A reevaluation of the role of anxiety: Self-Efficacy, anxiety and their relation to reading and listening proficiency

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A Reevaluation of the Role of Anxiety: Self-Efficacy, Anxiety, and Their Relation to Reading and Listening Proficiency

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Abstract: Research findings from several academic domains have demonstrated that students’ judgments of their own academic capabilities, or self-efficacy beliefs, influence their academic behaviors and performances. Absent from this body of research are studies assessing self-efficacy beliefs and their relation to foreign language proficiency. Informed by the tenets of Bandura’s (1986) social cognitive theory, the purpose of this study was to examine the relationship between self-efficacy, anxiety, and French proficiency in reading and listening. Students’ reading self-efficacy in French was positively related to reading proficiency, whereas reading anxiety was not related. Listening self-efficacy was positively associated with listening proficiency only for the female participants, and listening anxiety was positively related to the listening proficiency of both males and females. Implications for researchers and educators are discussed.

Key words: anxiety, listening, proficiency, reading, self-efficacy

Language: French

Introduction
Contemporary second language acquisition (SLA) theory stresses the importance of linguistic input for successful language acquisition. Oral and written input are an essential part of the Communication goal of the Standards for Foreign

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language Learning (National Standards, 1999). Standard 1.2 of the Communication goal emphasizes the importance of students' comprehension of written and spoken language on a variety of topics. This standard suggests that students' ability to “control” what they hear and read has an impact on students' development of comprehension. Long (1986) has suggested that students gain a sense of confidence with the language when their receptive skills are well developed. Similarly, Rivers (1981) proposed that our goal as language instructors should be to promote confidence in students' ability to comprehend all kinds of input from the early stages of language instruction. By enhancing students' confidence in their ability to hear and read in a foreign language, instructors may assist in the development of foreign language comprehension. Students' self-perceptions of their abilities to process and control this oral and written input may provide valuable information to language instructors and may have significant implications in the foreign language classroom.

Bandura's (1986, 1997) social cognitive theory is a theory of human functioning that subscribes to the notion that humans can control their behavior. Individuals possess a system of self-beliefs that enables them to exercise control over their thoughts, feelings, and actions. According to this theory of human behavior, "what people think, believe, and feel affects how they behave" (Bandura, 1986, p. 25). Among the most pervasive arbiters of self-reflection are perceptions of self-efficacy, or "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p. 3). Beliefs of personal efficacy, therefore, are not dependent on one's abilities but instead on what one believes may be accomplished with one's personal skill set. Therefore, self-efficacy beliefs are often better predictors of success than prior accomplishments, skills, or knowledge (Multon, Brown, & Lent, 1991; Schunk, 1991).

Moreover, in social cognitive theory (Bandura, 1986, 1997), self-efficacy plays a central role in the arousal of student anxiety. Students' efficacy beliefs possess a positive relationship to their academic performance, whereas anxiety toward the subject matter assumes minimal or no relationship to their academic achievement (Bandura, 1986, 1997). In other words, according to social cognitive theory, state anxiety is typically a function of the confidence with which individuals approach activities and tasks. As a result of a student's weakened sense of efficacy in a particular academic subject, he/she becomes anxious about the corresponding academic demands. A weaker sense of efficacy, therefore, arouses anxiety as well as decreases achievement. Self-efficacy research in mathematics, science, and writing reveals that students' perceived efficacy possesses a stronger relationship to academic achievement than that of levels of anxiety or apprehension (Bandura, 1997; Britner & Pajares, 2001; Pajares & Graham, 1999; Pajares & Johnson, 1994, 1996; Pajares & Valiante, 1997, 1999, 2001).

The evaluation of self-efficacy beliefs in listening and reading in a foreign language could provide valuable insight into the understanding of students' self-perceptions of their abilities to process and control this oral and written input. The purpose of this investigation is to determine whether French reading and listening self-efficacy beliefs possess a stronger relationship to listening and reading proficiency of college intermediate French students than that of levels of anxiety. We will also analyze gender differences in the motivation and listening and reading proficiency of foreign language students to help understand the relationship of self-efficacy to the foreign language proficiency of both males and females.

Review of Literature
Self-Efficacy, Achievement, and Proficiency
Self-efficacy, a construct grounded in social cognitive theory, can be generally defined as personal beliefs in one's capabilities. In a meta-analysis of self-efficacy research
published between 1977 and 1988, Multron, Brown, and Lent (1991) found a positive relationship between efficacy beliefs and academic achievement in over a decade of published research. The analyses revealed that self-efficacy accounted for approximately 14% of the variance in academic performance. Graham and Weiner's (1996) review of motivational research revealed similar results with their finding that self-efficacy possessed a stronger relationship to performance in other academic disciplines over and above other motivational constructs. Such research findings indicate the strong influence of students’ perceptions of academic potential on academic behaviors and performance.

