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# ANXIETY ABOUT L2 READING OR L2 READING TASKS? A STUDY WITH ADVANCED LANGUAGE LEARNERS

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## **Abstract**

The role of anxiety has primarily been examined at the introductory levels in oral, communicative situations (Saito, Horwitz, & Garza, 1999), however the role of affect in L2 reading is yet to be fully understood (Bernhardt, 2003). With 92 university students enrolled in an advanced level Spanish grammar and composition course, the present study addresses whether the following exists: (1) anxiety about L2 reading as a separate phenomenon from other language skills, (2) anxiety about performance variables involved after L2 reading: oral and written tasks, and (3) a relationship between reading anxiety and comprehension. Results indicate that at the advanced level of language instruction learners generally do not feel anxious about reading in a second language. Students reported being most anxious about speaking, then writing, and equally anxious (low) about listening and reading. Finally, learners were more anxious about post-L2 reading tasks (both oral and written) then the act of reading itself, and they were more anxious about post-oral than post-written tasks. Students feel less anxious about reading when immediate communication apprehension is not a concern. No positive or negative correlations were found among anxiety factors and both written comprehension tasks. The present study attempts to provide initial empirical evidence to substantiate Bernhardt's (2000; 2003) L2 reading model by beginning to explain the transient variable, anxiety, with more proficient L2 learners. Future investigations should examine anxiety and reading across stages of acquisition and utilize data collection instruments that include both written questionnaires and oral interviews (Frantzen & Magnan, 2005). Anxiety about reading at the advanced level may not be a function of reading itself, but rather a function of oral or written reading comprehension tasks.

Relying on Goodman's (1967) theory of L1 reading, Coady (1979) developed an interactive model of L2 reading that suggests that the ability and resources of the L1 reader may enhance or hinder the comprehension process. Coady includes both text-based and reader-based factors in his model. Bernhardt's interactive (2000; 2003) model of L2 reading is the first to address the heterogeneity of L2 readers. Bernhardt posits that 50% of L2 reading is accounted for by L1 literacy and L2 proficiency, and that more research is needed to examine the 50% of variance that remains unexplained. More specifically, she states that the... "role of affect in L2 reading is yet to be understood" (p. 805). Bernhardt's model is the first L2 reading model that directly attempts to explain transient variables, such as affect, in the L2 reading process. Furthermore, Bernhardt's model explains the importance of L2 proficiency level or instructional level in the reading process. In her model, as proficiency develops over time, the rate of errors

due to both content knowledge and knowledge constructed during comprehension decreases. One might posit, then, that the rate of errors in L2 reading comprehension due to anxiety decreases as proficiency increases. The present investigation is a preliminary attempt to help understand reading and anxiety at the advanced levels of language instruction. More specifically, the present study addresses whether the following exists with learners from advanced levels of acquisition in Spanish: (1) anxiety about L2 reading as a separate phenomenon from other language skills, (2) anxiety about performance variables involved after L2 reading: oral and written tasks, and (3) a relationship between reading anxiety and comprehension.

Saito, Horwitz, and Garza (1999) pioneered the concept of foreign language "reading" anxiety, and with students from introductory levels they examined several interacting variables involved *during* the L2 reading process such as target language and students' perceptions of the difficulty of L2 reading. They proposed that future studies examine L2 reading and anxiety with participants from more advanced stages of acquisition and that post-L2 reading anxiety should also be explored. Young (2003) contended that little reading research exists with learners from the advanced levels of language instruction, which is ironic because it is at this level that the reading of lengthy, authentic texts usually begins. The present study attempts to fill the lacuna in the database by examining anxiety related to L2 reading and post-L2 reading tasks at the advanced level of language instruction, the level where students have chosen to continue second language study and have declared either a major or minor in Spanish.

## **Language Learning and Anxiety**

Results from studies on language learning and anxiety reveal that anxiety is a significant variable in second language oral production with adults (Clement et al., 1977; Clement, 1987; Gardner, 1985; Horwitz, 1986; Muchnicek & Wolfe, 1982; Pak, Dion & Dion, 1985), but not so with children (Tarampi, Lambert, & Tucker, 1968; Swain & Burnaby, 1976). In a review of studies on L2 reading and anxiety, Scovel (1978) and Horwitz, Horwitz & Cope (1986) discussed the ambiguities in research methods as well as conflicting results, and MacIntyre & Gardner (1989) stated that even with the disparities in research methodologies there is a clear relationship between foreign language anxiety and foreign language proficiency in communicative situations. Most recently, Frantzen & Magnan (2005) reported that beginners enrolled in language classes at the university do not experience extreme anxiety, and this may be due to instructional practices. It is important to note that the majority of investigations reviewed by the above researchers utilized participants from the introductory levels of language instruction.

MacIntyre and Gardner (1991) identified three distinct approaches to the study of anxiety: trait anxiety refers to general personality traits; state anxiety is an emotional state; and situation specific anxiety refers to forms of anxiety within a given situation (p. 87). The authors maintain that situation specific perspective better captures the nature of foreign language anxiety. In studies on situation specific constructs participant's anxiety is examined in a well-defined situation, and consequently conclusions can be made about specific language learning tasks. MacIntyre (1999) offers a synthesis of language anxiety research (see MacIntyre, 1999, Table 3.1, p. 40) and offers the following general assertions: (1) anxiety develops from negative experiences early in the language learning experience; (2) language anxiety negatively correlates with L2 achievement and with self-perception of L2 proficiency; and finally, (3) anxious learners achieve lower grades, spend more time studying, and have greater difficulty processing new L2 input and output (p. 41). To date, the database of research concerning anxiety and L2 reading is

not complete, and therefore no generalizations specific to reading can be formulated. The present study examines L2 reading and post-reading tasks (situation specific anxiety) at the advanced levels.

