Anxiety and EFL: does multilingualism matter?

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Anxiety and EFL: does multilingualism matter?

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The current study is motivated by the gap in the current literature about foreign language classroom anxiety, namely the underlying construct of FL anxiety with regard to the understudied relationship between anxiety, proficiency, and multilingualism. The evidence for the effect of language anxiety on achievement is well-documented. More recently, there has been evidence that anxiety is inversely proportional to the number of languages studied; however, this notion of the relationship between multilingualism and anxiety is under-researched. This study analyzes the anxiety profiles of low-level multilingual (LLM) versus high-level multilingual (HLM) learners of English, using 123 EFL college students in Korea. The participants completed the Foreign Language Classroom Anxiety Scale (FLCAS); a factor analysis, and subsequently discriminant function analyses show the differences in language learning anxiety from a variety of perspectives. An intriguing new factor emerged from the data: fear of ambiguity in English, a factor which has previously not been discussed in the language anxiety research. Additionally, the English language anxiety profiles of the LLM versus the HLM participants were also distinct, answering the question of the effect of various levels of multilingualism on language learning anxiety.

Keywords: anxiety; multilingualism; EFL; Korea; proficiency

Introduction

There have been a multitude of studies on the topic of foreign language anxiety (FLA) (e.g., Horwitz 1986) as well as a few studies on the relationship between anxiety and multilingualism (e.g., Dewaele 2007, 2010). The impetus of the current study is to further explore the relationship between anxiety and multilingualism in the under-represented context of Korea. Specifically, the purpose of the current study is to examine the effects of multilingualism and proficiency on English language anxiety. For this, the study first seeks to investigate the underlying constructs of the Foreign Language Classroom Anxiety Scale (FLCAS) by the use of a factor analysis (FA). Then, the study compares the anxiety profiles of three groups of English as a foreign Language (EFL) learners who differ in terms of L2 and L3 proficiency. This study is unique in several ways. Firstly, prior to the current analysis, an FA of the FLCAS had never been done with data of this kind – EFL learners in Korea. Also, a fascinating new factor emerged from the data: fear of ambiguity in English, a factor which has previously not been discussed in the language anxiety research. Additionally, the study examines the relationship between anxiety, multilingualism, and proficiency,

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a relationship that is under emphasized in the realm of Second Language Acquisition (SLA) anxiety research.

**Language learning anxiety**

There has been anecdotal evidence of language learning anxiety as long as there has been language instruction. Scovel’s (1978) seminal article is acknowledged as a shift in the way that language learning anxiety was conceptualized and defined, and with Horwitz, Horwitz, and Cope (1986) came the creation of the most commonly used measure of language learning anxiety, the FLCAS. For the creation of this measurement tool, a focus group entitled ‘Support Group for Foreign Language Learning’ was formed to have discussions of the difficulties of language learning. From the comments of the students in this focus group, the 33 questions of the FLCAS were created. One of the most important outcomes of Horwitz, Horwitz, and Cope (1986) was the idea that language learning anxiety (state anxiety) is distinct from general anxiety (trait anxiety), a sentiment echoed in MacIntyre and Gardner (1994). Although several studies have concluded that FLA is a result of insufficient language abilities, including those in the L1 (e.g., Sparks and Ganschow 1991, 2007; Sparks, Ganschow, and Javorsky 2000), MacIntyre and Gardner (1994) showed otherwise. In MacIntyre and Gardner (1994), French language students were divided into four groups, three of which involved a video camera filming various parts of activities. The fourth group was not exposed to a video camera. Participants in the video camera groups reported an increase in anxiety upon introduction of the camera, and subsequently forgot vocabulary that they had previously used. The implications were that anxiety causes performance deficits that are unrelated to cognitive or linguistic deficiencies.

Whether anxiety is seen as being the cause or the result of poor language classroom performance, there is no doubt that there is a relationship between anxiety and achievement. There have been several studies in which the participants’ final grades have an inverse relationship with scores on the FLCAS (e.g., Abu-Rabia 2004; Aida 1994; Coulombe 2000; Horwitz 1986; Kim 1998, 2009; Malallah 2000; Saito and Samimy 1996). Several studies have also found an inverse relationship between the scores on the FLCAS and self-ratings of language proficiency (e.g., Gardner and MacIntyre 1993; MacIntyre, Noels, and Clément 1997) as well as between anxiety and attitudes toward people from different cultures (Spitali 2000). Horwitz (2001) provides a summary of many important studies regarding FLA and achievement.

Contrary to popular belief, there were no specific factors built into the FLCAS upon its creation; on the contrary, Horwitz, Horwitz, and Cope (1986) argue that FLA is not only composed of communication apprehension, fear of negative evaluation, and test anxiety:

Actually, I do not see the FLCAS as being composed of communication apprehension, fear of negative evaluation, and test anxiety as some published works argue. Horwitz, Horwitz, & Cope specifically state that these anxieties are only related to FLA and that FLA is not simply composed of them. In fact they argue that foreign language anxiety is different from those three constructs. (E. Horwitz, personal communication, 6 October 2011)
In light of this fact, it is crucial to perform FAs on the data that come from diverse contexts to investigate if an underlying factor structure of the FLCAS can be established.

One of the most thorough analyses using a FA with the FLCAS is from Aida (1994), which presents the findings of foreign language (FL) classroom anxiety of 96 American students studying Japanese. The FA resulted in four factors: Speech anxiety and fear of negative evaluation, Fear of failing the class, Comfortableness in speaking with Japanese people, and Negative attitudes toward the Japanese class. A more recent study by Huang, Eslami, and Hu (2010) also found a similar four-factor structure with Taiwanese participants: Speech anxiety and fear of negative evaluation, Comfort with English learning, Fear of failing the class, and Negative attitudes towards learning English.

The question is whether the results of the aforementioned four-factor models would be transferable to a different context, such as the Korean EFL context presented in this study. In other words, what is the underlying construct of FL anxiety, and what are the similarities and differences between the results of the FA in Aida (1994) and Huang, Eslami, and Hu (2010) and the results of the FA in the current study?