Students’ sense of efficacy affects their academic performance in various ways. Students with a strong sense of academic self-efficacy have been proven to willingly undertake challenging tasks (Bandura & Schunk, 1981), expend greater effort (Salomon, 1984), show increased persistence in the presence of obstacles (Bandura & Schunk, 1981; Schunk, 1982), demonstrate lower anxiety levels (Meece, Wigfield, & Eccles, 1990; Pintrich & DeGroot, 1990), display flexibility in the use of learning strategies (Bouffard-Bouchard, 1990; Pintrich & DeGroot, 1990), and self-regulate better than other students (Zimmerman, Bandura, & Martinez-Pons, 1992; Zimmerman & Martinez-Pons, 1990). Students with high self-efficacy also often demonstrate accurate self-evaluation of their academic performance and greater intrinsic interest in scholastic matters, and they attain higher intellectual achievement (Bouffard-Bouchard, 1990). Students with low self-efficacy, conversely, may choose to complete only uncomplicated academic tasks to which they apply minimal effort and limited persistence or they may choose to entirely avoid the completion of an academic assignment.

Despite the large body of self-efficacy research found in other academic disciplines, few studies have examined the self-efficacy of foreign language students. Previous research, however, has evaluated the influence of self-efficacy on first language (L1) acquisition. Research has linked L1 reading self-efficacy beliefs to L1 reading performance (Nicholls, 1979; Paris & Oka, 1986; Shell, Murphy, & Bruning, 1989). Henk and Melnik (1995) have claimed that self-perceptions of L1 reading ability can influence an individual’s attitude toward reading, choice of reading activities, persistence and involvement with the written text, and overall reading comprehension and achievement.

Limited research has focused on the relationship between self-efficacy and the academic achievement of language learners (Hunt, 2003; Mills, 2004). The current study evaluated the relationship between self-efficacy and anxiety on the proficiency of third- and fourth-semester French students. We acknowledge that both achievement and proficiency-oriented assessments are used in the evaluation of foreign language students. Whereas achievement tests evaluate students’ understanding of material covered during the course of instruction, proficiency-oriented measures evaluate overall competence in the foreign language (Liskin-Gasparro, 1984).

Self-Efficacy and Anxiety
In evaluating the relationship between self-efficacy and anxiety on the reading and listening proficiency of third and fourth semester French students, this study was grounded in Bandura’s (1986, 1997) social cognitive theory and its depiction of the relationship between self-efficacy and anxiety. Bandura (1997) defined anxiety as “a state of anticipatory apprehension over possible deleterious happenings” (p. 137). Individuals experiencing anxiety embody apprehension and avoidant behavior that often interfere with performance in everyday life as well as in academic situations. In social cognitive theory, one’s perceived sense of efficacy plays a key role in the arousal of student anxiety. Those with a stronger sense of efficacy are more apt to take on the “deleterious happenings” that
breed stress with positive expectations and are often more successful in transforming them into positive events. Individuals, therefore, only experience anxiety when they believe themselves to be incapable of managing potentially detrimental events (Bandura, 1997).

According to social cognitive theory, as a result of a student’s weakened sense of efficacy in a particular academic subject, he/she becomes anxious about the corresponding academic demands. In addition, social cognitive theory proposes that anxiety or physiological arousal is also one of the four sources of self-efficacy (Bandura, 1986, 1997). Consequently, anxiety serves as both a source and effect of self-efficacy beliefs. Self-efficacy research in mathematics, science, and L1 writing revealed that students’ perceived efficacy possesses a stronger relationship to academic achievement than levels of anxiety or apprehension (Bandura, 1997; Britner & Pajares, 2001; Pajares & Graham, 1999; Pajares & Johnson, 1994, 1996). Such results reveal that it is one’s sense of efficacy to control or dismiss apprehensive emotions that accounts for anxiety (Bandura, 1997).

Despite such findings about the relationship between self-efficacy and anxiety, the construct of anxiety continues to receive much attention in foreign language and second language (L2) research. Horwitz, Horwitz, and Cope (1986) defined language anxiety as “a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process” (p. 28). Much research on such depictions of foreign language anxiety has reported the negative effects associated with foreign language anxiety (Foss & Reitzel, 1988; MacIntyre & Gardner, 1991a, 1991b, 1991c; Price, 1991). Moreover, researchers describe the level of language anxiety in classrooms as “alarming,” estimating that approximately half of the students in language courses experience anxiety at debilitating levels (Campbell & Ortiz, 1991; Horwitz & Young, 1991). Krashen (1982) has argued that students experiencing anxiety in the foreign language classroom will have difficulty processing meaningful language input resulting in decreased language acquisition.

For such reasons, many studies have documented language anxiety as one of the primary predictors of SLA (Horwitz, Horwitz, & Cope, 1986; MacIntyre & Gardner, 1989). Without the inclusion of self-efficacy variables in their studies, many researchers have consistently found a moderate and negative relationship between language anxiety and various measures of language achievement (Gardner & MacIntyre, 1993; MacIntyre & Gardner, 1991c; Young, 1986).

MacIntyre and his associates have evaluated language learners’ confidence beliefs using a construct similar to self-efficacy called perceived competence (Baker & MacIntyre, 2000; MacIntyre & Charos, 1996; MacIntyre, Clément, & Donovan, 2002; MacIntyre, Noels, & Clément, 1997). Perceived competence, a construct embedded within the sociocontextual model, may be defined as the individual’s perception of his/her ability to “properly process information in such a way that communicative behaviors occur in some orderly rule governed way” (Baker & MacIntyre, 2000, p. 70). Perceived competence has been found to be negatively correlated to language anxiety (Baker & MacIntyre, 2000; MacIntyre, Clément, Dörnyei, & Noels, 1998). Although useful information is gained about the relationship between perceived competence and anxiety, the strength of the relationship among self-efficacy, anxiety, and performance remains unclear.

