Anxiety plays an important role in foreign language (FL) students' classroom performance. This study presents the results of the first empirical examination of the effect of general FL learning anxiety on students' achievement in an Arabic course and of listening anxiety on students' listening comprehension. The data came from 2 measures of anxiety and a background questionnaire administered to 233 postsecondary students of Arabic as a FL. Anxiety scores were correlated with final grades and listening comprehension scores. The results indicated that FL learning anxiety and listening anxiety are separate but related phenomena that both correlate negatively with achievement. The study also revealed significant negative correlations among FL learning anxiety, listening anxiety, and selected demographic variables. These results suggest that reducing student anxiety and providing a less stressful classroom environment might enable teachers and Arabic programs to help students improve both their listening comprehension proficiency as well as their overall course performance.

THE ROLE OF ANXIETY AND ITS POTENTIALLY detrimental effect on learners in foreign or second language (FL) classes has concerned FL educators for years. Various aspects of FL learning may engender anxiety in students, but the unfamiliar writing and phonological systems, as well as the foreign cultural context of the less commonly taught languages (LCTL), such as Arabic, Japanese, or Chinese, appear to produce greater anxiety in learning many LCTLs than the more commonly taught languages.

Learning Arabic seems to be very challenging for native speakers of English. The Foreign Service Institute estimates that approximately 1320 hours of instruction in an intensive program are required for such languages as Arabic, Chinese, Japanese, and Korean to bring students to the same level of proficiency that may be reached after only about 480 hours of instruction in languages like French or Spanish (Omaggio Hadley, 2001). Ryding (1991) noted that many students of Arabic give up after a year or two of study, frustrated at their lack of communicative competence even after "great effort" (p. 212). Despite this somewhat discouraging observation, new students continue to enroll in beginning Arabic classes at ever-increasing rates.

Although modern FL enrollment declined from 16.1 per 100 postsecondary students in 1960 to 8.7 per 100 in 1998 (Welles, 2004), enrollment in Arabic courses in U.S. universities has increased significantly in recent years. In 1998, only 5,505 students were studying Arabic at U.S. colleges and universities, yet this number represents a 23.9% increase in the number of students of Arabic from 1995 to 1998. According to a recent survey conducted by the Modern Language Association, Arabic experienced a 92.3% increase in enrollment from 1998 to 2002 (Welles, 2004). Furthermore, since the tragic events of September 11, 2001, anecdotal reports from the field indicate
that interest and enrollment in Arabic classes has increased at many U.S. universities (K. Belnap, personal communication, June 10, 2003).

The recent surge in enrollment in Arabic classes appears to reflect the desire of many individuals for a greater understanding of the Arab world. Despite this laudable motivation, many students embark on their study of Arabic with little or no knowledge of the language, even to the extent that they are sometimes surprised to discover that they must master new writing, syntactic, morphological, and phonological systems. Consequently, attrition among students of Arabic tends to be higher than for other FLs (Belnap, 1995).

A pedagogical issue unique to Arabic is diglossia, the existence of two forms of the language, Modern Standard Arabic (MSA) and several regional vernaculars (colloquial Arabic: Ryding, 1991). Most instruction in U.S. Arabic programs targets the acquisition of proficiency in either MSA or one of the dialects. Students who work hard to become proficient in MSA may be discouraged to find that they still cannot communicate effectively because native speakers of Arabic do not use MSA for interpersonal communication, and students who study a dialect may feel inadequate in more formal situations where colloquial Arabic is inappropriate. All of these students may experience anxiety in classroom listening exercises that feature an unfamiliar form of Arabic.

The present study considered how anxiety affects listening comprehension and overall classroom performance in Arabic. A precise definition of FL anxiety is offered by Horwitz, Horwitz, and Cope (1986): “a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process” (p. 128). It may arise from self-doubt, frustration, and perceived (or fear of) failure. When anxiety is associated with learning a FL, it can manifest itself in altered performance, lower test scores, and final grades. If it is severe, it can even lead to a change in the student's academic or career plans.

Horwitz et al. (1986) determined that anxiety plays an important role in determining students' success or failure in FL classes. Besides making the classroom experience more difficult for students and instructors alike, FL anxiety can deter students from pursuing academic or professional careers in which FLs are essential for success. FL anxiety is an important element in the overall learning process, particularly in noncognate, non-Western languages, such as Arabic. For Arabic to occupy and maintain its place in undergraduate, as well as graduate, university programs and achieve inclusion among the more typical LCTLs such as Chinese and Japanese, it behooves instructors to find means of reducing learner anxiety in Arabic classes.

There are some published studies concerning the issue of listening anxiety in FLs, but none has examined FL learning anxiety or listening anxiety in Arabic. The present study aimed to contribute to our understanding of FL anxiety, in general, and listening anxiety in Arabic, in particular. This study also explored the relationship between listening anxiety and general FL learning anxiety. Some FL students report FL learning anxiety in general whereas others say they become anxious only when participating in skill-specific activities, for instance, speaking, listening, reading, or writing. Although the two types of anxiety might appear to be independent constructs, it is also possible that they share several common features, including negative affect toward elements of classroom communicative practice.

No published studies have investigated the relationship between general FL anxiety and listening anxiety related to Arabic. The present study was the first attempt to fill this gap and to reveal more about the relationship between the two types of anxiety and achievement in the Arabic classroom.