Anxiety, multilingualism, and proficiency

Although FL anxiety research has been examined in relation to various factors such as major and gender (e.g., Kim 2000) and achievement (e.g., Saito and Samimy 1996), very few studies have examined the relationship between FL anxiety, proficiency, and multilingualism, which is the focus of this study. Pavlenko (2005) provides a comprehensive overview of various emotions related to multilingualism, including language choice in multilinguals. She includes a discussion of anxiety, but the focus is on L1 anxiety as a result of past traumatic events, such as an attack or other negative emotional attachments to the L1. She also makes the point that the study of anxiety has been framed in classroom language learning of middle-class American and that researchers ‘...are less reflective of experiences of immigrants and guestworkers, who strive to join the global marketplace and whose fears are fueled not by test-taking anxiety but by gate-keeping practices and power relationship that present them from accessing the target language community and resources’ (Pavlenko 2005, 35).

There has been documentation in the SLA literature that indicates multilinguals have a heightened sense of metalinguistic awareness, which could arguably decrease their language learning anxiety. For example, there are several studies (Bialystok 2006; Evitar and Ibrahim 2000; Herdina and Jessner 2002; Jessner 2005; Le Pichon Vorstman et al. 2009) that illustrate that learning additional languages increases metalinguistic awareness (the explicit knowledge of linguistic systems). Having more explicit knowledge about a language (or languages in general) could ostensibly reduce language learning anxiety, although there have been no empirical studies to link metalinguistic awareness to a reduction in language learning anxiety. There is, however, empirical evidence linking multilingualism to lower anxiety for learning languages (Dewaele 2007, 2010; Dewaele, Petrides, and Furnham 2008).

Regarding anxiety and multilingualism, it is important to take into account the relative proficiency levels of the languages in question. In his study examining the relationship between multilingualism and affordances to communicative competence
(CC) and FLA, Dewaele (2010, 125) indicates in his study that there is indeed a relationship between these variables. In this study of 953 users of French, there was a stronger effect of affordances (operationalized by Dewaele as a score derived by the linguistic proximity of the L1 to other languages studied) for French as an L2 and L3, ‘…for which participants reported medium to advanced levels of CC’; higher levels of affordances were also linked to lower FLA. Dewaele did not find an effect of affordances for French as an L1 or L4 (either very low or very high levels of reported CC) which he explains in the following way: ‘Affordances could thus be seen as a crutch for some, providing extra support for those with one functioning leg, but less useful for those without legs’ (Dewaele 2010, 125). He also argues that anxiety is a less relevant theme to discuss once the language learner has reached a very high level of competence. Similarly, Dewaele (2007, 404) found that the ‘…differences in CA/FLA levels are strongest between the L1 and L2 and gradually weaken in languages learnt subsequently.’ In this same study, trilinguals and quadrilinguals were found to be less anxious in their L2s. Dewaele explains this finding as, ‘…trilinguals and quadrilinguals have become better communicators as a result of their multilingualism and that their self-confidence, as well as their self-perceived competence has grown as a result’ (Dewaele 2007, 404). An additional study that supports the relationship between lower anxiety and multilingualism is Dewaele, Petrides, and Furnham (2008). Using the data from 464 multilinguals who filled out web-based questionnaires, ‘[t]hose with a higher number of languages tended to report lower levels of CA/FLA’ (935).

Vis-à-vis operationalizing a multilingual learner, the field has recently seen an influx of studies challenging the traditional definition of multilingualism. For example, some researchers have found language effects for even very low levels of a nonnative language (Aronin and Singleton 2012; De Angelis 2007), challenging the notion that a learner must have high levels of proficiency in all of the languages in question in order to be considered multilingual. Additionally, Thompson (forthcoming) has argued for an innovative classification of multilinguals: Perceived Positive Language Interaction (PPLI). In the PPLI classification of multilingualism, a learner has to be cognizant of the linguistic interactions of his or her linguistic systems in order to be considered multilingual. The results of these studies indicate a tendency of a more flexible operationalization of multilingualism, a tendency that is continued in the current study.

**Anxiety in the Korean context**

It has been found that anxiety can also be attributed to different cultural norms and expectations, and the imetus of the current study is to further explore the relationship between anxiety, proficiency, and multilingualism in the underrepresented context of Korea. Kiziltepe (2000) and Kunt (1997) found relatively low levels of anxiety in Turkish learners of English, whereas Truitt (1995) found relatively high levels of anxiety in Korean learners of English. Additionally, Woodrow (2006) in her study of anxiety with English for Academic Purposes (EAP) students from a variety of backgrounds found that students from China, Korea, and Japan were more anxious than the students from other countries.

As the current study is in the context of English language learners in Korea, a more in-depth discussion of the implications of this specific context is needed. On the topic of Korean students studying in the USA, Lee (2009) discusses the results of a study
with six Korean graduate students and the factors that influenced their oral participation in class. Although all of the participants in this study had test scores that were high enough to be enrolled in a graduate program at an American university, all of them stated that they felt their language level was not sufficient to participate in class discussions. This sentiment supports the findings of MacIntyre, Noels, and Clément (1997) and Gardner and MacIntyre (1993), who found that high levels of anxiety correlated with low scores on self-rating questionnaires. The participants also openly indicated a high level of anxiety about speaking in class, commenting on nervousness, dizziness, or the feeling of freezing when called upon to speak. As Kang (2005) indicates, this classroom anxiety could also be a result of different teaching styles in the USA and Korea where the former is a setting where student participation is expected and the latter has traditionally been a setting where lecture-based, teacher-fronted classrooms are the norm, although as Kim (2009) indicates, communicatively based classrooms in Korea are becoming increasingly popular.

For the context of studying English in Korea, Kim (2009) analyzed the anxiety of 59 students taking both a conversation and a reading course at a Korean university. The overall results indicate that the students were significantly more anxious in the conversation course than in the reading course, which is aligned with Saito, Horwitz, and Garza (1999) who stated that there are different levels of anxiety for the oral and written modalities. Kim (2009) also found that anxiety was inversely proportional to achievement in both the reading and the conversation courses.

Also in the context of Korean university students learning English are the studies by Truitt (1995) and Kim (2000). Truitt (1995) used the FLCAS, along with other instruments, to analyze a group of Korean students learning English in Korea. The study indicates that Koreans tend to have a higher level of anxiety than students from other backgrounds (e.g., Aida 1994; Horwitz, Horwitz, and Cope 1986), indicating that anxiety is perhaps influenced by certain cultural expectations about classroom interactions, a sentiment echoed in Kang (2005). Truitt (1995) also found that those who are confident about their language abilities had lower scores on the FLCAS than their classmates without this confidence. Similarly, Kim (2000) studied different aspects of anxiety with Korean students learning English in the context of Korea. The results are similar to those of Truitt (1995), indicating that Korean students have a high level of anxiety when learning English. Specifically, she noted that humanities students had higher levels of anxiety than non-humanities students, and had especially negative attitudes towards their English courses.