## **Anxiety and L2 Reading**

To date, only a few studies have addressed affect and L2 reading. Franson (1984) found that ... "type of motivation for reading a particular text is an important factor influencing the choice of approach to learning, and thus also determining likely levels of outcome," (p. 115). He concluded that students naturally perform better on reading comprehension when there is no expectation of a factual knowledge test. Steffensen, Goatz, and Cheng (1999) included affect as a key variable in a study about readers' nonverbal responses. In three different experiments conducted with students in China, the researchers explored the imagery and emotional responses that readers experienced while reading a text in L1 and L2. Readers completed rating scales for imagery and emotional response ratings as well as free reports. Overall, findings revealed that affect and imagery are present during the reading process and that the "nonverbal representational system is a fundamental component of both L1 and L2 reading" (p. 316). With participants from introductory courses of French, Russian and Japanese, Saito, Horwitz, and Garza (1999) found that foreign language reading anxiety does exist, and that it is distinct from general foreign language anxiety concerning oral performance. More specifically, they found that levels of reading anxiety vary by target language and seem to be related to writing systems. In their study, learners of Japanese were most anxious, followed by French and then Russian. They attributed the difference between the results of French and Russian to the fact that Russian symbols are phonetically dependable and French is not. Moreover, they reported that student course grades decreased alongside levels of reading anxiety as well as with general foreign language anxiety. The higher the self-reported level of foreign language reading anxiety, the lower the course grade, and vice versa. The authors discuss the level of instruction as a variable to be examined in future inquiries of this type. Additionally, as Saito, Horwitz and Garza state, "... the anxiety might appear at some point after the reading was actually accomplished or when the student encounters the teacher's or other students' interpretations of the text" (p. 215).

With participants from a third semester course and an intermediate level conversation course in university level Spanish, Sellars (2000) also found that reading anxiety is a distinct variable in foreign language learning. Furthermore, students with higher levels of overall foreign language learning anxiety reported higher levels of reading anxiety. In a close look at anxiety ratings, findings showed that more students indicated feeling "somewhat" anxious about L2 reading than any other rating. Sellars asked students to read a magazine article and found a negative relationship between reading anxiety and L2 reading comprehension. In a complex L2 reading investigation with students of second year university level Spanish, Young (2000) examined several interacting variables including anxiety, comprehension, self-reported comprehension, text features, and reading ability. With four different non-literary reading passages (magazines, newspapers, etc) she found that the higher the reading anxiety, the lower students rate their level of understanding the L2 texts. She also reported a significant relationship between L2 reading anxiety and L2 reading comprehension with two of the four passages utilized in the study. These findings echo Sellar's (2000) results with third semester participants where reading anxiety affected reading comprehension, and Young explains that linguistically dense texts could produce more reading anxiety than the text length and structure. Results also revealed that reading anxiety is not a good predictor of L2 comprehension at this level. Both

Sellers and Young utilized participants from courses taken before the reading of authentic texts begins which leads to the following question: Do students at the advanced levels feel anxious about reading lengthy authentic texts? If so, do they feel anxious about the act of reading and/or post-L2 reading tasks? Does anxiety affect comprehension?

## **The Present Study**

For the present study, Horwitz, Horwitz, and Cope's (1986, pg. 31) definition of foreign language anxiety is utilized: "a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process." This definition of foreign language anxiety involving "self-perceptions, beliefs, feelings, and behaviors" has been used by other L2 reading researchers (Campbell & Shaw, 1994; Campbell, 1999; Young, 1999).

In a discussion about the conceptual foundations of foreign language anxiety, Horwitz, Horwitz, and Cope (1986) discussed three related performance anxieties: (1) communication apprehension; (2) test anxiety; and (3) fear of negative evaluation (p. 30). The purpose of this article is the following: First, to explore the concept of second language anxiety about reading as distinct from anxiety about L2 speaking, listening and writing at the advanced level of language instruction. Second, with the same readers, to examine anxiety about tasks (oral and written) involved after the L2 reading process. Finally, to explore the relationship between anxiety and comprehension. To date, it appears that no such research has examined anxiety and reading at the advanced stages of language instruction.

The following research questions guide the present study:

- 1. Are learners at the advanced levels of language instruction more anxious about L2 reading than L2 speaking, listening and writing?
- 2. Do learners feel more anxious about the process of L2 reading or post-L2 reading tasks (oral and written)?
- 3. Is there a relationship between anxiety and L2 reading comprehension?