The study also produced information concerning the relationships among achievement, anxiety, and specific demographic variables: gender, year in school, Arabic course level (first, second, or third year), and course type (elective, required, or major). Furthermore, it examined the impact of gender and course level on listening and FL learning anxiety. It posited that listening anxiety in Arabic is a phenomenon related to, but distinguishable from, general FL learning anxiety, and it further hypothesized that higher anxiety levels result in lower overall course grades in general, and lower listening comprehension scores in particular.

**REVIEW OF THE LITERATURE**

Scholars have studied anxiety and its effect on FL learning for many years. Curran (1972) developed a language pedagogy method called Community Language Learning (CLL), designed to reduce tension and student anxiety in the classroom. This method, although not universally accepted, called attention to the issue of anxiety and its role in FL learning. Its emphasis on the active engagement of learners and teachers in the process of learning purported to contribute
significantly to the reduction of tension and anxiety in the classroom (Ryding, 1999).

Stevick (1980) described several aspects of FL learner characteristics, including reluctance to take risks and fear of embarrassment in class, and suggested practical ways for instructors to reduce student anxiety and inhibition in class. Beebe (1983), Foss and Reitzel (1988), Krashen (1982), andScarcella, Anderson, and Krashen (1990), for example, investigated several affective variables, including anxiety, in attempts to shed light on the FL learning process. The phenomenon of FL anxiety assumed increasing importance as researchers began to note its potential effect on student performance and its possible relationship to decreased success and increased attrition in language classes.

Chastain (1975) studied the effect of anxiety on course grades in elementary language courses for three languages and discovered that affective characteristics seem to have as much influence on learning as ability factors. Young (1991) identified several different sources and causes of learner anxiety in the FL classroom and suggested some possible anxiety-reducing strategies. Learner and instructor strategies to improve listening comprehension and reduce anxiety were also evaluated by Mendelsohn (1995). Bailey (1983) explored the correlation between anxiety and learners’ performance and concluded that a high level of anxiety could have adverse effects on student’s FL performance. Onwuegbuzie, Bailey, and Daley (1999) and Vogely (1998) reported similar findings. In particular, anxious students may underestimate their own ability, which, in turn, diminishes their performance in class (MacIntyre, Noels, & Clément, 1997).

Studies on the effect of anxiety on student performance in language classes have occasionally produced conflicting results. For example, on the one hand, Alpert and Haber (1960) determined that anxiety could have a beneficial or facilitative effect on student performance. On the other hand, Spielmann and Radnofsky (2001) concluded that anxiety has a detrimental effect on language acquisition. Depending on the individual, anxious FL learners may express their feelings through avoidance behavior, such as skipping language class, failing to prepare for class, or avoiding eye contact with the instructor (Bailey, 1983). Some students become so fearful of speaking in class that they refuse to participate at all (Young, 1991). Oxford (1999) discussed the effect of anxiety on FL students and on their performance, citing a study (Ganschow, Sparks, Anderson, Javorsky, Skinner, & Patton, 1994) whose authors concluded that poor FL learning skills are the cause of FL language anxiety, not the result. The majority of studies support the view that anxiety contributes to poor performance, not the reverse.

MacIntyre (1995), in a review of language anxiety research, determined that anxiety does indeed play a significant role in language learning problems. Other investigators have reinforced a belief long held by FL instructors that anxiety is a widespread and important factor in language acquisition. Anxiety, motivation, and self-confidence are among the components of Krashen’s (1982) affective filter hypothesis, which posits that learners with low levels of anxiety perform better than anxious students. Gardner and MacIntyre (1993) believe that if language anxiety continues to increase rather than to abate over time, it will have a persistent and potentially adverse effect on L2 learners’ acquisition and performance.

Horwitz (2001) reviewed a large body of research and concluded that there is a clear relationship between anxiety and poor language learning. Although some researchers discount the role of anxiety in FL learning, Horwitz (2000, 2001) spoke for many others in reiterating the importance of anxiety as a factor in student performance.

Research involving general FL anxiety has traditionally focused on students of English as a second (ESL) or foreign (EFL) language, followed by research relating to students of Spanish and French as FLs. More recently, several scholars have investigated the role of anxiety in some LCTLs such as Japanese (Aida, 1994; Kitano, 2001; Matsuda & Gobel, 2001; Saito & Samimi, 1996; Samimi & Tabuse, 1992) and Russian (Ingram, Nord, & Dragy, 1975; O’Toole, 1993). To the best of the author’s knowledge, only two published studies have addressed the phenomenon of anxiety in Arabic. In a small qualitative case study, Suleiman (1991) determined that attitude and affect directly influence the success of an individual’s study of Arabic. Studying Arabic learners’ writing task strategies, Khalidieh (2000) observed that less proficient students exhibited more anxiety than capable writers. To date, no studies have explored the effect of anxiety on listening comprehension performance or on general classroom achievement in Arabic.

Although general FL anxiety may be present on a consistent basis for many students, other students report what MacIntyre and Gardner call “situation specific anxieties” (1991a, p. 90), or anxiety related to a particular class activity, such as
public speaking. A large proportion of anxiety research has focused on what Daly (1991) calls “communication apprehension” (p. 142), or the fear of speaking in public. When public speaking must be in a language other than the speaker’s native language, the resulting anxiety can be overwhelming. Some researchers have examined the effect of FL anxiety on the learner’s oral performance in class (Aida, 1994; Chang, 1996; Ellis, 1994; Horwitz et al., 1986; Koch & Terrell, 1991; Phillips, 1991, 1992; Young, 1990, 1991). Cheng, Horwitz, and Schallert (1999) noted that many of the instruments designed to measure FL anxiety have a preponderance of items that address speaking anxiety, which reflects the widely held supposition that speaking is the most anxiety-provoking aspect of FL learning for many students. Although these instruments may facilitate accurate measurement of speaking anxiety, they may not be much help in identifying students who are anxious about other language skills.