These aforementioned studies provided a starting point for the current study, which investigates English anxiety, proficiency, and multilingualism in the context of Korea. Although Korea is not an inherently bilingual/multilingual country (as opposed to countries like Belgium, Canada, Holland, Hong Kong, India, or Switzerland, for example), it is important to document the effects of multilingualism for students whose culture does not espouse multilingualism as a cultural norm. Investigating anxiety and multilingualism in an innately monolingual context such as Korea greatly adds to the literature on language learning anxiety and multilingualism.

The study

The current study is motivated by the gap in the current literature about FL classroom anxiety, namely the underlying construct of FL anxiety within an understudied EFL context and the relationship between anxiety, proficiency, and
multilingualism. This study is an investigation of the English FLA of Korean university students as measured by the FLCAS. This English anxiety was examined from a variety of perspectives: anxiety and proficiency in English, level of multilingualism and anxiety, and the combination of both English proficiency and proficiency in an additional FL in relation to anxiety. Below are the specific research questions for the study.

**Research questions**

(1) What are the underlying factors in the FLCAS?

(2) Do low-level multilingual (LLM) learners and high-level multilingual (HLM) learners have different FLA profiles when considering the combined variables of English and FL proficiency? In other words, can group membership be predicted by the factors resulting from the underlying construct of the FLCAS? If so, which factors contribute more to predicting this group membership?

(2-1) Is there a difference in the FLA profiles of advanced English proficiency (AEP) and intermediate English proficiency (IEP) learners?

(2-2) Is there a difference in the FLA profiles of LLM and HLM learners?

**Participants**

This study includes 123 EFL learners at the tertiary level at two different universities in Korea. All of the participants have Korean as an L1 and are in the process of learning English. Thirty males and 93 females participated in this study, the majority of whom are majoring in languages or humanities, although 23 of the participants are majoring in science, engineering, law, and hotel management. The age range of the participants is 18–41 ($M = 31.93$, $SD = 7.22$). At the time of the survey, all participants were taking language courses as well as courses about language learning or pedagogy. The participants all completed extensive background questionnaires, and information from these questionnaires regarding their past language learning experience was used to categorize them into groups. Although there is some controversy on using self-report data for an indication of language proficiency, there are many examples of when self-report data have been used, especially when multiple languages are involved (e.g., Dewaele 2010; Dewaele and Stavans 2012; Dewaele and Wei in press):

It [self report data] gives you a rough indication, and is good enough for what we want to do. If we look at language profiles, it would be impossible to measure true, actual proficiency in 15 languages. It just wouldn’t be possible. So we have to rely on what they say, and the only argument I would say is that a number of studies have shown a decent correlation between both. If I ask you to fill out that questionnaire, you would have no reason to lie. You won’t win anything by telling me you are brilliant in 12 languages if you aren’t. (Dewaele 2012)

On the basis of this rationale, self-reported proficiency data were used to divide the participants into groups. For the purpose of this study, the participants were initially divided into two groups for the analysis of their anxiety: one group was composed of those participants with an IEP and the other group was those participants with an
Additionally, for some of the analyses, the groups underwent additional categorization based on the level of proficiency in a FL other than English. One of these sub-groups was labeled as the ‘low-level multilingual (LLM)’ group and indicated an IEP or AEP and a low level of proficiency in an additional FL. The other group was labeled as the ‘high-level multilingual (HLM)’ group and had an IEP or AEP in English and an intermediate or high level of an additional FL. Thus, the participants fell into one of four possible categorizations:

1. Intermediate English LLMs: (IEP and low additional FL proficiency)
2. Advanced English LLMs: (AEP and low additional FL proficiency)
3. Intermediate English HLMs: (IEP and intermediate or high additional FL proficiency)
4. Advanced English HLMs: (AEP and intermediate or high additional FL proficiency)

Table 1 illustrates the languages other than English studied by the participants in the current study. Some of the participants studied three or more languages, which is why total number in Table 1 exceeds the total number of participants in this study.

More details about these classifications are provided in the Data analysis and Results sections.

**Procedure**

The data presented in this study are part of a larger study on the individual differences of Korean EFL learners. For this part of the project, the participants answered a Korean version of the FLCAS that was put online via SurveyMonkey (http://www.surveymonkey.com/) (see Wilson and Dewaele 2010, for an elaboration of the benefits of online surveys and SLA research). The survey contains 33 items and was available in both Korean and English simultaneously. Volunteers were recruited and then sent the link to the survey via e-mail. The data were analyzed using SPSS version 18.0. The specific procedures for the FA, discriminant function analysis (DFA), and independent t-tests are described the Data analysis section.

**Data analysis**

The statistical tests used in this study are an exploratory FA, DFAs, and independent t-tests for post hoc comparisons. For RQ1, a FA was performed on the data from the FLCAS. A common practice for exploratory factor analyses is to use Principle Component Analysis (PCA), which is theoretically similar to a Multivariate Analysis of Variance (MANOVA); however, it is not a FA method, strictly speaking. Exploratory FAs also often use orthogonal rotations, but the use of PCA and

<table>
<thead>
<tr>
<th>Japanese</th>
<th>Mandarin</th>
<th>German</th>
<th>French</th>
<th>Spanish</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>N = 67</td>
<td>N = 36</td>
<td>N = 29</td>
<td>N = 27</td>
<td>N = 16</td>
<td>N = 11</td>
</tr>
</tbody>
</table>

Note: ‘Other’ includes the following: Italian (N = 3), Indonesian (N = 2), Latin (N = 2), Arabic (N = 1), Portuguese (N = 1), Polish (N = 1), and Turkish (N = 1).
orthogonal rotations are not without controversy. PCA has been argued not to be a true FA (Field 2005), and orthogonal rotations are arguably not logical for social science research. The main difference between orthogonal rotations (varimax, quartimax, and equamax) and oblique rotations (direct oblimin and promax) is that orthogonal rotations anticipate no relationship between factors, while oblique rotations assume that there might be some level of correlation among factors. According to Field (2005, 637), ‘...there are strong grounds to believe that orthogonal rotations are complete nonsense for naturalistic data, and certainly any data involving humans...As such, some argue that orthogonal rotations should never be used,’ and are thus illogical for social science research. Because of these reasons, this study used Maximum Likelihood (ML) as the extracting methods (as opposed to PCA) and the oblique rotation of direct oblimin as a rotation tool.

