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Foreword

I would like to welcome readers to the 7th volume of the Philippine ESL Journal. The index of the journal has increased since the journal started in 2008 with an increased amount of citations. We would like to encourage readers more to use and cite the articles in the journal as one of the scientific outlets to disseminate knowledge about the existence of Philippine English in an international perspective.

In this issue, five empirical reports and one commentary provide insights about Language learning and Philippine English. The study by Iris Sioson found in a predictive model that language learning strategies, in general, were found to decrease beliefs about language learning and anxiety. In another predictive model by Clarisse Anne Ilustre, found that support and problem solving reading strategy with active belief in reading increased students text comprehension while passive beliefs decrease it. Lina Tao who studied learning styles and found that a specific set of learning styles allow students to become proficient in English tests such as the design, authority orientation, kinesthetic, and mobility. Yuan Cao tested two measurement models of foreign language classroom anxiety. He found that a simpler three-factor model (communication apprehension, test anxiety, and fear of negative evaluation) fitted students better. The study by Rochelle Irene Lucas, Edna Miraflorres, and Dianne Go found that none of the language learning strategies predict communication anxiety while low use of listening and vocabulary strategy leads to English classroom anxiety. Lastly, Ariane Macalinga Borlongan, described the presence of Philippine English through his codification of Philippine English in the preparation and writing of a grammar of the Philippine English verb system.

The empirical studies provide predictive models to better understand how Filipino learners process the English language in various scenarios. The models also explain and typify the status of English among students in the Philippine setting.

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Language Learning Strategies, Beliefs, and Anxiety in Academic Speaking Task
Irish C. Sioson
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Abstract
This study aimed to determine which among the subscales of language learning strategies (LLS), beliefs about language learning and anxiety was the strongest predictor of performance in an academic speaking context, and whether significant relationships between and among the factors existed. Results show that all the subscales of language learning strategies, beliefs and anxiety were positively correlated with their respective subscales. However, LLS, in general, were found to be negatively correlated with beliefs about language learning and anxiety, but beliefs about language learning and anxiety subscales had generally no relationship with each other. Furthermore, only the motivation subscale of beliefs about language learning was the significant predictor of speaking performance, but yielded a negative relationship with performance. Implications were then drawn from the study.

Keywords: language learning strategies, language learning beliefs, anxiety, academic speaking

Introduction

In the field of second language acquisition (SLA), the bulk of literature has been devoted to establishing the roles of learner characteristics on language learning performance such as attitude (e.g. Wenceslao, 1991), self-concept, self-efficacy, and self-perception (e.g. Chapman & Tunmer, 2002; Wenceslao, 1991), self-concept, self-efficacy and self-perception (e.g. Chapman, & Tunmer, 2002; Slavin, 2003 in Brown, 2007), and motivation (e.g. Yihong, Yuan, Ying & Yan, 2007) among others.

While there has been rich literature on such learner factors, studies on the interrelationships between and among these factors seem lacking as most researches were concerned with how a particular factor was related to performance. For example, one’s preference for or use of specific language learning strategies can be
largely traced from his/her own beliefs on how languages can be learned. These beliefs, in turn, could also have been influenced by emotions, such as anxiety, that learners bring when learning a language, and that such factors contribute to their overall language learning performance. Furthermore, Hedge (2000) also asserted that “Any individual may be influenced by a variety of motivations which will affect such things as anxiety, or attitude, or willingness to try new learning strategies” (p. 22). This study, therefore, focused on these three learner factors that play a role in second language acquisition, particularly in speaking: 1) language learning strategies, 2) language learning beliefs, and 3) anxiety.

**Language Learning Strategies**

The term Language Learning Strategies (LLS) has been defined differently by various researchers over the years. For example, Robin (1975, p. 43) defined the learning strategies as ‘the techniques or devices that a learner may use to acquire knowledge’ (in Zhou, 2010). For Mayer (1988, p. 11) learning strategies are ‘behaviours of a learner that are intended to influence how the learner processes information’ (in Lessard-Clouston, 1997). Finally, LLS are described by Oxford (1990) as the learners’ specific practices or actions that aid them in learning a second or a foreign language. It is Oxford’s framework which is probably the most widely used by various researchers. This is probably because according to Vidal (2002), Oxford’s scheme is based on previous studies, is an all-embracing scheme for learning strategy use...[is] “more comprehensive and detailed...[and is] more systematic” (p. 47) as the language skills (listening, speaking, reading, and writing) are associated with individual strategies and strategy groups.

Oxford’s (1990) LLS framework is divided into two main classes: the direct and indirect strategies. According to her, direct strategies are the strategies that involve mental processing of the target language which is directly linked with the learning and use of the target language; indirect strategies, on the other hand, involve the management and support to language learning without necessarily using the target language directly. These classes are further classified into six strategy groups. Direct strategies include 1) memory
strategies (help learners remember new language items), 2) cognitive strategies (help learners think about and understand the target language, and 3) compensation strategies (help learners compensate for lack of knowledge). Indirect strategies include 1) metacognitive strategies (help them regulate their cognition), 2) affective strategies (how students feel about the new language) and 3) social strategies (involve interaction with others).

Most LLS researches fall into two related categories of areas of study. The first group concentrated on the identification of specific strategies that learners use most often while the second group focused on the establishment of the relationship between strategy use and performance. Together, these groups are based on the assumption that the strategies most frequently used by successful learners can be taught to struggling learners. Furthermore, it has been suggested that it is in the appropriate use of strategies that distinguishes the successful learner from the less successful one, i.e. the more proficient learners knew when to use a particular strategy (Chamot & Kupper, 1989 in Ming-Nuan, 2007) and that more proficient learners were reported to have greater strategy use than the less proficient ones (Mbi, Ong, & Amzah, 2001). For instance, Ming-Nuan (2007) found that the more proficient students are in the language, the more strategies they employed. Zhou (2010) identified the most frequently used strategies by Chinese senior high school students in relation to gender. It was found that the participants used more compensation strategies and that females employed more strategies than males. Riazi (2007), however, found that female Arabs used more metacognitive, cognitive, and compensation strategies than memory, social and affective strategies. Vidal (2002) also found that strategy use correlated with learning achievement.

**Language Learning Beliefs**

Learner beliefs are concerned with the nature of learning and epistemological belief, and in the context of language learning, Flavell asserted that (1987 in Bernat & Gvozdenko, 2005) beliefs are perceived to be everything that learners think and understand about themselves in relation to learning a language and is therefore viewed as a factor of metacognitive knowledge. This can be illustrated when
learners think that they either have or do not have an aptitude for learning a language (Bernat & Gvozdenko, 2005). Victori and Lockhart (1995, p. 224) defined beliefs in the SLA context as the ‘general assumptions that students hold about themselves as learners, about factors influencing learning and about the nature of language learning’ (in Rieger, 2009). Richardson (1996, p. 103) provides another definition of beliefs which are “psychologically held understandings, premises, or propositions about the world that are felt to be true” (in Nikitina & Furuoka, 2006). When learners find their study important and interesting, they become more involved in the learning process and develop more perseverance academically (Pintrich & DeGroot, 1990 in Nikitina & Furuoka, 2006).

The literature on beliefs suggests that a number of related factors such as attitude, motivation, experiences and actions in the classroom may be possibly influenced by learning beliefs, which according to Bernat (2006), can affect learning in two ways: either to encourage or deter successful language acquisition. Bernat (2006) also provided a brief survey of the findings of studies that investigated the relationship of beliefs to various factors, citing the works of Yang (1999) on strategy use, Kim-Yoon (2000) and Banya & Chen (1997) on motivation and language proficiency (Huang & Tsai, 2003) among others. Based on these studies, Bernat (2006) then deduced that negative and unrealistic beliefs of students on language learning lead to anxiety. Moreover, such studies also found that proficiency and beliefs are related since the more proficient students had more realistic beliefs on learning (Bernat, 2006).

The most widely used instrument in determining one’s language learning beliefs is Horwitz’s (1987 in Rieger, 2009) Beliefs About Language Learning Inventory (BALLI) which he developed. Based on the participants’ suggestions, Horwitz listed the possible language learning beliefs which he later grouped into themes: 1) foreign language aptitude, 2) difficulty of language learning, 3) nature of language learning, 4) learning and communication strategies, and 5) motivations and expectations. The first theme is concerned with one’s potential for language learning achievement, while the second theme deals with the general difficulty of foreign language learning and the specific difficulty of the target language. The next theme is concerned with the nature of the process of language learning, while
the fourth theme is linked with the actions of the language learner. Finally, the fifth theme involves the students’ association of desires and opportunities with language learning (Altan, 2006).

Anxiety

Spielberger (1983, p. 15) defined anxiety as the ‘subjective feeling of tension, apprehension, nervousness, and worry associated with an arousal of autonomic nervous system (Awan, Azher, Anwar & Naz, 2010) while Horwitz, Horwitz, and Cope (1986p. 128) defined language anxiety as ‘a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process’ (n Khan & Zafar, 2010). Such definition seems encompassing and hence, may be the reason why anxiety has also been linked with other learner factors such as self-efficacy (Mills, Pajares, & Herron, 2006), attitude (Awan et al, 2010) and the two other factors being investigated by the present study, language learning beliefs (Vitasari, 2010) and learner strategy use (Wu, 2010).

Anxiety is generally believed by many researchers to play a significant factor in language learning (Awan et al, 2010), and had been found to be one of the main predictors of academic performance (e.g. McCraty, 2007 in Vitasari, Wahab, Othman & Awang, 2010). In fact, research has generally found a negative correlation between anxiety and language performance (e.g. Awan et. Al, 2010; Khan, 2010; Sparks & Ganschow, 2007), and that anxiety has been even regarded as having a “detrimental effect” to academic performance (Vitasari et al, 2010); in addition, high degree of anxiety can impede memory and concentration (Vitasari et al).

Most researches done on language learning anxiety have used Horwitz’s (1986 in Al Sibai, 2005) Foreign Language Classroom Anxiety Scale (FLCAS) in which items have been classified into three dimensions of related performance anxieties: 1) communication apprehension, 2) test anxiety, and 3) fear of negative evaluation which were considered sources of anxiety.

The Study
Based on the literature then, the three factors being examined are interrelated in the sense that language learning beliefs are also linked with metacognition which is one of the language learning strategy groups, while anxiety is strongly associated with affective factors, which is also one of the LLS groups. Furthermore, previous studies (e.g. Wenden, 1987 in Liao & Chiang, 2004) found that there is a strong relationship between language learning beliefs and language learning strategy use. While the two variables are different, research seems to suggest that beliefs could influence the way learners use strategies. Hence, these factors have then been considered by the current study to associate with a particular language skill (i.e. speaking) which has been found to be one of the sources of anxiety in learning.

Among sources of anxiety, language anxiety and class presentation anxiety have been consistently found by various researchers (e.g. Vitasari, Wahab, Othman & Awang, 2010). Speaking in the second language is confirmed to be considered as an “anxiety-producing” experience and that which ‘reflects the widely held view that speaking is the most anxiety-provoking aspect of language learning for many L2 students’ (Cheng et al, 1999, p. 420 in Al-Sibai, 2005). Because of the nature of speaking which involves a public display of one’s ability, it has then been deemed to be more associated with anxiety (Horwitz, Horwitz & Cope, 1986 in Leger, 2009). Furthermore, of the four macro skills, it is speaking in the second or foreign language which is deemed to be the most demanding (Bailey & Savage, 1994 in Lazaraton, 2001).

While several studies have confirmed the relationship between language leaning and the identified learner factors, there seems to be limited literature that focused on identifying the variables that best predict language learning performance. Hence, this study aimed to determine which particular factor is the strongest predictor of language learning performance, specifically in speaking. Another objective of this study was to find out whether significant relationships among the three learner factors exist. Furthermore, while previous studies (e.g. Leger, 2009; Tsou, 2005) investigated such factors in oral proficiency in general as manifested in classroom participation and are conversational in nature, this study focused on the oral performance of learners in the context of academic speaking.
which required the participants to present the results of their research to the public. Such activity is treated as academic speaking task when the content of the speech is derived from a study which is technical in nature as the topics were specific to the field of specialization and designed to contribute to the academic community. Furthermore, it is academic speaking because the presentation is highly structured due to the conventions of the genre (research paper presentation).

Moreover, there have been inconsistent results in the previous studies done on the specified variables in this study. Furthermore, since there are various strategies, beliefs, and emotions that learners bring when learning a language, it would be interesting to examine whether these factors can predict the quality of their performance. It is due to these compelling reasons that this study had been undertaken. The study involved the identification of first year college students’ language learning strategies, beliefs, and anxiety and related these factors with their academic speaking performance. The study, moreover, determined which among these factors the strongest predictor of oral performance was.

Method

Participants

Three hundred first year college from a private institution were the respondents in the study. The classes were grouped heterogeneously as they had varied ability levels and were taking different courses such as Music, Mass Communication, Accountancy, Hotel and Restaurant Management, Commerce, Fine Arts, Information Technology, and Psychology. The participants’ age ranged from 16-18. Each participant should have a Philippine language as their first language and at least started learning English as a second language at the age of 7. Moreover, they were taking Communication Arts 2 in the second semester of the school year 2010-2011 which focused on academic writing of research paper and which required them to present the results of their research paper in class as part of their final examination. Their papers were in line with the field of specialization they were taking and both the oral presentation and research paper were evaluated by their respective professors.
Instruments

**Language background questionnaire.** A language background questionnaire based on Gullberg and Indefrey (2003) was developed to determine their age, language/s they speak at home, the age they started leaning, and the amount of exposure to the English language. Aside from the demographic background, the questionnaire also included five open-ended questions to identify their perceived strengths, weaknesses in public speaking, the techniques they use when encountering problems, and how these techniques aid them.

**Strategy inventory for language learning.** To determine the specific strategies the participants preferred in language learning, the ESL/ EFL Version of Strategy Inventory for Language Learning (SILL) developed by Oxford (1990) was employed. The 50-item questionnaire made use of a 5-point Likert scale ranging from 1 (never or almost never) to 5 (always or almost always) and consists of six strategy groups namely: 1) Memory, 2) Cognitive, 3) Compensatory, 4) Metacognitive, 5) Affective, and 6) Social. Memory strategies are strategies used to help students remember new language items. Items such as “I review English lessons often”, and “I use flashcards in remembering new words” are included. Cognitive strategies which help them think about and understand the new language include items like “I practice the sounds of English”, and “I watch English language TV shows or movies.” Compensation strategies are strategies which help them compensate for lack of knowledge. The items consist of statements such as “To understand unfamiliar English words, I make guesses”, and “I read English without looking up every new word.” For metacognitive strategies which help them regulate their cognition, items such as “I plan my schedule so I will have enough item to study English”, and “I notice my English mistakes and use that information help me do better” are included. “I try to relax whenever I feel afraid of using English” and “I write down my feelings in a language learning diary” are some items in affective strategies which relate to how students feel about the new language. Finally, social strategies that involve interaction with others include items such as “I ask English speakers (e.g.
teachers) to correct me when I talk”, and I practice English with other students”.

The instrument has been widely used for second and foreign language learners and has yielded an internal consistency reliability of .94 in Yang’s (1992 in Ming-Nuan, 2007) study involving 505 respondents and .92 in Watanabe’s (1990 in Ming-Nuan) study which involved 315 participants. Its content validity is .99 as evaluated by independent raters (Oxford & Burry-Stock, 1995 in Ming-Nuan).

**Beliefs about language learning inventory.** Another instrument used in the study was the Beliefs About Language Learning Inventory (BALLI devised by Horwitz, (1987 in Nikitina & Furuoka, 2006) to determine the participants’ beliefs about the five subscales: foreign language aptitude, difficulties of language learning nature of nature of language learning, and learning and communication strategies, motivation and expectations. The Cronbach alpha of this instrument based on Rad’s (2011) study was 0.74 which shows acceptable consistency of reliability, and is found to be suitable by Nikitina and Furuoka (2006) to measure language learning beliefs in varied socio-linguistic settings. A slight modification in the instrument was done as the items in the questionnaire were reordered and grouped according to each component.

Foreign language aptitude refers to the language learner’s potentials and achievement which include items such as “It is easier for children than adults to learn a second language” and “Some people have a special ability learning second language”. The next subscale which is difficulty of language learning includes the general difficulty of leaning a foreign language and the target language’s difficulty on the part of the learner. The items include “Some languages are easier than others” and “The English language is a difficult language”. The third is the nature of language learning related to the nature of the process of language learning with statements like “It is best to learn English in an English-speaking country” and “The most important part of learning a foreign language is learning new words”. Specific items such as “I feel shy speaking English with other people’ and “It is important to speak English with an excellent pronunciation” fall under learning and
communication strategies which are associated with the language learning practices of the learners. Finally, motivations and expectations which are the desires and opportunities learners associate with the learning of the target language include statements like “If I learn to speak English very well, I will have better job opportunities” and “I want to learn to speak English very well”.

Foreign language classroom anxiety scale. The Foreign Language Classroom Anxiety Scale (FLCAS) which was developed by Horwitz and Cope (1986 in Sparks, Patton, Ganschow & Humbach, 2009) was also employed by the study. This consists of 33 items, using a 5-point Likert scale with choices ranging from strongly agree to strongly disagree. Sparks et al (2009) tested its reliability by calculating the Cronbach alpha which resulted in a reliability coefficient of .94.

Communication apprehension deals with the anxiety felt by the learner when communicating and sample items for this dimension include “I start to panic when I have to speak without preparation in English class” and “I get nervous and confused when I am speaking in English class”. The second dimension, fear of negative evaluation which is caused by fear of failure, include items such as “I worry about making mistakes in English class” and “I keep thinking that the other students are better at the English language than I am”. Finally, general feeling of anxiety involves apprehension felt towards a foreign language and other emotions indirectly associated with fear of communication or negative evaluation. Items included in this dimension are “I feel pressure to prepare very well for English class”.

Similar with BALLI, the FLCAS questionnaire was slightly modified as items were grouped according to each component and some words were negated or omitted to make the all the items stated in the negative for consistency purposes. For example, the word “don’t” in original statement “I don’t worry about making mistakes in English class” was omitted, and the original statement “I am usually at ease during tests in my English class” was changed into “I am usually uncomfortable during tests in my English class”.

Oral presentation rubric. To measure the students’ academic speaking performance, a modified version of the Oral presentation rubric/evaluation (n.d.) was used in the study. The rubric was
retrieved from a website and was evaluated by seven faculty members of the school’s English department. It has been used by the department for three consecutive years and reviewed every year. Six components were included in the rubric: 1) organization which refers to the logical sequence of information, 2) subject knowledge which deals with the mastery of the topic, 3) graphics which evaluates the usefulness and relevance of visual aids used, 4) mechanics which covers mechanical and grammatical lapses, 5) eye contact, and 6) elocution which is concerned with the delivery of the speaker in terms of the use of voice and suprasegmentals.

Adjustments in the distribution of weight were made which was done in consultation with the faculty members. For example, while the original instrument used equal pointing system in all the components (i.e. 4 points for each component as the highest possible score), all the components were made to have a 10-point system). Furthermore, subject knowledge was given the highest point in which the score is multiplied by 3, as this component was deemed to be the most important since this demonstrates whether the presenter knows well the content of the presentation. Scores obtained in the organization and elocution components are multiplied by 2, while the rest of the components had the same highest possible score which is 10.

For the purposes of this study, interrating was done to determine the reliability of the instrument. The researcher paired with another Communication Arts faculty member to evaluate 25% of the sample. The researcher and the students’ respective instructor in the subject both evaluated the same student using the rubric.

Concordance was then computed for interrating consistency in which correlations were significant at p< .05000. It was found that ratings were consistent in the subject knowledge (p=.000), eye contact (p=.000), and elocution (p=.015) components. This was probably because such components were fairly observable as students’ knowledge or mastery of the topic can be easily gauged by the content of their presentation and by the quality of their answers in addressing questions from the audience, while eye contact was easily established when students looked at the audience rather than read from their notes (which could also reflect their mastery of their
research), and finally, elocution was relatively clear to evaluate in terms of the students’ pronunciation, volume, and voice clarity.

However, the raters differed in the way they evaluated the students in the areas of organization (p=.188), graphics (p=.845), and mechanics (p=.086) as the raters may have deemed the flow of ideas, use of transitions, visual aids, and mechanics differently. Since mechanics covered grammar and mechanical usage (spelling, capitalization in the visual aids) it would perhaps be better if grammar and mechanics were treated separately. It is therefore suggested that further re-evaluation of the instrument be done to ensure consistency. Nevertheless, the instrument was found to be generally consistent when the total scores were arrived at.

Procedure

The language background questionnaire, SILL, BALLI and FLCAS questionnaires were administered 10 classes and participants were then chosen according to the selection criteria set for the study (e.g. age, age started to learn English etc.). As mentioned, the oral presentation was done by the students as part of their final examination which was 10% of their final grade in the subject. The evaluation was done by their respective teachers and as time allowed, the researcher, together with students’ respective professors also evaluated randomly selected students.