Several investigators have studied writing apprehension and its effect on students’ performance in FL courses (Cheng, 2002; Cheng et al., 1999; Daly & Wilson, 1983). Saito and Samimy (1996) explored the relationship between anxiety and the study of a LCTL (Japanese) and noted that attitude and motivation, along with anxiety, were significant factors affecting student performance over time.

Although it might not seem that FL reading would be a source of anxiety for FL students, evidence suggests that some learners experience reading-related anxiety, especially in the LCTLs. Some recent studies, for instance, have concentrated on reading anxiety as a corollary of general FL anxiety. Saito, Garza, and Horwitz (1999) discovered that unfamiliar scripts and unfamiliar cultural material can and do evoke anxiety in students of Japanese as a FL resulting in impaired performance and comprehension. Sellers’ study (2000) yielded similar results for anxious students of Spanish, who scored lower on reading comprehension tests than did students who were less anxious. Athey (1985), Lee (1999), and Samimy and Tabuse (1991) investigated the relationship between anxiety and reading in a FL and ascertained that anxiety may indeed impair students’ reading performance.

Listening in a FL is a less thoroughly studied skill in general. We know even less about the interaction between listening and learning anxiety. Some instructors, for example, are unaware that listening exercises may arouse a debilitating anxiety in their students (Vogely, 1999). Krashen (as cited in Young, 1992) asserted that listening comprehension can indeed be “highly anxiety provoking” (p. 168). Several researchers have studied anxiety and its relationship to listening comprehension (Bacon, 1989; Gardner, Lalonde, Moorcroft, & Evers, 1987; Lund, 1991). The consensus is that anxiety impedes listening comprehension.

The relationship between two separate types of anxiety has been explored by some researchers. Cheng et al. (1999), in a study of EFL learners in Taiwan, produced empirical evidence that writing apprehension and general FL anxiety are separate, but related phenomena. In a study of U.S. students of Japanese, Saito et al. (1999) concluded that reading anxiety and general FL anxiety are also separate but related phenomena, each having significant effects on student performance. Additional evidence for the existence of reading anxiety as a phenomenon separate from general FL anxiety emerged in a study of students of Spanish (Sellers, 2000).

Despite the potentially detrimental role of anxiety in FL classes, there has been no previously published research examining how FL learning anxiety and FL listening anxiety are related. The present study represents the first examination of the relationship between general FL learning anxiety and listening anxiety. Although a large body of research involving many different aspects of FL acquisition exists, there is little language-specific research for the LCTLs, especially Arabic. In light of the increasing interest in Arabic and Middle Eastern studies in recent years, the present study was an attempt not only to address this deficiency, but also to stimulate further research and encourage badly needed empirical studies that may increase our understanding of how learner variables such as anxiety affect students’ success in learning the Arabic language.

**PURPOSE OF THE STUDY**

This study addressed the issue of how FL learning anxiety and listening anxiety are related, and how, in turn, they affect student achievement and listening comprehension performance in Arabic courses. A major goal was to determine whether general FL anxiety and listening anxiety are separate phenomena in the Arabic language classroom. Secondary aims of this study were to examine correlates of learning and listening anxiety and to evaluate the differences in these two types of anxiety across learner characteristics (gender, year in school), and type of Arabic course (elective, required, or major). Specifically, the study addressed the following three research questions:
1. Does listening anxiety exist as a phenomenon distinguishable from general FL learning anxiety?
2. Are FL learning anxiety and listening anxiety levels correlated with achievement (course grade and listening comprehension grade) and academic experience (year in school and level of Arabic course)?
3. Do FL levels of learning anxiety and listening anxiety differ across categories of gender, level of Arabic course, and course type (elective, required, or major)?

METHODOLOGY

Participants

A total of 453 students enrolled in Arabic language programs at 10 U.S. universities took part in the study. From these students, 220 participants were excluded because their instructors did not report separate listening comprehension grades for them. Final grades and listening comprehension grades were available for the remaining 233 students from 6 universities. Therefore, only data obtained from these students entered into the analysis. The participants included both undergraduate and graduate students, of whom 131 (56%) respondents were studying first-year Arabic, 71 (31%) were taking second-year Arabic, and 31 (13%) were in third-year Arabic classes. Of the participants 126 (54%) were females and the remaining 107 (46%) were males. Regarding their year in school, juniors accounted for 29% of the respondents, followed by 22% for sophomores. Seniors comprised 21% of the sample, and graduate students comprised 15%. Of those responding, 48% characterized the Arabic course as an elective; 53% indicated it was required or a major course. Undergraduate students reported majors in the sciences, social sciences, and humanities, whereas graduate students reported pursuing degrees in Middle East Studies, religion, anthropology, agriculture, and history. Table 1 contains demographic data about the participants.

Procedures

At the beginning of the spring semester in 2002, the participants completed a background questionnaire and two anxiety assessment measures in their Arabic classes and returned them to their instructors, who mailed the completed surveys to the researcher. At the conclusion of the academic year, the instructors provided the final course grades and listening comprehension grades. Not all Arabic language instructors routinely record a listening comprehension grade separately from (or in addition to) the final course grade. The present study included only data from those instructors who assigned listening comprehension grades in their classes.