In order to address RQ2, the participants of this study were divided into groups of LLMs and HLMs according to a combination of L2 (English) proficiency and L3 (an FL other than English) proficiency. The rationale for the categorization is that language anxiety, the focal construct of this study, could be jointly affected by all languages studied. As noted in Dewaele (2010), effects of multilingualism and affordances were also related to CC. Following this logic, the learners were classified into groups by using a combination of English proficiency and proficiency in an additional FL. Specifically, based on a self-rating proficiency scale, HLMs are operationalized as those learners who have at least an intermediate level of English and have an intermediate or advanced FL proficiency (other than English) whereas LLMs are operationalized as those who have at least an intermediate level of English and have below an intermediate FL proficiency (i.e., beginning levels of FL proficiency). A six-point Likert self-rating proficiency scale was used (Max = 5, Min = 0). Thus, this study operationalizes low proficiency as average scores ranging from 0 to 2, intermediate proficiency as mean scores ranging from 2.1 to 4, and high proficiency as scores ranging from 4.1 to 5.¹ This criterion yields the following partition of the participants, as shown in Table 2.

Interestingly, only five participants are HLMs with IEP (a fact that is interesting in and of itself); they are majoring in an FL other than English: German (n = 3) and French (n = 2). Despite the fact that this group would be theoretically interesting, the group was not included in data analysis because the small number of the sample size is likely to lead to unreliable interpretations of the statistical analyses. Thus, this study includes only the three groups: (1) IEP LLMs (IEP and low additional FL proficiency), (2) AEP LLMs (AEP and low additional FL proficiency), and (3) AEP HLMs

Table 2: Operationalization of low-level multilinguals (LLM) and high-level multilinguals (HLM).

<table>
<thead>
<tr>
<th></th>
<th>LLM (low proficiency in an FL other than English)</th>
<th>HLM (intermediate or high proficiency in an FL other than English)</th>
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</thead>
<tbody>
<tr>
<td>Intermediate English proficiency</td>
<td>N = 26</td>
<td>N = 5</td>
</tr>
<tr>
<td>Advanced English proficiency</td>
<td>N = 59</td>
<td>N = 31</td>
</tr>
</tbody>
</table>

Note: The total number in this table is 121 because two of the participants did not answer the self-assessment of language proficiency part of the questionnaire.
RQ2, which examines the difference between LLM and HLM learners when considering the combined variables of English and FL proficiency, was investigated by analyzing the three groups simultaneously using a DFA. The two follow-up questions of RQ2 were examined by pair-wise comparisons of the three groups. In order to ensure that the compared groups differ significantly in terms of language proficiency, independent \( t \)-tests were run before doing the DFA for verification purposes. RQ2-1, which is concerned with the effect of English proficiency on anxiety, was answered by comparing IEP LLMs \((n = 26)\) and AEP LLMs \((n = 59)\) in order to remove the potentially confounding variable of multilingualism. When running an independent \( t \)-test with English proficiency scores as a dependent variable and with the two groups as an independent variable, IEP LLMs and AEP LLMs differed significantly in their English proficient scores, \( t(83) = 14.64, p = 0.0001, d = 3.21 \); however, an independent \( t \)-test with FL proficiency scores as a dependent variable did not yield a significant difference between the two groups, \( t(83) = 0.69, p = 0.49 \). Thus, the two groups (i.e., IEP LLMs vs. AEP LLMs) differed significantly in terms of L2 (English) proficiency, whereas they did not differ in terms of FL proficiency. This result means that they had a significantly different level of English but not of an FL, verifying that all of the participants in both groups could be classified as LLMs. RQ2-2, which examines the interaction of anxiety and multilingualism, was addressed by looking at the differences between AEP LLMs \((n = 59)\) and AEP HLMs \((n = 31)\). Administering an independent \( t \)-test of the two groups with FL proficiency scores as a dependent variable, AEP LLMs showed significantly lower FL proficiency scores than AEP HLMs, \( t(88) = -14.98, p = 0.0001, d = 3.19 \); however, the two groups did not differ in terms of English proficiency scores, \( t(88) = 1.45, p = 0.15 \). Therefore, the two groups (i.e., AEP LLMs vs. AEP HLMs) were differentiated in terms of multilingualism, while they were comparable with respect to L2 (English) proficiency.

For the overarching statistical analysis for RQ2, which examines the difference between LLM and HLM learners when considering the combined variables of English and FL proficiency, a DFA (a multivariate statistical technique) was administered with the four anxiety scores as independent variables and the group variable of the three levels as the dependent variable. The DFA was performed on the data in order to minimize Type I error rates by taking into account all of the dependent variables simultaneously. Also, the DFA allows us to see whether group membership can be predicted from the anxiety scores while indicating the relative significance of the four scores in differentiating the three groups. The follow-up questions, RQ2-1 and RQ2-2, were examined to elaborate on the differences between

<table>
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<th>English proficiency</th>
<th>FL other than English proficiency</th>
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<td></td>
<td>( M )</td>
<td>( \text{SD} )</td>
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<tr>
<td>IEP LLM ((n = 26))</td>
<td>3.62</td>
<td>0.34</td>
</tr>
<tr>
<td>AEP LLM ((n = 59))</td>
<td>4.68</td>
<td>0.23</td>
</tr>
<tr>
<td>AEP HLM ((n = 31))</td>
<td>4.76</td>
<td>0.28</td>
</tr>
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</table>
the groups in terms of the four anxiety factors found from the FA. As a post hoc measure, and in order to reduce Type I error, a series of Bonferroni-corrected independent t-tests was administered with the group classification as an independent variable and the four-factor scores as dependent variables.

Results

RQ1: What are the underlying factors in the FLCAS?

RQ1 is ‘What are the underlying factors in the FLCAS?’ An exploratory FA was performed with the responses of 123 Korean EFL students on the FLCAS questionnaire consisting of the 33 items. The FA employed the ML extraction method and the oblique direct oblimin rotation method. There were two main guiding principles used when choosing the FA method: (1) items could only be included if they had an eigenvalue greater than 1 and (2) a four-factor structure for the analysis was favored, which was influenced by Aida (1994), which was the first study to use FA for the FLCAS, and Huang, Eslami, and Hu (2010). The four-factor structure proved to be the most statistically reliable of all of the iterations attempted.