Data Analysis.

To obtain results from the questionnaires, the mean and standard deviation were computed and ranked. Concordance was computed to determine the interrating reliability of the rubric used in the study. Pearson r correlation was employed to determine whether significant relationships between the independent variables exist. Finally, hierarchical multiple regression was employed to identify which among the factors was the strongest predictor of academic speaking performance. Multiple regression, in general, is used to predict the dependent variable in relation to a set of predicting variables which is done by entering all the predicting variables into the analysis (Petrocelli, 2003). Specifically, theoretical assumptions are the bases for the way the factors or predictors are entered into the

Results

Table 1 shows the mean and standard deviation of each factor. Results show that the scores obtained from all the factors are close to each other as indicated in their standard deviations. In terms of LLS, metacognitive strategies scored the highest, followed by cognitive and social strategies. These were followed by compensatory, affective and memory which was the least preferred strategy.

With regard to BALLI, the students had a general positive belief about learning the language. Specifically, they had the most positive belief about their motivations and expectations, followed by their perceptions about the nature of language learning, then their aptitude, their learning and communication strategies, and finally, difficulty of language learning. That the results ranged from 1.49 to 2.46 indicated that the participants in the study had overall optimistic beliefs about language learning.

Lastly, in terms of anxiety, their most common source of anxiety was communication apprehension with a mean of 3.14 which is between the “neutral” and “disagree” responses. This was followed by fear of negative evaluation, and finally, general feelings of anxiety.

Table 1
Mean and Standard Deviation of the Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language Learning Strategies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Memory</td>
<td>3.02</td>
<td>0.54</td>
</tr>
<tr>
<td>Cognitive</td>
<td>3.38</td>
<td>0.63</td>
</tr>
<tr>
<td>Compensatory</td>
<td>3.16</td>
<td>0.70</td>
</tr>
<tr>
<td>Metacognitive</td>
<td>3.55</td>
<td>0.76</td>
</tr>
<tr>
<td>Affective</td>
<td>3.10</td>
<td>0.72</td>
</tr>
<tr>
<td>Social</td>
<td>3.25</td>
<td>0.72</td>
</tr>
</tbody>
</table>
Beliefs about Language Learning
Foreign Language Aptitude 2.04 0.58
Difficulty of Language 2.42 0.50
Learning 1.49 0.50
Nature of Language Learning
Learning and Communication Strategies 3.14 0.87
Motivations and Expectations 2.96 0.87
2.84 0.75
Anxiety
Communication Apprehension
Fear of Negative Evaluation
General Feelings of Anxiety

The intercorrelations between and among the variables in the study were conducted. Expectedly, all the LLS were positively correlated with each other in the same way that BALLI and anxiety subscales were correlated positively with their respective subscales. That is, the more they used a particular strategy group another strategy group use increased. In terms of BALLI, the more students felt positive about the learning situation for instance in their foreign language aptitude, the more they also felt positive in their perceptions of the nature of language learning. Finally, as students felt communication apprehension, they experienced fear and general feeling of anxiety.

However, LLS, in general, were found to be negatively correlated with beliefs about language learning and anxiety. This means that the more the students used a particular strategy group, the less positive belief they held about language learning, and less anxiety was felt by the learners in learning the language. BALLI and anxiety subscales, on the other hand, had generally no relationship with each other, that is, there was only a pure chance relationship between the two factors.
Table 2
Regression for Oral Presentation

<table>
<thead>
<tr>
<th></th>
<th>Beta</th>
<th>SE</th>
<th>B</th>
<th>SE</th>
<th>t(285)</th>
<th>p-level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>76.69*</td>
<td>7.18*</td>
<td>10.67*</td>
<td>0.00*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Memory</td>
<td>0.04</td>
<td>0.07</td>
<td>0.76</td>
<td>1.25</td>
<td>0.60</td>
<td>0.54</td>
</tr>
<tr>
<td>Cognitive</td>
<td>0.06</td>
<td>0.10</td>
<td>0.93</td>
<td>1.50</td>
<td>0.61</td>
<td>0.53</td>
</tr>
<tr>
<td>Compensatory</td>
<td>-0.09</td>
<td>0.08</td>
<td>-1.24</td>
<td>1.01</td>
<td>-1.22</td>
<td>0.22</td>
</tr>
<tr>
<td>Metacognitive</td>
<td>-0.01</td>
<td>0.09</td>
<td>-0.16</td>
<td>1.16</td>
<td>-0.130</td>
<td>0.89</td>
</tr>
<tr>
<td>Affective</td>
<td>0.07</td>
<td>0.08</td>
<td>0.91</td>
<td>1.07</td>
<td>0.84</td>
<td>0.39</td>
</tr>
<tr>
<td>Social</td>
<td>-0.09</td>
<td>0.08</td>
<td>-1.16</td>
<td>1.12</td>
<td>-1.03</td>
<td>0.29</td>
</tr>
<tr>
<td>Aptitude</td>
<td>0.09</td>
<td>0.07</td>
<td>1.99</td>
<td>1.50</td>
<td>1.32</td>
<td>0.18</td>
</tr>
<tr>
<td>Difficulty</td>
<td>-0.08</td>
<td>0.06</td>
<td>-1.40</td>
<td>1.08</td>
<td>-1.29</td>
<td>0.19</td>
</tr>
<tr>
<td>Nature</td>
<td>-0.03</td>
<td>0.07</td>
<td>-0.59</td>
<td>1.22</td>
<td>-0.48</td>
<td>0.62</td>
</tr>
<tr>
<td>Learning</td>
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<td>0.07</td>
<td>2.29</td>
<td>1.34</td>
<td>1.70</td>
<td>0.08</td>
</tr>
<tr>
<td>Motivation</td>
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<td>0.06*</td>
<td>-2.99*</td>
<td>1.28*</td>
<td>-2.32*</td>
<td>0.02*</td>
</tr>
<tr>
<td>Apprehension</td>
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<td>0.05</td>
<td>1.10</td>
<td>0.05</td>
<td>0.95</td>
</tr>
<tr>
<td>Fear</td>
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<td>-0.00</td>
<td>1.29</td>
<td>-0.00</td>
<td>0.99</td>
</tr>
<tr>
<td>Feeling</td>
<td>0.08</td>
<td>0.11</td>
<td>1.02</td>
<td>1.32</td>
<td>0.76</td>
<td>0.44</td>
</tr>
</tbody>
</table>

Note. R = .22117770 R² = .04891958 Adjusted R² = .00219984 F(14,285) = 1.0471 p

Table 2 shows the regression results to determine which of these factors the strongest predictor of academic speaking performance was. When the first set of predictors (LLS) was entered into the analysis, not one of the factors significantly predicted the students’ oral performance. When the second set of predictors (BALLI) was then added to the first set (LLS), and even with the later inclusion of anxiety factors, it was only the motivations and expectations subscale which had a significant predicting influence on the oral performance of the participants, but this yielded a negative relationship.
Discussion

It can be observed that indirect strategies (strategies used to manage and support the learning of a language) such as metacognitive and social are in the upper range of preferred strategies of the participants. Metacognitive strategies involve planning and study management of learning while social strategies involve interaction with other people.

The preference for metacognitive strategies might be attributed to the age and educational level of the respondents, educational level being in first year college. Metacognitive strategies commonly preferred by the students include “I notice my English mistakes and use that information to help me do better” and “I have clear goals for improving my English skills”. This further supports the claim that adult learners make use of planning strategies and adjustments as they would do in learning other skills and that older learners are more efficient than the younger ones (Lightbown & Spada, 1999). Furthermore, this strengthens the belief that adult learners are more self-directed and that they recognize the importance of setting priorities (Knowles, 1976 in Hilles and Sutton, 2001). It may also be attributed to the participants’ awareness of the pressures of college life and therefore might be trying to adjust to their new environment by managing their learning. This is probably the case especially because according to Dhieb-Henia (2006) college academic life deals with English for Special Purposes (ESP) which is different from the kind of English that they dealt with in the previous academic level.

The second most preferred strategies were cognitive strategies, most students like to “watch English language TV shows spoken in English or go to movies spoken in English”, to “read for pleasure in English”, and to “write notes, messages, letters, or reports in English”. Such preference for cognitive strategies may also be due to its relationship with metacognitive strategies, as Purpura (1999, in Oxford, 2001) asserted that metacognitive strategies had a ‘significant, positive, direct effect on cognitive strategy use, providing clear evidence that metacognitive strategy use has an executive function over cognitive strategy use in task completion’ (p. 61). Furthermore, adult learners are more cognitively matured due to their knowledge,
life experiences and language learning experiences (Hermosa, 2002; Hilles & Sutton, 2001).

The third most preferred specific social strategies, on the other hand, include asking the other person to slow down or repeat if the message was not understood, and asking teachers to correct them when they talk. The learners might have preferred social strategies due to the need to belong to a group and to work with other learners and teachers, especially at the stage where establishing relationships with others is deemed important by the learners.

These results corroborate other studies (e.g. Paiva, 1997 as cited in Vidal, 2002; Vidal, 2002) which provide possible reasons for such preferences. For instance, metacognitive strategies which include planning and managing learning, cognitive strategies which involve watching English TV shows and movies suggest that students learn in spite of teacher’s methods and that most strategies are frequently used outside the classroom.

On the other hand, memory strategies were the least preferred strategy group. This might be explained by the level of the participants, as according to Oxford (2001), memory strategies are usually attributed to the strategies learners use at the beginning stage of language learning, but that once learners have developed a wide range of vocabulary and structures, automaticity then is expected. Furthermore, as this study was done in an ESL context, students at this stage already developed their proficiency to a certain extent, especially considering the amount of exposure to the English language they had.

In terms of the relationship between the variables as seen in the results of the correlations, it was expected that generally all the strategy groups were positively correlated with each other in the same way that BALLI and anxiety subscales were correlated positively with their respective subscales. That is, the more they used a particular strategy group, for example, metacognitive, another strategy group, for instance, compensatory use increased. In terms of BALLI, the more students felt positive about the learning situation, for instance, in their foreign language aptitude, the more they also felt positive in their perceptions of the nature of language learning. Finally, as students felt communication apprehension, they also experienced fear and general feeling of anxiety.
Interestingly, LLS, in general, yielded negative relationships with beliefs about language learning and anxiety. In terms of the relationship between LLS and anxiety, for example, when students used more metacognitive strategies, they had less feelings of communication apprehension, fear, and general feelings of anxiety. This is probably because metacognitive strategies deal with goal-setting, planning and monitoring of their learning, which somehow lessen their anxiety, thus, possibly making them more self-confident. One might wonder, though, why more use of metacognitive strategies indicated that they were less motivated, as the results showed, especially considering that when students are taught LLS, there is an increase in their motivation level (Nunan, 1997 in Oxford, 2001). This may be attributed to the nature of the form of assessment used in this study which was oral presentation which was equivalent to their final examination. They might not have exhibited a high level of motivation, as it might have been perceived as part of their obligations that they had to fulfill.

What is perhaps another interesting finding is the negative relationship between LLS and BALLI, that is, the more they used language learning strategies, the less positive belief about language learning the students held. This is probably because when students think that language learning is difficult, they tend to use specific strategies that enable them to cope with or meet the perceived difficulty or demand of learning a language. Thus, learners may have exerted more conscious efforts or employed specific or varied strategies in dealing with the language especially because, according to Mayer (1988, p. 11) learning strategies are ‘behaviours of a learner that are intended to influence how the learner processes information’ (in Lessard-Clouston, 1997).

With regard to the relationship between the LLS strategy groups and anxiety, there was generally a negative relationship among the variables; that is, the more specific strategies they used, the less anxiety they felt. Because LLS are specific techniques that enable learners to cope and manage their learning, there might have been an increase in their self-confidence, thus lowering their anxiety. Such finding may add to the limited literature on establishing the relationship between strategy use and anxiety.
BALLI and anxiety subscales, however, were generally found to have no relationship, and therefore, there was only pure chance relationship among the variables. This means that whether they had positive beliefs regarding language learning, such beliefs may not necessarily mean they had higher or lower anxiety levels.

In terms of which factor was deemed to be the strongest predictor as seen in the results of hierarchical multiple regression, while metacognitive strategies had been established by previous studies as “often strong predictors of L2 proficiency” (Oxford, 2001, p. 364), the results revealed that only motivations and expectations subscale had a negative relationship with oral presentation performance. This particular finding also contradicted the existing literature on motivation which generally found that motivation and positive attitude were associated with successful language learning (Lightbown & Spada, 1999).

Several implications may be drawn from such a surprising result. First, participants may have not been that motivated since the oral presentation was the students’ final examination and may have been treated as the requirement. Motivation, then, may have been context-specific i.e. they were generally motivated to learn the language or have a positive attitude toward it but may have felt negatively toward the oral presentation activity as it had been viewed as an obligation. Another possible explanation for such results may be due to the participants’ preparation for their final exam especially because the oral presentation was extemporaneous in nature, that is, ample time had been given to them to prepare, rather than an impromptu presentation. Therefore, the degree of the spontaneity of the performance was somehow lessened. Another consideration that perhaps needs to be made is that the academic speaking genre entails certain conventions and expectations and these had been made clear to the students as their respective professors discussed the nature and evaluation procedure of their final examination. Hence, students knew what to expect in the way they were going to be assessed which may have also affected not only their motivations but their expectations about the task. In terms of LLS use, participants may have been using varied strategies although such strategies may have been inappropriately used, since according to Oxford (2001), there are certain circumstances that specific strategies work best. Finally, other
variables not accounted for by this study may have played a role in their performance.

Despite the inconsistencies of the results of the present study with other studies, the present research attempts to contribute to the literature of learner characteristics, and thus provides insights to language teachers. The importance of learner factors such as language learning strategies, learning beliefs, and anxiety has been stressed and currently reflected in a number of SLA research (e.g. Oxford, 2001; Hermosa, 2002; Patsy & Lightbown, 1999). Such focus on these learner characteristics will further contribute to the understanding of the learners’ perspective which could then be translated to teaching perspective.

Implications for pedagogical practices, teacher characteristics, and assessment and future studies can also be drawn from the present study. First, it is suggested that learner strategy training be incorporated in language instruction as the assumption held is that strategies used by proficient language learners can be taught to struggling learners. Moreover, it has been established in the SLA research that there have positive effects of strategy training (Vidal, 2002) and specifically, on speaking proficiency (Oxford, 2001). Another implication is that aside from making such strategies available to students through strategy training, they should also be taught when a particular strategy is more useful in a particular situation. It has also been found that strategy instruction could yield to higher level of motivation (Nunan, 1997 in Oxford, 2001).

Second, it is also recommended that teachers create a positive atmosphere for learners. While learners have already formed their attitudes or perceptions about language learning, teachers play a significant role in creating conditions for them to develop a positive attitude towards language learning. These conditions can be achieved through choice of materials and tasks, constructive feedback, and assessment. Moreover, a positive learning environment further motivates learners and lowers their anxiety level. This is because according to Krashen (1982 in Lightbown & Spada, 1999), affective factors such as attitudes and motives can affect language acquisition; that is, when students have high affective filter or feel negatively, they may ‘filter out’ the input, making acquisition difficult, but when they feel relaxed and motivated, acquisition becomes easier.
Third, an implication for task design or assessment tool may be drawn. For example, Oxford (2001) noted that strategy use works well if the “strategy relates well to the L2 task at hand” (362). In this study, for instance, social strategies may work best in public speaking as it entails practicing the language with other learners. Tasks also can heighten students’ motivation and lessen their anxiety when tasks are deemed to be interesting and challenging which may have not necessarily been the case in the task used in this study.

In terms of future studies to be made, it is recommended that other learner variables not accounted for by this study such as learning styles, age, self-perception and their relationships with each other be considered. Moreover, another public speaking activity can be used to gauge the learners’ performance (e.g. debates or impromptu speech). Finally, development of a reliable instrument in assessing performance-based task needs to be considered.

References


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Beliefs about Reading, Metacognitive Reading Strategies and Text Comprehension among College Students in a Private University

Clarisse Anne P. Ilustre
goFLUENT Philippines

Abstract
This paper aims to explore whether metacognitive reading strategies or beliefs about reading is a better predictor of text comprehension. 226 Filipino college students in a private university were asked to accomplish a Reading Beliefs Inventory (RBI) (Kara-Soteriou, 2007) and the Survey of Reading Strategies Inventory (SORS) (Mokhtari & Sheorey, 2002), and then answer a researcher-made reading comprehension test. Results showed that among the three subscales of metacognitive reading strategies, only problem solving strategies correlated positively with text comprehension, with those students who reported to be using this strategy obtaining relatively higher scores in the reading tasks. The findings also show that active beliefs, and not passive beliefs about reading, were positively correlated with text comprehension. Moreover, the results suggest that, over the effects of active views about reading, problem solving reading strategies contributed to text understanding.

Keywords: reading comprehension, metacognitive reading strategies, beliefs about reading

Introduction

Literacy is a crucial issue in almost every country’s educational system. While most studies have attempted to focus on elementary school literacy, adolescent literacy must also be given attention because the content that they learn increases and so, literacy demands also surge (Snow & Biancarosa, 2003). Compared to the traditional view of reading under which a reader simply draws information from the material, the current view describes a reader as an active one - extracting information from more than one text and then synthesizing and making a representation of the text’s message (McKeown, Beck, Sinatra, & Loxterman, 1992).

Both linguists and cognitive psychologists have taken the liberty of identifying cognitive and affective factors that affect the
reading process. They have emphasized the role of cognitive processes in reading complex materials and the importance of readers’ word recognition skills, vocabulary, and critical thinking (Chall and Jacobs, 2003).

The National Reading Panel (2000) articulated three important themes in the field of reading. Firstly, reading involves complex cognitive processes where both vocabulary development and instruction are considered paramount. Secondly, comprehension of a text is an active process which often involves the tapping of one’s prior knowledge. Thirdly, teachers should guide learners in using strategies that result in reading success.

One’s knowledge of various cognitive strategies that can be used in reading may be maximized if readers do not know when and how to use them. Reading is a multifaceted process. To explain the process of fluent reading, many researchers focus on the two main areas of metacognition namely, metacognitive knowledge and skills monitoring (Grabe, 1991).

Metacognitively skilled readers not only construct meaning; they also monitor and evaluate texts that they read (Israel, 2007). They exhibit understanding of what they read for they are conscious of their own mental processes (Gunning, 1996). Metacognition is how one thinks about his or her own thoughts (Harris & Hodges, 1995). Flavell (1979) believed in the feasibility and desirability of increasing both the quantity and quality of learners’ metacognitive knowledge through systematic instruction.

Metacognitive knowledge consists of understanding the following: (a) strategies that can be used for different tasks, called declarative knowledge (b) the conditions under which strategies can be used, or procedural knowledge; and (c) the extent to which the strategies are effective, conditional knowledge (Flavell, 1979; Lawrence, 2007). Those who are unable to select appropriate strategies and to monitor their reading have are regarded as novice or passive comprehenders (Garner, 1987, in Alfassi, 1998).

There is a continuing trend on the study of metacognition in the classroom because it is regarded as an integral part of effective reading and reading instruction (Israel, 2007). However, only a few studies have looked into readers’ metacognitive awareness of reading strategies, strategy use, and reading proficiency (Singhal, 2001).
Research in the area of verbal protocol analysis has guided researchers in their understanding of the reading processes. One of which is Pressley and Afflerbach's (1985, in Israel, 2007) groundbreaking study which explored reading behaviors of good readers. They described expert readers and highly skilled readers as those who use specific metacognitive strategies before, during, and after reading to support them in their comprehension of the texts being read. The researchers noted that the behaviors that good readers use aid them in constructing meaning while reading. These readers exhibited automaticity in making evaluations of texts and in making connections with prior knowledge and experiences. On the contrary, less able readers were described as less proficient in automatically applying metacognitive strategies.

Researchers have also been fascinated by the metacognitive strategies used by bilinguals. Second language (L2) learners of English readers are said to use metacognitive reading strategies differently from native speakers (Connor, 1984, in Knight, Padron, & Waxman, 1985) for the former processes reading texts in their first language (L1) differently from how they process in their L2.

Carrell (1989) explored the metacognitive awareness of L2 readers on the reading strategies in their L1 and L2, and their relationship between their metacognitive awareness and comprehension in both languages. Subjects were native speakers of Spanish enrolled at an ESL intensive program at a University and native speakers of English of varying proficiency levels who are studying Spanish. They found local reading strategies (e.g. grammatical structures, sound-letter, word meaning, and text details) to be negatively correlated with L1 reading performance. More proficient ESL readers were inclined to be global (i.e. used background knowledge, text gist, and textual organization) or top-down in their perceptions of effective and difficulty-causing reading strategies. Consequently, the Spanish-as-a-foreign language group with lower proficiency levels tended to be more local.