Instruments

The first part of the survey questionnaire elicited basic demographic information, including gender, year in school, number of years of Arabic study (designated as first-year, second-year, or third-year); course type (elective, required, or major course), study of other FLs, and exposure to spoken Arabic. The participants then completed two surveys designed to assess (a) listening anxiety in Arabic and (b) general Arabic language learning anxiety (see Appendixes A and B).

The first anxiety survey involved the use of the Foreign Language Listening Anxiety Scale (FLLAS), as specifically adapted for Arabic listening anxiety by the author from the Foreign Language Reading Anxiety Scale (FLRAS).
developed by Saito et al. (1999). The present study represents the first time this instrument has been tested for listening, as well as the first time it has been used for Arabic. The word reading in the FLRAS was replaced with the word listening. The words French, Russian, Japanese specified in the FLRAS were replaced by the word Arabic. The scale consisted of 20 items, for each of which the participant recorded a response on a 5-point Likert scale. On the FLLAS as on the FLRAS, lower scores indicated lower anxiety, and higher scores indicated higher anxiety. The response continuum was: 1 = Strongly Disagree, 2 = Disagree, 3 = Neither Agree nor Disagree, 4 = Agree, 5 = Strongly Agree. The FLLAS showed an acceptable level of reliability, with an internal consistency coefficient of .96 ($n = 233$). Saito et al. (1999) reported a coefficient of .86 ($n = 383$) for internal consistency. The theoretical range for the FLLAS is 20 to 100. As shown in Table 2, the total scores ranged from 20 to 100, with a mean of 55.47 ($SD = 22.97$).

The second measure of anxiety was the Foreign Language Classroom Anxiety Scale (FLCAS) designed by Horwitz et al. (1986) for assessing student anxiety in Spanish classes as adapted for Arabic by the author. For this study, the words foreign language were replaced by the word Arabic. Like the FLLAS, this study represented the first occasion on which the survey was used for Arabic. It consisted of 33 items, each accompanied by a 5-point Likert scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neither Agree nor Disagree, 4 = Agree, 5 = Strongly Agree. The estimated reliability for the FLCAS (Cronbach’s alpha) was .94 ($n = 233$). Validity and reliability data for this scale have appeared in the reports of several other studies (e.g., Horwitz et al., 1986; Saito et al., 1999; Saito & Samimy, 1996; Sellers, 2000). For Horwitz et al. (1986), the internal consistency was .93 ($n = 75$), and the test–retest reliability over a period of 8 weeks yielded $r = .83$ ($p < .001$), with all items showing significant corrected item–total scale correlations. The construct validity of the FLCAS suggests that FL anxiety may be distinguished from other types of anxiety. The maximum range for the FLCAS is 33 to 165, with lower scores indicating lower anxiety and higher scores indicating higher anxiety. As Table 2 shows, the total scores in this study ranged from 44 to 146 with a mean of 90.06 ($SD = 23.81$). For each participant, an anxiety score was the sum of his or her ratings for the 20 (FLLAS) and 33 (FLCAS) items. When statements for the FLLAS and the FLCAS were negatively worded, the responses were reverse coded so that in all cases, a high score represented high anxiety in the Arabic classroom.

The instructors provided final course grades and listening comprehension grades for each participant. The final course grade for each student served as an overall index of performance. This measure has been used extensively as a global assessment of FL proficiency in previous research (Aida, 1994; Chastain, 1975; Cheng et al., 1999; Horwitz & Young, 1991; Saito & Samimy, 1996; Samimy & Tabuse, 1992). The listening comprehension grade was the measure of listening achievement.

### RESULTS

**Research Question 1**

**Does listening anxiety exist as a phenomenon distinguishable from general FL learning anxiety?**

The index of relationship between the FLCAS and FLLAS was a Pearson product-moment correlation coefficient. The Pearson $r$ (see Table 3) indicated a significant positive relationship between the two scales ($r = .66, p < .01$). The shared variance ($r^2$) was .44. Students with higher levels of FL anxiety tended to have higher levels of listening anxiety and vice versa.

**Research Question 2**

**Are FL learning anxiety and listening anxiety levels correlated with achievement (course grade and listening comprehension grade) and academic experience (year in school and level of Arabic course)?**

The results revealed a negative correlation between both measures of anxiety and both measures of student achievement. The correlations appear in Table 3, and each variable is discussed below.

**Listening Anxiety by Listening Grade and Final Course Grade**

**Listening Grade.** The results in Table 3 show a significant negative correlation between listening

### Table 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>Mdn</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLLAS</td>
<td>55.47</td>
<td>51.00</td>
<td>22.97</td>
<td>20–100</td>
</tr>
<tr>
<td>FLCAS</td>
<td>90.06</td>
<td>88.00</td>
<td>23.81</td>
<td>44–146</td>
</tr>
<tr>
<td>General Grade</td>
<td>3.20</td>
<td>3.00</td>
<td>0.91</td>
<td>1–4</td>
</tr>
<tr>
<td>Listening Grade</td>
<td>2.72</td>
<td>3.00</td>
<td>1.12</td>
<td>1–4</td>
</tr>
<tr>
<td>Year in School</td>
<td>3.13</td>
<td>3.00</td>
<td>1.25</td>
<td>1–6</td>
</tr>
<tr>
<td>Years Studied Arabic</td>
<td>1.87</td>
<td>2.00</td>
<td>0.71</td>
<td>1–3</td>
</tr>
</tbody>
</table>

*Note. FLLAS = Foreign Language Listening Anxiety Scale; FLCAS = Foreign Language Classroom Anxiety Scale.*
TABLE 3
Correlation Matrix (N = 233)

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. FLLAS</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. FLCAS</td>
<td>0.66**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. General Grade</td>
<td>-0.65**</td>
<td>-0.54**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Listening Grade</td>
<td>-0.70**</td>
<td>-0.53**</td>
<td>0.82**</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Year in School</td>
<td>-0.13**</td>
<td>-0.15</td>
<td>0.09</td>
<td>0.02</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>6. Years Studied Arabic</td>
<td>-0.19**</td>
<td>-0.22**</td>
<td>0.13*</td>
<td>0.09</td>
<td>0.35**</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Note. FLLAS = Foreign Language Listening Anxiety Scale; FLCAS = Foreign Language Classroom Anxiety Scale.