The four-factor solution with the 33 items had an internal consistency measured by Cronbach’s alpha of 0.79. Three items which had a value of below 0.3 for the factor loadings (item 5, 6, and 8) were removed because items containing lower factor loadings tend to be eliminated in exploratory FA (Guadagnoli and Velicer 1988). After removing the three items, Cronbach’s alpha was improved (alpha = 0.84).

The final solution of the four-factor structure with 30 items accounts for 59.01% of the total variance. The first factor (F1), labeled ‘English class performance anxiety,’ contains 13 items that address fear of using English in front of other students or the teacher in the English class and explains 47.60% of the variance. The direction of the factor loadings (positive or negative) in F1 shows that learners agreed with statements indicating anxiety (such as item 3 ‘I tremble when I know that I’m going to be called on in English class’) and disagreed with the statement that did not indicate anxiety (such as item 18 – ‘I feel confident when I speak in my English class’). The second factor (F2) contains 3 items, and was labeled ‘Lack of self-confidence in English’ because it contains three items addressing the idea of thinking others are better in English than oneself and explains 5.08% of the variance. The third factor (F3) is labeled ‘Confidence with native speakers of English’ and includes three items related to comfort around native speakers of English as well as the idea that English classes are nothing to get upset about and explains 3.01% of the variance. The fourth factor (F4) was labeled ‘Fear of ambiguity in English,’ which has 11 items indicating a panicked feeling when not everything is understood in English as well as a general dislike and nervousness about English and English courses, explaining 3.33% of the variance. Table 4 illustrates the factor loadings for the four factors.

Thus, the analysis shows four underlying factors: F1 – English class performance anxiety, F2 – Lack of self-confidence in English, F3 – Confidence with native speakers of English, and F4 – Fear of ambiguity in English. There have been few other studies that have also done an FA on the FLCAS (e.g., Aida 1994; Huang, Eslami, and Hu 2010). In the Discussion section a detailed comparison of two studies, Aida (1994) and the current study, is given to account for FAs performed on two fundamentally different contexts.
Table 4. Factor loadings for EFL anxiety.

<table>
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<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<tr>
<td>Factor 1: English class performance anxiety</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I tremble when I know that I’m going to be called on in English class</td>
<td>0.95</td>
<td></td>
<td></td>
<td></td>
<td>0.64</td>
</tr>
<tr>
<td>20. I can feel my heart pounding when I’m going to be called on in English class</td>
<td>0.84</td>
<td></td>
<td></td>
<td></td>
<td>0.85</td>
</tr>
<tr>
<td>2. I don’t worry about making mistakes in English class</td>
<td>-0.72</td>
<td></td>
<td></td>
<td></td>
<td>0.61</td>
</tr>
<tr>
<td>24. I feel very self-conscious about speaking English in front of other students</td>
<td>0.70</td>
<td></td>
<td></td>
<td></td>
<td>0.46</td>
</tr>
<tr>
<td>9. I start to panic when I have to speak without preparation in English class</td>
<td>0.70</td>
<td></td>
<td></td>
<td></td>
<td>0.66</td>
</tr>
<tr>
<td>33. I get nervous when the English teacher asks questions which I haven’t prepared in advance</td>
<td>0.68</td>
<td></td>
<td></td>
<td></td>
<td>0.50</td>
</tr>
<tr>
<td>12. In English class, I can get so nervous that I forget things I know</td>
<td>0.65</td>
<td></td>
<td></td>
<td></td>
<td>0.28</td>
</tr>
<tr>
<td>13. It embarrasses me to volunteer answers in my English class</td>
<td>0.62</td>
<td></td>
<td></td>
<td></td>
<td>0.67</td>
</tr>
<tr>
<td>1. I never feel quite sure of myself when I am speaking in my English class</td>
<td>0.61</td>
<td>0.30</td>
<td></td>
<td></td>
<td>0.45</td>
</tr>
<tr>
<td>27. I get nervous and confused when I am speaking in my English class</td>
<td>0.60</td>
<td></td>
<td></td>
<td></td>
<td>0.86</td>
</tr>
<tr>
<td>18. I feel confident when I speak in my English class.</td>
<td>-0.47</td>
<td>-0.32</td>
<td></td>
<td></td>
<td>0.46</td>
</tr>
<tr>
<td>28. When I’m on my way to English class, I feel very sure and relaxed.</td>
<td>-0.44</td>
<td>-0.32</td>
<td>0.33</td>
<td></td>
<td>0.62</td>
</tr>
<tr>
<td>22. I don’t feel pressure to prepare very well for English class</td>
<td>-0.35</td>
<td></td>
<td></td>
<td></td>
<td>0.47</td>
</tr>
<tr>
<td>Factor 2: Lack of self-confidence in English</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. I always feel that the other students speak English better than I do</td>
<td>0.74</td>
<td></td>
<td></td>
<td></td>
<td>0.20</td>
</tr>
<tr>
<td>7. I keep thinking that the other students are better at English than I am</td>
<td>0.59</td>
<td></td>
<td></td>
<td></td>
<td>0.83</td>
</tr>
<tr>
<td>21. The more I study for an English test, the more confused I get</td>
<td>0.44</td>
<td>0.33</td>
<td>0.43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 3: Confidence with native speakers of English</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32. I would probably feel comfortable around native speakers of English</td>
<td>0.82</td>
<td></td>
<td></td>
<td></td>
<td>0.55</td>
</tr>
<tr>
<td>14. I would not be nervous speaking English with native speakers</td>
<td>0.78</td>
<td></td>
<td></td>
<td></td>
<td>0.57</td>
</tr>
<tr>
<td>11. I don’t understand why some people get so upset over English classes</td>
<td>0.31</td>
<td></td>
<td></td>
<td></td>
<td>0.54</td>
</tr>
<tr>
<td>Factor 4: Fear of ambiguity in English</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. I get nervous when I don’t understand every word the English teacher says</td>
<td>0.76</td>
<td>0.74</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. I feel overwhelmed by the number of rules you have to learn to speak English</td>
<td>0.59</td>
<td>0.72</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. I get upset when I don’t understand what the teacher is correcting</td>
<td>0.58</td>
<td>0.74</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Even if I am well prepared for English class, I feel anxious about it</td>
<td>0.34</td>
<td></td>
<td>0.53</td>
<td>0.59</td>
<td></td>
</tr>
<tr>
<td>10. I worry about the consequences of failing my English class</td>
<td>0.48</td>
<td>0.66</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Continued)
RQ2: Do LLM learners and HLM learners have different FLA profiles when considering the combined variables of English and FL proficiency?