# Methodology

## **Participants**

A total of 92 students enrolled in an advanced level Spanish grammar and composition course at a private university participated in the study. As part of the course requirements, all students in all sections of advanced Spanish participated in the investigation. Students were told that they were not obliged to allow results to be used as part of the investigation, but all students signed the consent form to utilize results for the study. In previous beginning and intermediate courses at the university all participants in the study had read short readings from newspaper articles, magazines and historical vignettes. In the advanced grammar course, students are assigned to read lengthy, authentic literary works from the literary canon for the first time. As part of the course requirements they read complete short stories from a literary anthology designed for this level of acquisition. Before coming to class, students complete multiple choice comprehension questions. During class, students are randomly selected to read the story out loud, and then the instructor asks oral comprehension questions to deconstruct the plot. Students are

<sup>&</sup>lt;sup>1</sup> McIntyre (1999) reports that anxiety about language learning begins at early stages of formal training, and therefore participants in the present study were taken from the level at which the reading of lengthy, authentic texts begins.

then assigned to write an out-of-class composition about what they read, and they must include supporting evidence from the primary source. Both instructors and students in all sections of the class only speak Spanish in the classroom.

Only students with the following criteria were included in the final data analysis: students who were placed in the course based on scores from the national Advanced Placement Spanish exam; students who achieved the appropriate score on the departmental placement exam; and students who took prerequisite Spanish courses at the university. Furthermore, only students whose native language was English and only those who completed all tasks were included in the final analysis. In the final analysis 82 participants were included. At the university where data was collected there is no language requirement, and therefore all students in the study enrolled in the course voluntarily.

# **Instruments Anxiety Test**

As discussed earlier, MacIntyre and Gardner (1991) assert that a situation specific view better captures the nature of foreign language anxiety. In situation specific constructs participant's anxiety is examined in a well-defined situation, and consequently conclusions can be made about specific language learning tasks. Saito, Horwitz and Garza (1999) state that anxiety could appear after L2 reading is actually accomplished (written assessment) or in oral situations when the student encounters the teacher's or other students' interpretations of the text (p. 215). Keeping both MacIntyre and Gardner's (1991) and Saito, Horwitz and Garza (1999)'s perspectives in mind, for the present study the anxiety questionnaire was created and modified according to selected items from the Foreign Language Classroom Anxiety Scale (FLCAS) (Horwitz, Horwitz, & Cope, 1986). Items from the FLCAS were altered with a focus on L2 reading instead of general language learning, and the Reading Anxiety Scale (RAS) served as a guide to aid the process of re-writing FLCAS questions. See Table 1 for a complete list of questions solicited on the written questionnaire. The entire survey was written in English. For questions specific to L2 reading, all questions fit into three categories representing different dimensions of L2 reading and anxiety: general L2 reading; L2 reading and oral tasks; and, L2 reading and written tasks. For each item there were the following five possible choices: (1) Strongly Agree; (2) Agree; (3) Undecided; (4) Disagree; (5) Strongly Disagree.<sup>2</sup>

## **Background Questionnaire**

The background questionnaire included questions about participant's age, gender, academic major, whether or not he or she studied in a Spanish speaking country, language spoken at home, and years studying Spanish (including high school).

## **Reading Selection**

For the present study the short story, *Lo que sucedio a un dean de Santiago con don Illan, el mago de Toledo*, by Don Juan Manuel, was taken directly from the anthology used in the course. It consisted of approximately 1285 words and included 191 clauses. To control for authenticity of passage selection, the story was kept in its original form, and it included the glosses provided in the anthology. The story is a parable about a cleric who wants to learn magic. As he rises in position in the church he neglects promises made to his magic teacher. As a result,

<sup>&</sup>lt;sup>2</sup> In accordance with previous research, participants responded to a standard Likert scale ranging from strongly agree to strongly disagree with items (Horwitz, Horwitz, & Cope, 1986; reprinted in Young, 1999).

the magician ultimately refuses to teach him and reveals that his rise in power was just an illusion.

## **Comprehension Assessment Tasks**

The written recall task is often used in L2 reading investigations (Barnett, 1988; Brantmeier, 2001; Brantmeier, 2003; Carrell, 1983; Lee, 1986a; 1986b; Maxim, 2002; Young, 1999; among others). After the participants in the present study completed the reading, they were instructed to write down as many ideas and details about the passage without looking back at the reading. After completing the written recalls participants answered 10 multiple choice questions. The multiple-choice questions were created to meet the two criteria set by Wolf (1993): (a) all items are passage dependent, and (b) some of the items require the reader to make inferences. In addition, a third condition was added: correct responses cannot be determined by looking at the other questions on the page. For each of the 10 multiple-choice questions four possible responses were created: one correct response and three distractors. All distractors in the multiple-choice questions are plausible (Bernhardt, 1991; Wolf, 1993), and all multiple-choice questions cannot be answered correctly without having read and understood relevant parts of the passages.

Prior research has also shown that when the readers are allowed to use their native language in the written tasks, a truer depiction of comprehension is revealed. Therefore, both tasks in this study were completed in the learner's native language, English (Bernhardt, 1983; Lee, 1987; Wolf, 1993).

## **Procedure**

During the 10<sup>th</sup> week of the spring semester during regular class time participants were asked to complete the anxiety questionnaire as well as a background questionnaire. After this, students completed the reading, the written recall, and the multiple choice questions. Students had the 60 minutes to complete the study. The semester lasts 14 weeks, and therefore the experiment was conducted during the 10<sup>th</sup> week of classes so that students were familiar with the routine of reading and completing post-reading tasks.