*p < .05. **p < .01.

anxiety (FLLAS) and the final listening comprehension grade \(r = -0.70, p < .01\), which indicates that students who reported higher listening anxiety had lower listening comprehension grades than students who reported lower anxiety. The shared variance \(r^2\) was .49.

General Grade. Table 3 shows a significant negative correlation between listening anxiety and the final general grade \(r = -0.65, p < .01\). In other words, students who experienced higher listening anxiety also received lower course grades. The variance common to the two measures \(r^2\) was .42.

Year in School. There was a small, but statistically significant negative correlation (see Table 3) between listening anxiety and the participant’s year of postsecondary instruction \(r = -0.13, p < .05\). That is, older or more advanced students—sophomores, juniors, and seniors—experienced lower listening anxiety than younger students, such as freshmen. The shared variance for the two measures \(r^2\) was .17.

Level of Arabic Course. The data revealed a small, but statistically significant negative correlation (see Table 3) between listening anxiety and the level of the Arabic course \(r = -0.19, p < .01\). In other words, more advanced students reported lower listening anxiety levels than did beginning or intermediate students. The variance common to the two measures \(r^2\) was .36.

Foreign Language Learning Anxiety by Listening Grade and Final Course Grade

Listening Grade. The results (see Table 3) showed a significant negative correlation between FL anxiety (FLCAS) and the final listening comprehension grade \(r = -0.53, p < .01\). Students who experienced higher FL anxiety had lower listening comprehension grades than students who experienced lower FL anxiety. For this relationship, \(r^2\) was .28.

General Grade. The results also showed a significant negative correlation between FL anxiety and the final course grade \(r = -0.54, p < .01\). Students who experienced higher FL anxiety received lower general course grades. The index of common variance \(r^2\) was .29.

Year in School. There was a small, but statistically significant negative correlation (see Table 3) between FL learning anxiety and the year in school \(r = -0.15, p < .05\). In other words, more advanced students reported lower general FL anxiety levels. The index of common variance \(r^2\) was .023.

Level of Arabic Course. There was a small but statistically significant negative correlation (see Table 3) between FL learning anxiety and the level of the Arabic course \(r = -0.22, p < .01\). This means that students in more advanced Arabic courses experienced lower general FL anxiety than students in beginning or intermediate courses. The index of common variance \(r^2\) was .048.

Research Question 3

Do FL levels of learning anxiety and listening anxiety differ across categories of gender, level of Arabic course, and course type (elective, required, or major)?

Given the distinct nature of the two types of anxiety, group differences in learning and listening anxiety were examined by two means factorial analysis of variance (ANOVA) models, of which gender, level (first, second, or third year of study of Arabic), and course type (required, elective,
TABLE 4
Results of ANOVA for Listening Anxiety

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
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<td>1</td>
<td>340389.55</td>
<td>695.90</td>
<td>.000</td>
</tr>
<tr>
<td>Level</td>
<td>4935.60</td>
<td>2</td>
<td>2467.80</td>
<td>5.04</td>
<td>.007</td>
</tr>
<tr>
<td>Gender</td>
<td>1109.84</td>
<td>1</td>
<td>1109.84</td>
<td>2.26</td>
<td>.133</td>
</tr>
<tr>
<td>Course</td>
<td>646.74</td>
<td>2</td>
<td>323.37</td>
<td>0.66</td>
<td>.519</td>
</tr>
<tr>
<td>Level × Gender</td>
<td>345.51</td>
<td>2</td>
<td>172.75</td>
<td>0.35</td>
<td>.703</td>
</tr>
<tr>
<td>Level × Course</td>
<td>5110.35</td>
<td>4</td>
<td>1277.58</td>
<td>2.61</td>
<td>.036</td>
</tr>
<tr>
<td>Gender × Course</td>
<td>583.44</td>
<td>2</td>
<td>291.72</td>
<td>0.59</td>
<td>.552</td>
</tr>
<tr>
<td>Level × Gender × Course</td>
<td>1435.13</td>
<td>4</td>
<td>358.78</td>
<td>0.73</td>
<td>.570</td>
</tr>
<tr>
<td>Error</td>
<td>105163.91</td>
<td>215</td>
<td>489.13</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TABLE 5
Results of ANOVA for Learning Anxiety