**Gender, Self-Efficacy, and Anxiety**

In addition to the examination of self-efficacy, anxiety, and achievement, gender has also been a focus of self-efficacy research in other academic fields. Researchers in the academic areas of science and mathematics have reported gender differences in self-efficacy, namely that male students
tend to be more confident in their math and science abilities than are female students (Britner & Pajares, 2001; Pajares & Miller, 1994; Simpson & Oliver, 1990). In the area of foreign languages, some SLA research has also suggested that gender is a factor affecting foreign language performance (Aida, 1994; Onwuegbuzie, Bailey, & Daley, 2001; Oxford, 1993; Schmidt, Boraie, & Kassagby, 1996). Onwuegbuzie, Bailey, and Daley (2001) suggested that a “female oriented foreign language culture” (p. 12) may exist in which men may perceive foreign language study as a feminine domain and thus feel less comfortable in the language learning context. Similarly, Campbell (1999) revealed gender-related differences in language anxiety in the four skills. The results revealed that men and women perceived equal listening anxiety two weeks prior to the course and two weeks later, minimal gender difference in listening anxiety was noted. On the contrary, in reading, the percentage of women experiencing reading anxiety fell by 7% whereas the percentage of anxious men rose approximately 9%. As a result of the research reflecting disparities between men and women, gender was evaluated in this investigation.

Methodology

The purpose of this study was therefore to evaluate the relationship between self-efficacy, anxiety, and gender on the listening and reading proficiency of third and fourth semester French students. The paucity of research available on the relationship among these variables in the field of foreign language motivation merits their investigation.

Hypotheses

Informed by the theoretical tenets of social cognitive theory and building on the results of previous self-efficacy investigations, we will test two research hypotheses:

1. French reading self-efficacy will make an independent contribution to the prediction of French reading proficiency of third and fourth semester college French students when French reading anxiety and gender are controlled.

2. French listening self-efficacy will make an independent contribution to the prediction of French listening proficiency third and fourth semester college French students when French listening anxiety and gender are controlled.

Participants and Setting

Participants consisted of 95 college students enrolled in third and fourth semester French courses at a university in the southeastern United States. The undergraduate student body consists of approximately 6,500 students, 45% male and 55% female. The university's student admissions process is defined as “most selective” by US News & World Report (Zuckerman, 2003) and SAT scores range from 1300 to 1460. Characteristics of the participants are presented in Table 1.

In Fall 2003, French students enrolled in three third semester French courses (French 201) and four fourth semester French courses (French 203) participated in the study. The third semester French course emphasized the development of French oral and written communication skills through an integrated film-based

<table>
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<tr>
<th>Characteristics of Study Participants</th>
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<tbody>
<tr>
<td>Gender No. of participants</td>
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<tr>
<td>Male 29</td>
</tr>
<tr>
<td>Female 66</td>
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<tr>
<td>University Class</td>
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<tr>
<td>Year 1 48</td>
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<tr>
<td>Year 2 24</td>
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<tr>
<td>Year 3 14</td>
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<tr>
<td>Year 4 0</td>
</tr>
<tr>
<td>Other 9</td>
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<tr>
<td>Level</td>
</tr>
<tr>
<td>Intermediate I 46</td>
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<tr>
<td>Intermediate II 49</td>
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</table>

(N = 95)
course for learning French language, culture, and grammatical concepts. The course met four hours per week and class size did not exceed 18 students. The fourth semester French course provided a bridge to more advanced language and literature courses through further emphasis on the development of French writing skills, a more thorough review of the fine points of French grammar, and more detailed analyses of longer literary texts. In the fourth semester course, the classes met four hours per week and the class size did not exceed 12 students.

**Instrumentation**

*The French Self-Efficacy Scale* was used to assess French reading and listening self-efficacy (see Appendix A). The French reading self-efficacy measure consists of 14 items that ask students to evaluate their capability to perform various reading tasks at ACTFL’s (1986) Intermediate and Advanced reading proficiency levels. The French listening self-efficacy measure, similarly, consists of 21 items that ask students to self-evaluate their competence in various French listening tasks at the Intermediate and Advanced proficiency levels of ACTFL’s Proficiency Guidelines (1986). In this study, the reading and listening self-efficacy items assess perceived competence in the skills measured in the University of Minnesota’s Graduate Standard reading (1988) and listening (1990) proficiency measures. These proficiency tests are given to University of Minnesota’s students to determine if they have satisfied the foreign language requirement at the Intermediate-High proficiency level. For this reason, only Intermediate and Advanced proficiency levels were assessed in the reading and listening self-efficacy items.

Furthermore, the relationship among variables and effect sizes are enhanced when self-efficacy instruments and performance measures are closely matched (Pajares & Miller, 1995). For this reason, the investigators developed the French proficiency self-efficacy measure for reading and listening to closely match self-efficacy items with proficiency tasks on the University of Minnesota’s Graduate Standard Reading and Listening Proficiency Measures. For example, a reading self-efficacy item evaluates a student’s competence to read and comprehend the main ideas of a page from a tourist brochure describing various organized activities in France. The reading proficiency test then had a corresponding item that asked the students to read a tourist brochure from the south of France describing these activities and answer a comprehension question about the main ideas.