In a more recent study, Xianming (2007) studied the metacognitive awareness of 74 freshmen college students by asking them to accomplish the Metacognitive Awareness of Reading Strategies (MARS) questionnaire (Mokhtari & Reichard, 2002), conducting interviews, and through passive participant observation. Results revealed that there was a moderate use of the strategies. The
researcher identified the most commonly used ones namely, reading, encircling and underlining, translating, and knowing the questions to be answered prior to reading.

In the local context, Mante (2009) sought to identify factors that affect Filipino bilingual high school students' reading comprehension in English. The objective of her paper was twofold; first was to determine and measure the participants' dimensions of motivation to read, and second was to identify the relationships between the participants' motivation to read in English, their reading comprehension and their use of metacognitive reading strategies when reading in the same language. Results were not conclusive as to whether reading motivation or use of metacognitive reading strategies, affect reading comprehension more for there was no single predictor of the reading test scores.

Apart from metacognition, researchers in the field of reading have also acknowledged the role of readers' beliefs, not only in school achievement, but also in text comprehension (Law, Chan, & Sachs, 2008; Linderholm & Wilde, 2010).

Due to the move from the traditional/passive to a more active view of reading, (Kara-Soteriou, 2007) argued that two broad categories of beliefs about reading may be proposed namely, The More Passive Beliefs which are more or less consistent with the passive view of reading, and the More Active Beliefs which are in accordance to the active view of reading. A Reading Beliefs Inventory was used to examine fourth and sixth graders' active and passive beliefs about reading and their relation to grade level, gender, and reading comprehension. After calculating reading comprehension scores on the Degrees of Reading Power test, data revealed that students with high reading comprehension had statistically lower scores on passive beliefs than the average and low reading comprehension students.

In a study by Logan and Johnston (2009), gender differences in the relationship between reading ability, frequency of reading and attitudes and beliefs relating to reading and school were explored. Two hundred and thirty-two 10-year-old children (117 males and 115 females) completed a reading comprehension test and a questionnaire that explores frequency of reading, attitude to reading, attitude to school, competency beliefs and perceived academic support (from peers and teacher). Girls tended to have better reading
comprehension, read more frequently, and have a more positive attitude to reading and school. However, greater gender differences were found in attitudes and frequency of reading than in reading ability. They also reported that reading ability correlated with both boys’ and girls’ reading frequency and competency beliefs. Consequently, only boys’ reading ability was associated with their attitude to reading and school. Their study noted that it is in the relationship between factors, rather than solely in the factors themselves, where we can primarily find gender differences.

In the Philippine context, Aunario (2004) found a positive and moderate relationship between reading attitude scores and short story scores through the use of a validated questionnaire that is based on Mathewson’s and McKenna’s models of reading attitude acquisition. She reported a significant difference in attitudes toward reading between young and older elementary HS students, between male and female participants, and between those with high and low reading achievement in the different subscales of the said questionnaire.

These studies have highlighted three important points about reading. First is that both successful and unsuccessful bilingual readers make use of strategies when they read; successful ones, however, use better and more appropriate strategies, whereas the others tend to rely on basic and decoding strategies. Secondly, readers employ different strategies when reading L1 and L2 texts. Another is that readers’ beliefs about reading can affect reading comprehension. Finally, gender may be a factor in determining the role of one’s reading attitude to reading ability.

Most of the research reviewed was done in Western contexts, with few empirical studies looking into how beliefs about reading and metacognitive strategies awareness contribute to comprehension in the Filipino cultural context. Consequently, this research aims to identify which factor, beliefs about reading or metacognitive strategies, is a better predictor of Filipino college students’ text comprehension.

Since researchers have argued that students who hold passive beliefs about reading would tend to show limited understanding of the nature and purposes of reading, (He, 2007; Kara-Soteriou, 2007), the present author believes that active beliefs in reading will be a good predictor of text comprehension. Metacognitive awareness, on the other
hand, should also be a good predictor of reading comprehension, primarily because it leads to successful construction of meaning (Shih, 1992). However, if we look at Mante’s (2009) research involving Filipino bilingual high school students, metacognitive reading strategies were not a predictor of reading comprehension. It was therefore the aim of this exploratory study to confirm which factor would greatly influence text comprehension of college students.

Framework

Comprehension or reading strategies show how readers perceive a task, steps they take to understand and make sense of what they read (Singhal, 2001). Likewise, these strategies are used by readers to enhance reading comprehension and conquer comprehension failures. Skilled readers automatically use conceptual knowledge (content schemata), text-structure knowledge (formal schemata), and knowledge about text-processing strategies to successfully construct meaning (Shih, 1992).

In the sociocognitive framework (Vygotsky, 1978), reading takes place in a sociocultural context where cognitive conditions (i.e. knowledge of language or teaching strategies) and affective conditions (i.e. motivation to read and motivation to engage students) are imperative in influencing learners’ decisions (Kara-Soteriou, 2007). An aspect that we are especially concerned about in this paper is the affective condition which fosters self-assessment, self-awareness, and metacognition, by allowing readers to own their reading experiences (Biancarosa & Snow, 2007).

According to Kara-Soteriou (2007), some readers hold active beliefs and consider that it is possible to question the author, or that one’s reading purpose, the type of text, and the context of instruction when trying to understand a text. This is the more active beliefs category which is related to the notions of interaction and transaction. Some readers, on the other hand, exhibit a passive acceptance of the writers’ or the texts’ ideas. These passive beliefs are translated to a group of beliefs that are consistent with the transmission and translation notions of reading. Since reading is an active process, learners who are confined to passive beliefs might have difficulty comprehending texts.

The focus of this exploratory study is on how beliefs about
reading and metacognition affect reading comprehension. To comprehend a text, one should be able to use context to recognize meaning of words, find main ideas, and locate important information (Duffy, Roehler, Meloth, Vavrus, Book, Putnam, & Wesselman, 1985).

Methodology

Participants

A total of 226 subjects, all undergraduate students of De La Salle University (DLSU) ranging in age from 16-22 years old (mean age = 17.70), participated in this study. All were native speakers of Tagalog. Those who reported another Philippine language as their L1 were removed from the sample. The sample consisted of 113 males and 113 females.

Instruments

The present study utilized three research instruments (1) a Reading Beliefs Inventory (RBI) that was developed by Kara-Sotiriou (2007); (2) the Survey of Reading Strategies Inventory (SORS) (Mokhtari & Sheorey, 2002); and (3) Reading Comprehension Test.

The RBI was designed to assess whether readers have a passive or active view of reading. After using an orthogonal factor solution with principal component analysis, the questionnaire consisted of 15 items, 9 statements with respect to more passive views of reading, and 6 with respect to more active views of reading. Each item was rated based on a 5-point Likert-type scale (see Appendix A).

The Survey of Reading Strategies (SORS), on the other hand, was selected to identify bilingual students’ metacognitive awareness and use of reading strategies. It was adapted from the Metacognitive Awareness of Reading Strategies Inventory (MARI) and was designed to measure three categories: Global Reading Strategies, Problem Solving Strategies, and Support Strategies. (See Appendix B). Global Reading Strategies focus on how students monitor their reading. Problem Solving Strategies cover how learners resolve reading problems. Finally, Support Strategies include possible techniques that can help readers.

The researcher created an online survey where they can answer both questionnaires and two reading comprehension tests. Two texts
were chosen for the subjects to read – Text 1 was about the role of literature in the classroom (556 words), and Text 2 was about the shoe industry in Marikina, Philippines (734 words). According to the Flesch Reading Ease Readability Formula, Text 1 is considered difficult (47.235) and Text 2 is fairly difficult (50.49), meaning both are considered appropriate for college students. To measure reading comprehension, eight questions multiple choice questions were constructed by the researcher. The multiple choice questions criteria by Wolf (1993, in Brantmeier, 2003) was followed in order to address the limitations of the said assessment tool: (1) all items should be passage dependent; (2) some of the items should require the reader to make inferences; and (3) correct responses could not be determined by looking at the other questions. The items target both the literal and interpretative levels of reading comprehension. There are three choices, with only one correct answer and two distracters which are also plausible answers. The creation of the comprehension test was deemed critical by the researcher for the choice of assessment task affects a reader’s performance in a reading comprehension test (Brantmeier, 2003).

Analyses

The study employed quantitative research methods. The former was useful in the analysis of the factors that predict text comprehension. The Hierarchical Multiple Regression analysis with forward step was used to determine whether the components of metacognitive reading strategies and beliefs about learning significantly predict text comprehension.

Results

Table 1 presents the descriptive statistics of the variables included in the study.
Table 1
*Means and Standard Deviation of Metacognitive Reading Strategies and Beliefs about Reading*

<table>
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<th></th>
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<th>M</th>
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<td>Age</td>
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<td>Problem Solving</td>
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<td>0.54</td>
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<tr>
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</tr>
<tr>
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<td>0.56</td>
</tr>
<tr>
<td>Text Comprehension</td>
<td>226</td>
<td>9.68</td>
<td>3.06</td>
</tr>
</tbody>
</table>

The mean score of 226 participants for problem solving strategies was 3.91 and obviously scored the highest among the factors of metacognitive reading strategies. Its standard deviation is 0.54, indicating that the scores obtained were near to each other. With regard to views about reading, the 226 participants reported more active views, obtaining a mean score of 3.87 and a standard deviation of 0.56.

Zero order correlations were conducted to determine the statistical relationship of text comprehension to the factors metacognitive reading strategies and beliefs about learning (see Table 2).

As expected, there was a strong positive association between global reading strategies and problem solving strategies ($r = .71, p<.05$), and between global reading strategies and support strategies ($r = .65, p<.05$). There was also a strong positive correlation between problem solving strategies and support reading strategies ($r = .48, p<.05$). We can also see that passive belief about reading is significantly correlated with active views about reading. All subscales of metacognitive reading strategies are positively correlated with the two subscales of beliefs about learning.

A small but significant correlation was found between problem solving strategies ($r = .15, p<.05$) and text comprehension, and active views about reading ($r = .07, p<.05$) and text comprehension. On the other hand, text comprehension was found to be negatively correlated with support reading strategies ($r = -.14, p<.05$) and passive beliefs about reading ($r = -.14, p<.05$).
Stepwise multiple regression analyses were carried out to identify the variables that predicted text comprehension. Since the literature does not specify the entering sequence of the predictors into regression models, the present study used the stepwise technique rather than hierarchical methods. In order to determine which variable will be included in the analyses of text comprehension, Hierarchical Multiple Regression was run. Only four variables were significant predictors of text comprehension, namely, problem solving reading strategies, support reading strategies, passive beliefs about reading, and active beliefs about reading.
Table 3
*Stepwise multiple regressions on metacognitive reading strategies and beliefs about reading*

<table>
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<th>Model</th>
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<td>11.64</td>
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<td>Constant</td>
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<td>Support Reading Strategies</td>
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</tr>
<tr>
<td>Support Reading Strategies</td>
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<td>0.32</td>
<td>-0.15</td>
<td>-2.21</td>
<td>0.028</td>
</tr>
<tr>
<td>Active Beliefs About Reading</td>
<td>1.86</td>
<td>0.43</td>
<td>0.34</td>
<td>4.32</td>
<td>0.000</td>
</tr>
<tr>
<td>Passive Beliefs About Reading</td>
<td>-1.48</td>
<td>0.44</td>
<td>-0.27</td>
<td>-3.35</td>
<td>0.001</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>7.25</td>
<td>1.66</td>
<td>4.37</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Support Reading Strategies</td>
<td>-1.16</td>
<td>0.35</td>
<td>-0.25</td>
<td>-3.33</td>
<td>0.001</td>
</tr>
<tr>
<td>Active Beliefs About Reading</td>
<td>1.32</td>
<td>0.46</td>
<td>0.24</td>
<td>2.90</td>
<td>0.004</td>
</tr>
<tr>
<td>Passive Beliefs About Reading</td>
<td>-1.35</td>
<td>0.44</td>
<td>-0.24</td>
<td>-3.11</td>
<td>0.002</td>
</tr>
<tr>
<td>Problem Solving Reading Strategies</td>
<td>1.41</td>
<td>0.44</td>
<td>0.25</td>
<td>3.19</td>
<td>0.002</td>
</tr>
</tbody>
</table>

Note. $R^2 = .02$ for Step 1; $\Delta R^2 = .05$ for Step 2; $\Delta R^2 = .09$ for Step 3; $\Delta R^2 = .13$ for Step 4

It can be gleaned from Table 3 that the model that emerged as the most significant is Model 4 [adjusted $R^2=0.13$; $F(221, 225) = 9.196$, $p < .00$], with four predictors accounting for 14.3% of the variance.
The strongest predictors of text comprehension in this model are problem solving strategies [$\beta = .25$, $SE = .44$, $t = 3.19$, $p < .00$, followed by active beliefs about reading [$\beta = .24$, $SE = .46$, $t = 2.90$, $p < .00$].

Discussion

The present study investigated the relations between metacognitive reading strategies, beliefs about reading, and text comprehension. In particular, it aimed to determine which variable will be a better predictor of college students’ overall comprehension. The findings somehow support the researcher’s hypothesis, for only problem solving strategies correlated positively with text comprehension, with those students who reported to be using this strategy obtaining higher scores in the reading tasks. The findings also show that active beliefs, and not passive beliefs about reading, were positively correlated with text comprehension. In addition, the results suggest that, over the effects of active views about reading, problem solving reading strategies contributed to text understanding.

These findings suggest that perhaps, the metacognitive knowledge of the participants in the study is limited to declarative knowledge only. In other words, they reported what skills they knew and which were taught to them, but have failed to incorporate the strategies in order to address problems they encountered during the reading task.

The present study’s findings did not fit with Mante’s (2009) findings with Filipino high school students, where neither reading motivation nor the use of metacognitive reading strategies was a predictor of the reading test scores. Contrary to Logan and Johnston’s (2009) research where boys’ reading ability was associated with their attitude to reading, gender did not play a significant role in the present study. In addition, age only had a negative significant correlation with active beliefs about reading, suggesting that as one gets older, one’s active beliefs about reading tends to weaken.

In this study, it was also highlighted that problem solving strategies, active beliefs about reading, passive beliefs about reading, and support strategies accounted for 14.3% of the variance; but what about the 85.7%? One factor that can possibly account for the majority of the variance is prior knowledge (Spires & Donley, 1998). Constructivists describe the reader as active, extracting information
and making a representation of the text’s message to comprehend (McKeown, Beck, Sinatra, & Loxterman, 1992). Readers’ knowledge base is regarded as a “powerful, pervasive, individualistic, and modifiable” tool (Alexander & Fox, 2004, p.42) that is advantageous when undertaking a reading task. In order to comprehend, a reader with low prior knowledge will primarily depend on the information that is explicitly written on the text. (McNamara, 2001). After all, Carrell (1989) found more proficient ESL readers to be global (i.e. used background knowledge, text gist, and textual organization) or top-down in their perceptions of effective and difficulty-causing reading strategies.

The findings reported in this study report the factors that predict reading comprehension among Filipino college students in a selected university. The present research has probed which factor, whether metacognitive reading strategies or beliefs about reading, is a better predictor of text comprehension. Results showed that among the three subscales of metacognitive reading strategies, only problem solving strategies correlated positively with text comprehension, with those students who reported to be using this strategy obtaining relatively higher scores in the reading tasks. The findings also show that active beliefs, and not passive beliefs about reading, were positively correlated with text comprehension. Moreover, the results suggest that, over the effects of active views about reading, problem solving reading strategies contributed to text understanding.

In the light of the present study, it would be interesting to add other factors that may possibly contribute to reading comprehension. Another point to take into account is the age of the participants. It would also be fascinating to include subjects from other universities and subjects with a lower age range. Many possibilities were presented in this research with regard to how bilinguals process and comprehend texts in their second language. This is one proof that working with bilinguals is a difficult but enthralling enterprise (Grosjean, 1998).

References


Linderholm, T., & Wilde, A. (2010). College students' beliefs about comprehension when reading for different purposes. *Journal of College Reading and Learning, 40*(2), 7-19.


Appendix A
Reading Beliefs Inventory RBI

Directions: Listed below are statements about what people do when they read academic or school-related materials such as textbooks or library books. Five numbers follow each statement (1, 2, 3, 4, 5), and each number means the following:

• 1 means “I never or almost never do this.”
• 2 means “I do this only occasionally.”
• 3 means “I sometimes do this” (about 50% of the time).
• 4 means “I usually do this.”
• 5 means “I always or almost always do this.”

After reading each statement, circle the number (1, 2, 3, 4, or 5) that applies to you using the scale provided. Please note that there are no right or wrong answers to the statements in this inventory.

(1) I believe that it is important to predict what will happen while reading a story.

   1  2  3  4  5

(2) When I read, I should simply get the information from the reading passage.

   1  2  3  4  5

(3) For me, the main purpose of reading is to learn new information.

   1  2  3  4  5

(4) When I read, it is important to imagine how I would feel if I were the character.

   1  2  3  4  5

(5) Books can have different meanings for different people.

   1  2  3  4  5

(6) I believe that most books mean exactly what they say.

   1  2  3  4  5

(7) It is important to think about the author's reasons for writing the book.

   1  2  3  4  5

(8) When I think about a book, I should try to "stick" to what the author says.

   1  2  3  4  5
(9) When I read, I should focus on how I feel about the information as much as on what I learn.

(10) It is important to judge whether the behavior of the characters is good or bad.

(11) When I read, it is important to think about what the author says I should learn.

(12) Knowing what the characters did in a story is usually enough to understand the story.

(13) When I read, I should think about why the characters did things.

(14) When I read, it is important to think about what I want from the book.

(15) I believe that it is easier to understand a reading passage if we memorize some of the information in it.
Appendix B
The Survey of Reading Strategies Inventory (SORS)

Directions: Listed below are statements about what people do when they read *academic or school-related materials* such as textbooks or library books.

Five numbers follow each statement (1, 2, 3, 4, 5), and each number means the following:

- **1** means “I *never or almost never* do this.”
- **2** means “I do this *only occasionally.*”
- **3** means “I *sometimes* do this” (about 50% of the time).
- **4** means “I *usually* do this.”
- **5** means “I *always or almost always* do this.”

After reading each statement, *circle the number* (1, 2, 3, 4, or 5) that applies to you using the scale provided. Please note that there are *no right or wrong answers* to the statements in this inventory.

**Type Strategy Scale**

1. I have a purpose in mind when I read.
2. I take notes while reading to help me understand what I read.
3. I think about what I know to help me understand what I read.
4. I take an overall view of the text to see what it is about before reading it.
5. When text becomes difficult, I read aloud to help me understand what I read.
6. I think about whether the content of the text fits my reading purpose.
7. I read slowly but carefully to be sure I understand what I’m reading.
8. I review the text first by noting its characteristics like length and organization.
9. I try to get back on track when I lose concentration.
10. I underline or circle information in the text to help me remember it.
11. I adjust my reading speed according to what I’m reading.
12. When reading, I decide what to read closely and what to ignore.
13. I use reference materials such as (e.g. dictionary) to help me understand what I read.
14. When text becomes difficult, I pay closer attention to what I’m
reading.
15. I use tables, figures, and pictures in text to increase my understanding.
16. I stop from time to time and think about what I’m reading.
17. I use context clues to help me better understand what I’m reading.
18. I paraphrase (restate ideas in my own words) to better understand what I read.
19. I try to picture or visualize information to help remember what I read.
20. I use typographical aids like boldface and italics to identify key information.
21. I critically analyze and evaluate the information presented in the text.
22. I go back and forth in the text to find relationships among ideas in it.
23. I check my understanding when I come across new information.
24. I try to guess what the material is about when I read.
25. When text becomes difficult, I reread to increase my understanding.
26. I ask myself questions I like to have answered in the text.
27. I check to see if my guesses about the text are right or wrong.
28. When I read, I guess the meaning of unknown words or phrases.
29. When reading, I translate from English into my native language.
30. When reading, I think about information in both English and my mother tongue.

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Learning Styles: Predictors of Foreign Language Proficiency?

Lina Tao
De La Salle University- Manila

Abstract
This study predicted English achievement of Chinese students using the Productivity Environmental Preference Survey (PEPS), a broadly focused learning style instrument. Learning style refers to “the general approach...that students use in acquiring a new language”, which “provides broad direction to learning” (Oxford, 2003, p. 273). Adopting the recommendation made by Ehrman and Oxford (1995), the participants consisted of 300 university students with non-English majors aged from 18 to 23 in the second year. Foreign language achievement was measured using the students' final grades in their English course. A Chinese version of the PEPS was adopted to measure the students’ learning preferences pertaining to the following 19 modalities: noise, light, temperature, design, motivation, persistence, responsibility, structure, peer orientation, authority orientation, auditory, visual, tactile, kinesthetic, intake, evening/morning, late morning, afternoon, and mobility. The multiple regression was used to analyze whether these PEPS subscales could significantly predict English proficiency. Results showed that only Seating design (.04), Responsibility (.00), Authority orientation (.00), Kinesthetic (.01), and Mobility (.00) were significant predictors of English achievement ($p<.05$), which account for 19% of variance in English Achievement ($R^2=.19$, Adjusted $R^2=.15$).