#### **Scoring and Analysis**

The short story was divided into pausal units by three different raters. Pausal units were defined as a unit that has a "pause on each end of it during normally paced oral reading," (Bernhardt, 1991; p. 208). Separately, the researcher and one additional rater identified the total pausal units for the text and then compared results. The percent of scoring agreement between the two raters was .97. A third rater was consulted for the disagreement in recalls to reach a final decision. The total number of pausal units for each recall was tallied. For multiple choice questions the correct number of responses was calculated.

For Research Questions One and Two data were submitted to SPSS to obtain frequency scores and percentages. For these questions a repeated measures design was utilized as the comparison is within one group, and a matched t-test allowed for the comparison of scores. For Research Question Three, a series of correlational analyses was calculated. The alpha level was set at .05.

#### **Results and Discussion**

Research Question 1: Are learners at the advanced levels of language instruction more anxious about L2 reading than L2 speaking, listening and writing?

Table One lists the means and standard deviations for anxiety related questions. Table Two lists descriptive statistics for all questions and includes percentages of students selecting each alternative. In the present study, learners of advanced Spanish grammar disagreed with being overly anxious about reading in Spanish outside of this course for homework (see Item 1). This finding contradicts readers at the introductory and intermediate levels of L2 language instruction (Sellars, 2000; Young, 2000). Perhaps because students have already been exposed to the reading of magazine articles and short vignettes, by the time they reach the advanced levels their affective filters are already lowered. MacIntyre (1999) asserts that anxiety develops from negative experiences early in the language learning experience. Conceivably the students in the present study had positive experiences with L2 reading at the beginning levels, and consequently they are not anxious about reading at this level. Moreover, reading is traditionally a silent act done outside of class without the pressure of peers, and students can read at their own pace. Perhaps the routine of a low-stress task during the first years of language instruction helped reduce anxiety at the upper levels. Furthermore, students in the present study had been reading weekly outside of class for about 10 weeks and were familiar with this independent task.

On the other hand, students reported feeling somewhat anxious (midway on the 5-point anxiety scale) about not understanding the readings in the future literature courses. A major component of the course is to prepare the students for the reading of lengthy, authentic texts required in the future literature courses, but even with this goal students still feel anxious. Prior studies have shown that high anxiety may negatively affect reading comprehension (Sellars, 2000; Young, 2000), and that the higher language learning anxiety the lower the overall course grades (Saito, Horwitz, and Garza, 1999). In the present study, readers are not overly anxious about the reading required in their current course, but they express anxious feelings about the readings in the upcoming literature courses. Could anxiety have a facilitating effect on reading comprehension in the advanced literature courses? Higher anxiety may facilitate better comprehension with participants in the advanced literature courses. This question is partially answered in an upcoming section of this article with students in advanced grammar courses.

Results of the present study (Table One) show that of all three skills, speaking causes the most anxiety, followed by writing, then listening and reading. Figure One graphically displays mean anxiety scores for reading, speaking, writing and listening. Findings partially echo Sellars (2000), where reading anxiety is an individual factor in language learning. It is well documented that spontaneous speaking in the L2 class is the most threatening aspect of foreign language learning (Horwitz, Horwitz, & Cope, 1986), and the findings of the present study echo this assertion. These results are fairly surprising because students have already read the reading and should be familiar with the plot and consequently should feel less anxious about classroom discussion. Students reported feeling least anxious about reading and listening, and with both tasks students do not have to produce anything. In the present study, students were somewhat anxious about writing, and this could be because 30% of the course grade is based on their composition grades. These findings lend further support to the view that students feel less anxious about language learning when immediate communication apprehension is not a concern. Outside of class, performance is not constantly monitored as it is in the language classroom. At

<sup>&</sup>lt;sup>3</sup> It is important to note that the prior studies on the effects of L2 reading anxiety levels were conducted with students from the beginning and intermediate levels.

home, students are in control of the pace of learning as well as the communicative situation, both factors that effect language learning in the classroom (McCroskey, 1977). In class, however, the instructor controls the pace and communication with may induce anxiety.

Research Question 2: Do learners feel more anxious about the process of L2 reading or post-L2 reading tasks (oral and written)?

Mean scores and standard deviations for anxiety items are listed on Table One, and Figure Two offers a graphic depiction of mean anxiety scores for L2 reading and post L2 reading tasks. As indicated, students are more anxious about both reading out loud and answering oral questions about what they read then they are about the actual act of reading itself. The matched ttest revealed a significant difference in anxiety levels for L2 reading and reading out loud (p < .05) and a significant different in anxiety levels for L2 reading and answering oral comprehension questions (p < .05). As discussed earlier, communication apprehension has been well documented in L2 language learning (Horwitz, Horwitz, & Cope, 1986). A closer look at Figure Two reveals that of the two oral production tasks, students are most anxious about oral comprehension questions. To further explore this difference, mean scores for oral reading and oral questions were submitted to the matched t-test. Findings yielded no significant difference between post-L2 reading oral tasks, with participants being only slightly more anxious about answering questions in class (m = 3.0; neither agree nor disagree) than reading out loud in class (m = 3.1).