The second research question addresses the issue of the similarity or difference of the LLM and HLM participants’ language learning anxiety profiles when considering the combined variables of English and FL proficiency. A DFA was used to indicate whether the group membership can be predicted from the anxiety scores while indicating the relative significance of the four scores in differentiating the three groups (IEP LLMs, \(n=26\); AEP LLMs, \(n=59\); and AEP HLMs, \(n=31\)). In this DFA, the dependent variable was a group membership variable of the three levels and the independent variables were the four anxiety factor scores. The descriptive statistics of the four-factor scores for the groups, which is shown in Table 5, are also graphically represented in Figure 1.

The DFA identified one function as significant in predicting group membership, accounting for 97.9% of the total variance, Wilk’s Lambda = 0.64, eigenvalue = 0.54, \(\chi^2(8) = 49.09, p = 0.0001\). In DFAs, the term function is similar to the idea of factor. In most cases many factors are reduced to one function when a DFA is performed, as in Factor 1, items 2, 18, 22, and 28 have negative factor loadings, contrary to other items in Factor 1. The negative loadings are due to the opposite sentiment of these four items to the other items in Factor 1. For example, item 18 states, ‘I feel confident when I speak in my English class’ which shows a lack of anxiety, rather than anxiety, such as in item 3, ‘I tremble when I know that I’m going to be called on in English class.’ In order to resolve the issue of cancelling out the answers magnitude because of oppositely worded questions, responses of the four items were recoded (i.e., 1=6, 2=5, 3=4, 4=3, 5=2, and 1=6), thus having the questions converge to Factor 1 ‘English class performance anxiety.’

<table>
<thead>
<tr>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. It frightens me when I don’t understand what the teacher is saying in the English class</td>
<td>0.33</td>
<td>0.47</td>
<td>0.76</td>
</tr>
<tr>
<td>25. English class moves so quickly that I feel worried about getting left behind</td>
<td>0.34</td>
<td>0.43</td>
<td>0.67</td>
</tr>
<tr>
<td>19. I am afraid that my English teacher is ready to correct every mistake I make</td>
<td>0.42</td>
<td>0.61</td>
<td>0.35</td>
</tr>
<tr>
<td>31. I am afraid the other students will laugh at me when I speak English</td>
<td>0.35</td>
<td>0.63</td>
<td>0.32</td>
</tr>
<tr>
<td>26. I feel more tense and nervous in my English class than in my other classes</td>
<td>0.34</td>
<td>0.32</td>
<td>0.34</td>
</tr>
<tr>
<td>17. I often feel like not going to my English class</td>
<td>0.32</td>
<td>0.72</td>
<td>0.25</td>
</tr>
</tbody>
</table>

Table 4 (Continued)

Table 5. Descriptive statistics of the four-factor scores for the three groups.

<table>
<thead>
<tr>
<th>Factor</th>
<th>IEP LLMs (n=26)</th>
<th>AEP LLMs (n=59)</th>
<th>AEP HLMs (n=31)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Factor 1</td>
<td>4.32</td>
<td>0.83</td>
<td>3.43</td>
</tr>
<tr>
<td>Factor 2</td>
<td>3.73</td>
<td>1.04</td>
<td>2.74</td>
</tr>
<tr>
<td>Factor 3</td>
<td>2.58</td>
<td>0.85</td>
<td>3.48</td>
</tr>
<tr>
<td>Factor 4</td>
<td>3.64</td>
<td>0.90</td>
<td>2.84</td>
</tr>
</tbody>
</table>

Note: In Factor 1, items 2, 18, 22, and 28 have negative factor loadings, contrary to other items in Factor 1. The negative loadings are due to the opposite sentiment of these four items to the other items in Factor 1. For example, item 18 states, ‘I feel confident when I speak in my English class’ which shows a lack of anxiety, rather than anxiety, such as in item 3, ‘I tremble when I know that I’m going to be called on in English class.’ In order to resolve the issue of cancelling out the answers magnitude because of oppositely worded questions, responses of the four items were recoded (i.e., 1=6, 2=5, 3=4, 4=3, 5=2, and 1=6), thus having the questions converge to Factor 1 ‘English class performance anxiety.’
was the case with our data; thus, our four anxiety factor scores were reduced into one function for this analysis. Each of the three participant groups has a unique centroid, all three of which are represented in Figure 2; the centroids of the three groups indicate the locations of the three groups in the multidimensional space (where each

![Figure 1. Pictorial representation of the anxiety factors among the three groups.](image1.png)

![Figure 2. Illustration of the centroids of the three groups of participants.](image2.png)
group is located within the function). The centroid of the IEP LLMs is 1.28, that of the AEP LLMs is -0.19, and that of the AEP HLMs is -0.70; the numbers indicate that the IEP LLM group is located relatively closer to the AEP LLMs than to the AEP HLMs, illustrating the uniqueness of the LLMs and the HLMs. Figure 2 also illustrates the proximity of the two AEP groups, indicating that English proficiency alone also has an effect on English language anxiety.

With respect to differentiating the three groups, the structure matrix (showing which variables contribute more to differentiating group memberships) indicated that Factor 1 had the highest loading (0.81), followed by Factor 2 (0.78), Factor 3 (-0.73), and Factor 4 (0.69). Factor 1 is the most significant variable in predicating the group membership while other factors had comparably high loadings; thus, all the responses of the four factors significantly differentiate the three groups.

**RQ2-1: Is there a difference in the FLA profiles of AEP and IEP learners?**

The first follow-up question of RQ2 (i.e., RQ 2-1) examines the effect of English proficiency on the four anxiety factors found in research question 1: 'Is there a difference in the foreign language anxiety profiles of advanced English proficiency (AEP) and intermediate English proficiency (IEP) learners?' In other words, the question examines the relationship between language English anxiety and English proficiency in a context that the previous studies have not explored. As described in the Data analysis section, this research question was investigated by comparing LLMs of AEP (n = 59) with LLMs of IEP (n = 26).