Keywords: English achievement, Learning style

Introduction
Many studies have been carried out on ESL/EFL learners to examine different variables associated with their language achievement, such as motivation (e.g., Gao et al., 2007), anxiety (e.g., Bailey, 1983; Horwitz et al., 1986), unwillingness to communicate (e.g.,
Liu & Jackson, 2008), language attitudes (e.g., He & Li, 2009),
investment and identity (e.g., Gao et al., 2007), and learning strategies
(e.g., Chen, 2007). These variables have been shown to significantly
affect second/foreign language achievement.

However, relatively few researches have explored the effect of
learning styles on other individual difference variables and/or on
foreign language proficiency. Learning styles, a major component of
personality, refer to “the general approaches...that students use in
acquiring a new language or in learning any other subject”, which
“provide broad direction to learning” (Oxford, 2003, p.273). Learning
styles differ from learning strategies in the sense that the former
describes unintentional, or automatic individual characteristics while
the latter represents actions chosen by students that are intended to
facilitate learning (Ehrman & Oxford, 1995). There are only a few valid
and reliable instruments used to assess students’ language learning
styles (Dunn et al., 1989), out of which a very broad, comprehensive
one is the Productivity Environmental Preference Survey (PEPS),
designed by Dunn et al. (1991, in Howard, 1996). The PEPS, a 100 item
survey in seven-point Likert format, consists of the following four
areas: (1) environmental preferences (sound, light, temperature, and
design); (2) emotional preferences (motivation, persistence,
responsibility, and structure); (3) sociological preference (learning
alone or with peers); and (4) physical preferences (perception, intake,
time of day, mobility). Dunn et al. (1991, in Howard, 1996) argue that
each individual's learning style reflects his/her automatic reactions to
outside stimuli when the person learns in a particular context. As such,
the PEPS seeks to elicit information about general conditions under
which the individuals prefer to learn.

Using a self-reporting questionnaire including 50 statements,
Reid (1987) investigated the perceptual preferences of 154 native
English students (NES) and 1234 nonnative students of English (NNES)
at several American universities. Results revealed that NNES’s
learning style preferences were often significantly different from those
of NES and that NNES with different languages sometimes have
different perceptual preferences. Although most of NNES and NES
were kinesthetic, they differed in their use of tactile learning style.
Korean students showed the most visual preference, followed by Arabic and Chinese students, who strongly like auditory approach as well. Thai, Malay, and Spanish students, however, prefer auditory condition while Japanese were the least auditory. Meanwhile, the researcher found that different perceptual preferences might relate to other variables such as sex, length of time in the United States, length of time studying English in the U. S., field of study, level of education, TOEFL score, and age, and that change in NNES’s preferences would keep pace with changes in academic environment and experience.

Several studies have related isolated dimensions of learning styles to language achievement. For instance, Oxford et al. (1993) focused on a group of 107 students from 8 high schools in Alabama, Mississippi, Tennessee, New Jersey, and Illinois, respectively, who learned Japanese as their foreign language through satellite television. The researchers looked into such factors that influence language achievement as the students’ motivation, learning styles (specifically, visual, auditory, and hands-on), learning strategy use, gender, previous language learning experience, and course level. Four instruments were used: the Japanese Learning Survey (JLS), the Strategy Inventory for Japanese Language Learning by Satellite (SZJALL), the Japanese Language Achievement Test (JLAT), and the Learning Channel Preference Checklist (LCPC). Results indicated that motivation and learning strategy were the most influential determiner of achievement. Visual learning styles might be more prevalent in the satellite instruction sample than auditory or hands-on styles since visual students significantly outperformed auditory and tactile/kinesthetic students.

The studies conducted by Ehrman and Oxford (1990; 1995) might be the most influential researches investigating the relationship between isolated learning styles and foreign language achievement. Employing the Myers-Briggs Type Indicator (MBTI) and the Strategy Inventory for Language Learning (SILL), Ehrman and Oxford (1990) examined language learning styles and strategies of 20 students from the Foreign Service Institute (FSI) in an intensive foreign language training setting. Results suggested that introverts, feelers, perceivers and intuitive seemed to advance extroverts, thinkers, judgers, and
sensing students in language learning in the classroom, evidenced by their higher average grades than the latter. Thinkers, judgers, and sensing students, all of whom were more detail- and structure-oriented than their opposites, preferred a large number of identifiable, specific strategies instead of the smaller number of more sweeping strategies exploited by feelers, perceivers, and intuitive.

Ehrman and Oxford (1995), in their study of connecting a variety of variables with proficiency in speaking and reading, included 855 highly educated FSI adults in intensive foreign language training classrooms at the U.S Department of State. Independent variables included were tested cognitive aptitude, learning strategies, learning styles, personality, motivation, and anxiety. Accordingly, ten instrument served to satisfy the requirement of this study: Affective Survey, the Hartmann Boundary Questionnaire (HBQ), the National Association of Secondary Schools Principles’ Learning Style Profile (LSP), the Myers-Briggs Type Indicator (MBTI), the Type Differentiation Indicator (TDI), the Modern Language Aptitude Test (MLAT), Strategy Inventory for Language Learning (SILL), Measures of Student Language Proficiency, Faculty Rating Questionnaire, and Self-report as an Issue. Ehrman and Oxford found that cognitive inflexibility, age, less education, no previous language learning experience, certain kinds of anxiety, thick ego boundaries, compliance, and preference for MBTI sensing might impose negative effect on the success of speaking and reading. On the other hand, despite the fact that language learning success at FSI strongly correlated with cognitive aptitude, several learning styles did correlate at low levels with end-of-training speaking and reading proficiency, albeit not significant. First, FSI students with thin ego boundaries seemed to achieve higher scores in reading and speaking. Then, intuition correlated at low levels with reading and speaking proficiency. However, the researchers recommended replicating the study particularly with university students because of the self-selective sample of FSI students.

Until now, very few empirical studies have examined the relationships between a combination of learning styles and foreign language achievement. Thus, adopting the recommendation made by
Ehrman and Oxford (1995), this study intends to use a broadly focused learning style instrument --- the PEPS to identify a combination of learning styles that might be correlated with English achievement of Chinese university students with non-English majors. It was hypothesized that the overall relationship of the language learning styles and the Chinese student’s English achievement would be positive. It is felt that the findings of this study would present teachers a full picture of the learning style distributions of Chinese EFL non-majors and help the students to understand and compensate for their own less preferred styles.

Specifically, the present study attempts to answer the following two questions:

1. What are the learning style distributions of these Chinese English students?
2. Which among the learning styles could best predict English achievement of these students?

**Methodology**

**Participants**

The participants consisted of 300 non-English major students aged from 18 to 23 in the second year at a Chinese university. Thirty-two percent of the sample was female. These students were from the colleges of Engineering, Computer, and Economy and Trade. These students were required to take the English language course in their first and second years as part of a degree program. In addition, all the participants had studied a foreign language formally in high school and a majority of them (99%) had never left China. Their mother tongue is Chinese Mandarin while their foreign language is English. Approximately 99.3% of the students had immediate family members whose native language was not English. These criteria were determined through demographic questions in the instruments.
Instrument

Two instruments were used: a Chinese version of the Productivity Environmental Preference Survey (PEPS) and the students’ final English grades. The PEPS is a comprehensive approach to the identification of how the students learn best in the following four domains: (1) environment (i.e. sound, temperature, light, and seating design); (2) emotionality (e.g. motivation, responsibility, persistence, and the need for either structure or flexibility); (3) sociological preferences (i.e. learning alone or with peers); and (4) physical needs (e.g. perceptual preference(s), time of day, intake, and mobility). Specifically, the PEPS (for the 100 items, see Appendix A and for the item combination of the 19 modalities, see Appendix B) measures individuals’ preferences pertaining to the following 19 modalities: noise, light, temperature, design, motivation, persistence, responsibility, structure, peer orientation, authority orientation, auditory, visual, tactile, kinesthetic, intake, evening/morning, late morning, afternoon, and mobility.

Performance of each modality (each subscale) is expressed in standard score units, ranging from 20 points to 80 points ($M=50$, $SD=10$) in accordance with the seven-point Likert scale, ranging from strongly disagree to strongly agree. Strong preferences have scores that are 40 or lower or 60 or higher while scores between 40 and 60 indicate no preference. Thus, for example, a high score on the visual subscale (i.e. 60 or more) indicates that the individual strongly prefer learning language via the visual approach, whereas a low score (i.e. 40 or less) shows strong preference to learn language not via the visual mode. Based on a 504-person sample, the average reliabilities of the PEPS is .75, with the reliability of its subscales being shown as follows: sound (.86), light (.91), warmth (.86), formal design (.76), motivated/unmotivated (.65), persistent (.63), responsible (.76), structure (.71), learning alone/peer oriented (.86), authority-oriented learner (.48), auditory preferences (.81), visual preferences (.71), tactile preferences (.33), kinesthetic preferences (.67), requires intake (.88), evening/morning (.87), late morning (.84), afternoon (.88), and needs mobility (.83) (Price, 1996, in Islam, 2007). The internal consistency
reliability of the PEPS is .71, based on a 117-person stratified random sample (Howard, 1996). In Howard’s (1996) study, a panel of experts reported the content validity of the instrument.

A Chinese version of the Productivity Environmental Preference Survey (PEPS) was used by Islam (2007) where the PEPS was translated into Chinese by a professional translator through all necessary steps (i.e. back translation, synonym substitution, and proof reading). This study modified this Chinese version by changing its Likert scale from six-point to seven-point and specifying its context as learning English. Thus, this resulting Chinese version of the PEPS ensured, on the one hand, that Chinese students could fully understand the 100 items, and on the other, that the seven-point Likert scale would be consistent with the standard score units, ranging from 20 points to 80 points ($SD=10$, thus seven intervals).

Foreign language achievement was measured using the students' final grades in their English course (the full grade is 100 points) because final course grades are by far the most common measure of foreign language achievement in Chinese universities. As all the non-major English students were taught by a same English teacher using the same textbooks and tested by the same test paper, there’s no need to consider the differences in teacher characteristics (e.g. effectiveness, experience, motivation, and testing and scoring standards).

Procedure

Permission was asked to the colleges of Engineering, Computer, and Economy and Trade at this university for the administration of the PEPS. After making a time schedule, the questionnaire was sent to the three colleges’ counselors through email. The counselors helped make 300 copies of the questionnaire and administered the PEPS. All the students agreed to participate in the study before the distribution of the PEPS questionnaire.

During the completion of the questionnaire, the students stayed in several quiet classrooms to avoid distractions and the counselors offered some necessary help to them by explaining the instructions on
the questionnaire and asking them to provide the demographic information first. After that, the students spent 20-30 minutes to finish the 100 items in the PEPS questionnaire. The three counselors entered the questionnaire data into an Excel file and offered me these students' final grades in their English course in Excel file format too, then mailed them back to me.

Data Analysis

The PEPS results of the participants were computed on the basis of the 19 modalities. For each modality, the score that is 40 or lower or 60 or higher suggests the preference for this style while the score between 40 and 60 indicates no preference.

Descriptive statistics were calculated for the PEPS distributions of the students to answer the first research question. To examine the relationship between learning styles and foreign language achievement (the second question), the statistical procedure of multiple regression was adopted, which uses scores on the 19 subscales of the PEPS to predict scores on English achievement. The contribution of the 19 modalities was determined by employing Cohen's (1988, in Onwuegbuzie et al., 2008) effect criteria for multiple regression models in the behavioral sciences. That is, $R^2$ values between 2 and 12.99% suggest small effect sizes, values between 13 and 25.99% indicate medium sizes, and values of 26% and greater suggest large effect sizes.

Results

The distribution of the 19 learning styles (light, temperature, design, motivation, persistence, responsibility, structure, peer orientation, authority orientation, auditory, visual, tactile, kinesthetic, intake, evening-morning, late morning, afternoon, and mobility), and the English achievement grades was computed. Table 1 shows the numbers, the means, the percentages (in terms of the means), the minimum and maximum scores, and the standard deviation distribution of all factors.
Table 1

Descriptive Statistics for the PEPS and English Achievement Grade

<table>
<thead>
<tr>
<th>Factor</th>
<th>N</th>
<th>M</th>
<th>P</th>
<th>Minimum</th>
<th>Maximum</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Achievement</td>
<td>300</td>
<td>61.16</td>
<td>63.67%</td>
<td>19</td>
<td>94</td>
<td>10.99</td>
</tr>
<tr>
<td>PEPS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) Sound</td>
<td>300</td>
<td>39.37</td>
<td>51%</td>
<td>20</td>
<td>55</td>
<td>8.69</td>
</tr>
<tr>
<td>2) Light</td>
<td>300</td>
<td>65.66</td>
<td>77.67%</td>
<td>45</td>
<td>80</td>
<td>9.38</td>
</tr>
<tr>
<td>3) Temperature</td>
<td>300</td>
<td>50.54</td>
<td>50%</td>
<td>20</td>
<td>80</td>
<td>15.07</td>
</tr>
<tr>
<td>4) Seating design</td>
<td>300</td>
<td>58.51</td>
<td>55.33%</td>
<td>44</td>
<td>80</td>
<td>9.45</td>
</tr>
<tr>
<td>5) Motivation</td>
<td>300</td>
<td>67.57</td>
<td>86.67%</td>
<td>40</td>
<td>80</td>
<td>8.04</td>
</tr>
<tr>
<td>6) Persistence</td>
<td>300</td>
<td>66.90</td>
<td>94.33%</td>
<td>53</td>
<td>78</td>
<td>5.59</td>
</tr>
<tr>
<td>7) Responsibility</td>
<td>300</td>
<td>58.97</td>
<td>52.33%</td>
<td>42</td>
<td>80</td>
<td>8.45</td>
</tr>
<tr>
<td>8) Structure</td>
<td>300</td>
<td>60.73</td>
<td>63.66%</td>
<td>32</td>
<td>78</td>
<td>8.30</td>
</tr>
<tr>
<td>9) Peer orientation</td>
<td>300</td>
<td>40.22</td>
<td>50.67%</td>
<td>26</td>
<td>60</td>
<td>8.19</td>
</tr>
<tr>
<td>10) Authority orientation</td>
<td>300</td>
<td>60.01</td>
<td>52.67%</td>
<td>42</td>
<td>76</td>
<td>7.89</td>
</tr>
<tr>
<td>11) Auditory</td>
<td>300</td>
<td>61.73</td>
<td>59.67%</td>
<td>45</td>
<td>78</td>
<td>7.69</td>
</tr>
<tr>
<td>12) Visual</td>
<td>300</td>
<td>68.26</td>
<td>93.33%</td>
<td>53</td>
<td>79</td>
<td>5.70</td>
</tr>
<tr>
<td>13) Tactile</td>
<td>300</td>
<td>62.92</td>
<td>65.67%</td>
<td>40</td>
<td>77</td>
<td>8.10</td>
</tr>
<tr>
<td>14) Kinesthetic</td>
<td>300</td>
<td>50.57</td>
<td>81%</td>
<td>40</td>
<td>80</td>
<td>8.29</td>
</tr>
<tr>
<td>15) Intake</td>
<td>300</td>
<td>40.19</td>
<td>50.33%</td>
<td>20</td>
<td>58</td>
<td>9.70</td>
</tr>
<tr>
<td>16) Evening-Morning</td>
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<td>53%</td>
<td>30</td>
<td>73</td>
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<td>80</td>
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<tr>
<td>18) Afternoon</td>
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<td>50</td>
<td>74</td>
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Note: The total score for English Achievement is 100. The score for the PEPS ranges from 20 to 80 with a 7-point scale.

The mean of Chinese non-English major college students in English Achievement Grade is 61.16 showing their pass or average English proficiency because the pass level in English course in China is 60. The mean scores in the PEPS modalities range from 39.37 to 68.26, suggesting a wide spread as evidenced by the standard deviations especially for Temperature (15.07) and Late morning (13.26).

The students with the percentage of 94.33%, 93.33%, 86.67%, 77.67%, 65.67%, 64%, 63.66%, 59.67%, 52.67% in turn (arranged in descending order) have the preference of condition of Persistence (mean=66.90), Visual (mean=68.26), Motivation (mean=67.57), Light (mean=65.66), Tactile (mean=62.92), Afternoon (mean=61.88),
Structure (mean=60.73), Auditory (mean=61.73), Authority Orientation (mean=60.01), respectively. In contrast, 51% of the students prefer not the Sound condition in English learning, as indicated by the mean of 39.37.

For English Achievement, the minimum score is 19 and the maximum is 94, such large range of scores producing a considerable standard deviation (10.99). Furthermore, the 19 modalities of the PEPS display the full score range from 20 to 80 with the former occurring in Sound while the latter in Light, Temperature, Seating design, Motivation, Responsibility, Kinesthetic, and Late morning. Moreover, the relationship of the 19 modalities of the PEPS and the English Achievement grades were determined using the Pearson r. Multivariate correlation was used to establish the correlation matrix of these factors as shown in Table 2.
Table 2
Correlation Matrix of the PEPS and English Achievement Grade

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* $p<.05$

** $p<.01$
As can be seen from Table 2, the six modalities: Seating design (.18), Persistence (.16), Responsibility (.36), Authority orientation (.36), Kinesthetic (.25), Mobility (.47) are significantly related to the English Achievement Grades. The magnitudes of all the six subscales are positive with marked (.40-.59) to negligible (.00-.19) strengths, indicating that when they increase, the English Achievement grades increase too. However, Mobility presents the substantial relationship with English Achievement, followed by Responsibility, Authority orientation, and Kinesthetic.

As far as the correlation among the 19 subscales is concerned, it is worthwhile to note that Mobility is associated with Responsibility (.20) and Authority orientation (.33) while Intake might correlated with Late morning (.38) though both to a low degree. Temperature has a negative relationship with Afternoon with a weak coefficient value (-.20) whereas Kinesthetic to Evening-Morning (-.22) reveals the same property.

The statistical technique, multiple regression, hypothesizes that there is a linear relationship between the independent variables (the 19 modalities in the PEPS) and the dependent variable (English Achievement). Thus, multiple regression was used to determine the predictive significance of the 19 subscales of the PEPS and a proportion of the variance in English Achievement in a significant level. In the multiple regression analysis, the 19 factors functions as predictors of English Achievement and the contributions of them were then assessed. The predictors are considered significant if the p-value is less than .05.

Table 3 displays the multiple regression model of the PEPS as predictors of English Achievement.

In this model, Seating design (.04), Responsibility (.00), Authority orientation (.00), Kinesthetic (.01), and Mobility (.00) are significant predictors (p<.05) and the remaining are not. The data accounts for 19% of variance in English Achievement ($R^2 = .19$), suggesting a moderate effect according to Cohen's (1988, in Onwuegbuzie et al., 2008) effect criteria. The five subscales, namely Seating design, Responsibility, Authority orientation, Kinesthetic, and Mobility are all positively related to English Achievement, increasing by 0.10, 0.24, 0.19, 0.13, and 0.32 for every point in English Achievement, respectively. The effect of Seating design, Responsibility, Authority
orientation, Kinesthetic, and Mobility to English Achievement is also significant, $t (300)=2.10, p<.05$, $t (300)=4.80, p<.05$, $t (300)=3.75, p<.05$, $t (300)=2.51, p<.05$, and $t (300)=6.29, p<.05$, separately.

Table 3
*Multiple Regression Model of the PEPS as Predictors of English Achievement*

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<th>SE of Beta</th>
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*p<.05

Note: $R=.43$, $R^2=.19$, Adjusted $R^2=.15$, SE=8.86

**Discussion**

Descriptive statistic analysis shows that ten subscales of the PEPS have their respective mean score (above 60) indicating preference: Visual, Motivation, Persistence, Light, Tactile, Afternoon, Auditory, Structure, Authority Orientation, and Sound (arranged in
descending order of the mean). The students preferring Visual and Auditory modes confirms Reid’s (1986) argument that Chinese students strongly liked visual and auditory approach to learn. The preference of Afternoon, Structure, and Authority orientation provides support for the study of Harrelson et al. (1998) that the athletic training students tended to favor structured learning and the presence of authority figures, and male students preferred learning in the afternoon. Noteworthy is that English course in this Chinese university is mainly instructed in the morning while the students being receptive to new information occurs in the afternoon, as the present study shows. Thus, it is important for the school administrator to keep in mind the students’ effective teachable moment and reconsider the appropriate time schedule.