Table Two lists each anxiety item with percentages of students selecting each alternative (anxiety level). A close look at Table Two reveals that 43% of the participants reported being very anxious about not understanding the lengthy texts in future literature courses, and only 18% reported being very anxious about reading in Spanish outside of the current class for homework. A close examination of items concerning oral production reveals that 38 % of students indicated feeling very anxious about both having to speak in Spanish class and also having to answer questions orally in class about what they have read. Horwitz, Horwitz, & Cope, 1986 also found that anxious students (from introductory levels) fear that other students will negatively evaluate them, and more specifically, in their study 31% of the students indicated that they feel that other students speak the foreign language better than they do. Given the results of the present study with advanced learners, a future investigation might examine more precisely what component of oral communication invokes anxiety (Horwitz, Horwitz, & Cope, 1986). The following questions could be included to probe deeper into this phenomenon: Do the students at the advanced levels fear that their peers will negatively evaluate them when they discuss what they have read? Do they feel that the other students speak better and can better articulate responses to questions posed by the instructor? Recently, Frantzen & Magnan (2005) utilized open-ended questions and oral interviews, in addition to the FLCAS, to examine these issues concerning anxiety with students from beginning levels of language instruction. A future investigation might use Frantzen & Magnan's (2005) data collection instruments and include the above questions.

Figure Two offers a graphic depiction of mean anxiety scores for L2 reading and post L2 reading tasks. As indicated, students are more anxious about completing multiple choice comprehension questions and writing compositions than they are about reading. The matched t-test revealed a significant difference in anxiety levels for L2 reading and writing compositions (p < .05) and no significant difference in anxiety levels for L2 reading and answering written multiple choice comprehension questions (p > .05). Prior research has shown that familiar tasks create less anxiety (Bailey, 1983), and the participants in the present study were accustomed to completing multiple choice tasks after reading in the introductory, intermediate and advanced

levels. The writing of compositions based on the reading is an unfamiliar task presented for the first time in this level of language instruction. Participants were somewhat anxious (midway on 5-point anxiety scale) about writing compositions. In summary, students are less anxious about completing multiple choice questions than they are about writing compositions based on the reading. This is not surprising given that multiple choice questions are traditionally used to assess both L1 and L2 reading comprehension, and that there is little production required on the part of the learner. With multiple choice or open-ended questions, additional interaction exists among texts, reader, questioner, and among the questions (Bernhardt, 1991) which may actually reduce anxiety.

As all L2 instructors and researchers know, evaluation is integral to the reading process. In the advanced level courses for the present study reading comprehension is partially tested through written compositions, which involves more responsibility on the part of the learner. Test anxiety involves a type of performance anxiety where students fear failure (Horwitz, Horwitz, & Cope, 1986; Sarason, 1986). Participants in the present study may be anxious about writing compositions because they fear they will not receive high grades. What is interesting is that students write compositions after they have already deconstructed the plot during class, which should prepare them for writing compositions at home. A future study of this type could examine more specifically if the global or local components of writing make them nervous, such as sentence structure, vocabulary, and grammar, or creativity, organization and development. In this class, students write 6 different compositions based on the readings, and the compositions are worth 30% of their final course grade. Three of the six compositions include two drafts, and with the revisions the writing is more process-oriented than product driven. In-class pre-writing activities are not a mandatory component of instructional practices in this course. Instructional practices may affect anxiety about writing compositions. The present study reveals that students are anxious about writing about what they read, and future inquiries could probe further into these phenomena to understand what part of the writing process induces anxiety. Again, some anxiety may not hinder writing but could actually enhance it at this level.

A comparison of anxiety levels for post oral and written tasks yields interesting results. The mean anxiety score for both post-oral tasks is 3.1, and the mean anxiety score for post-written tasks is 3.5. The matched t-test revealed a significant difference between scores for combined post-oral tasks and combined post-written tasks (p < .05), with participants being more anxious about oral tasks. This could be explained because with written tasks students are in control of the pace of their production (both MC and compositions) as these tasks are completed outside of the classroom away from their peers. Students can consult the primary text as they answer questions and write compositions. This is not the case for oral assessment when students are in class and are not able to page through the text to find answers. Again, in the present study, it can be said that students feel less anxious about reading when immediate communication apprehension is not a concern. These results lead to the following inquiry that could be addressed in a future study: How does anxiety about post-oral tasks effect non-verbal representations during reading? Does anxiety about follow-up oral tasks interfere with the non-verbal representations? A think aloud protocol utilized during reading could help gain a clearer picture of this issue.

Research Question 3: Does anxiety about L2 reading affect comprehension? The strength of the relationship of (1) anxiety levels about L2 reading, and (2) anxiety levels about post-written tasks to L2 reading comprehension were determined through a series of correlational analyses. No positive correlations were found for any anxiety items and written

recall or multiple choice. Findings contradict both Young (2000) and Sellars (2000) where anxiety affects reading comprehension with students from lower levels of instruction.

The lack of significant correlations among anxiety factors and reading comprehension could be interpreted in several ways. The participants in the present study are from advanced levels of language instruction where they are accustomed to reading individually before coming to class, and they are routinely asked to write compositions based on what they read. The readers also regularly complete multiple choice questions about the plot before coming to class, so they are accustomed to the expectation of factual knowledge. Prior research has shown that familiar tasks create less anxiety (Bailey, 1983). On the other hand, Franson (1984) found that students perform better on reading comprehension when there is no expectation of an examination of factual knowledge, but this was not the case in the present investigation with advanced learners.

