) and MacIntyre and Gardner (1989) for whom speaking-in-class anxiety and peer evaluation are part of the elements of foreign language classroom anxiety but for whom test anxiety is not. Test anxiety may be a general problem, non-specific to the language classroom.

The test anxiety findings here are consistent with MacIntyre and Gardner (1991) who conclude, as does Aida (1994: 162), that test anxiety is a general anxiety problem — unlike Horwitz et al. (1986). ‘Speech anxiety and fear of negative evaluation are considered relatively enduring personality traits whereas test anxiety is regarded as a state marked by temporary reactions to an academic or evaluation situation’.

4. Conclusions and implications

In this concluding section, the implications of the findings of this study are discussed not only for Chinese speakers of English but also for non-Chinese learners.

Second language learning speaking-in-class anxiety in the Chinese context warrants attention because in addition to confirming previous findings (for example, Aida, 1994; Horwitz et al., 1986; Liu and Jackson, 2008), this study has also provided evidence that students’ negative attitudes towards the language class can contribute to their overall levels of second/foreign language anxiety. It reveals that negative self-evaluation is an important factor leading to speaking-in-class anxiety. Negative attitudes can affect oral performance and grades when meeting compulsory requirements to speak and contribute to role-plays and discussions in a positive manner. These requirements are unlikely to abate, with more and more emphasis placed on the ability to communicate satisfactorily so all language teachers, not just teachers of Chinese students, should endeavour to mitigate the effects of anxiety wherever possible. Given that the results reveal that affective variables such as anxiety influence learners’ L2 performance the implications are that all language professionals need to respond not only to students’ linguistic but also affective needs, by attempting to provide a secure and comfortable learning atmosphere, free from fear of speaking and conducive to risk taking in the target language.

One finding that has strong implications for all teachers of EFL, but particularly for teachers of Chinese-speaking EFL students, is the influence of appropriate wait-time in reducing anxiety. Wait-time, originally identified for science students by Rowe (1974a, 1974b, 1986), is culturally significant for Chinese students in the L2 language classroom. The Chinese students are clear that they usually require longer wait-time to speak up and respond than their European counterparts because ‘group unity’ and ‘face’ are important elements of their culture. These two elements are
threatened by an inability or reluctance to speak when they feel pressured. Tsui (2001: 124), when investigating classroom interaction, concludes that ‘not giving enough wait-time for learners to process a question and formulate an answer is another reason for lack of response from students’. However, she also finds that ‘...excessive lengthening of wait-time exacerbated anxiety amongst students’ (Tsui, 2001). The anxiety caused by the long-standing but invidious practice of calling upon a student to respond to a teacher initiation and then making them stand if they fail to answer until after the teacher becomes exasperated, moves on and asks her question of another student, cannot be overestimated. Falvey (personal communication) cites the case of a sixteen-year-old female student from a secondary school in the New Territories of Hong Kong who ‘confessed’ to avoiding ever speaking English in class. She was so anxious about speaking that she was willing to suffer the humiliation of standing exposed to the teacher and her classmates for long periods in every English classroom during her five years of secondary education.

The use of learners’ L1 in the second language classroom is a controversial issue in applied linguistics in all language teaching situations and used to be frowned upon. This perspective, however, has altered somewhat in recent years (Cook, 2001; Turnbull, 2001) with researchers such as Butzkamm (2003), Brooks-Lewis (2009), and Macaro (2005), promoting the advantages of using L1. The present study supports the views of Cook (Ibid) and Turnbull (Ibid). It finds that allowing learners to use their L1 in the ESL classroom reduces speaking-in-class anxiety because the use of the L1 will build up learners’ confidence and, in turn, encourage speaking. Teachers of all languages should, however, note that the amount of L1 to be used should only be enough in order to ensure that adequate exposure to the target language also takes place. In this context, Copland and Neokleous (2010) draw attention to the use of the L1 in Cyprus by noting that teachers feel guilt about the use of L1 in the L2 classroom. Furthermore, they reveal that what teachers say about the use of L1 and what they do, differ.

It is generally recommended that L1 use should be minimized gradually as SL confidence and proficiency develop. Over-dependence on L1 is not advised. Indeed, in the course of establishing language benchmarks for primary and secondary teachers of English in Hong Kong, Coniam and Falvey (2002) found that excessive use of the L1 (Cantonese) correlated strongly with lack of teacher L2 proficiency.

The study found that being corrected by peers or teachers when speaking and using student mistakes to elaborate teaching points were anxiety-provoking. Establishing a balance between accuracy and fluency is a delicate part of a teacher’s repertoire of strategies. A focus on fluency to build up confidence may be preferable to an undue focus on accuracy. Using student errors as an immediate stimulus for a teaching point is unlikely to be productive so teacher development programmes that use teachers’ reflective practices may well benefit both the teachers and their students (Alexander, 2006). It would appear that the practice of using errors to illustrate syntactic points should only be recommended when the focus of the class and the activities being used by the teacher is accuracy.

It is generally accepted that large amounts of teacher talk and limited student talk neither facilitate nor encourage students’ speech in the classroom (Ma, 2006; Lei, 2009). Using the target language in front of the class can be frustrating as the process places linguistic, cognitive and psychological demands on the learner. It is therefore recommended that teachers should ensure that learners are given time to prepare the speech/presentation before being asked to speak in front of the class.

Test anxiety is not a factor leading to Chinese ESL speaking-in-class anxiety. Test anxiety appears to be a general problem, part of social anxiety and not specific to the Chinese learners English language classroom.

It can thus be seen that this study has a number of implications not only for Chinese teachers of English but also for non-Chinese teachers of language. The study also has implications not only for tertiary education but also for secondary and possibly primary language education.

5. Limitations and suggestions for future research

Only the relationships between second language learning speaking-in-class anxiety and factors which can be controlled within the classroom setting have been investigated. Factors such as improvements in language proficiency from private tutorials, self-access learning and discussion outside class cannot be controlled and have not been considered.

Inferences drawn from the results of this study are limited because the participants were solely first-year undergraduate students in one university in Hong Kong. To make the results more generalizable, the study could be replicated with students in other universities, both in Hong Kong and overseas, to investigate whether cultural background plays a role in speaking-in-class anxiety levels. In addition, the interesting phenomenon of wait-time
could be investigated for Taiwanese, Korean and Japanese students to see whether their cultures require face-saving behaviour in the classroom.

The present study has focused on students' responses. It is possible that investigating the teachers' perspective on anxiety creation through qualitative data such as classroom observations, teacher reflections and teacher interviews would deepen our understanding of speaking-in-class anxiety.

To conclude, the present study has deepened our understanding of speaking-in-class anxiety levels of Chinese ESL students and the factors contributing to them from the students’ perspectives and provided implications for wider applications. Using these findings, language teachers and educators can, hopefully, adopt and sustain the kinds of teaching behaviour and classroom practices which reduce speaking-in-class anxiety and promote spoken English in the language classroom which in turn would, ideally, lead to better attitudes and improved oral performances and educational outcomes for our students.

References


Falvey, P. Personal communication.


Ma, X., 2006. Teacher Talk and EFL in University Classrooms. MA Thesis. School of Foreign Languages and Literature, Chonqing Normal University and Yangze Normal University, China.