Based on the multiple regression model, it’s found that Seating design, Responsibility, Authority orientation, Kinesthetic, and Mobility have a stronger effect than other modalities on English achievement of these Chinese students with non-English majors, which account for 19% of variance in English Achievement. In other words, at least in this study, Chinese higher achievers in English class appear to like formal classroom design and the kinesthetic mode. They prefer more mobility for English learning and are more responsible in completing English tasks. The moderate proportion (19%) suggests that the learning styles may not be strong predictors of English achievement of these Chinese students. This is in accordance with the finding of Ehrman and Oxford (2005) that learning styles were only weakly or indirectly related to foreign language proficiency.

The result of this study concerning kinesthetic preference runs parallel to the studies of Reid (1987), who suggested that most American university students preferred kinesthetic learning, and Felder and Henriques (1995), who reported that sensory modes (e.g. physical sensations) were preferred by kinesthetically oriented students to receive information. These students tended to be methodical, relied on memorization, and followed rules and standard procedures. The use of memorization and rule following by the students may indicate a cultural habit indicated by Swden (2005) that Chinese students “faithfully copy and reproduce” (p. 227) what their authorities (e.g. teachers or textbooks) say and take it “as transmission, before any independence of mind or creativity in a field can be
expected” (Cortazzi & Jin, 1997, p. 78, in Sowden, 2005, p. 227). This also counts for why the students in this study are authority-oriented. However, such predictive power of kinesthetic found contrasts with the result of Harrelson et al. (1998) that the athletic students did not have a kinesthetic, which clashed with the idea that students in the medical and allied health fields prefer hands-on learning. This led Harrelson et al. to suggest that a more stringent definition of kinesthetic and tactile activities was needed in the PEPS, which could explain the discrepancy.

Responsibility and formal seating functioning as predictors could possibly be attributed to Chinese culture and educational system. In Chinese collectivism culture, the students from childhood are educated to be responsible for the family, group, and society, and there’s no seat choice in the English classroom at the Chinese university as all the seats are arranged already when the students enter the class. Thus, they are accustomed to this kind of atmosphere.

English major and level of the participants may help explain the modest proportion of the variance. In the present study, the majority of the participants are not very interested in English (reflected by the English teacher), as compared to those majoring English in other studies. On the other hand, they have relatively limited knowledge and skills in English, as evidenced by the English Achievement mean grade, 61.16. Another reason might be that the questionnaire distributed may need more carefulness and more guidance since the 100 items set are sometimes positive and sometimes negative.

That only a modest proportion of the variance in foreign language achievement has emerged may be accounted for by the fact that learning styles do not contain information about factors that are related to foreign language proficiency, such as anxiety (e.g., Horwitz et al., 1986). To maximize the effect of learning styles on English achievement, a possible way is through their relationship with learning strategies, as Ehrman and Oxford (1990, 1995) show. That is, learning styles may determine, to some extent, students’ choice of learning strategies, which, in turn, may modulate levels of foreign language achievement. Thus, future research should continue to investigate the relationship among learning styles, learning strategies, and foreign language proficiency at the college level. It is also reasonable to assume that learning styles, precursors of attitudes
toward the learning environment, may affect the motivation of the learner. The finding that the modality, motivation, appears to have negative relationship with responsibility in the multivariate correlation analysis suggests exploring the interaction in the context of Gardner's socio-educational model, where motivation has repeatedly been found to strongly affect foreign language achievement (Gao et al., 2007).

Overall, there is great diversity in learning styles among the non-English major second-year students, despite of the four subscales of the PEPS as predictors found. This could produce implications for general teaching and learning and English teaching and learning in China. It’s hypothesized that learning style can be expressed very closely in the form of teaching style when an educator teaches (Harrelson et al. 1998). In reality there exists the phenomenon that certain dominant teaching style might not match students’ preferred style. As a result, their learning becomes worse. In other words, it’s not tolerable for educators to hope to satisfy all students if they employ only one teaching style. Therefore, it is very important for educators not only to be aware of the diversity of their students but to correspond to their own learning styles, i.e. their teaching style.

This enables the educators to encompass all possible instructional methods suitable for all groups of students (e.g., low vs. middle vs. high achievers, peer-oriented vs. non peer-oriented, authority-oriented vs. non authority-oriented), not just for one group. For example, the likelihood that the Chinese high achievers prefer kinesthetic learning could encourage Chinese educators to consider whether the curriculum and their teaching style accommodate non-kinesthetic learners. Keeping in mind the non-kinesthetic students’ individual advantages can affect them effectively. On the other hand, using role playing, discussion, and simulation aside from traditional teaching methods for the educators might enhance the kinesthetic experience of the non-kinesthetic students.

Moreover, it is also necessary and critical to expose students to a variety of teaching methods appropriate for all learning styles so as to make them to further develop those learning areas where they are not as strong. For instance, students learning alone can become more peer-oriented by demonstrating examples or models set by their classmates who prefer learning through peer orientation. Furthermore,
having learning styles of high achievers in mind may help low achievers understand and compensate for their own less preferred styles. Importantly, students and educators have to know that students should have experience of each of the learning styles in order to grow to be more balanced or flexible learners.

As the learning situation may influence learners' reports of their learning styles (Ehrman, 1996), the PEPS, a global learning style instrument, may not elicit enough subtle responses. Skehan's (1991, p. 285) suggestion “to go beyond questionnaires” to adopt “more open-ended and ethnographic techniques” might be recommended. In this connection, in-depth interviews like those conducted by Ehrman (1996) may illustrate more clearly the students’ learning style differences associated with foreign language achievement. The present study is limited to the college sophomores with non-English majors, so research with participants at more advanced levels might yield more significant results. Future research could also examine its interaction with other personality variables to determine foreign language achievement.

References


Language Annals, 26, 359-371.

Appendix A
Productivity Environmental Preference Survey (PEPS)

Instructions:
The purpose of this survey is to identify adult’s individual productivity and learning style preference. This instrument can be an important and useful first step toward analyzing the conditions under which an adult is most likely to produce, achieve, create, solve problem, make decisions or learn.
Please give your immediate reaction to each question by putting a circle in the given box according to your answer. (1: strongly disagree; 2: slightly disagree; 3: disagree; 4 neutral; 5: agree; 6: slightly agree; 7 strongly agree.

<table>
<thead>
<tr>
<th>Items</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I prefer studying in bright light.</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>2. I like to study alone.</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>3. It is easy for me to concentrate late at night.</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>4. I like to draw or use diagrams when I study.</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>5. I often have to be reminded to complete certain tasks or assignments.</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>6. The one job I like doing best, I like to do with an expert in the field.</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>7. I can think better lying down than sitting.</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>8. I prefer cool temperatures when I need to concentrate.</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td>---</td>
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</tr>
<tr>
<td>9. I can block out noise or sound when I study.</td>
<td>1</td>
</tr>
<tr>
<td>10. People keep reminding me to do things</td>
<td>1</td>
</tr>
<tr>
<td>11. It is difficult for me to concentrate when I am warm.</td>
<td>1</td>
</tr>
<tr>
<td>12. The job I like doing best, I do with two or more people.</td>
<td>1</td>
</tr>
<tr>
<td>13. I prefer to study or read when the lights are shaded.</td>
<td>1</td>
</tr>
<tr>
<td>14. When I concentrate I like to sit on a soft chair or couch.</td>
<td>1</td>
</tr>
<tr>
<td>15. I usually finish what I start.</td>
<td>1</td>
</tr>
<tr>
<td>16. The things I remember best are the things that I hear.</td>
<td>1</td>
</tr>
<tr>
<td>17. I enjoy tasks that allow me to take breaks.</td>
<td>1</td>
</tr>
<tr>
<td>18. I can study more effectively in the afternoon than in the morning.</td>
<td>1</td>
</tr>
<tr>
<td>19. I like to take “snake” when I’m concentrating.</td>
<td>1</td>
</tr>
<tr>
<td>20. When I have a lot of study to do I like to study with colleagues.</td>
<td>1</td>
</tr>
<tr>
<td>21. Noise or extraneous sound usually keeps from concentrating.</td>
<td>1</td>
</tr>
<tr>
<td>22. I often forget to do things I’ve said I would do.</td>
<td>1</td>
</tr>
<tr>
<td>23. I take lots of notes in a lecture, to help me remember.</td>
<td>1</td>
</tr>
<tr>
<td>24. I like to study or analyze an assignment with another individual.</td>
<td>1</td>
</tr>
<tr>
<td>25. I prefer cool temperatures when I’m studying.</td>
<td>1</td>
</tr>
<tr>
<td>26. The one job I like doing best, I do with several people.</td>
<td>2</td>
</tr>
<tr>
<td>27. I concentrate best in the late afternoon.</td>
<td>1</td>
</tr>
<tr>
<td>28. The things I remember best are the things that I read.</td>
<td>1</td>
</tr>
<tr>
<td>29. I usually complete tasks that I start.</td>
<td>1</td>
</tr>
</tbody>
</table>
30. I can concentrate better when I sit up rather than when I recline.  | 1 2 3 4 5 6 7
31. I like to learn or study with a person in authority.  | 1 2 3 4 5 6 7
32. I study best early in the morning.  | 1 2 3 4 5 6 7
33. I get a lot done when I study on my own.  | 1 2 3 4 5 6 7
34. When I study I turn all the lights on.  | 1 2 3 4 5 6 7
35. I prefer that others share responsibility for a task we’re doing.  | 1 2 3 4 5 6 7
36. I really enjoy television.  | 1 2 3 4 5 6 7
37. I like either a teacher or supervisor to outline tasks I’ve to complete.  | 1 2 3 4 5 6 7
38. I like to sit on straight-back chair when I concentrate.  | 1 2 3 4 5 6 7
39. I study or study best by myself.  | 1 2 3 4 5 6 7
40. I can remember things best when I study them in the evening.  | 1 2 3 4 5 6 7
41. I remember best that things I read in a book or magazine.  | 1 2 3 4 5 6 7
42. I always finish tasks that I start.  | 1 2 3 4 5 6 7
43. If I have to learn something new, I prefer to learn about it by hearing a record, tape, or lecture.  | 1 2 3 4 5 6 7
44. I am most alert in the evening.  | 1 2 3 4 5 6 7
45. The one job I like doing best, I do with a group of people.  | 1 2 3 4 5 6 7
46. I’m uncomfortable when I study or try to study in a warm room.  | 1 2 3 4 5 6 7
47. I prefer to have teachers or supervisors set deadlines for my study.  | 1 2 3 4 5 6 7
48. I like to eat while I am concentrationg.  | 1 2 3 4 5 6 7
49. I prefer completing one thing before I start something else.  | 1 2 3 4 5 6 7
50. It is difficult for me to start a new task before I finish the task I am doing.  | 1 2 3 4 5 6 7
51. I really enjoy movies.  | 1 2 3 4 5 6 7
52. I have to be reminded to do things I have  | 1 2 3 4 5 6 7
<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>53.</td>
<td>I study best when the lights are shaded.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>54.</td>
<td>I prefer that persons in authority stay away until I have completed my study.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>55.</td>
<td>I keep trying to accomplish a task even if it appears that I may not succeed.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>56.</td>
<td>I like to learn about something new by hearing a tape or a lecture.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>57.</td>
<td>I feel I am self-motivated.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>58.</td>
<td>The job I like best. I prefer doing alone.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>59.</td>
<td>Eating something would distract me when I’m studying.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>60.</td>
<td>My performance improves if I know my study will be checked.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>61.</td>
<td>I prefer to study with music playing.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>62.</td>
<td>I stay at a task until it is finished, even if I don’t like what has to be done.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>63.</td>
<td>I learn best by being directly involved in what I’m doing.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>64.</td>
<td>I always do the best I can.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>65.</td>
<td>I prefer to learn how to do a new task by actually doing it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>66.</td>
<td>I often read in dim light.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>67.</td>
<td>If I have to learn something new, I like to learn about it by reading.</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>68.</td>
<td>I prefer to learn how to do a new task by actually doing it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>69.</td>
<td>I would rather start study in the morning than in the evening.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>70.</td>
<td>I constantly change positions in my chair.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>71.</td>
<td>The things I remember best are the things that I hear.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>72.</td>
<td>I like my instructor(s) or supervisor(s) to recognize my efforts.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>73.</td>
<td>I learn better by reading than by listening to someone.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>74.</td>
<td>I get more done in the afternoon than in</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
75. I can block out most sound when I study. & 1 & 2 & 3 & 4 & 5 & 6 & 7 \\
76. I really like to build things. & 1 & 2 & 3 & 4 & 5 & 6 & 7 \\
77. I prefer to study under a shaded lamp with the rest of the room dim. & 1 & 2 & 3 & 4 & 5 & 6 & 7 \\
78. I chose to eat, drink, smoke or chew only after I finish studying. & 1 & 2 & 3 & 4 & 5 & 6 & 7 \\
79. I remember things better when I study in the evening. & 1 & 2 & 3 & 4 & 5 & 6 & 7 \\
80. If I have to learn something new, I like to learn about it by seeing a movie. & 1 & 2 & 3 & 4 & 5 & 6 & 7 \\
81. I feel good when my spouse, colleague or supervisor praises me for doing well at my job. & 1 & 2 & 3 & 4 & 5 & 6 & 7 \\
82. I prefer a cool environment when I try to study. & 1 & 2 & 3 & 4 & 5 & 6 & 7 \\
83. It’s difficult for me to block out sound (music, T.V, talking,) when I study. & 1 & 2 & 3 & 4 & 5 & 6 & 7 \\
84. I would rather learn by experience than by reading. & 1 & 2 & 3 & 4 & 5 & 6 & 7 \\
85. I like being praised for a “job well done”. & 1 & 2 & 3 & 4 & 5 & 6 & 7 \\
86. It is difficult for me to sit in one place for a long time. & 1 & 2 & 3 & 4 & 5 & 6 & 7 \\
87. I like to have something to drink when I study. & 1 & 2 & 3 & 4 & 5 & 6 & 7 \\
88. I enjoy doing experiments. & 1 & 2 & 3 & 4 & 5 & 6 & 7 \\
89. If a task becomes very difficult, I tend to lose interest in it. & 1 & 2 & 3 & 4 & 5 & 6 & 7 \\
90. I like to learn new thing. & 1 & 2 & 3 & 4 & 5 & 6 & 7 \\
91. I can sit in one place for a long time. & 1 & 2 & 3 & 4 & 5 & 6 & 7 \\
92. I can concentrate best in the evening. & 1 & 2 & 3 & 4 & 5 & 6 & 7 \\
93. I prefer to study with someone who really knows the material. & 1 & 2 & 3 & 4 & 5 & 6 & 7 \\
94. I often change my position when I study. & 1 & 2 & 3 & 4 & 5 & 6 & 7 \\
95. I would study more effectively if I could eat while I’m studying. & 1 & 2 & 3 & 4 & 5 & 6 & 7 \\
96. If I can go through each step of task I
always remember what I learn.

97. I learn better when I read the instructions than when someone tells me what to do.  

98. I only begin to feel wide awake after 10.00 A.M.  

99. I often complete unfinished study on a bed or couch where I can recline.  

100. I often wear a sweater or jacket indoors.  

Appendix B  
Item Combination of 19 Modalities  

<table>
<thead>
<tr>
<th>Modalities</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sound</td>
<td>21,83,9,75</td>
</tr>
<tr>
<td>2. Light</td>
<td>1,34, 13,53,66,77</td>
</tr>
<tr>
<td>3. Temperature</td>
<td>8,11,25,46,82,100</td>
</tr>
<tr>
<td>4. Seating design</td>
<td>30,38,7,14,99</td>
</tr>
<tr>
<td>5. Motivation</td>
<td>57,72,90,81,85</td>
</tr>
<tr>
<td>6. Persistence</td>
<td>15,29,42,49,50,55,62</td>
</tr>
<tr>
<td>7. Responsibility</td>
<td>5, 64, 10,22,52,89</td>
</tr>
<tr>
<td>8. Structure</td>
<td>37,60,68,76,96</td>
</tr>
<tr>
<td>9. Peer oriented</td>
<td>2,33,39,58,12,20,24,26,35,45</td>
</tr>
<tr>
<td>10. Authority oriented</td>
<td>6,31,47,54,93</td>
</tr>
<tr>
<td>11. Auditory</td>
<td>16,23,43,56,61,71</td>
</tr>
<tr>
<td>12. Visual</td>
<td>28,36,41,51,67,73,80,97</td>
</tr>
<tr>
<td>13. Tactile</td>
<td>4,84,88</td>
</tr>
<tr>
<td>14. Kinesthetic</td>
<td>63,65</td>
</tr>
<tr>
<td>15. Intake</td>
<td>19,48,87,95,59,87</td>
</tr>
<tr>
<td>16. Evening-Morning</td>
<td>3,32,69</td>
</tr>
<tr>
<td>17. Late morning</td>
<td>98</td>
</tr>
<tr>
<td>18. Afternoon</td>
<td>18,27,40,44,74,79,92</td>
</tr>
<tr>
<td>19. Needs modality</td>
<td>17,70,86,94,91</td>
</tr>
</tbody>
</table>
Comparison of Two Models of Foreign Language Classroom Anxiety Scale

Yuan Cao
De La Salle University, Manila, Philippines

Abstract
The present study compares the two models of foreign language classroom anxiety scale (FLCAS). According to Horwitz, Horwitz, and Cope (1986), foreign language anxiety is “as a distant complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process…also differs from general communication anxiety” (p.128). FLCAS was constructed where items reflect the characteristics of foreign language anxiety. There showed two models of FLCAS which are three factor model and four factor model. The three factor model has three domains which are communication apprehension, test anxiety, fear of negative evaluation. The four factor model has four domains which are communication apprehension, test anxiety, fear of negative evaluation, and fear of English classes. The FLCAS was administered to a sample (N=300) and the factors were confirmed using Confirmative Factor analysis (CFA). The results showed that the three factor model of FLCAS has the better fit fit ($\chi^2=2169.18$, RMSEA=.07, AIC=7.72, SBC=8.57, BCCVI=7.78).

Keywords: Foreign language classroom anxiety, communication apprehension, test anxiety, fear of negative evaluation

Introduction
Language anxiety, one of the most important affective elements in language learning, has been explored by many studies (e.g., Bailey, 1983; Horwitz, Horwitz, & Cope, 1986), especially in western countries, since the 1970s. The earlier studies were mainly concerned with the causes of language anxiety. For example, Bailey (1983), through the analysis of the diaries of eleven learners, examined the
relationship between the learners’ competitiveness and self-esteem as a potential source of learner anxiety. She found that anxiety might be the consequences of the competitive nature of L2 learning, on the one hand, and language tests and learners’ perceived relationship with their teachers, on the other. These aspects that Bailey identified were supported in subsequent studies, specifically, in Young’s (1991) study. According to Young (1991), six potential causes of language anxiety are involved in students’ language learning, which include personal and interpersonal, learner beliefs about language learning, instructor beliefs about language teaching, instructor-learner interactions, classroom procedures and language tests. As can be seen, Young (1991) identified the causes from three aspects which are the aspects of learners, teachers and instructional practice, to which Bailey’s findings also complied.

The findings of Horwitz, Horwitz and Cope (1986) might be the most influential on this aspect. The researchers investigated 225 students in beginning language classes at the University of Texas and made a unique contribution to the identification of the scope of foreign language anxiety by designing a systematic instrument – Foreign Language Classroom Anxiety Scale (FLCAS) including 33 items. This scale integrating three related components, i.e. communication apprehension, test anxiety, and fear of negative evaluation, has been reliably used by researchers to measure foreign language learners’ anxiety and examine the effect of anxiety on learning in different contexts. Furthermore, Krashen (1985) stated that high anxiety will prevent input that learners receive in the classroom from reaching the language acquisition device in his affective filter hypothesis. In addition, Horwitz (1986) asserted that language anxiety can cause students to postpone language study indefinitely or to change majors. MacIntyre and Gardner (1994) conducted a study on anxiety, involving 97 college students that learn French, concluded that compared with more relaxed learners, those with anxiety find it more difficult to express their own views and tend to underestimate their own abilities. Another finding in MacIntyre and Gardner’s (1994) study is that anxiety and learning achievement are negatively correlated in the three stages of language acquisition - input, processing and output. Moreover, there were other studies which
have been conducted to find the negative correlation between anxiety and four macro aspects in language learning, specifically in speaking and listening. For example, MacIntyre and Gardner (1991) found that speaking is by far the main agent of anxiety-arousal, and that students with high anxiety perform worse than those with low anxiety. Up to now most studies have shown a negative relationship between anxiety and language achievement. In contrast, there were some other studies which found neutral and positive relationships between anxiety and second language achievement. For example, in Bailey’s (1983) study of competitiveness and anxiety, it was found that facilitative anxiety was one of the keys to success, and closely related to competitiveness. As can be seen, the relationship between anxiety and achievement is probably not a simple linear one. It may be influenced by some other factors, such as learners’ proficiency, gender, and other influencing factors.