Directions on the self-efficacy instrument asked students, “How sure are you that you can perform each of the French skills below?” Participants provided confidence judgments for each of the 35 items on an 8-point Likert-type scale from 0 (not confident at all) to 7 (completely confident). Such a scale response format was chosen because it has been proven to provide ample specificity without sacrificing variability in the measurement of adolescents’ self-beliefs (Marsh, 1990). Face validity was established through the review of the instrument by the intermediate French I and intermediate French II language coordinators, two trained ACTFL oral proficiency raters, an ACTFL Proficiency Guideline authority involved in the creation of the revised writing proficiency guidelines (ACTFL, 2001), and an expert in academic self-efficacy research. The results of the French self-efficacy instrument were computed by the principal investigator. The psychometric properties of the scale were evaluated for internal consistency. The Cronbach’s alpha coefficients for the listening self-efficacy and reading self-efficacy scales were .97 and .95 respectively.

French reading and listening anxiety was measured using an adapted version of Betz’s (1978) Mathematics Anxiety Scale (MAS). In line with previous self-efficacy and anxiety research in other academic domains, we chose to use Betz’s MAS anxiety scale over other foreign language
anxiety instruments. Although adapted MAS scales from previous research have consisted of nine items (Britner & Pajares, 2001; Pajares & Graham, 1999; Pajares & Valiante, 1997), the French learning anxiety scale consists of 18 items to account for anxiety in the language skills of reading and listening (See Appendix B). Each of the nine MAS anxiety items was adapted to the reading and listening domains, therefore totaling 18 items. An example of a French listening anxiety item is “Listening to native French speakers makes me feel uneasy and confused.” An example of a French reading anxiety item is “I get a sinking feeling when I think of trying to read a difficult French reading comprehension passage.” Students responded on an 8-point Likert-type scale continuum from 0 (definitely false) to 7 (definitely true) to questions about feelings of stress and uneasiness associated with French language learning. Cronbach’s alpha coefficients for adapted MAS scales in various academic subjects have varied from .87 to .91 (Pajares & Graham, 1999; Pajares & Kranzler, 1995; Pajares & Urdan, 1996) and Dew, Galassi, and Galassi (1983) have reported a test–retest reliability of .87 over a two-week interval. The Cronbach’s alpha coefficients for the reading and listening anxiety scales were .87 and .88 respectively.

French proficiency in listening and reading was assessed using the University of Minnesota’s Graduate Standard Listening (1990) and Reading (1988) Proficiency Tests in French. These proficiency tests were not based on knowledge of course content, but instead evaluated students’ ability to understand written and spoken language at ACTFL’s Intermediate-High proficiency level. Students must pass these examinations to fulfill the foreign language requirement at University of Minnesota’s College of Liberal Arts. At our institution, foreign language proficiency examinations are not required to fulfill the language requirement and this test did not evaluate course content knowledge. In this investigation, the paper-based proficiency tests, as opposed to the computer-based examinations currently used at the University of Minnesota, were used to evaluate the relationship between French listening and reading proficiency and self-efficacy. The high cost of the site licenses for the computerized proficiency tests prohibited the use of the computer-based proficiency examinations for this research. The listening proficiency examination consisted of 19 listening video-texts and 40 multiple-choice items based on ACTFL’s Intermediate-Mid, Intermediate-High, and Advanced proficiency levels. ACTFL’s Advanced-Plus level was not assessed (see Appendix C). The reading proficiency examination consisted of 15 reading passages and 40 multiple-choice items (see Appendix C). Tests assessing reading and listening proficiency often have multiple-choice items allowing for the evaluation of large numbers of students (See the Test de Français International, Educational Testing Service, 2002). Previous Cronbach’s alpha coefficients for the listening and reading proficiency tests have ranged from .70 to .90 (Lange, Prior, & Sims, 1992). Cronbach’s alpha coefficients for the listening and reading proficiency tests were .75 and .79 respectively.

As a result of low reliability coefficients for the listening proficiency test, further item analyses were conducted on the items. An analysis of inter-item consistency of the listening proficiency test revealed that 24 of the 40 listening proficiency items had a correlation of less than .30 with the total listening proficiency score, two items possessing negative correlations. A further analysis of the item difficulty revealed that 10 of the items possessed means of .90 or higher, thus revealing that 90% or more of the students answered these items correctly. We removed negatively correlated items and those that had correlations of less than .30 with the total proficiency score from the listening proficiency measure and the change in reliability was minimal as measured by the Cronbach’s alpha coefficients. As a result of the minimal change in reli-
ability, all proficiency items are included in the analyses.

**Procedure**
In fall 2003, the instruments were administered to students in their third- and fourth-semester French classes. Administering the survey of French self-efficacy and reading and listening anxiety took place during one class period in the first two weeks of the fall 2003 semester. The third- and fourth-semester French instructors were not present during the survey administration to encourage participants’ honesty and candor in responding to attitudinal items. First, the participants were asked to complete a demographic questionnaire. Next, the principal investigator read aloud the written directions for each subscale and encouraged the participants to ask questions if they did not understand the directions.