A series of follow-up comparisons using independent t-tests were conducted to examine the differences between the two groups in terms of the four anxiety factors. As a post hoc measure, and in order to reduce Type I error, four separate independent t-tests with Bonferroni corrections were administered with a group variable as an independent variable and the four-factor scores as dependent variables. As shown in Table 6, the four Bonferroni post hoc comparisons indicate that the IEP group has significantly higher anxiety when compared with the AEP group across all four factors.

**RQ2-2: Is there a difference in the FLA profiles of LLM and HLM learners?**

The second follow-up research question of RQ2 (i.e., RQ 2-2) investigates whether LLM and HLM learners have different English anxiety profiles by comparing the two groups in terms of the four anxiety factors. As described in the Data analysis section, this research question was addressed by comparing LLMs of AEP (n = 59) with HLMs of AEP (n = 31).

Four post hoc pairwise comparisons with Bonferroni corrections (t-tests) were performed. The results indicated that the two groups (i.e., AEP LLMs vs. AEP

<p>| Table 6. Post hoc comparisons between IEP and AEP (using Bonferroni corrections). |
|---------------------------------|-----------------|-----------------|-----------------|</p>
<table>
<thead>
<tr>
<th>Mean differences (standard errors)</th>
<th>Independent t-tests</th>
<th>Cohen’s d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>0.89 (0.19)</td>
<td>t(83) = 4.74, p = 0.0001</td>
</tr>
<tr>
<td>Factor 2</td>
<td>0.99 (0.20)</td>
<td>t(83) = 4.87, p = 0.0001</td>
</tr>
<tr>
<td>Factor 3</td>
<td>-0.90 (0.20)</td>
<td>t(83) = -4.52, p = 0.0001</td>
</tr>
<tr>
<td>Factor 4</td>
<td>0.80 (0.20)</td>
<td>t(83) = 4.08, p = 0.0001</td>
</tr>
</tbody>
</table>
HLMs) differed significantly in Factor 1, approached a significant difference in Factor 4, but did not differ in Factors 2 or 3. Table 7 shows the results for the comparison of the AEP LLMs and the AEP HLMs.

These results provide crucial insights for understanding the interface between anxiety and levels of multilingualism. Further elaboration on this point is found in the Discussion section of this article.

### Discussion

This study is an analysis of several different factors that could affect the English language anxiety of L1 Korean students learning English in an EFL setting. This study is unique in several ways. Firstly, a FA of the FLCAS had not previously been done with data of this kind. Additionally, the study examines the relationship between anxiety, multilingualism, and proficiency, which is understudied in the realm of SLA anxiety research; from this data, an intriguing new concept emerged – fear of ambiguity in English, an idea that has previously not been discussed in the language anxiety research. The results indicate several intriguing results for each of the research questions; a discussion and implications of these results are presented below.

Research question 1 is ‘What are the underlying factors in the FLCAS?’ Our analysis shows four underlying factors: F1 – English class performance anxiety, F2 – Lack of self-confidence in English, F3 – Confidence with native speakers of English, and F4 – Fear of ambiguity in English. There have been few other studies that have also done an FA on the FLCAS (e.g., Aida 1994; Huang, Eslami, and Hu 2010). For the purpose of this article, the results of Aida (1994) will be compared to those of the current study to see what factors of the FLCAS can be generalizable as the contexts of the two studies are quite different. The current study’s participants are Korean students learning English as an FL, whereas the participants in Aida’s study are American students learning Japanese as an FL.

The analyses in both studies resulted in four factors. There was one factor – F3 in both studies – that resulted in the same three questions loading onto that factor. In both studies, this factor describes comfort with interaction with native speakers of the target language and includes items 32, 14, and 11 from the FLCAS (see Table 4 in the results section in this study for the items and factor loading of this study, and see Aida 1994 for the factor loadings of that study). The similarity of the results for Factor 3 in both studies could indicate that similar levels of anxiety exist with regard to interactions with native speakers regardless of the language being learned or the cultural background of the student. As an extension of this idea, we can postulate that the anxiety that results from interactions of native speakers is perhaps a universal phenomenon.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean differences (standard errors)</th>
<th>Independent ( t )-tests</th>
<th>Cohen’s ( d )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>0.45 (0.18)</td>
<td>( t(88) = 2.54, p = 0.01 )</td>
<td>0.54</td>
</tr>
<tr>
<td>Factor 2</td>
<td>0.26 (0.16)</td>
<td>( t(88) = 1.56, p = 0.12 )</td>
<td>0.33</td>
</tr>
<tr>
<td>Factor 3</td>
<td>−0.30 (0.18)</td>
<td>( t(88) = -1.66, p = 0.10 )</td>
<td>0.35</td>
</tr>
<tr>
<td>Factor 4</td>
<td>0.31 (0.17)</td>
<td>( t(88) = 1.84, p = 0.07 )</td>
<td>0.39</td>
</tr>
</tbody>
</table>
There are also many overlapping items in F1 in both studies. In Aida (1994), F1 contained 18 items and was labeled ‘Speech anxiety and fear of negative evaluation.’ These 18 items were a combination of the 11 items in F1 in our study, ‘English class performance anxiety’ and the four items in F2 in our study, ‘Lack of self-confidence in English.’ There were four additional items in F1 in Aida (1994) that grouped with our F4. The similarity in these results also points toward the idea that all students to some extent have anxiety in the classroom and to some extent lack self-confidence when learning a second or FL. This concept is rational because when one learns another language, the security of being able to logically express thoughts and desires (as easily as in the L1) is suddenly weakened.

Along the same lines of dealing with ambiguity in language learning, there was one factor in our analysis – F4, 11 items, ‘Fear of ambiguity in English’ – that did not appear in any form in Aida (1994). The items that loaded onto this factor in the current study were a combination of the items from Aida’s F2, some items from F1, and several of the items that were eliminated. Multilinguals’ heightened tolerance for ambiguity has only just begun to appear in the literature. Dewaele and Wei (in press) found that multilinguals had significantly higher tolerance for ambiguity than bilinguals or monolinguals, regardless of the proficiency level in their languages. The concept of tolerance for ambiguity in language learning has also been addressed in the recent discussions about language aptitude. Sternberg (2002) postulates that there are three core constructs in language aptitude: analytical intelligence, creative intelligence, and practical intelligence. Creative intelligence precisely addresses this idea of fear of ambiguity. In order to have a high level of language aptitude in this construct, one must have the ability to deal with novel and ambiguous situations as well as with unfamiliar words in an unfamiliar context. Thus, because this factor was found in our analysis of language learning anxiety, we can postulate that debilitative anxiety could potentially relate to language learning aptitude. It also must be questioned whether or not the classroom culture affected this fear of ambiguity in the current study. As Kang (2005) indicates, Korean classrooms are traditionally more teacher-fronted and lecture based, especially when compared with language learning setting in the USA. When students have less in-class time to use the language in question, each incident of language use is more likely to cause anxiety. Also, if the students in this study were exposed to a grammar-translation style of teaching, accuracy (as opposed to communication) would have been valued (Brown 2007), thus making the students cognizant of every mistake made in the classroom. An interesting area for further research would be to see if the results collected from participants in different settings would also result in a ‘Fear of ambiguity in English’ factor with a FA.