Regarding the correlation of anxiety with gender, Rezazadeh and Tavakoli (2009) conducted a survey to look into the relationship among gender, academic achievement, years of study, and levels of test anxiety. One hundred and ten undergraduate students (65 females and 45 males) from the University of Isfahan were involved. Results showed that in contrast to male students, female students had a higher level of test anxiety as their mean scores of test anxiety reached higher. A statistically significant negative correlation was observed between test anxiety and academic achievement and there was no meaningful relationship between test anxiety and years of study. There have been some studies to explore the relationship between anxiety and English achievement (Lei, 2004; Tang, 2005; Wang, 2003; Xue, 2005) based on Chinese context in mainland China focusing on college students.

The FLCAS (Foreign Language Classroom Anxiety Scale) designed by Horwitz et al. (1986) was widely employed by the researchers (such as Horwitz et al., 1986; Bailey, 1983; Lei, 2004; Young, 1991; Zhao, 2007; Huang, 2008) to investigate foreign language classroom anxiety. Horwitz et al. (1986) treated FL anxiety as a special phenomenon related well-known relative performance anxieties within an academic context. They are “communication apprehension, test anxiety, and fear of negative evaluation” (Horwitz
et al., 1986, p.127). The FLCAS contains 33 items related to three main types of causes of foreign language classroom anxiety: communication apprehension, test anxiety, and fear of negative evaluation. However, there were two models which were employed by researchers (Horwitz et al., 1986; Bailey, 1983; Hizwari, 2008; Zhao, 2007; Huang, 2008) investigating foreign language classroom anxiety. For example, in Huang (2008), the first model (see Figure 1) was used in assessing students’ anxiety in foreign language classroom. The model is presented as follows:

![Figure 1. Model 1 of FLCAS](image)

For example, in Huang’s (2008) study, the three factor model was used. The 33 items in this model were constructed under three domains: communication apprehension, test anxiety, and fear of negative evaluation which are consistent with the model used in Horwitz (1986). The other model, the four factor model is also employed by some researchers such as Zhao (2007). The second model (see Figure 2) was used in Zhao’s study in investigating High school students’ foreign learning anxiety. The model 2 is presented below.
Foreign Language Classroom Anxiety

Communication Apprehension
Item 1, 9, 14, 18, 24, 27, 29, 32

Test Anxiety,
Item 2, 8, 10, 19, 21

Fear of Negative Evaluation
Item 3, 7, 13, 15, 20, 23, 25, 31, 33

Anxiety of English Classes
Item 4, 5, 6, 11, 12, 16, 17, 22, 26, 28, 30

Figure 2. Model 1 of FLCAS

In the four factor model, the 33 items were reconstructed under four domains: communication apprehension, test anxiety, fear of negative evaluation, and anxiety of English classes. A new domain (anxiety of English classes) was constructed in the four factor model compared in the three factor. The above two models were both employed in the previous researches. However, the fitness of the two models is still not clear. Thus, this study aims to find out which model of FLCAS has better fitness.

Method

Subjects

A sample of 300 Chinese individuals was used, 204 males and 96 females. Their ages range from 18 to 23. At the time of this investigation, all of the subjects were college students studying engineering, information technology, economy and trade in China mainland. Students’ first language is Chinese Mandarin and foreign language is English. English is the obligatory subjects for all college students in their school from the first year to the second of college.
Instruments

A questionnaire was used in this study including two parts which are background information and the Foreign Language Classroom Anxiety Scale (FLCAS) developed by (Horwitz et al., 1986). The background information includes students’ name (optional), programme, gender, and age. This instrument is composed of thirty-three items, each of which is answered on the five-point Likert scale, range from strongly disagree to strongly agree with values 1–5 assigned to them respectively. The higher the score, the more anxiety the students have. Since the item 2, 5, 8, 11, 14, 18, 22, 28, 32 were negative the score was reversely computed. The scale has demonstrated internal reliability, achieving an alpha coefficient of .93 with all items producing significant corrected item-total scale correlations. Test-retest reliability yielded an r=.83 (p<.001) (Horwitz et al., 1986). Minor modifications were made to the instrument. For example, “foreign language” was changed to “English language”. For each individual a score was derived. The Chinese version of FLCAS was distributed to students which was adapted from Huang (2008). The Chinese version of FLCAS used in Huang (2008) showed no differences between the English and the Chinese version of the questionnaires by using the paired-samples t-test.

Procedure

The research first made arrange and asked permission to the school for the administration the FLCAS. The students involved range from the first year of college to fourth year college students’ ages 18 to 23 years old. Most importantly, the participants should agree to participate in the study because this study was done in a voluntary basis. Before distributing the questionnaire the students were given instructions and were asked to faithfully answer the questionnaire. After completing the questionnaire, the researchers thanked the participant for their time.
Data Analysis

The reliability was tested by using Cronbach’s alpha. Confirmatory Factor Analysis (CFA) consists of comparing several alternative models (as in any structural equation modeling technique – SEM) which represent alternative factor-structures of a measure. The comparison is carried out in terms of goodness-of-fit statistics and size of the factor loadings. Goodness-of-fit statistics designate a set of indices which measure the extent to which the covariance matrix predicted by the model corresponds to the observed covariance matrix in the data. There are several fit indices, each of them reflecting this correspondence from different considerations. Usually only three or four of them are reported in a goodness-of-fit statistics summary. In the present study, the factors structure was tested using CFA. The CFA can show whether each factor is significant for the measured construct. The overall fit of the measurement model was also tested. The better fitting model was determined by comparing the fit indices of the models produced using change in chi-square ($\chi^2$), Root Mean Square Error Approximation (RMSEA), Akaike Information Criterion (AIC), Schwartz Bayesian Criterion (SBC), Browne-Cudeck Cross Validation Index (BCCVI).

Results

The FLCAS contains 33 items related to three main factors of causes of foreign language classroom anxiety: communication apprehension, test anxiety, and fear of negative evaluation. In three factor model of FLCAS, the 33 items were classified under each of the new factor solution based on communication apprehension, test anxiety, and fear or negative evaluation. The first factor contains items reflecting the communication and it was labeled as communication apprehension (Horwitz et al., 1986) with 11 items which are item 1, 4, 9, 14, 15, 18, 24, 27, 29, 30, 32 (e. g., “I never feel quite sure of myself when I am speaking in my English class”). The second factor contains items indicating anxiety relating to test and is labeled as test anxiety (Horwitz et al., 1986) with 15 items which are
item 3, 5, 6, 8, 10, 11, 12, 16, 17, 20, 21, 22, 25, 26, 28 (e. g., “I worry about the consequences of failing my English class”). The third factor contains items that show students’ fear relating to the evaluation in the foreign language classroom and is labeled as fear of negative evaluation (Horwitz et al., 1986) with 7 items which are item 2, 7, 13, 19, 23, 31, 33 (e. g., “I don’t worry about making mistakes in English class”). In the four factor model of FLCAS, the 33 items were classified under each of the new factor based on communication apprehension, test anxiety, fear or negative evaluation and anxiety of English classes. The first factor is labeled communication apprehension (Horwitz et al., 1986) containing item 1, 9, 14, 18, 24, 27, 29, and 32. The second factor is labeled as test anxiety (Horwitz et al., 1986) containing item 2, 8, 10, 19, and 21. The third factor is labeled as fear of negative evaluation (Horwitz et al., 1986) containing item 3, 7, 13, 15, 20, 23, 25, 31, and 33. The forth factor is labeled as anxiety of English classes (Zhao, 2007) containing item 4, 5, 6, 11, 12, 16, 17, 22, 26, 28, 30.

In the three factor model, the factor structure showed that all the 33 items that were used as indicators for each factor were significant, p>.001. The correlations of the three latent constructs ranged from .91 to 1.00. The significant correlations with a positive direction indicate convergence of the three factors of foreign language classroom anxiety. The reliability of the items of FLCAS using Cronbach’s alpha had a .95 value indicating the responses in the 33 items have high internal consistency. In the three factor model, when the Cronbach’s alpha were determined for each factor, the responses to the items still yielded high internal consistencies .91, .89, and .88 for communication apprehension, test anxiety, and fear of negative evaluation respectively (see Figure 3).

In the four factor model, the factor structure also showed that all the 33 items that were used as indicators for each factor were significant, p>.001. The correlations of the four latent constructs ranged from .97 to 1.00. The significant correlations with a positive direction also indicate convergence of the four factors of foreign language classroom anxiety (see Figure 4).
Figure 3. Three Factor Model of FLCAS

Communication
Apprehension

Test Anxiety

Fear of Negative
Evaluation

| Item 1 | .48 | Error 1 |
| Item 4 | .36 | Error 2 |
| Item 9 | .43 | Error 3 |
| Item 14 | .46 | Error 4 |
| Item 15 | .37 | Error 5 |
| Item 18 | .37 | Error 6 |
| Item 24 | .43 | Error 7 |
| Item 27 | .45 | Error 8 |
| Item 29 | .36 | Error 9 |
| Item 30 | .52 | Error 10 |
| Item 32 | .54 | Error 11 |

| Item 3 | .38 | Error 11 |
| Item 5 | .39 | Error 12 |
| Item 6 | .32 | Error 13 |
| Item 8 | .48 | Error 14 |
| Item 10 | .46 | Error 15 |
| Item 11 | .31 | Error 16 |
| Item 12 | .28 | Error 17 |
| Item 16 | .25 | Error 18 |
| Item 17 | .11 | Error 19 |
| Item 20 | .36 | Error 20 |
| Item 21 | .34 | Error 21 |
| Item 22 | .25 | Error 22 |
| Item 25 | .40 | Error 23 |
| Item 26 | .39 | Error 24 |
| Item 28 | .33 | Error 25 |

| Item 2 | .38 | Error 26 |
| Item 7 | .18 | Error 27 |
| Item 13 | .35 | Error 28 |
| Item 19 | .16 | Error 29 |
| Item 23 | .21 | Error 30 |
| Item 31 | .48 | Error 31 |
| Item 31 | .46 | Error 32 |
Figure 4. Four Factor Model of FLCAS

Communication
Apprehension

Test Anxiety

Fear of Negative
Evaluation

Anxiety of English
Classroom

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<td>Item 22</td>
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<td>Item 26</td>
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<td>Item 28</td>
<td>.33</td>
<td>.21</td>
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</tbody>
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To prove which model of FLCAS (three factor model or four factor model of FLCAS) is better fit, the better fit model should show better fit by comparing fit indices. Table 1 shows the fit indices of the three factor model and four factor model.

Table 1
Comparison of Fit of the Two Models of FLCAS

<table>
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<tr>
<th>Model</th>
<th>χ²</th>
<th>RMSEA</th>
<th>AIC</th>
<th>SBC</th>
<th>BCCVI</th>
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<td>Three-factor Model</td>
<td>2169.18</td>
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<td>7.72</td>
<td>8.57</td>
<td>7.78</td>
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<tr>
<td>Four-factor Model</td>
<td>2211.19</td>
<td>.07</td>
<td>7.88</td>
<td>8.77</td>
<td>7.93</td>
</tr>
</tbody>
</table>

**P<.01

The best fitting model is determined by comparing the fit indices of the models produced using change in chi-square (χ²), Root Mean Square Error Approximation (RMSEA), Akaike Information Criterion (AIC), Schwartz Bayesian Criterion (SBC), Browne-Cudeck Cross Validation Index (BCCVI). These indices should show values to that indicated better fit. In comparing the two models using their fit indices, the three factor model has the best fit (χ²=2169.18, RMSEA=.07, AIC=7.72, SBC=8.57, BCCVI=7.78). The analysis of the three factor structure showed that the derived three-factor structure of FLCAS was confirmed. The adequate fit means that the solution tested fits the observations in the study. The factor structure also showed that all the 33 items that were used as indicators for each factor were significant, p>.001.

Discussion

The study was able to confirm three factor model of foreign language classroom anxiety scale (FLCAS) is composed of three domains: Communication Apprehension, Test Anxiety, Fear of Negative Evaluation. These three domains are empirically derived through factor analysis and further confirmed having the best fit for
Having confirmed the four domains explains foreign language classroom anxiety better with its exclusive characteristics. Previous studies (i.e. Zhao, 2007) investigated foreign language classroom anxiety by using the four factor model of FLCAS. However, in the present study showed that the three factor model has the better fit by comparing the fit indices of the models produced using change in chi-square ($\chi^2$), Root Mean Square Error Approximation (RMSEA), Akaike Information Criterion (AIC), Schwartz Bayesian Criterion (SBC), Browne-Cudeck Cross Validation Index (BCCVI). As can be seen, the three factor model could be considered as the better model in investigating foreign language classroom anxiety.

In the three factor model, the three domains are communication apprehension, test anxiety, fear of negative evaluation which was initially derived by Horwitz et al. (1986) and further supported by present study using CFA. Communication apprehension was termed by Horwitz et al. (1986). Communication apprehension in language learning is characterized by a reluctance to talk or shyness in communicating and is “a distinct complex of self-perception, beliefs, feelings, and behaviors...arising from the uniqueness of the language learning process” (Horwitz, et al., 1986, p.128). To cite Aida’s (2004) point, the typical behavior of communicatively apprehensive people tends to avoid and withdraw from communication. Moreover, these people are also reluctant to participant in conversations or get involved in interactions with others. In some special, or extreme cases, “students may think of cutting class to avoid anxiety situations, causing them to be left behind” (Aida, 1994). Oral communication skill mainly consists of two major components: listening and speaking, however, speaking is the most anxiety-provoking part in an foreign language learning context as stated by MacIntyre and Gardner (1991a). As Young (1990) and Daly (1991) stated, students were extremely anxious when they had to speak in a foreign language in front of their class. Examples of statement for communication apprehension are “I never feel quite sure of myself when I am speaking in my English class”or “it frightens me when I don’t understand what the teacher is saying in English”.

In the three factor model, the communication apprehension domain includes item 1, 4, 9, 14, 15, 18, 24, 27, 29, 30,
and 32. While in four factor model (e.g. Zhao, 2007), communication apprehension domain includes item 1, 9, 14, 18, 24, 27, 29, and 32. The item 4, 15, and 30 were removed to the other domain in four factor model. For example, item 4 “It frightens me when I don’t understand what the teacher is saying in English” and item 30 “I feel overwhelmed by the number of rules you have to learn to speak English” were moved to the fourth domain in four factor model, namely, Anxiety of English Classes. However, it seems that the item 4 does not belong to the domain four anxieties of English classes in the four factor model based on the definition by Horwitz et al., (1986).

Sarason (1984, in Oxford, 1999) defines test anxiety as “the tendency to become alarmed about the consequences of inadequate performance on a test or other evaluation” (p.54). Test-anxious learners habitually put impractical demands on themselves and “feel that anything less than a perfect test performance is a failure” (Horwitz et al, 1986, p.128). Young (1991b) claimed that test anxiety could affect foreign language learners with low levels of oral proficiency more than those with high levels of oral proficiency. On the other hand, it is believed that test anxiety would occur when learners had poor preformances in the previous tests or evaluation situations. From those unhappy experiences, students would develop a negative stereotype about tests or quizzes and then have irrational perceptions in evaluation situations. Test-anxious learners habitually put impractical demands on themselves and “feel that anything less than a perfect test performance is a failure” (Horwitz et al., 1986, p.128). Examples of statement for test anxiety are “I tremble when I know what I’m going to be called on in English class” or “I am usually at easy during tests in my English class”. In the three factor model, the test anxiety domain includes item 3, 5, 6, 8, 10, 11, 12, 16, 17, 20, 21, 22, 25, 26, and 28, while in four factor model, this domain includes item 2, 8, 10, 19, and 21. The item 3, 5, 6, 8, 11, 12, 16, 17, 20, 22, 25, 26, and 28 were moved to other domains in the four factor model. Take the item 3 for example, it is more reasonable to include item 3 in the domain of test anxiety based on the above discussion. In addition, confirmative factor analysis results showed that the rearrangement of the items make the less fitness of the model to foreign language classroom anxiety and the original arrangement of items in the domain has better fit.
The construct of fear of negative evaluation is defined as “apprehension about others’ evaluations, avoidance of evaluative situations, and the expectation that others would evaluate oneself negatively” (Horwitz et al., 1986, p.128). In other words, fear of negative evaluation is likely to be manifested by a student’s over concern with others’ criticism or judgments about his or her performance in foreign language classroom. Horwitz et al. (1986) suggested that the students’ fear of negative evaluation could be triggered in any social evaluative contexts, especially in a foreign language classroom where students’ performances were continually evaluated by the teacher. Many study have proposed that students were worried about speaking in public because they feared being negatively evaluated. For example, Young (1990) mentioned that most Spanish learners in her survey study emphasized that they would be more willing to participate in the speaking practice in the foreign learning classroom if they were not afraid of making mistakes and being evaluated by their peers. The same as communicatively apprehensive people, learners who fear to be negatively evaluated rarely initiate conversations and interactions actively in an foreign language classroom since they may doubt their ability to make proper impression in front of others (Gregersen et al., 2002). Examples of statement for fear of negative evaluation are “I don’t worry about making mistakes in English class” or “I keep thinking that the other students are better at languages than I am”. In the three factor model of FLCAS, items 2, 7, 13, 19, 23, 31, and 33 are included in the domain of fear of negative evaluation. Different from the three factor model, in the four factor model, different items are included in the domain of fear of negative evaluation. They are item 3, 7, 13, 15, 20, 23, 25, 31, and 33. For example, item 2 are included in the domain of fear of negative evaluation “I don’t worry about making mistakes in English class” in the three factor model, while it is included in the test anxiety domain in the four factor model. However, based on the definition by Horwitz et al., (1986), it might be more reasonable to include it in the domain of fear of negative evaluation.

The three domains confirmed in the study form the foreign language classroom anxiety. In the present study, foreign language classroom anxiety is composed of three domains which are communication apprehension, test anxiety and fear of negative
evaluation. Furthermore, three factor model has better fit by comparing fit indices. Having confirmed the construct of foreign language classroom anxiety allows other researchers to use and further test the construct to strengthen its generalizability.

References


Appendix A

Questionnaire for Chinese Students (English Version)

Dear students:

The purpose of this study is to understand the language anxiety of Chinese EFL learners. Kindly offer your precious experience and your answers are considered to be highly valuable. Your answers will also be kept confidential to others. Please honestly answer the questions according to your own situation. Thank you for filling out the questionnaire and may you have a nice day.

Graduate:

Cao Yuan
Name (optional):______ Age:____________
Programme:_________
Gender:____________
Your grade in your English course:
For the following statements, please indicate the extent to which you feel that best fits (using a mark “√”). (SD = strongly disagree; D = disagree; N = neither agree nor dis-agree; A = agree; SA = strongly agree;)

<table>
<thead>
<tr>
<th>Items</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I never feel quite sure of myself when I am speaking in my English class.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2. I don’t worry about making mistakes in English class.</td>
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<tr>
<td>3. I tremble when I know that I'm going to be called on in English class.</td>
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</tr>
<tr>
<td>4. It frightens me when I don't understand what the teacher is saying in English.</td>
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<tr>
<td>5. It wouldn't bother me at all to take more English classes.</td>
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<tr>
<td>6. During English class, I find myself thinking about things that have nothing to do with the course.</td>
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<td></td>
</tr>
</tbody>
</table>
7. I keep thinking that the other students are better at languages than I am.
8. I am usually at ease during tests in my English class.
9. I start to panic when I have to speak without preparation in English class.
10. I worry about the consequences of failing my English class.
11. I don't understand why some people get so upset over English classes.
12. In English class, I can get so nervous I forget things I know.
13. It embarrasses me to volunteer answers in my English class.
14. I would not be nervous speaking English with native speakers.
15. I get upset when I don't understand what the teacher is correcting.
16. Even if I am well prepared for English class, I feel anxious about it.
17. I often feel like not going to my English class.
18. I feel confident when I speak in English class.
19. I am afraid that my English teacher is ready to correct every mistake I make.
20. I can feel my heart pounding when I'm going to be called on in English class.
21. The more I study for an English test, the more confused I get.
22. I don't feel pressure to prepare very well for English class.
23. I always feel that the other students speak English better than I do.
24. I feel very self-conscious about speaking English in front of other students.
25. English class moves so quickly I worry about getting left behind.
26. I feel more tense and nervous in my English class.
27. I get nervous and confused when I am speaking in my English class.
28. When I'm on my way to English class, I feel very sure and relaxed.
29. I get nervous when I don't understand every word the English teacher says.
30. I feel overwhelmed by the number of rules you have to learn to speak English.
31. I am afraid that the other students will laugh at me when I speak English.
32. I would probably feel comfortable around native speakers of English.
33. I get nervous when the English teacher asks questions which I haven't prepared in advance.