The listening and reading proficiency of the participants was evaluated during two separate classes in the middle of the fall 2003 semester. During the first class, participants completed the reading proficiency measure, and the listening proficiency measure was administered during the second class session. Written directions were read aloud to the participants and student clarification questions were encouraged. Participants were provided 30 minutes to complete the reading proficiency measure and 45 minutes to complete the listening proficiency measure.

**Data Analyses**
To determine the relationship between self-efficacy in reading and listening and the respective French proficiency, multiple regression analyses were conducted. The general purpose of multiple regression is to learn more about the relationship between several independent variables and a dependent variable. Although researchers and statisticians use the term “prediction” in describing regression, causality is not inferred. Separate regression analyses were conducted for reading and listening proficiency. The dependent variable was the reading proficiency score in the regression model testing Hypothesis 1 and the listening proficiency score in the regression model testing Hypothesis 2. The independent variables in the regression model testing Hypothesis 1 were French reading self-efficacy, French reading anxiety, gender, and the interaction variable of gender and reading self-efficacy. In the regression model testing Hypothesis 2, the independent variables were French listening self-efficacy, French listening anxiety, gender, and the interaction variable of gender and listening self-efficacy.

**Results**

**Descriptive Statistics**
Means, standard deviations, and zero-order correlations for the variables in the proficiency analyses are included in Tables 2 and 3. Correlation coefficients were com-

<table>
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<th>TABLE 2</th>
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<tr>
<td><strong>Means and Standard Deviations of the Self-Efficacy, Anxiety, and Proficiency Variables</strong></td>
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<tr>
<td></td>
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<tr>
<td>1. Reading self-efficacy</td>
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<td>2. Listening self-efficacy</td>
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<td>3. Reading anxiety</td>
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<tr>
<td>4. Listening anxiety</td>
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<tr>
<td>5. Reading proficiency</td>
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<tr>
<td>6. Listening proficiency</td>
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<td>(N = 95)</td>
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</table>

Note. Means for all self-efficacy and anxiety variables are on an 8-point Likert type scale (ranging from 0–7). Means for proficiency scores ranged from 0 to 100. Data for the reading proficiency measure was only available for 78 of the participants. Data for the listening proficiency measure was only available for 83 of the participants.
puted among the self-efficacy, anxiety, and proficiency scales \((n = 95)\). Three of the five correlations with reading self-efficacy were statistically significant and ranged from \(r = -.38\) to \(r = .78\). Results of the correlation analyses reveal that a stronger sense of reading self-efficacy is associated with a stronger sense of listening self-efficacy and is negatively associated with reading anxiety and listening anxiety. Three of the five correlations with listening self-efficacy were also significant and ranged from \(r = -.36\) to \(r = .78\). A stronger sense of listening self-efficacy was associated with a stronger sense of reading self-efficacy and was negatively associated with listening anxiety and reading anxiety.

**Hypothesis 1**

It was hypothesized that reading self-efficacy would make an independent contribution to the prediction of French reading proficiency when reading anxiety was included in the statistical model. The assumptions for multiple linear regression were satisfied.

The linear combination of reading self-efficacy, reading anxiety, gender, and the interaction variable of gender with reading self-efficacy was not significantly related to reading proficiency, \(R^2 = .097, F(4,73) = 1.96, p = .110\). However, the results of the regression analyses reveal that reading self-efficacy (\(\beta = .309\)) was significantly related to reading proficiency. Reading anxiety (\(\beta = -.042\)) was not significantly related to reading proficiency when reading self-efficacy, gender, and the interaction variable of gender with reading self-efficacy were controlled. The results suggest that reading self-efficacy positively influences reading proficiency.

**Hypothesis 2**

It was hypothesized that listening self-efficacy would make an independent contribution to the prediction of French listening proficiency when listening anxiety was controlled. The assumptions for multiple linear regression were satisfied.

The linear combination of listening self-efficacy, listening anxiety, gender, and the interaction variable of listening self-efficacy and gender was significantly related to listening proficiency, \(R^2 = .18, F(4,78) = 4.27, p < .01\). The results of the regression analyses reveal that listening anxiety (\(\beta = -.35\)) was significantly related to listening.

### TABLE 3

Zero-Order Correlations of the Self-Efficacy, Anxiety, and Proficiency Variables

<table>
<thead>
<tr>
<th></th>
<th>Reading self-efficacy</th>
<th>Listening self-efficacy</th>
<th>Reading anxiety</th>
<th>Listening anxiety</th>
<th>Reading proficiency</th>
<th>Listening proficiency</th>
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<tbody>
<tr>
<td>1. Reading</td>
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<tr>
<td>self-efficacy</td>
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<tr>
<td>2. Listening</td>
<td>.74***</td>
<td></td>
<td>-.30**</td>
<td></td>
<td></td>
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<tr>
<td>self-efficacy</td>
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<tr>
<td>3. Reading</td>
<td>-.47***</td>
<td>-.53***</td>
<td>-.19</td>
<td>-.18</td>
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<td>anxiety</td>
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<tr>
<td>4. Listening</td>
<td>-.38***</td>
<td>.56***</td>
<td>-.16</td>
<td>-.34**</td>
<td>.53**</td>
<td></td>
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<tr>
<td>anxiety</td>
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<tr>
<td>5. Reading</td>
<td>.29*</td>
<td>.25*</td>
<td>-.19</td>
<td>-.18</td>
<td></td>
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<tr>
<td>proficiency</td>
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<tr>
<td>6. Listening</td>
<td>.24*</td>
<td>.16</td>
<td>-.16</td>
<td>-.34**</td>
<td>.53**</td>
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<tr>
<td>proficiency</td>
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\(n = 95\)