With participants from second-year Spanish, Young (2000) found that high L2 reading anxiety negatively affects recalls. The present study revealed no association between anxiety and recall scores. Furthermore, no participant indicated that they strongly agree with the statement about becoming anxious when writing about the reading. Even though participants indicated feeling somewhat stressful about the task of writing about what they read, this did not hinder their written performance (as measured via recall). A future study could correlate anxiety to writing and performance on written compositions. Only three students indicated that they strongly agree with the item concerning anxiety about multiple choice questions after reading, but this anxiety did not affect multiple choice scores.

In summary, an interesting finding of the present study is that participants reported higher anxiety about oral than written comprehension assessment tasks. With readers from advanced courses, the present study also reveals that anxiety is not a major obstacle in foreign language reading comprehension (when measured via recall and multiple choice). Prior research has consistently found that anxiety is a significant obstacle to be overcome in learning to speak in a foreign language (Aida, 1996; Horwitz & Cope,1991; Price, 1991). A future inquiry could examine the association between anxiety about post-oral tasks and performance on oral tasks. Anxiety about reading at the advanced level may not be a function of reading itself, but rather a function of oral or written reading comprehension tasks.

The findings of the present study underscore the need for more investigations concerning anxiety and L2 reading. As Phillips (1992) contends, rejecting any association between anxiety and performance is dangerous. The present study is not enough evidence to assert that with advanced readers anxious feelings do or do not affect comprehension. Perhaps more detailed questions, including open-ended questions and oral interviews, concerning anxiety and L2 reading of lengthy texts would add to the present findings

#### Limitations

Situational anxiety was the best focus for the present study. However, it must be said that the experiment did not account for teaching approaches. Different teaching approaches could produce different levels of anxiety, especially with post oral comprehension tasks. Furthermore, the present study does not account for anxiety in L1 writing. Students may or may not feel anxious about L1 and L2 writing in a variety of situations. A future study should consider L1 writing ability as well as anxiety about writing in general. Finally, the present study did not include open-ended questions. A future study could replicate Frantzen & Magnan (2005) and utilize oral interviews to explore issues concerning anxiety and L2 reading. Open-ended questions would give another opportunity to explore what respondents are thinking.

#### **Conclusion**

The present study is an attempt to address issues concerning L2 reading and anxiety at the advanced stages of acquisition. Results of this investigation reveal that anxiety about L2 reading is not a factor at the advanced level of language instruction as it does not hinder comprehension (as measured via multiple choice and recall). Findings also indicate that anxiety about post-L2 reading oral tasks does indeed exist at this stage. Different assessment tasks (oral and written) may require different types of reading, and consequently may invoke different types of anxiety. This investigation shows that anxiety about oral tasks may be a factor involved in the L2 reading process that should be considered more thoroughly in future inquiries. For now, instructors should be aware of anxiety about oral comprehension tasks and implement practices that involve positive exchanges of ideas. Future investigations of this nature conducted across languages and levels may reveal how anxiety fits in Bernhardt's interactive model of L2 reading.

## References

- Aida, Y. (1994). Examination of Horwitz, Horwitz, and Cope's construct of foreign language anxiety: The case of students of Japanese. <u>The Modern Language Journal</u>, 78, 155-168.
- Bailey, K. M. (1983). Competitiveness and anxiety in adult second language learning: Looking at and through the diary studies. In Herbert. W. Seliger & Michael H. Long (Eds.), <u>Classroom Oriented Research in Second Language Acquisition</u> (pp. 67-102). Rowley, MA: Newbury House.
- Barnett, M. A. (1988). Reading through context: how real and perceived strategy use affects L2 comprehension. <u>Modern Language Journal</u>, 72, 150-160.
- Bernhardt, E. B. (1983). Syntactic and lexical /semantic skill in foreign language reading comprehension: the immediate recall protocol. <u>Die</u> Unterrichtspraxis, 16, 27-33.
- Bernhardt, E. B. (1991). <u>Reading development in a second language</u>. Norwood, NJ: Ablex Publishing Corporation.
- Bernhardt, E. B. (2000). Second-language reading as a case study of reading scholarship in the 20<sup>th</sup> century. In M. Kamil, P. Mosenthal, D. Pearson., & R. Barr (Eds.), pp. 793-811, Handbook of Reading Research Volume III. Hillsdale, NJ: Earlbaum.
- Bernhardt, E. B. (2003). New directions in reading research: Second language perspectives. Reading Research Quarterly, 37(4), 112-117.
- Brantmeier, C. (2001). Second Language Reading Research on Passage Content Gender: Challenges for the Intermediate Level Curriculum. <u>Foreign Language Annals</u>, (34) 325-333.
- Brantmeier, C. (2003). Does gender make a difference? Passage content and comprehension in second language reading. Reading in a Foreign Language, 15, 1–27.
- Campbell, C. M. & Shaw, V. (1994). Language anxiety and gender differences in adult second language learners: Exploring the relationship. In C. Klee (Ed.), <u>Faces in a crowd: The</u> individual learner in multisection courses. Boston: Heinle & Heinle.
- Campbell, C. M. (1999). Language anxiety in men and women: Dealing with gender difference in the language classroom. In Young, D. J. (Ed.), <u>Affect in foreign language and second language learning: a practical guide to creating a low-anxiety classroom atmosphere</u> (pp. 191-215). Boston: McGraw Hill.
- Carrell, P. L. (1983). Some issues in studying the role of schemata, or background knowledge, in second language comprehension. Reading in a Foreign Language, 1 (2), 81-92.
- Clement, R. (1987). Second language proficiency and acculturation: An investigation of the effects of language status and individual characteristics. <u>Journal of Language and Social</u> Psychology, 5, 271-290.
- Clement, R., Gardner, R.C., & Smythe, P. C. (1977). Motivational variables in second language acquisition: A study of Francophones learning English. <u>Canadian Journal of Behavioral Science</u>, 9, 123-133.
- Coady, J. (1979). A psycholinguistic model for the ESL reader. In Mackay, R., Barhman, B. & Jordan, R.R. (eds) pp. 5-12. <u>Reading in a Second Language</u>. Rowley, Mass.: Newbury House.
- Franson, A. (1984). Cramming or understanding? Effects of intrinsic and extrinsic motivation on approach to learning and test performance. In J. C. Alderson and H.H. Urquhart (Eds.), Reading in a foreign language. London: Longman.