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
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<td>1</td>
<td>975060.40</td>
<td>1826.88</td>
<td>.000</td>
</tr>
<tr>
<td>Level</td>
<td>5460.32</td>
<td>2</td>
<td>2730.16</td>
<td>5.11</td>
<td>.007</td>
</tr>
<tr>
<td>Gender</td>
<td>2317.39</td>
<td>1</td>
<td>2317.39</td>
<td>4.34</td>
<td>.038</td>
</tr>
<tr>
<td>Course</td>
<td>1234.59</td>
<td>2</td>
<td>617.29</td>
<td>1.15</td>
<td>.317</td>
</tr>
<tr>
<td>Level × Gender</td>
<td>416.36</td>
<td>2</td>
<td>208.18</td>
<td>0.39</td>
<td>.678</td>
</tr>
<tr>
<td>Level × Course</td>
<td>3652.38</td>
<td>4</td>
<td>913.09</td>
<td>1.71</td>
<td>.149</td>
</tr>
<tr>
<td>Gender × Course</td>
<td>749.61</td>
<td>2</td>
<td>374.80</td>
<td>0.70</td>
<td>.497</td>
</tr>
<tr>
<td>Level × Gender × Course</td>
<td>1795.14</td>
<td>4</td>
<td>448.78</td>
<td>0.84</td>
<td>.501</td>
</tr>
<tr>
<td>Error</td>
<td>114751.41</td>
<td>215</td>
<td>533.72</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

major) served as independent variables. The results for the analyses appear in Tables 4 and 5 and are discussed in the following sections.

Main Effect 1: Level of Arabic Study. The results of the ANOVA presented in Table 4 reveal significant differences across the levels of listening anxiety of first-, second-, and third-year students of Arabic, $F(2, 215) = 5.04, p < .01$. These results (see Table 5) also indicate significant differences for the levels of learning anxiety of these three groups, $F(2, 215) = 5.11, p < .01$. The Scheffé post hoc test showed that students in third-year Arabic reported significantly lower levels of listening and learning anxiety (Listen $= 41.33$; Learn $= 76.17$) than either students in first-year Arabic (Listen $= 57.21$, Learn $= 92.81$) or students in second-year Arabic (Listen $= 53.66$, Learn $= 88.61$). The results of the post hoc test, however, showed no significant differences between the students of first- and second-year Arabic on either listening anxiety or learning anxiety.

Main Effect 2: Gender. The results of the ANOVA presented in Table 5 indicated a significant difference, $F(1, 215) = 4.34, p < .01$, between males and females in their levels of learning anxiety, with females being more anxious ($M = 90.05$) than males ($M = 81.68$). The data reported in Table 4 reveal no significant difference between listening anxiety based on gender (Males $= 47.83$, Females $= 53.62$).

Main Effect 3: Course Type. The results of the ANOVAs (see Tables 4 and 5) show that there were no significant learning anxiety, $F(2, 215) = 1.15, p > .05$, and listening anxiety, $F = 0.66, p > .05$, differences attributable to course type (required, elective, or major).

Interaction Effects. A significant interaction (level by course type) effect for listening anxiety, $F(4, 215) = 2.61, p < .05$, emerged (Table 4). In this case, students who took third-year Arabic as an elective course reported the lowest level of listening anxiety ($M = 37.25$). However, students who took second-year Arabic as an elective course reported the highest level of listening anxiety ($M = 64.52$), followed by students of first-year Arabic who took it as a required course ($M = 59.52$).

DISCUSSION

Consistent with expectations, general FL learning anxiety and listening anxiety, as shown by the results relating to the two measures (FLLAS and
FLCAS). appear to represent empirically distinguishable constructs; moreover, the findings indicate that the learners with higher levels of FL learning anxiety also tended to have higher levels of listening anxiety. Table 2 shows the results for the two measures of anxiety. Although this relationship was significant and implies a reasonable amount of overlap between the two measures, it also showed a substantial amount of discrimination. A correlation coefficient of .66 means that the two measures share approximately 44% of the variance. Thus, approximately 56% of the variance was not common to the measures, a finding that supports the distinctiveness of the two constructs.

The FLAS has been extensively tested and widely used to investigate FL learning anxiety. In the present study, the estimated reliability for this measure was .94 ($N = 233$), which compares acceptably with Horwitz’s (1986) finding of .95 ($N = 75$). Thus, the concurrent validity of this construct does not appear to be in question. Given that this is the first time the FLLAS has been used to measure listening anxiety, there was some concern about the reliability of this instrument. However, the demonstrated internal consistency coefficient was .96 ($N = 233$), which allayed that concern.

In light of the findings, we may conclude that there is at least preliminary support for the existence of FL listening anxiety as a phenomenon related to, but distinguishable from, general FL learning anxiety. The findings of the present study compare favorably to the results of previous studies of language-skill-specific anxiety and its relationship to certain language skills, for example, reading in Spanish (Sellers, 2000), reading in Japanese (Saito & Samimy, 1996), and speaking and writing in English (Cheng et al., 1999). These studies all indicated that high levels of anxiety could have adverse effects on student’s FL performance overall and for specific language skills. The current study was consistent with these earlier conclusions concerning FL instruction in general, but provided specific evidence for the effect of both types of anxiety, not only on FL learners’ overall course grades, but on their listening comprehension performance as well.

The results of this study revealed significant negative correlations among listening and FL learning anxiety, students’ listening comprehension scores, and final grades as a measure of overall achievement. The correlation of both listening anxiety and learning anxiety to achievement, as indexed by listening scores and final course grades, was negative (Table 3). These findings are consistent with those of Bailey (1983), who explored the correlation between anxiety and learners’ performance, and also support the conclusions reached by several investigators in earlier studies (Aida, 1994; Cheng et al., 1999; Horwitz et al., 1986; MacIntyre & Gardner, 1991b; Phillips, 1992; Saito et al., 1999; Sellers, 2000).

The present study was the first empirical investigation of the relationship of FL learning anxiety, listening anxiety, and student performance in a FL class. Although it focused on students of Arabic, the results may also be applicable to other LCTLs in particular, and to the more commonly taught languages in general.