Concerning research question 2, ‘Do LLM and HLM learners have different foreign language anxiety profiles when considering the combined variables of English and foreign language proficiency?’, the centroid numbers indicate that the IEP LLM group is located relatively closer to the AEP LLMs than to the AEP HLMs, illustrating the uniqueness of the HLM participants. Figure 2 also illustrates the similarity in location of the two AEP groups, indicating that English proficiency alone also has an effect on English language anxiety. These results indicate a joint impact of English and FL proficiency on English language anxiety [IEP LLMs > AEP LLMs > AEP HLMs]. This trend is also illustrated in Figure 1 in the Results section. It is clear that for F1, F2, and F4, the IEP LLMs have the highest level of English language anxiety, followed by the AEP LLMs and then by the AEP
HLMs. F3 is ‘confidence in English,’ thus the AEP HLMs had the highest scores in this factor, followed by the AEP LLMs, and then the IEP LLMs. The sub-questions for research question 2 tease apart what factors precisely are causing this anxiety.

Research question 2-1 specifically questions whether English proficiency affects English language anxiety. Because of this, the HLM participants (AEP HLMs) were not compared so that the only variable was English proficiency level (IEP LLMs and AEP LLMs were compared for this question). From previous research (Dewaele 2007, 2010; Dewaele, Petrides, and Furnham 2008), it would be expected that those learners with higher levels of English would have lower levels of English anxiety. This was indeed the case, as there were significant differences between the two groups for all four factors ($p < 0.0001$ in all cases). Thus, this study replicates the findings of the previous research on the relationship between anxiety and second language proficiency.

Perhaps some of the most interesting results of the current study are found in the analysis of RQ2-2. The participants responded to the FLCAS with regard to their English language anxiety, and RQ2-2 addresses the question of whether a certain level of multilingualism (knowledge of an FL other than English) would have an effect on English language anxiety. It is crucial to note that the question is not inquiring about multilingualism and the effect on anxiety regarding the additional FL studied, but instead about the concept of if multilingualism in and of itself could have an effect on all language learning experiences. In other words, could the fact that someone had reached a certain proficiency in multiple languages (French, Chinese, etc.) have an effect on anxiety levels in a different language (in this case English)?

The answer is a resounding yes. For F1 (English class performance anxiety), a $p$ value of 0.01 was reached when comparing the English anxiety of LLM and HLM participants. Additionally, for F4 (Fear of ambiguity in English, $p = 0.07$), the results were approaching significance. If a learner has multiple experiences in a language learning environment, it is logical that performing in subsequent language learning environments would be less anxiety inducing. Additionally, when one has more language learning experiences, the tolerance for ambiguity becomes greater. For example, someone who has communicated successfully in FL settings understands that not understanding every single lexical item in a sentence is crucial for overall comprehension. However, it is not necessarily the case that studying an additional language will automatically reduce anxiety. Although the language learning profiles should always be taken into consideration (not just when the participants have reached advanced levels of proficiency, per the trend in SLA research), the learner has to have the opportunity to use the language before he or she knows how the additional language affects language learning anxiety. Thus, as shown from the results of the current study, multilingualism at the beginning stages (LLM) can have little effect on anxiety; this is not to be interpreted, however, as a complete lack of effect that low-levels of an additional language can have on other areas, such as strategy use or intercultural competence. Further discussion of these issues is beyond the scope of the current article, but is an important area for future research.

**Conclusion**

In conclusion, the results of this study bring to light several previously understudied issues with regard to language learning classroom anxiety. With the FA implemented
upon this data set, it was found that some of the constructs composing the FLCAS seem to be universal. However, the finding of Factor 4 (Fear of ambiguity in English) was a factor previously undetected in previous research involving the FLCAS. For future research, it would be interesting to see if data from other contexts would pattern in the same manner. Additionally, a significant difference in English anxiety was found with all four factors with regard to IEP and AEP, indicating that language proficiency has a profound effect on language anxiety.

Other than the emergence of the ‘fear of ambiguity’ factor, the most significant finding from this study comes from the results of RQ2-2, which addresses the question of whether a certain level of multilingualism (knowledge of an FL other than English) would have an effect on English language anxiety. In other words, could multiple language learning experiences have an effect on anxiety levels in a different language? The results indicate that multiple language learning experiences combined with at least an intermediate level of proficiency in the additional language do indeed affect anxiety levels in an unrelated language. With these results, we can confidently state that knowledge of an FL other than English at an intermediate level can also have an effect on level of English language anxiety. These results provide further evidence of the importance of learning multiple languages in today’s global society. It is our hope that further research in diverse contexts will continue to explore the interaction between anxiety, proficiency, and multilingualism.

Acknowledgements
This work was supported in part by Hankuk University of Foreign Studies Research Fund given to Junkyu Lee.

Notes
1. Note that the highest average for self-rating was 4.2, indicating that the participants were not as proficient as the advanced users in Dewaele (2010). See Table 3 for data on self-ratings.
2. The first trial using the criteria of eigenvalue greater than 1 yielded a six-factor solution, accounting for 60.58% of the total variances. However, two factors out of the six factors were loaded with one item, which is not recommended by many statisticians (Guadagnoli and Velicer 1988). The second attempt in which the number of factors was specified as three could account for 53.67% of variance. Again, one factor out of the three factors was loaded with one item; thus, the four-factor solution met all of the parameters for a solid analysis.
3. Item 5 = It wouldn’t bother me at all to take more English classes; item 6 = During English class, I find myself thinking about things that have nothing to do with the course; item 8 = I am usually at ease during tests during my English class.
4. As the descriptive statistics (Table 5) showed, the directionality of the factor scores is different; F3 is negative because the higher scores in this factor indicate less anxiety while higher scores mean more anxiety in F1, F2, and F3.

References