\(*p < .05, **p < .01, ***p < .001\)
There was also a significant interaction between gender and listening self-efficacy ($\beta = -0.81$). Gender ($\beta = 0.61$) and listening self-efficacy ($\beta = 0.15$) were not significantly related to listening proficiency. The results suggest that listening anxiety negatively influences listening proficiency. Figure 1 illustrates a positive relationship between listening self-efficacy and listening proficiency for women and a negative relationship between listening self-efficacy and listening proficiency for men.

**Discussion**

Before drawing conclusions, it is important to stress that any implications should be interpreted in light of the following limitations. The self-report instruments used in this study may not appropriately capture the participants’ perceptions and feelings and may therefore serve as an important limitation. When using questionnaires that require self-reporting of beliefs, there is always the danger that participants’ beliefs may be misrepresented. Participants sometimes report what they believe is expected, rather than their true beliefs. The assurance of confidentiality and anonymity in reporting aggregate data as well as the utilization of valid empirical self-belief measurements, however, minimizes these issues. A second limitation lies in the evaluation of reading and listening proficiency. Low reliability coefficients and the use of low-stakes testing conditions where students have no perceived or real consequences may have influenced the proficiency results obtained. High-stakes conditions may be preferable in future self-efficacy and proficiency research. Future studies should examine the role of self-efficacy and motivational variables on speaking and writing proficiency. Moreover, this study only researched third- and fourth-semester French students. Further research should evaluate the relationship among self-beliefs, proficiency, academic achievement, and daily class performance for students studying other foreign languages at different levels of language study.

The primary objective of this investigation was to reevaluate the role of anxiety and self-efficacy and their French reading and listening proficiency. For several decades of foreign language research, anxiety has often been associated with negative student performance. The current findings provide new and valuable information about the powerful relationship of the self-efficacy construct to proficiency. To date, no investigations have been conducted on the relationship between self-efficacy and foreign language proficiency even though research in other academic disciplines has suggested that students who are efficacious achieve.

Our first research hypothesis investigated whether reading self-efficacy beliefs would independently predict students’ reading proficiency in French. Findings reveal that those who reported a stronger sense of efficacy to read attained higher reading proficiency scores. The current findings suggest that students who perceive them-
selves to be good readers become proficient in reading. Furthermore, these findings put into question the role of reading anxiety on reading proficiency in French. In controlling for reading self-efficacy beliefs, reading anxiety possessed no relationship to reading proficiency. Reading anxiety, however, was negatively associated with reading self-efficacy. These results further support Bandura’s (1986, 1997) claims that efficacy beliefs play a central role in regulating anxiety arousal and anxiety also serves as a primary source of self-efficacy beliefs. Following Bandura’s claims, foreign language readers may experience anxiety when they perceive themselves to be less competent in their ability to read foreign language texts. The physiological anxious reaction to foreign language reading may also serve as a source for individuals’ self-efficacy beliefs. It appears as if those students with a stronger sense of efficacy to read in French experience weaker anxious expectations and attain higher levels of French reading proficiency.

Results from the present study would indicate that a focus on the development of students’ reading efficacy beliefs would be beneficial to students’ reading proficiency. Some suggestions from research on the cultivation of self-efficacy in first language (L1) reading may also be suitable to foreign language readers. These suggestions include personalizing the reading process, teaching foreign language reading strategies, promoting collaborative discussion, and encouraging students to self-evaluate their progress toward predetermined reading goals (Schunk, 2003; Walker, 2003). Further research needs to be conducted to evaluate the influence of reading strategies on foreign language reading self-efficacy and proficiency.

Our second hypothesis investigated whether listening self-efficacy beliefs would independently predict listening proficiency in French. Curiously, the confidence that students reported in their capability to listen at the Intermediate-High proficiency level possessed a significant relationship to the listening proficiency of only the female participants. This finding could support research by Onwuegbuzie, Bailey, and Daley (2001) that a “female oriented foreign language culture” (p. 12) may exist where men feel less comfortable in the language learning context. Furthermore, listening anxiety was significantly associated with the listening proficiency of all participants. These results may have been partly due to the low reliability and the problematic item difficulty and inter-item consistency of the listening proficiency measure. Such issues with the proficiency measure may have influenced the results attained in this research.

Associated with the reliability of the measure were the low-stakes test-taking conditions. The students were aware that their performance on the proficiency test would not affect their grade and these students were not required to pass a proficiency test for the language requirement. An analysis of the listening proficiency scores revealed that 41% of the men received listening proficiency scores below 70% whereas only 23% of the women received scores below 70%. Because there were no differences found in the final grades of the male and female students, one could speculate that some male students, in particular, may have placed less effort in completing the listening proficiency test items resulting in lower proficiency scores. These low proficiency scores, possibly due to decreased effort, were thus not associated with those male participants’ stronger beliefs in their French listening capabilities. Further research should be conducted under high stakes testing conditions with the use of a larger sample of male participants.