In this study, the ANOVA shown in Table 5 revealed a significant effect for general FL learning anxiety attributable to gender, with females being more anxious than males. This finding seems to contradict those of Aida (1994) and Chang (1996), whose studies uncovered no differences in classroom anxiety between males and females. Further investigation is warranted to determine if anxiety type is indeed correlated with gender. It is noteworthy that no significant differences in listening anxiety attributable to gender surfaced (see Table 4). The apparent inconsistency in these findings may be the result of unknown factors or sampling error.

The significant negative correlations among listening anxiety, learning comprehension grade, and final course grade lend support to the premise that increased anxiety adversely affects student performance. Although the present study does not support the conclusion that anxiety causes poor performance, the data suggest that anxiety plays a role in how well students do in class. Comparable negative correlations were in evidence for FL learning anxiety and the two measures of achievement, which further strengthens the possibility that anxiety contributes in a negative manner to overall performance, not merely task performance related to listening comprehension.

For both listening and FL learning anxiety, small, but statistically significant negative correlations between anxiety and the student’s year in school emerged. These findings are inconsistent with results reported by Cheng (2002), whose study showed no significant anxiety differences among freshmen, sophomores, and juniors.

The present study revealed significant main effects for both types of anxiety among students of first-, second-, and third-year Arabic. Students in third-year Arabic reported significantly lower levels of both types of anxiety than did students in first-year. This finding supports those of MacIntyre and Gardner (1991a), suggesting that...
“as experience and proficiency increase, anxiety declines in a fairly consistent manner” (p. 111). In a contrasting study, Saito and Samimy (1996) determined that anxiety among Japanese learners did not decline with increased proficiency. One reason for this disparity might be, as explained by Saito’s note, that emphasis on reading and orthography was greatly increased in advanced Japanese classes and thus contributed to increased anxiety. In the case of Arabic, reading and orthographical tasks do not undergo a similar increase in difficulty, because the letters (alphabet) acquired during the initial period of instruction remain the same.

In an unexpected finding, students of second-year Arabic who took the course as an elective reported the highest level of listening anxiety. One possible explanation for this result may lie in the anecdotal characterization of second-year Arabic by many students and teachers as a “watershed” in Arabic study. This characterization relates to frequent observations that second-year Arabic is significantly more difficult than first-year because expectations increase, syntax and morphology become increasingly complex, more authentic material is introduced, and greater emphasis is placed on communicative practice, including listening comprehension.

Kitano (2001) noted a similar finding for students of advanced Japanese, suggesting that the students’ greater awareness of their own errors and the increased use of Japanese in the classroom might account for the higher level of anxiety of advanced students than beginning students. Comparable conditions may give rise to increased anxiety in Arabic class as well. Nonetheless, this higher level of listening anxiety reported by students who were taking the course as an elective is still puzzling and calls for more investigation.

PEDAGOGICAL IMPLICATIONS

Instructors who already recognize that many students suffer from general FL anxiety may find it useful to broaden their understanding to include specific anxiety related to listening comprehension. Steps may be taken to reduce the level of tension and anxiety in the classroom. For example, instructors can provide not only input that is quite comprehensible, but also schedule more opportunities for listening practice to familiarize students with the tasks. Instructors may also teach specific listening strategies to help students listen more effectively and recall more of what they hear. For example, although it may seem obvious to some instructors that successful language learning entails many mistakes, students should be explicitly reminded to guess and to take risks in class. It should be made clear to them that mistakes are not a sign of failure, but rather a normal aspect of the language learning process. Teachers should also provide enough class structure to maintain what Stevick (1980) considered a basic learner’s need: the feeling of security. As one researcher noted, instructors are not merely providers of comprehensible input, but they must also teach learners “how to listen” (Mendelsohn, 1995, p. 132).

Horwitz et al. (1986) suggested that instructors help students cope with anxiety-producing situations and make the learning context less stressful. Positive self-coaching may also be beneficial (Young, 1990). Teachers should assist their students to overcome unrealistic expectations about understanding everything they hear. They should pay special attention to the selection of listening passages, especially when using authentic materials. It is also important to provide materials that are at an appropriate level of difficulty for the student audience. Increasing opportunities for students to experience small successes in the target language will help reduce their listening anxiety. Vogely (1999) suggested using appropriate practice exercises tailored for each skill level, as a means of permitting students to experience success.

Instructors should also encourage their students to acknowledge their listening anxiety and to discuss it openly in the class. Sharing of common feelings of nervousness or frustration with the group may elicit creative ways to solve the problem for the whole class. A teacher who is dealing with anxious students should be aware that apprehensive learners may underestimate their ability (MacIntyre et al., 1997). This is especially true for the LCTLs like Arabic. Samimy and Tabuse (1992) suggest that learners often bring fears and anxieties with them to the FL classroom, especially in the LCTLs. A discussion of how to study the language may be helpful, especially for freshmen and sophomores who may not have extensive language learning experience.

Teaching explicit listening strategies to all students of Arabic regardless of level or year in school will be instrumental in decreasing anxiety and increasing motivation. Positive feedback and continued encouragement may lower the level of the students’ anxiety and frustration and enable them to develop greater self-confidence (Khalidieh, 2000). Students who are at ease are more likely to continue their own study of the language and encourage others to consider taking Arabic.
Cultural differences in expectations and perceptions on the part of students and instructors of Arabic may also unintentionally create tensions and anxiety in the classroom. Scarcella, Anderson, and Krashen (1990) noted that instructors who attempt to teach college-age students the social rules of a target language may unconsciously violate a U.S. custom that precludes teaching adult learners how to behave. Horwitz (2001) suggested that some practices perceived as comfortable by one group of learners may prove stressful for a group from a different background. Building a supportive and friendly classroom environment is just as important to the success of the class as developing the curriculum.