The questionnaire was adapted from Horwitz et al. (1986).
Appendix B
背景资料调查问卷

亲爱的同学:

本研究的目的是调查在中国英语学习者的语言焦虑情况，并将结果作为英语教学和学习上的参考。此问卷调查纯粹作为研究之用，希望您能提的答案也将会被保密。为使本研究能顺利发展，并得到客观的结果，请您在回答问题时，务必按照真实的情况回答。此次调查问卷共有二部分，第一为学生背景资料，第二为外语焦虑量表共有 33 题，烦请详细回答，谢谢您填写这份问卷。

姓名 (可选填):__________ 　　年龄:__________
性别:__________ 　　专业:__________

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<th>选项</th>
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<th>不同意</th>
<th>中间看法</th>
<th>同意</th>
<th>非常同意</th>
</tr>
</thead>
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<tr>
<td>1.上英语课时，我对讲英语没把握。</td>
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<tr>
<td>2.上英语课时，我不担心犯错。</td>
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<tr>
<td>3.上英语课时，我知道将被老师叫到时，我会发抖。</td>
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<td>4.当我听不懂英语老师在说什么时，我会感到害怕。</td>
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<tr>
<td>5.再多上几节英语课，我也不会觉得困扰。</td>
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<tr>
<td>6.上英语课时，我会想着和课程无关的事。</td>
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</tbody>
</table>
7.我一直认为其它同学的英语比我好。
8.考英语时，我通常感到轻松自在。
9.上英语时，如果没有准备而要我讲英语我会开始惊慌。
10.我担心英语不及格。
11.我无法理解为什么有些人很烦恼上英语。
12.上英语时，我会太紧张以至于忘记我所知道的东西。
13.要我上英语课时自愿回答问题，我会觉得困窘不安。
14.我和外国人讲英语不会感到紧张。
15.当我不了解老师所订正的英语时，我会感到烦恼。
16.即使我充分准备好英语，我仍感到焦虑。
17.我常常不想上英语课。
18.我对讲英语有自信。
19.我很害怕英语老师纠正我的每一个错误。
20.当我快被老师叫到时，我觉得我听到我的心跳声。
21.我读愈多英语，我愈感到困惑。
22.如果有充分准备，英语课时我就不会感到压力。
23.我总觉得其它同学的英语都讲的比我好。
24.在同学面前讲英语，我觉得非常不自在。
25.英语课进度太快，我会担心落后。
26.我上英语比上其它科目还要紧张不安。
27.当我上课讲英语时，我会感到紧张和困惑。
28.当我快上英语课时，我觉得有信心并感轻松。
29.当我听不懂英语老师所说的每一个字时，我会紧张。
30.学英语必须学那么多的文法，压着我使我喘不过气。
31.我害怕讲英语时，其它同学会笑我。
32.在说英语的外国人旁边，我觉得轻松自在。
33.当英语老师问到我那些没有事先准备好的问题时，我会感到紧张。
English Language Learning Anxiety among Foreign Language Learners in the Philippines

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Abstract
Several researches have revealed that anxiety can hinder success in second or foreign language learning (Bailey, 1983; Horwitz, Horwitz & Cope, 1986; MacIntyre & Gardner, 1994; Young, 1991; Ohata, 2005; Pappamihiel, 2002; Williams & Andrade, 2008). It was also found that language learning difficulties could predict anxiety best in foreign language settings (Chen & Chang, 2004). Using Horowitz et al.’s 1986 Foreign Language Classroom Anxiety Scale (FLCAS) and Cohen Oxford and Chi’s 2001 Language Strategy Survey (LSS), the proposed study intends to investigate the causes of anxiety in English language learning of foreign students in the Philippines. It will also look into the different language strategies utilized by these students who may be experiencing anxieties in learning the English language. Specifically, the study would like to target foreign students studying in tertiary institutions in Manila where these students abound. Findings suggest that these type of learners used vocabulary strategy to efficiently learn the English language and to cope with their English class anxiety. It has been found that the employment of this strategy enables the learners to take charge of their own learning as this serves as their basic aid to learn other macro skills in the target language.

Keywords: Language learning anxiety, language learning

Introduction

Background of the Study

Language learning anxiety, specifically foreign language learning anxiety has attracted several researchers to examine this phenomenon as it affects language learners. Anxiety has been
considered as one of the most important affective factors that influence second language learning (Na, 2007).

Language anxiety, a type of anxiety specifically associated with learning the second language (L2), can arise from many kinds of sources (Skehan, 1989; Young, 1991 as cited in Ohata, 2005). For instance, the language classroom naturally presents itself as an anxiety-causing situation to some language learners, as it involves constant and periodic evaluation of the learners’ performance and competence. In such linguistic situation, this evaluation might trigger anxiety on the part of the learners as they are reminded of their current L2 competence (Eharman, 1996 as cited in Ohata, 2005). Other factors that may contribute to the learners’ anxiety in learning a second language are: difficulty coping in a mainstream English classroom, lack of teacher engagement (Verplaetse, 1998 as cited in Pappamihiel, 2002), and limited cognitive skills in English (Cummins, 1984).

In order to address these issues concerning language learning anxiety, the present study intends to examine the causes and levels of anxiety of foreign college students studying in the country.

**Review of Related Literature**

With the shift of research focus from to teachers to learners in second language acquisition and learning, affective factors such as attitude, motivation and anxiety were thought to account for successful language learning outcomes. Anxiety, considered as one of the most important affective factors, has been studied since the 1970s.

Bailey (1983) through the analyses of the diaries of 11 learners found that competitiveness can cause anxiety on the part of the learners. He found that students have the tendency to outperform each other to gain positive feedback from their teacher regarding their progress and competence. He also found that tests and the learners’ perceived relationship with their teacher also contributed to the learners’ language anxiety (Bailey, 1983 as cited in Na, 2007).

Moreover, MacIntyre and Gardner (1994) in a study they conducted involving 97 college students learning French, found that those students with language anxiety find it more difficult to express their own views and tend to underestimate their own
abilities. They also discovered that in the process of three stages of language acquisition, that is, input, processing and output, anxiety and learning achievement are negatively correlated (MacIntyre & Gardner, 1994 as cited in Pappamihiel, 2002).

Pappamihiel (2002) conducted a study on language anxiety among 178 middle-school Mexican immigrant students attending school in the US. Participants were subjected to the English Language Anxiety Scale to identify how levels of anxiety correlated with specific factors such as years of stay in the US, levels of academic achievement, listening and speaking skills, reading and writing skills and gender. Results show that interaction with Mexican students raised levels of anxiety and that such strategies such as avoidance were used to reduce anxiety.

In relation to Pappamihiel’s study, Na in 2007, surveyed 115 Chinese high school students and found that these learners have high anxiety in learning the English language. Specifically she discovered that males have higher anxiety in learning English than their female counterparts. Moreover, she also found out that high anxiety plays a debilitative role in high school students’ language learning. This type of language anxiety causes the learner to ‘flee’ from the learning task to avoid further anxiety (Na, 2007).

Moreover, Ohata (2005) examined the nature of language anxiety from the perspective of five Japanese learners of English studying in the US. With the use of self-reflective accounts of the emotional difficulties experienced by these language learners, she found that characteristics of language anxiety are influenced by Japanese cultural norms or expectations they have acquired through numerous socialization processes in Japan. It seems that their cultural practices such as hesitating to express one’s own ideas or not being assertive, caused them anxieties in their interaction with others.

Williams and Andrade (2008) conducted a survey among 243 Japanese students in 31 English conversation classes at four universities in Japan. They found that language anxiety was often associated with the output and processing stages of the language learning process. Furthermore, they also discovered that students attributed their anxieties are caused by their teachers and classmates.
These studies conducted over the years have shown that language anxieties are caused by several factors. These factors may significantly contribute to the learners’ success in learning the second language.

Research Problem

The current study intends to investigate the current affective states of foreign students studying in the Philippines. Specifically, this research would like to know if these foreign language learners are experiencing language anxieties in learning English as a foreign language. The study intends to address the following research questions:

1. Do foreign students learning English in the Philippines experience language anxiety?
2. What could be some preponderant causes of language anxiety among foreign students learning English in the country?
3. What language strategy predicts foreign students’ coping with their language anxiety?

Theoretical Framework

Definition of Anxiety and Language Anxiety

In general, anxiety is defined as a psychological construct that is described as a state of apprehension, a vague fear that is only indirectly associated with an object (Hilgard, Atkinson, & Atkinson, 1971).

Anxiety has been found to interfere with several types of learning but when it is associated with learning a second or foreign language it is coined as ‘second/foreign language anxiety’. McIntyre and Gardner (1994) defined this linguistic phenomenon as a subjective feeling of tension, apprehension, nervousness, and worry associated with an arousal of the automatic nervous system. Furthermore, McIntyre (1999) states that language anxiety as the worry and negative emotional reaction aroused when learning a second language.
Types of Anxiety

Pekrun (1992) states that in situations where there is high anxiety, habitualized reactions can cause learners who have encountered many threatening situations in the past to perceive future situations as threatening. In the same vein, Vasey and Daleiden (1996) argue that highly anxious learners may have lower threshold of threat recognition, perceiving vague situations as potentially threatening more than moderately anxious persons. Due to the possibility that some learners are more prone to anxiety than others, it is important to differentiate between individuals who are often anxious and those who are not.

A distinction can be made between the various types of anxiety- trait anxiety, state anxiety and situation-specific anxiety. Drawing on work in psychology, Scovel (1978) defines trait anxiety as a permanent predisposition to be anxious. Those who are able to perceive situations as being threatening are said to have state anxiety, a social type of anxiety that occurs under certain conditions. Situation-specific anxiety is caused by specific situation or event such as public speaking, examinations or recitations.

Some experts further differentiate the concept of anxiety by distinguishing between cognitive (worry) and affective (emotional) components of anxiety (Deffenbacher, 1980; Schwarzer, 1986 as cited in Pappamihiel, 2002). As posited by Deffenbacher (1980), anxiety produced by cognitive interference (e.g. learning challenges) is due to extreme instances of worry and not the arousal of anxiety. Therefore, this cognitive anxiety type associated for instance, classroom learning is rarely facilitative that is the learners has to struggle in order to change their perspective with the new learning task.

However, some researchers like Scovel (1978) examine Alpert and Haber’s observation (1960) between facilitating and debilitating anxiety. The first motivates learners to ‘fight’ the new learning task, making them to expend extra efforts to overcome their feelings of anxiety although according to Horwitz (1986), this only happens in the accomplishment of simple tasks learning task. The latter prompts the learners to ‘flee’ from the learning task to avoid feelings of anxiety. Williams (1991) argues that the distinction between these other two types of anxiety may correspond to the intensity of
anxiety with low anxiety state having a facilitating function and high anxiety state having a debilitating effect. Moreover, he also suggests that these two kinds of anxiety may sometimes cancel each other out which may result in no apparent effect on achievement.

Anxiety and Language Learning

Horwitz and his colleagues (1986) define foreign language anxiety as a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom learning arising from the uniqueness of the language learning process. They also found that foreign language anxiety can be related to the following: communication apprehension (the fear of communicating with other people), test anxiety (fear of exams, quizzes, and other activities used to evaluate one’s competence) and fear of negative evaluation (the worry about how others view the speaker). On the other hand, MacIntyre and Gardner (1993) see language anxiety as a learned emotional response. At the earliest stages, the language learner may experience a form of state anxiety, a transient apprehensive experience. After repeated occurrence of state anxiety, the student will come to reliably associate anxiety with performance in the second language.

It has also been investigated that one-third of students learning a foreign language experience some kind of anxiety (Horwitz, et al., 1986). Young (1994) outlines the three sources of foreign language anxiety into three categories: sources associated with the learner, the teacher and the institution.

Anxieties related to the learner which eventually cause anxiety include low self-esteem, competitiveness, self-perceived low level of ability, communication apprehension, lack of group membership and attitudes and beliefs about language learning (Young, 1994).

As far as communication apprehension is concerned, Horwitz et al. (1986) found that anxious students reveal that speaking in the foreign language as the most anxiety-producing experience. In this linguistic situation, the language learner is placed in a position of communicating something without sufficient command of the language to do this task. Thus, the learner experiences anxiety as a result of fear of ‘losing oneself’ in the target culture. Moreover,
students’ attitudes and beliefs can also be related with anxiety. Horwitz (1989) found that anxious learners, who judged language learning to be relatively difficult, possess relatively low levels of foreign language aptitude. On the other hand, Palacios (1998) also outlined faulty beliefs such as learning another language at an early age is easier, using translation facilitates learning and studying another language is an overwhelming task may cause the learners to have unrealistic expectations about the language learning process.

With teacher factors, judgmental teaching attitude (Samimy, 1994) and a harsh manner of teaching (Aida, 1994) are related to anxieties with the teacher. Palacios (1998) stated that factors such as lack of teacher’s support, unsympathetic personality of the teacher and lack of time for personal attention does not help learners to cope in their new language learning environment. Ando (1999) also added that having a native speaker for a teacher can cause anxiety as the teacher may lack sensitivity of the learning process and difficulties of the non native learners. Moreover, Oxford (1999) posited that learning and teaching styles pose as potential sources of language anxiety. She found that if the instructor’s teaching style and the students’ learning styles are not compatible, ‘style wars’ can trigger more anxiety on the part of the learners.

Lastly, institutional anxiety can be traced to the list of classroom activities (activities ‘suggested’ by the curriculum) that the language learners perceive as anxiety-producing. These may include: (a) spontaneous role playing; (b) speaking in front of the class; (c) oral presentations and report; and (d) writing task on the board (Young, 1990; Palacios, 1998).

All these factors seem to account for the anxiety level a learner experiences in the language classroom. Thus, it is the hope of this present study to examine if indeed these factors found in previous studies are also manifested by foreign language learners studying in the country. Furthermore, this study will also give our educators an idea as to how to address the language concerns of these types of learners.
The current study will be guided by the following framework:

*Figure 1. Anxiety and Language learning Strategies as Predictors of Language Learning*
As previously mentioned, the present study will examine the causes of anxiety of students through the various types of anxiety that the student encounter in relation to learning English in a foreign land. Specifically, the research will look into language anxiety caused by the following factors: communication apprehension, fear of negative evaluation, text anxiety and anxiety caused by the learning environment (e.g. classroom as outlined by Horwitz, Horwitz & Cope, 1986).

Communication apprehension is characterized by fear and anxiety in communicating with people. Difficulty in speaking in public, listening or learning a spoken utterance are all manifestations of communication apprehension. This type of anxiety in learning a second language is derived from the learners’ personal knowledge that they will have difficulty understanding others and making themselves understood. Learners suffering from communication apprehension choose to keep silent in their English classes.

Test anxiety is a type of performance anxiety which is caused by fear of failing a test. Test anxious students often put unrealistic demands on themselves. Test anxiety is considered to be one of the most important aspects of negative motivation which will affect learning. This type of fear is defined as an unpleasant feeling or emotional state that has both physiological and behavioral concomitants and that is experienced by the anxious learner when taking formal test or other evaluative situations.

Fear of negative evaluation is the apprehension about other people’s evaluations. This may also include avoidance of evaluative situations and the expectations that others might evaluate them negatively. It may also include the student’s fear inside the English classroom where factors such as learning activities, teacher’s methodology and even peer pressure may contribute to novice language learners’ anxieties.

Furthermore, the language strategies used by these learners in coping with their anxieties will also be examined. Cohen, Oxford and Chi (2001) have created the Language Strategy Survey (LSS). The measure consists of 89 language strategy items in six language skill areas: listening, speaking, vocabulary, reading, writing, and translation. Included in these skill areas are both strategies for language use and strategies for language learning. The former
strategy-type refers to strategies that one employs while actually speaking, listening, reading, or writing in a L2.

**Methodology**

**Research Design**

The current research was descriptive in nature. It seeks to determine the causes that might contribute to the anxiety of foreign language learners of English. It also examined the language strategies used by these type of learners to cope with their anxieties in learning the English language. Two survey questionnaires (Horwitz et al.’s Foreign Language Classroom Anxiety Scale [FLCAS] and Cohen et al.’s Language Strategy Survey [LSS]) was administered to 250 foreign college students enrolled at De La Salle Manila-University, College of St. Benilde, St. Scholastica’s College-Manila, University of Santo Tomas and Far Eastern University.

**Setting and Participants**

The research was conducted in various tertiary institutions in Manila such as DLSU-Manila, CSB, St. Scholastica’s College-Manila, UST and FEU. Two hundred fifty foreign students were the respondents of this study. The target participants were foreign college students taking any course in these institutions provided that they are enrolled in any English course during the time of the administration of the questionnaires. These students should have stayed in the country for at least three years which means that they should be in their second/third year in the tertiary level.

**Instrument**

The Foreign Language Classroom Anxiety Scale (FLCAS) designed by Horwitz et al. (1986) was used to obtain data for this study. Horwitz and his colleagues made a unique contribution to the identification of the scope of foreign language anxiety by developing this systematic instrument.

The 33-item questionnaire is categorized by the causes of anxiety that may be prevalent among foreign language learners of
English. The factors are identified as communication anxiety, fear of negative evaluation, test anxiety and anxiety in English classroom classes. These are further classified in the following questionnaire items:

<table>
<thead>
<tr>
<th>Causes of Language Anxiety</th>
<th>Questionnaire Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication Anxiety</td>
<td>1, 9, 14, 18, 24, 27, 29 and 32</td>
</tr>
<tr>
<td>Fear of Negative Evaluation</td>
<td>3, 7, 13, 15, 20, 23, 25, 31 and 33</td>
</tr>
<tr>
<td>Test Anxiety</td>
<td>2, 8, 10, 19 and 21</td>
</tr>
<tr>
<td>English Classroom anxiety</td>
<td>4, 5, 6, 11, 12, 16, 17, 22, 26, 28 and 30</td>
</tr>
</tbody>
</table>

Horwitz et al. suggest that significant foreign language anxiety is experienced by many learners in response to at least some aspects of foreign language learning. This concept has been examined and used by several studies on language anxiety (Aida, 1994; Cheng, 1998; Liu, 2006; Saito, Garza & Horwitz, 1999; Yan, 1998).

The respondents of this study were asked to rate each of the statement in the FLCAS using the 5-point interval of which 1 refers to strongly agree, 2 as agree, 3 as neutral, 4 as disagree, and 5 as strongly disagree. The researchers rephrased items 6, 7, 10 and 13 in the FLCAS questionnaire and changed the term foreign language class to English language class.

The consistency measure for the internal reliability for the current study will be computed by Cronbach’s alpha coefficient. Moreover, the Language Strategy Survey (LSS) by Cohen, Oxford and Chi (2001) were also used for this study. The instrument consists of 89 language strategy items in six language skill areas: listening, speaking, vocabulary, reading, writing, and translation. Included in these skill areas are both strategies for language use and strategies for language learning. The former strategy-type refers to strategies that one employs while actually speaking, listening, reading, or writing in the English language. The researchers have modified the instrument to assign numerical values to the responses of the subjects. The subjects were asked to rate each statement in the LSS using the 5-point interval of which 1 refers to very often, 2 as often, 3 as sometimes, 4 as seldom and 5 as not applicable. The data were subjected to exploratory and confirmatory factor analyses to check its reliability and validity.
Procedure

The researchers sought the permission of the Chairs of the Department of English from various universities in Manila such as De la Salle University-Manila, College of St. Benilde, University of Santo Tomas, St. Scholastica’s College-Manila and Far Eastern University to conduct the study in their English classes where the target foreign respondents are enrolled. The researchers wrote a letter of request to conduct the study. They also enclosed the copy of the research proposal and the FLCAS and LSS questionnaires so that the Chairs would get an idea of the importance of this study to their department.

After the approval of the request, the teachers sought an appointment with the Chairs to get the names of the teachers and the classes to be visited. The researchers coordinated with the teachers to explain to them the purpose of this current study. Moreover, the researchers got the convenient schedule of the teachers as to the administration of the questionnaire to the target foreign participants. The researchers requested the teachers to allow them to administer the questionnaires during sessions when they are having their writing activities to prevent the untimely disruption of their classes.

On the appointed day, the classroom teacher oriented their foreign students to explain the extra task they have to accomplish. They were requested to occupy the last row of the seats to complete the questionnaire. They were given 30-35 minutes to accomplish the questionnaires.

Once all the data have been completed, the questionnaires were classified, tallied and tabulated.

Method of Analysis

Descriptive statistical analysis was used in analyzing the data. Weighted mean was used to describe the overall anxiety factors of the participants. Standard Deviation (SD) is used to measure the variability of responses and Pearson correlation to examine the relation between the causes of anxiety and the language strategies used by these types of learners in coping with such learning anxieties. Multiple regression analysis was also used to
determine how language strategies predict foreign language learners’ use of such strategies to cope with their language anxieties.