- Frantzen, D. & Magnan, S. S. (2005). Anxiety and the true beginner-false beginner dynamic in beginning French and Spanish classes. Foreign Language Annals, 38(2), 171-190.
- Gardner, R. C., (1985). <u>Social psychology and second language learning: The role of attitudes and motivation</u>. London: Edward Arnold.
- Goodman, K. S. (1967). Reading: a psycholinguistic guessing game. <u>Journal of the Reading</u> Specialist, 6, 674-91.
- Horwitz, E. K. (1986). Preliminary evidence for the reliability and validity of a foreign language anxiety scale. TESOL Quarterly, 20, 125-132.
- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. <u>The Modern Language Journal</u>, 70, 125-132.
- Lee, J. F. (1986a). On the use of the recall task to measure L2 reading comprehension. <u>Studies in Second Language Acquisition</u>, 8, 201-12.
- Lee, J. F. (1986b). Background knowledge and L2 reading. Modern Language Journal, 70, 350-354.
- Lee, J.F. & Ballman, T.L. (1987) Learners' ability to recall and rate important ideas of an expository text. In Van Patten, B., Dvorack, T.R. and Lee, J.F., editors, <u>Foreign language</u> learning: a research perspective, Rowley, MA: Newbury House, 108-17.
- MacIntyre, P. D. & Gardner, R.C. (1989). Anxiety and second-language learning: Toward a theoretical clarification. <u>Language Learning</u>, 39- 252-275.
- MacIntyre, P. D. & Gardner, R. C. (1991). Language anxiety: Its relation to other anxieties and to processing in native and second languages. Language Learning, 41, 513-534.
- MacIntyre, P. D. (1999) Language anxiety: A review of the research for language teachers. In Young, D. J. (Ed.), <u>Affect in foreign language and second language learning: a practical guide to creating a low-anxiety classroom atmosphere</u> (pp. 24-45). New York: McGraw Hill.
- Maxim, H. (2002). A study into the feasibility and effects of reading extended authentic discourse in the beginning German language classroom. <u>Modern Language Journal</u>, 86, 20-35.
- McCroskey, J. C. (1977). Oral communication apprehension: A summary of recent theory and research. <u>Human Communication Research</u>, 4, 78-96.
- Muchnick, A. G., & Wolfe, D. E. (1982). Attitudes and motivations of American students of Spanish. *The Canadian Modern Language Review*, 38, 262-281.
- Pak, A. W. P., Dion, K. L., Dion, K. K. (1985). Correlates of self-confidence with English among Chinese students in Toronto. <u>Canadian Journal of Behavioral Science</u>, 17, 369-378.
- Saito, Y., Horwitz, E., & Garza, J. (1999) Foreign Language Reading Anxiety. <u>The Modern Language Journal</u>, 83, 202-218.
- Sarason, I. G. (1986). Test anxiety, worry, and cognitive interference. In R. Schwarzer (Ed.), Self-related cognition in anxiety and motivation (pp. 19-34), Hillsdale, NJ: Erlbaum.
- Scovel, T. (1978). The effect of affect on foreign language learning: A review of the anxiety research. <u>Language Learning</u>, 28, 129-142.
- Sellars, V. (2000) Anxiety and reading comprehension in Spanish as a foreign language. <u>Foreign Language Annals</u>, 33(5), 512-521.
- Steffensen, M.S, Goetz, E. T. & Cheng, X. (1999). A cross-linguistic perspective on imagery and affect in reading: Dual coding in Chinese and English. <u>Journal of Literacy Research</u>, *31*(3), 293-319.