LIMITATIONS OF THE STUDY

An inherent difficulty in studying any of the LCTLs is the generally small sample size available. For the present study of Arabic, the author was fortunate in having the cooperation and assistance of colleagues at several universities so that a relatively large number of participants could be surveyed. However, the present sample was thus distributed among several institutions, with different instructors, grading scales, teaching methods, and instructor experience, irrespective of the use of the same textbooks or purportedly similar teaching philosophies. These variations could render the results of the present study less applicable to Arabic students as a class. Given the differing standards for assigning both final course grades and listening comprehension scores, the results for the present study should be viewed with caution. Earlier studies (Aida, 1994; Saito & Samimy, 1996) have recommended the use of achievement measures other than final course grades (or listening comprehension scores) in investigating the relationship between anxiety and achievement. It is difficult to measure affective variables under the most favorable circumstances, and results obtained with instruments of the type employed in this study may be less reliable because of untruthful or careless responses. The respondents’ personal interpretations of the items could lead to inaccurate responses. For this study, questionnaires were administered at the beginning of the semester; different results might have been obtained at the end of the semester, especially for beginning students who had less experience with Arabic classes on which to draw.

The FLRAS, from which the FLLAS was adapted, was originally designed to measure reading anxiety. In this study, the FLRAS was modified to measure listening anxiety; therefore, although in this study the FLLAS exhibited high internal consistency reliability (.96), the results of this first-time use must be interpreted with an awareness that the instrument requires further work to establish its reliability and validity as a measure of listening anxiety.

RECOMMENDATIONS

The present study provides some preliminary evidence for the role of anxiety in Arabic learners’ classroom learning experiences, with particular emphasis on how anxiety affects listening comprehension in Arabic. Several directions for further research evolve from this first study of listening anxiety in Arabic. The study should be repeated to validate the current findings and reveal whether different study conditions or data gathering methods yield similar results. It would also be of interest to include data from students of Arabic in overseas programs to study the foreign cultural context as a potential variable in student anxiety levels and their performance. It would also be useful to conduct a longitudinal study within a single institution to measure student achievement under fairly similar conditions, and determine its relationship to anxiety over time.

Although the results of the present study shed some light on how anxiety may affect student performance in FL classes, more empirical studies and different kinds of investigation could reveal useful insights into how students learn. For example, exploration of affective states and similar variables can sometimes be accomplished more effectively with qualitative studies using personal observation, retrospective interviews, or student journal entries than with quantitative studies. More research into the relationship between anxiety and the listening process is also indicated. Learner background, cultural knowledge, and student motivation for studying the language are some of the other factors to be considered in future studies of anxiety and listening in Arabic classes. With burgeoning enrollments in most Arabic programs, the need for Arabic-specific research has increased concomitantly.

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1 The multisite enrollment of participants was necessary to ensure a significant sample size. The present study did not aim to compare participating universities or their Arabic programs.

**APPENDIX A**

Foreign Language Listening Anxiety Scale (FLLAS)

Statements (1) through (20) describe how you feel about listening to Arabic. Please indicate whether you (1) Strongly Disagree, (2) Disagree, (3) Neither Agree nor Disagree, (4) Agree, or (5) Strongly Agree. Please read each statement carefully, give your first reaction to each statement, and mark an answer for every statement.
1. I get upset when I’m not sure whether I understand what I’m hearing in Arabic.  
2. When I listen to Arabic, I often understand the words but still can’t quite understand what the speaker is saying.  
3. When I’m listening to Arabic, I get so confused I can’t remember what I’ve heard.  
4. I feel intimidated whenever I have a listening passage in Arabic to listen to.  
5. I am nervous when I am listening to a passage in Arabic when I’m not familiar with the topic.  
6. I get upset whenever I hear unknown grammar while listening to Arabic.  
7. When listening to Arabic I get nervous and confused when I don’t understand every word.  
8. It bothers me to encounter words I can’t pronounce while listening to Arabic.  
9. I usually end up translating word by word when I’m listening to Arabic.  
10. By the time you get past the strange sounds in Arabic, it’s hard to remember what you’re listening to.  
11. I am worried about all the new sounds you have to learn to understand spoken Arabic.  
12. I enjoy listening to Arabic.  
13. I feel confident when I am listening to Arabic.  
14. Once you get used to it, listening to Arabic is not so difficult.  
15. The hardest part of learning Arabic is learning to understand spoken Arabic.  
16. I would be happy just to learn to read Arabic rather than having to learn to understand spoken Arabic.  
17. I don’t mind listening to Arabic by myself but I feel very uncomfortable when I have to listen to Arabic in a group.  
18. I am satisfied with the level of listening comprehension in Arabic that I have achieved so far.  
19. Arabic culture and ideas seem very foreign to me.  
20. You have to know so much about Arabic history and culture in order to understand spoken Arabic.

APPENDIX B  
Foreign Language Classroom Anxiety Scale (FLCAS)

Statements (1) through (33) describe how you feel about learning Arabic. Please indicate whether you (1) Strongly Disagree, (2) Disagree, (3) Neither Agree nor Disagree, (4) Agree, or (5) Strongly Agree. Please read each statement carefully, give your first reaction to each statement, and mark an answer for every statement.

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