Results

Table 1
Means and Standard Deviations of the Language Anxieties Experienced by Students in Learning English and the Learning Strategies Used to cope with them

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening strategy</td>
<td>2.48</td>
<td>0.44</td>
</tr>
<tr>
<td>Vocabulary strategy</td>
<td>2.67</td>
<td>0.46</td>
</tr>
<tr>
<td>Speaking strategy</td>
<td>2.55</td>
<td>0.52</td>
</tr>
<tr>
<td>Reading strategy</td>
<td>2.48</td>
<td>0.4</td>
</tr>
<tr>
<td>Writing strategy</td>
<td>2.46</td>
<td>0.52</td>
</tr>
<tr>
<td>Translation strategy</td>
<td>2.53</td>
<td>0.79</td>
</tr>
<tr>
<td>Communication Anxiety</td>
<td>2.89</td>
<td>0.42</td>
</tr>
<tr>
<td>Fear of Negative Evaluation</td>
<td>3.15</td>
<td>0.69</td>
</tr>
<tr>
<td>Test Anxiety</td>
<td>3.17</td>
<td>0.29</td>
</tr>
<tr>
<td>Anxiety in the English Classroom</td>
<td>3.02</td>
<td>0.37</td>
</tr>
</tbody>
</table>

The results of the descriptive analyses indicated that foreign students generally had a feeling of anxiety in learning the English language. Table 1 show that they experience Test Anxiety (M=3.176) and Fear of Negative Evaluation (M=3.158). Furthermore, it can be noted that these learners maximize the use of Vocabulary Strategy (M=2.672), Speaking Strategy (M=2.559), and Translation Strategy (M=2.538) in coping with the language learning anxieties they are experiencing.
Table 2
Correlation between Strategies used and Language Anxiety

<table>
<thead>
<tr>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
<th>(8)</th>
<th>(9)</th>
<th>(10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening Strategy</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vocabulary Strategy</td>
<td>.80*</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speaking Strategy</td>
<td>.66*</td>
<td>.55*</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading Strategy</td>
<td>.64*</td>
<td>.56*</td>
<td>.62*</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Writing Strategy</td>
<td>.72*</td>
<td>.64*</td>
<td>.78*</td>
<td>.76*</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Translation Strategy</td>
<td>.22</td>
<td>.10</td>
<td>.60*</td>
<td>.40*</td>
<td>.28</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comm. anxiety</td>
<td>.28</td>
<td>.17</td>
<td>.67*</td>
<td>.32</td>
<td>.37</td>
<td>.49*</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FNE</td>
<td>.10</td>
<td>.17</td>
<td>.41*</td>
<td>.17</td>
<td>.05</td>
<td>.58*</td>
<td>.61</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Test anxiety</td>
<td>.21</td>
<td>.09</td>
<td>.45*</td>
<td>.35</td>
<td>.38</td>
<td>.49*</td>
<td>.48</td>
<td>.25</td>
<td>---</td>
</tr>
<tr>
<td>English class anxiety</td>
<td>.12</td>
<td>.39*</td>
<td>.37</td>
<td>.29</td>
<td>.20</td>
<td>.33</td>
<td>.20</td>
<td>.38</td>
<td>.00</td>
</tr>
</tbody>
</table>

*p<.05

Table 2 suggests that strategies are significantly related except for translation strategy with listening, vocabulary, and writing strategy. Vocabulary Strategy significantly increases with coping in English Class Anxiety. Speaking and Translation Strategies significantly increases with all learning strategies except for English class anxiety. Reading and writing strategy do not significantly increase with any of the coping strategies for anxiety.

Table 3
Regression Summary for Dependent Variables (Communication Anxiety)

<table>
<thead>
<tr>
<th></th>
<th>Beta</th>
<th>SE</th>
<th>B</th>
<th>SE</th>
<th>t(19)</th>
<th>p-level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.83</td>
<td>0.47</td>
<td>3.88</td>
<td>0.00</td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>Listening strategy</td>
<td>-0.07</td>
<td>0.30</td>
<td>-0.06</td>
<td>0.28</td>
<td>-0.23</td>
<td>0.82</td>
</tr>
<tr>
<td>Vocabulary strategy</td>
<td>-0.19</td>
<td>0.27</td>
<td>-0.17</td>
<td>0.24</td>
<td>-0.72</td>
<td>0.48</td>
</tr>
<tr>
<td>Speaking strategy</td>
<td>1.07*</td>
<td>0.34</td>
<td>0.87</td>
<td>0.28</td>
<td>3.14</td>
<td>0.01</td>
</tr>
<tr>
<td>Reading Strategy</td>
<td>0.11</td>
<td>0.26</td>
<td>0.11</td>
<td>0.28</td>
<td>0.40</td>
<td>0.70</td>
</tr>
<tr>
<td>Writing Strategy</td>
<td>-0.36</td>
<td>0.35</td>
<td>-0.29</td>
<td>0.28</td>
<td>-1.03</td>
<td>0.32</td>
</tr>
<tr>
<td>Translation Strategy</td>
<td>-0.06</td>
<td>0.23</td>
<td>-0.03</td>
<td>0.13</td>
<td>-0.27</td>
<td>0.79</td>
</tr>
</tbody>
</table>

Note. R=.73, R²=.54, Adjusted R²=.39, F(6,19)=3.74, p<.01
The results in Table 3 show that Speaking Strategy significantly predicts coping in Communication Anxiety. All learning strategies if combined, significantly predict coping in communication anxiety.

Table 4
Regression Summary for Dependent Variable (English Classroom Anxiety)

<table>
<thead>
<tr>
<th></th>
<th>Beta</th>
<th>SE</th>
<th>B</th>
<th>SE</th>
<th>t(19)</th>
<th>p-level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.90</td>
<td>0.46</td>
<td>4.18</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Listening strategy</td>
<td>-0.76*</td>
<td>0.33</td>
<td>-0.64</td>
<td>0.27</td>
<td>-2.33</td>
<td>0.03</td>
</tr>
<tr>
<td>Vocabulary strategy</td>
<td>0.83*</td>
<td>0.29</td>
<td>0.66</td>
<td>0.24</td>
<td>2.82</td>
<td>0.01</td>
</tr>
<tr>
<td>Speaking strategy</td>
<td>0.44</td>
<td>0.38</td>
<td>0.31</td>
<td>0.27</td>
<td>1.17</td>
<td>0.26</td>
</tr>
<tr>
<td>Reading strategy</td>
<td>0.25</td>
<td>0.29</td>
<td>0.23</td>
<td>0.27</td>
<td>0.86</td>
<td>0.40</td>
</tr>
<tr>
<td>Writing strategy</td>
<td>-0.35</td>
<td>0.38</td>
<td>-0.26</td>
<td>0.27</td>
<td>-0.93</td>
<td>0.36</td>
</tr>
<tr>
<td>Translation strategy</td>
<td>0.16</td>
<td>0.26</td>
<td>0.07</td>
<td>0.12</td>
<td>0.60</td>
<td>0.55</td>
</tr>
</tbody>
</table>

Note. R = .66, R² = .44, Adjusted R² = .26, F(6,19) = 2.51, p < .01

Finally, Listening and Vocabulary Strategies significantly predict coping in English Class Anxiety as shown in Table 6. However, listening strategy decreases coping in English class anxiety. All strategies combined significantly predict coping in English class anxiety.

Discussion

The findings revealed that the foreign students who participated in this study are experiencing language anxiety in learning English in the country. These learners experience Test Anxiety and Fear of Negative Evaluation.

Cabukcu (2007) sees Test Anxiety as one of the most important aspect of negative motivation in learning. This type of anxiety is described as an unpleasant feeling or emotional state that has physiological and behavioral concomitants and that is experienced in formal testing or other evaluative situations. Moreover, this type of anxiety emerges for some children during the preschool or elementary school years when parents begin to make some demands or hold overly high expectations for their children’s performance (Hill & Wigfield, 1984). Through the years, some other factors such as parental, peer or self-induced aspirations, teachers’
attitudes and classroom atmosphere may enhance evaluation anxiety (Hill, Sarason & Zambardo, 1964; Hill & Sarason, 1966; Hill & Nottelmann, 1977). By and large, test anxiety is a problem from a variety of ethnic backgrounds, for both genders and for middle and working class children from all major socio-cultural groups (Hill & Wigfield, 1984).

In the similar vein, Ohata (2005) found that learners feared taking tests, because test-taking situations would make them anxious about the negative consequences of getting a bad grade. This would lead to other psychological stresses, such as the fear of losing self-confidence or feeling inferior to others.

The results from the data also revealed that foreign participants of this study also experienced anxiety due to Fear of Negative Evaluation from their teachers and their peers as well. This may be due to the classroom activities or tasks that they have to fulfill in class. Young (1991) compiled a list of classroom activities which are perceived by students as anxiety-producing activities: (1) spontaneous role play in front of the class; (2) speaking in front of the class; (3) oral presentations or skits performed in the class; (4) presenting a prepared dialogue in front of the class; and (5) writing work on the board. Error correction also turned out to play an important role in contributing to a student’s anxiety. Moreover, Palacios (1998) also found the following classroom tasks characteristics to be anxiety-producing: demands of oral production, feeling of being put on the spot, the pace of the class, and the element of being evaluated.

Although many learners feel that some error correction is necessary (Koch & Terrell, 1991; Horwitz, 1988), the manner of error correction is often cited as provoking anxiety. It has also been found that students are more concerned about how (i.e., when, what, where or how often, etc.) their mistakes are corrected rather than whether error correction should be administered in class.

In relation to the fear of negative evaluation from others, Ohata (2005) also suggests that fear of losing “face” in front of others was also found to be a shared anxious feeling by language learners. These students have expressed anxiety in evaluative situations in which their knowledge and performance of English were to be monitored by people around them. This fear of losing “face” may be particularly true for foreign students who may have the feeling of
being under critical evaluation as far as their utterances, grammar use and other communication means are concerned.

The data also suggest that foreign students made use of *Vocabulary strategies* to be able to cope with their language learning anxieties. Although the respondents of this study reported an anxiety towards being negatively evaluated, it seems that they were finding ways to assuage such fear. The results are in consonance with Wu and Wang (1998) who found that foreign language learners used a wide range of metacognitive and cognitive strategies for vocabulary learning.

Moreover, Graves (1987) suggested that, because students actually do most of their learning of new words independently, it makes sense to encourage them “to adopt personal plans to expand their vocabularies over time” (p. 177). It appears that learners would spontaneously develop or adopt effective vocabulary-learning practices as a result of their language learning experience.

Hamzah and Kafipour (2009) identifies several reasons why learners utilize the use of vocabulary strategies in coping with language learning anxieties. First, a vocabulary learning strategy, very broadly speaking, could be any action taken by the learner to aid the learning process of new vocabulary. Whenever a learner needs to study words, he/she uses strategy/strategies to do it. Second, a vocabulary learning strategy could be related to only such actions which improve the efficiency of vocabulary learning. Hence, there are actions which learners might employ but which do not enhance the learning process – a perfectly possible scenario with poor learners. Third, a vocabulary learning strategy might be connected to conscious (as opposed to unconscious) actions taken by the learner in order to study new words. Ideally, learners should be made aware of ‘good’, efficient strategies, so that they could freely and consciously choose the one(s) suitable for them.

The main benefit gained from all learning strategies, including strategies for vocabulary learning, is the fact that they enable learners to take more control of their own learning so that students can take more responsibility for their studies (Nation, 2001; Scharle & Szabó, 2000). Consequently, the strategies foster “learner autonomy, independence, and self-direction” (Oxford & Nyikos, 1989).
Examining the correlation between language anxiety and language learning strategies use, it can be gleaned from the results that again Vocabulary strategy significantly increases with coping with English class anxiety. The data is suggesting that by and large, foreign students would depend on the use of vocabulary strategy in dealing with their language learning process as earlier reported by Graves (1987), Hamzah, Kafipour and Abdullah (2009), Nation (2001), Scharle & Szabó (2000) and Oxford and Nyikos (1989).

Similarly, the use of both Speaking and Translation strategies are found to significantly increase as these types of learners cope with most of their language anxieties (test, fear of negative evaluation and communication) except for English class anxiety. Moriam (2005) found that although affective strategy was found to be the least frequently used category, it had a strong influence on the learners’ whole process of speaking strategy use. Another significant finding of this study is that the learners showed the strongest correlations of affective with interpersonal strategies to evaluate their speaking skill. It implies that the use of these strategies gave them confidence about their proficiency in speaking English.

Similarly, Liao (2006) observed that translation is widely used in learners’ foreign language learning process. He also believes that learners often use translation as a learning strategy to comprehend, remember, and produce a foreign language. In a similar vein, Kobayashi and Rinnert (1992) found that foreign students who wrote English essays through their L1 translation were rated higher than those who wrote directly in English. As for the advantages of translating, the students felt that the ideas were easier to develop, thoughts and opinions could be expressed more clearly, and words could be more easily found through the use of dictionary. In addition, translation as a learning strategy can also help in vocabulary acquisition.

Multiple regression analyses of the data also showed that Speaking strategy significantly predicts coping with Communication anxiety. The results would suggest that the foreign language learners of this study would find an effective learning strategy that would best address the language anxiety they are experiencing in the course of their learning of the English language. It appears that several strategies in speaking help them in coping with communication anxiety.
Many researchers have pointed out that the skill producing most anxiety is speaking (MacIntyre and Gardner 1991). This anxiety comes in part from a lack of confidence in the learner’s general linguistic knowledge but if only this factor were involved; all skills would be affected equally. What distinguishes speaking is the public nature of the skill, the embarrassment suffered from exposing the learner’s language imperfections in front of others (Arnold, 2000).

Communication anxiety can also be triggered during intercultural or interethnic communication. When a person interacts with people of other cultures and encounters cultural differences, he or she inclines to view people as strangers. Situation of this kind may lead to intercultural communication apprehension; this can be defined as “the fear or anxiety associated with either real or anticipated interaction with people of different groups, especially cultural and ethnic and/or racial groups” (Neuliep & McCroskey, 1997).

However, it appears that the participants of this study would still prefer to use speaking strategies perhaps to compensate for the communication anxiety that they are experiencing.

The Regression analysis also showed that the use of both Listening and Vocabulary strategies predict the learners’ ability to cope with English class anxiety. It can be gleaned from the data that these foreign learners find listening and vocabulary strategies as the most effective learning strategy they could use to cope with the anxiety they are experiencing while they are attending their English classes. It has been found that English Language Classroom Anxiety, a type of Foreign Language Classroom Anxiety (FLCA), is considered to be a situational anxiety experienced in the well-defined situation of the foreign language classroom (MacIntyre & Gardner, 1991a, 1991b, 1994). As such, Horwitz, Horwitz and Cope (1986) view this anxiety as a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process (Horwitz & Young, 1991). Moreover, according to Horwitz, Horwitz and Cope (1991) possible causes of FLCA are communication apprehension, test anxiety and fear of negative evaluation. MacIntyre and Gardner (1991a) describe this anxiety stemming from the negative expectations in foreign language learning.
Conclusions

The current study clearly showed that foreign language learners would equip themselves with learning strategies that would help them not only to learn the target language but also to cope with their language learning anxieties.

The findings suggested that these type of learners used vocabulary strategy to efficiently learn the English language and to cope with their English class anxiety. It has been found that the employment of vocabulary strategy enables the learners to take charge of their own learning as this serves as their basic aid to learn other macro skills in the target language.

It was also found that test anxiety and fear of negative evaluation constitute the type of learning anxieties these were students experiencing. It can be gleaned from the results that foreign learners experience anxiety if they are being evaluated by both their peers and their teachers as to their performance in using the target language. This is rooted perhaps because of the negative affective experience when they were learning the language and also, they would like to avoid ‘losing face’ in their English language class.

The correlation results also suggest that vocabulary strategy is significantly correlated with English class anxiety. This would mean that this strategy is effectively used to cope with the class anxiety that these types of learners experienced in their English classes.

Multiple regression results also suggest that speaking strategy significantly predicts coping when learners experience communication anxiety. It can be noted that this strategy serves as a compensatory strategy employed by foreign language learners to be able to cope with communication anxiety that they are experiencing their English classes.

Implications to Language Teaching

The results of the current study would help language teachers in several ways as regard their teaching of foreign learners in their classes.

First, language teachers have to realize that their foreign learners are experiencing anxiety in their classes. Apart from the general anxiety that they are experiencing studying in a foreign
land, being away from their families and the like, teachers have to also understand that learning a foreign language is also their major struggle. Apart from the culture shock that they may be having living in a foreign country, they are also suffering from ‘language shock’ which may help account for their resistance and difficulty in learning the target language.

Second, language teachers must be able to understand the nature of their students’ language anxieties. It may vary from one learner to another so it is pertinent that teachers be made aware of what language anxieties their students may be suffering from. As such, they may be able to design lessons and prepare activities and learning materials that will best address the strategies that can be effectively utilized by these types of learners to cope with their respective language anxieties.

Lastly, since foreign students are anxious for being negatively evaluated for their proficiency on the use of the target language, language teachers may opt for alternative assessment or evaluation schemes that may lessen the students’ anxiety during their performance in class. Group evaluation may be utilized and general comments on their linguistic performance may be given instead of individual evaluation that eventually causes anxiety on the part of their learners.

By and large, language educators must be willing to understand not only the learning difficulties learners are encountering in their classes. These difficulties stem from a more deeply rooted problem which is caused by certain anxieties that they are experiencing once they are in their English language classes. These language anxieties are also caused by several affective and cognitive factors that make learning the target language very difficult and an excruciatingly painful learning process to the learners.

Language anxiety impedes successful language learning among second and foreign language learners. It is important that language teachers look at the affective state of the learners as this greatly affects their learning.
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Editorial Commentary

The Preparation and Writing of a Grammar of the Verb in Philippine English and the Teaching of the English Verb System in Philippine Schools

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That there exists a variety of English called Philippine English is now incontestable. Though questions regarding its status came out (i.e. Gonzalez, 1972; Hidalgo, 1970) half a century ago when Llamzon (1969) published his groundbreaking monograph entitled Standard Filipino English, Philippine English is now a fact everyone has to live with. A plethora of studies on Philippine English will be able to lend evidence to the existence of the new English (cf. state-of-the-art papers of Bautista [2000b] and Gonzalez [1998]).

And recently, Borlongan (2011) attempts at a codification of Philippine English through the preparation and writing of a grammar of the Philippine English verb system. He analyzed a ten-percent sample of the Philippine component of the International Corpus of English. This is not the place to restate the findings of Borlongan; suffice it to say that he makes two important points on Philippine English: (1) That it is a self-regulating variety that has its own distinctive features and (2) that it has achieved endonormative stabilization in Schneider’s (2003, 2007) dynamic model of the evolution of postcolonial Englishes.

What Borlongan (2011) says of Philippine English and the verb in Philippine English has important implications for the teaching of likewise Philippine English and the verb in Philippine English. First, the grammar of the verb in Philippine English would tell that, indeed, the variety can be described and distinguished from other Englishes, particularly the more established ones. Needless to say, the structure of the variety can be more explicitly taught in English language classes with the necessary comparisons with more established Englishes. In retrospect, in the year 1981, a group of distinguished language specialists that represented the Philippines for the SEAMEO Regional Language Centre’s seminar entitled Varieties of English and Their Implications for Language Teaching in Southeast Asia convened for the seminar’s Philippine workshop and decided that the availability
of an adequate description of Philippine English is a prerequisite in making a decision on whether an exonormative or endonormative model in English language teaching in the Philippines.

And the mention of that hints at the second probable consequence of the preparation and writing of the grammar of the verb in Philippine English. There might now be a need to revisit the decision of that group of language specialists from the Philippines in 1981 and think about a possible paradigm shift in English language teaching in the Philippines. A promising scenario would be that English language teachers start with Philippine English grammatical structure. Then, also in an attempt to enhance the sociolinguistic competence of students (Bautista, 2003), teachers should also point out how Philippine English varies with reference to American English in particular – because it is the exonormative standard of Philippine English but not because it is the “better” standard – and other Englishes in general.

Ultimately, the goal of teaching Philippine English to students is for the variety’s increased awareness, acceptance, and even admiration. Bautista (2001a, 2001b) and Borlongan (2009) document the growing acceptance of Philippine English among English language teaching – the so-called “gatekeepers” – as well as students from a private university, albeit with some residual insecurity and longing for the norms previously held so dearly (cf. Borlongan, 2011; Schneider, 2003, 2007). Their survey respondents might not totally represent the Philippine population but their findings give hope to indiscriminate acceptance of Philippine English across the nation.

Of course, for every bright and bold idea is an accompanying challenge waiting to be overcome. Teachers need to be retrained; teaching materials need to be developed (the use of corpora in teaching Philippine English might be the first step); instructional leadership needs to be re-envisioned (cf. Borlongan [2010a, b] on the management of innovations in English language teaching in the Philippines). However, these are so little sacrifices that are not to be held back so as to finally put Philippine English on the pedestal of established Englishes, together with American, British, and Australian Englishes.
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