Despite such issues with the proficiency measure and the test-taking conditions, the differences between comprehension of spoken and written language should be considered. It has long been hypothesized that, in comparison to written language, the decreased accessibility and transitory nature of spoken language may result in the increased difficulty of aural comprehension on the part of the foreign language listener.
(Stevick, 1984). In reading, students may consistently review and reread the reading passage. In listening, any inattention to the listening text may result in a lack of comprehension of the main ideas or the message in its entirety. Listening comprehension, consequently, poses particular challenges for language learners as a result of the “fleeting, immaterial nature of spoken utterances” (Rivers, 1981, p. 151). Any lack of effort or inattention on the part of the language learner may therefore affect listening performance. Inattentiveness from certain male participants, in particular, may have thus resulted in lower listening proficiency. Furthermore, it may be possible that the “fleeting” nature of spoken language and the increased concentration needed to comprehend listening texts may incite increased anxiety arousal detrimental to the listening proficiency of language learners. The relationship between the listening self-efficacy and listening anxiety of men and women remains unclear, however, until further research is conducted with a sound listening proficiency measure and a larger sample size and a more equal number of male and female participants.

The highly reliable reading and listening self-efficacy scales developed by the investigators, however, provide the profession with effective measures from which researchers may gain valuable information about the self-efficacy beliefs of language learners (see Appendix A). Knowledge of students’ self-efficacy beliefs and their self-perceptions of their abilities to process and control oral and written input could help foreign language instructors determine the specific areas from which students’ perceptions of inadequacy stem and, in turn, develop teaching practices in college intermediate foreign language courses that might increase the self-efficacy beliefs of both men and women. By enhancing students’ confidence in their ability to hear and read in a foreign language, instructors may thus assist in the development of foreign language comprehension. In turn, improved listening and reading performance could then positively enhance students’ perceived competence.

Through the connection between foreign language education research and the current theoretical foundations and constructs found in contemporary educational psychology research, educators and researchers may learn valuable information about the self-beliefs and cognition of language learners. While research in educational psychology focuses largely on the relationship between self-efficacy and academic achievement, this study builds on previous self-efficacy research and extends available research to the relationship between self-beliefs and foreign language linguistic proficiency. In the daily foreign language classroom, our findings support the adoption and investigation of teaching techniques that enhance students’ beliefs about their abilities to succeed in specific linguistic tasks. Anxiety-reducing strategies, though important, are intended to alter a negative state of language behavior. The incorporation of strategies that foster self-efficacy could foster positive linguistic behavior from the very first days of instruction and reduce the subsequent need for techniques to reduce anxiety. Moreover, this research extends findings in applied linguistics by questioning the pervading research emphasis on anxiety and evaluating its relationship to self-efficacy and foreign language performance. The research design of this study, including regression analyses, allowed us to clarify the complicated relationship between self-efficacy and anxiety. By uniting contemporary theories and measures from educational psychology with those of applied linguistics, a more complete understanding of the influence of motivational factors on language proficiency may be gained.

Acknowledgments

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References


Appendix A

French Reading and Listening Self-Efficacy Items

French Reading Self-Efficacy Items
Directions: Please use the following scale to answer the following statements. Circle the number that best describes how sure you are that you can perform each of the French skills below.

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<td>No chance</td>
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1. Read and understand the main ideas of a short article from a French magazine.
2. Read and understand the main ideas of a French magazine article.
3. Read and understand the main ideas of a Christmas card message from a French friend.
4. Read and understand the details of a short story.
5. Read and understand the details of a short letter to the editor of a French teen magazine.
6. Read and understand the details of a page from a tourist brochure describing various organized activities in France.
7. Read and understand the details of a letter from a French friend who is bringing you up to date on the activities of his/her family.
8. Read and understand the main ideas of a reader’s short letter to a French teen magazine.
9. Read and understand the details of a reader’s short letter to a French teen magazine.
10. Read and understand the details of a paragraph from a French pen pal’s letter.
11. Read and understand the details of a letter to the editor and editor’s response in a French magazine.
12. Read and understand the main ideas from a tourist brochure describing various organized activities in France.
13. Read and understand the main ideas of a French ad for a vacation resort.
14. Read and understand the details of a story from a French newspaper.
French Listening Self-Efficacy Items
Directions: Please use the following scale to answer the following statements. Circle the number that best describes how sure you are that you can perform each of the French skills below.