- Swain, M., & Burnaby, B. (1976). Personality characteristics and second language learning in young children: A pilot study. Working Papers on Bilingualism, 11, 115-128.
- Terampi, A. S., Lambert, W. E., & Tucker, G.R. (1968). Audience sensitivity and oral skill in a second language. <u>Philippine Journal for Language Teaching</u>, 6, 27-33.
- Wolf, D. (1993). A comparison of assessment tasks used to measure FL reading comprehension. <u>Modern Language Journal</u>, 77, 473-89.
- Young, D. J. (1999). Affect in foreign language and second language learning: a practical guide to creating a low-anxiety classroom atmosphere. In Young, D. J. (Ed.), <u>Affect in foreign language and second language learning: a practical guide to creating a low-anxiety classroom atmosphere</u> (pp. 3-10). New York: McGraw Hill.
- Young, D. J. (1999). Reading Anxiety Scale (RAS). In Young, D. J. (Ed.), <u>Affect in foreign language and second language learning: a practical guide to creating a low-anxiety classroom atmosphere</u> (p. 256). New York: McGraw Hill.
- Young, D. (2000). An investigation into the relationship between L2 reading anxiety and L2 reading comprehension, and self-reported level of comprehension, topic familiarity, features of an L2 text and reading ability in the L1 and L2. <u>Current Research on the Acquisition of Spanish</u>. (Eds.) Ron Leow & Cristina Sanz. Somerville: Cascadilla Press, 15-33.
- Young, D. J. (2003). Workshop on overcoming anxiety in the foreign language classroom. Language Learning Series: Washington University in St. Louis.

## <u>Table One</u> <u>Anxiety Items: Mean Scores and Standard Deviation</u>

Item:	M*	(SD)
1. I become anxious when I have to read in Spanish outside of this course for homework.	3.8	(1.1)
2. I become anxious when I have to read Spanish out loud in class.	3.1	(1.3)
3. Generally speaking, I become anxious when I have to to speak Spanish in class.	3.0	(1.3)
4. I become anxious when I have to answer questions orally in this class about what I have read in Spanish.	3.0	(1.2)
5. I fear having <i>to read</i> lengthy texts in Spanish as homework in future literature courses.	3.3	(1.1)
6. I fear <i>not understanding</i> the lengthy texts I will have to read in future literature courses.	2.8	(1.1)
7. I become anxious when I am asked to write in Spanish.	3.5	(1.0)
8. I become anxious when I am asked to write compositions in Spanish about what I have read in this class.	3.4	(1.0)
9. I become anxious when I have to answer the multiple choice questions about what I have read in Spanish.	3.6	(1.0)
10. Generally speaking, I become anxious when I listen in this class.	3.8	(1.1)

<sup>\*</sup> n = 73 participants; the lower the mean score the higher the level of anxiety.

**Table Two** 

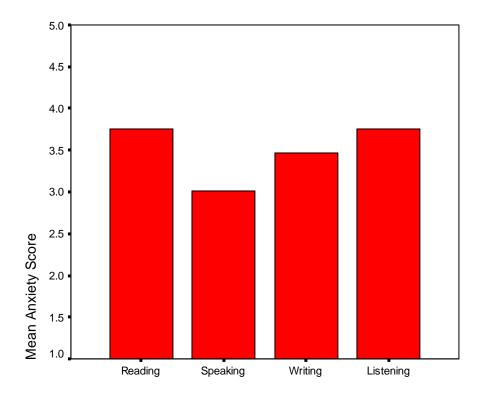
## **Item with Percentages of Students Selecting Each Alternative**

Item	SA	A	U	D	SD
1. I become anxious when I have to read in Spanish outside of this course for homework.	1	18	10	47	25
2. I become anxious when I have to read Spanish out loud in class.	8	36	12	26	18
3. Generally speaking, I become anxious when I have to speak Spanish in class.	8	38	12	26	15
4. I become anxious when I have to answer questions orally in this class about what I have read in Spanish.	7	38	12	33	10
5. I fear having <i>to read</i> lengthy texts in Spanish as homework in future literature courses.	6	26	15	43	11
6. I fear <i>not understanding</i> the lengthy texts I will have to read in future literature courses.	7	43	19	23	8
7. I become anxious when I am asked to write in Spanish.	1	21	18	51	10
8. I become anxious when I am asked to write compositions in Spanish about what I have read in this class.	0	23	21	51	6
9. I become anxious when I have to answer the multiple choice questions about what I have read in Spanish.	3	15	21	45	16
10. Generally speaking, I become anxious when I listen in this class.	1	18	10	47	25

<sup>\*</sup> n = 73 participants; the lower the mean score the higher the level of anxiety.

<u>Figure One</u>

<u>Mean Anxiety Scores for Reading, Speaking, Writing, and Listening\*</u>

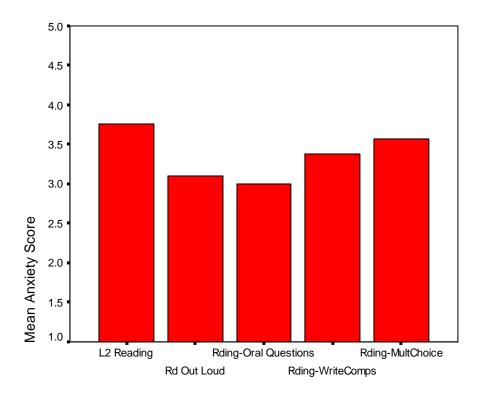


<sup>\*</sup>The higher the mean anxiety score the lower the anxiety

Figure Two

Mean Anxiety Scores for L2 Reading and Post-L2 Reading

Oral and Written Tasks



<sup>\*</sup>The higher the mean anxiety score the lower the anxiety

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