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1. Listen to and understand the main ideas of a conversation in which a tourist requests information and receives simple instructions.
2. Listen to and understand the details of a conversation between a French adult and a French teenager.
3. Listen to and understand the main ideas of a conversation about personal topics between two French friends.
4. Listen to and understand the details of a conversation in French between a postal clerk and a customer.
5. Listen to and understand the details of one side of a telephone conversation in French about travel plans.
6. Listen to and understand the main ideas of a French television commercial.
7. Listen to and understand the main topic of a conversation between a tourist and a native French speaker in which information is requested.
8. Listen to and understand the main topic of conversation between a French adult and a French teenager.
9. Listen to and understand the main ideas of a tour guide’s sight-seeing tour.
10. Listen to and comprehend the details of a conversation at a French market about shopping.
11. Listen to and understand the main ideas of a domestic quarrel between a French husband and wife.
12. Listen to and understand the main ideas of an announcement at a French train station.
13. Listen to and understand the main ideas of a conversation between two native speakers about weekend plans.
14. Listen to and understand the main ideas of an extended interview with a French journalist.
15. Listen to and understand the details of an extended interview with a French journalist.
16. Listen to and understand the details of an extended conversation between two adults about a variety of personal topics.
17. Listen to and understand the details of a conversation between two French people riding on a city bus.
18. Listen to and understand the main ideas of a televised French news report.
19. Listen to and understand the main ideas of a French weather report.
20. Listen to and understand the details of a domestic quarrel between a French husband and wife.
21. Listen to and understand the main ideas of a televised public service announcement.
Appendix B

French reading and listening anxiety items
Adapted version of Betz’s (1978) Mathematics Anxiety Scale

French Reading Anxiety Items
1. Taking French reading comprehension tests does not scare me.
2. Reading in French makes me feel uneasy and confused.
3. I have usually been at ease when reading in French.
4. I almost never get uptight while taking French reading comprehension tests.
5. I get really uptight during French reading comprehension exams.
6. I get a sinking feeling when I think of trying to read a difficult French reading comprehension passage.
7. My mind goes blank and I am unable to think clearly when reading a French passage.
8. I am afraid of doing French reading comprehension exercises when I know that they will be graded.
9. Just thinking about doing a French reading comprehension exercise makes me feel nervous.

French Listening Anxiety Items
1. Taking French listening comprehension tests does not scare me.
2. Listening to native French speakers make me feel uneasy and confused.
3. I have usually been at ease listening to native French speakers in class.
4. I almost never get uptight while taking French listening comprehension tests.
5. I get really uptight while taking French listening comprehension exams.
6. I get a sinking feeling when I think of trying to complete a difficult listening comprehension exercise.
7. My mind goes blank and I am unable to think clearly when my instructor asks me a question in French.
8. I am afraid of doing French listening comprehension exercises when I know that they will be graded.
9. Just thinking about trying to understand a native French speaker makes me nervous.
Appendix C
Sample of the University of Minnesota’s Graduate French Reading and Listening Proficiency Items

French Reading Proficiency

Exercise C: The passage below is from a tourist brochure describing various organized activities in an area of Southern France.

Écologie – Découverte
Haut lieu de la garrique, le pic St. Loup représente un centre d'intérêt d’exception.
Randonnées permettant la découverte du lieu, une meilleure connaissance de la
vegetation saisonnière, l’observation des oiseaux.
Encadrement assure par l’association régionale pour la vulgarization de
l’Écologique Scientifique

1. This weekend excursion would most likely interest:
   a. Nature lovers
   b. History buffs
   c. People interested in energy conservation
   d. People interested in regional cuisine

French Listening Proficiency

Situation 3: In the Latin Quarter

While eating dinner with friends in a small restaurant on the Boulevard St. Michel, a conversation between two women at the next table catches your ear. Now eavesdrop for a few minutes and answer questions 5 and 6.

Woman 1: Je me rappelle la première fois que je suis venue ici, c’était la première fois que je sortais avec Jules. Quel désastre!
   [I remember the first time that I came here, it was the first time that I went out with Jules. What a disaster!]

Woman 2: Jules . . . je me souviens de lui. Quel idiot, ce mec.
   [Jules . . . I remember him. What an idiot, that guy.]

Woman 1: Oui, quand le garçon est venu à notre table, il a vraiment été vulgaire. Rien ne lui a plu et j’ai été bien gênée. J’ai commandé de la salade de tomates et du poulet aux champignons et je n’ai rien aimé à cause de lui. C’est la première fois ce soir que je reviens ici depuis.
   [Yes, when the waiter came to our table, he was truly rude. Nothing pleased him and I was really annoyed. I ordered a tomato salad and chicken with mushrooms and I didn’t enjoy any of it because of him. It’s the first time that I have been here since that experience.]
Woman 2: *Ma chère, j’espère que ça marchera mieux cette fois. J’adore cet endroit. Je viens ici souvent à cause de leur fruit de mer, mais je pense que ce soir je vais prendre autre chose.*

[My dear, I hope that it will be better this time. I love this place. I come here often because of their seafood, but I think that tonight I am going to order something else.]

Woman 1: *Moi, je ne vais surement pas commander la meme chose que la dernière fois. Du coq au vin? Qu’est-ce que tu en penses?*

[Me, I’m certainly not going to order the same thing that I ordered last time. Coq au vin? What do you think?]

Woman 2: *Ah, ça a l’air bon . . . avec du potage et des croquettes de pommes de terre.*

[Ah, that seems like it would be good with bouillon and potato croquettes.]

5. Jeanne has not eaten in this restaurant for a long time because the last time she came:
   a. the food was not very good
   b. it was very noisy
   c. she got sick from the food
   d. her date was rude and critical

6. One of the dishes that the women decide to order is:
   a. potatoes
   b. a seafood platter
   c. a tomato salad
   d. a mushroom soufflé