

GENDER, VIOLENCE-ORIENTED PASSAGE CONTENT AND SECOND LANGUAGE READING COMPREHENSION

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Abstract

Various Latin American authors treat violence as a principal theme in their works. This inquiry examines the topic familiarity levels and comprehension of university level male and female second language (L2) readers with two different authentic violence-oriented texts. During two different testing periods 68 participants received: a 700 word reading passage, a written recall task, a multiple-choice test, and a questionnaire. The passages were by Horacio Quiroga, "The Decapitated Chicken" (DC), and the other by Mempo Giardinelli, "Slaughter at Naptime" (SN). While results revealed no significant gender differences in reported topic familiarity levels, females recalled more idea units and scored higher on the multiple choice than the males did for the DC passage, and these differences were significant. For the SN passage, no significant gender differences were found with both comprehension assessment tasks. The results of this study showed that while male and female readers at the advanced levels of instruction indicated being equally familiar with violence-oriented content of the target culture, females outscored their male counterparts on L2 comprehension tasks for texts that involved male-to-female violence. The overall findings indicate that females may have an advantage over males in the free written recall procedure. Though the results provide support for a multifarious model of L2 reading (Bernhardt, 1991), one cannot make the generalization that the apparent gender difference in the comprehension of passage DC is due to the victim's gender. Consequently, future research should demonstrate this effect in the opposite direction with learners at various levels.

Introduction

It is well documented by theory and investigations that skilled readers construct a coherent representation of a text by relying on their general world knowledge to make connections between ideas in a text (Bernhardt, 1991; Graesser, 1981; Kintsch, 1988; Kintsch & van Dijk, 1978). More recently, Horiba (2000) reviewed multiple theories about the assumptions of discourse process and representation while illuminating topic and content of the text as well as personal characteristics of the reader. Prior to Horiba (2000), Bernhardt's (1991) multifarious model of the L2 reading process illustrated that at the initial stages of L2 language acquisition, background knowledge overrides linguistic knowledge. According to the model, at the more advanced stages of acquisition effects from passage content are superseded by language proficiency. Do reader's gender and passage content have an effect at various stages of acquisition? To date, only a few studies have been conducted on the effects of passage content by gender on second language (L2) reading comprehension across stages of acquisition at the

university level (Brantmeier, 2002; 2003). As Bernhardt's (1991) model predicted, these studies revealed significant gender differences in comprehension with different passages at early stages of acquisition, but not at more advanced stages. Hence, gender may be a critical variable at early stages of language instruction but not at the upper levels. Brantmeier (2002) suggests a need for further studies that utilize varying authentic texts with different groups of L2 readers. Most recently, Bernhardt (2003) comments on the need for more L2 reading studies that examine variables beyond first and second language knowledge in the comprehension process. The present study utilizes readers from advanced grammar courses to examine the effects of gender on L2 comprehension of two different violence-oriented narrative texts written by Latin American authors.

Unlike ESL programs, generally there are no isolated reading/writing classes to directly teach reading in Romance Language departments. In most university Spanish classes for non-native speakers, reading begins at the first-year level of instruction, where emphasis is on oral communication. Short and easy reading materials are interwoven throughout the textbooks. Topics such as pollution, language, cultural differences, etc., are selected because they are thought to maintain student interest and motivation. An important goal of the courses taught between the basic levels of instruction and the literature courses is to equip students with the skills necessary to read and write in the advanced literature courses, and many of the readings consist of authentic short stories taken from the literary canon. Given the emphasis on reading in the courses taken directly before the literature courses, it is unfortunate that much of the L2 reading process at this level of acquisition remains unexplained. Furthermore, second language reading research that focuses specifically on passage content reveals disparities among research methods and procedures (Brantmeier, 2001) and therefore it is difficult to formulate theories for these stages of acquisition.

Violence is a topic common to authors in the literary canon for Peninsular and Latin American Spanish. Authors such as Julio Cortázar, Esteban Echeverría, José Hernández, Gabriel García Márquez, Cristina Civalé, and Armonía Sommers treat violence as a principal theme in their works, and texts are often analyzed in relation to the historical, social, and cultural contexts. Some professors teach literature courses to Spanish majors where violence is the connecting theme among works read in the seminar.¹ Are students prepared to read this type of literature in their second language? Do men and women equally comprehend these texts? Research has shown that the higher the level of Spanish, the wider the gap becomes between numbers of men and women in class (Chavez, 2001), with women outnumbering men four to one. The majority of readers of these violent texts written by Latin American authors are women.

By examining the effects of reader's gender and authentic, violence-oriented passage content on comprehension with readers enrolled in courses taken before the literature courses, instructors may realize the ways in which these variables interact and influence L2 reading comprehension. Moreover, instructors of this level of language instruction will better understand the importance of preparing students to read by activating relevant schemata through pre-reading activities. Instructors can also take these results into account when creating comprehension assessment tasks for this type of literature. Finally, standardized test writers will be able to use these results when selecting reading passages for the exams and when creating comprehension assessment tasks.

¹ An example is a course taught by Dr. Maria-Fernanda Lander entitled "Representaciones de la violencia en la literatura latinoamericana" at Washington University in St. Louis.

Review of Research

L2 Reading and Schema Theory

Schemata are commonly defined as the previously acquired background knowledge structures that are stored in the learners existing cognitive domain. More specifically, Bruning (1995) defines schema as the mental framework that helps the learner organize knowledge, direct perception and attention, and guide recall. The application of schema theory to second language reading dates back to the 1980's (Carrell, 1981, 1983a, 1983 b; Hudson, 1982; James, 1987; and Johnson, 1981) with studies conducted with ESL students of many different instructional levels. These researchers concluded that what students already know (their background knowledge) significantly influences their understanding of L2 reading materials. Moreover, with ESL students from only the high intermediate and advanced levels of instruction, research has shown that content schemata, as seen as culturally familiar and unfamiliar content, influence first and second language reading comprehension (Carrell 1987; Pritchard, 1990; Steffenson, et al, 1979). When students are familiar with the reading topics they are more successful L2 comprehenders.

In a review of schema theory, Omaggio (1993) focuses on the role of the individual in the comprehension process and how background knowledge and interests influence the reader's interpretation. Each individual has different internal representations for the subject matter of a text. Lee and Van Patten (2003) contend that schemata are "... used to disambiguate, elaborate, filter, and compensate" (p. 219). All of these actions - interpretation, inference, evaluation and compensation - are based on the existing knowledge that the reader brings to the text. Research on schema theory provides empirical evidence that the process of making meaning varies from reader to reader. The variation between gender groups in the meaning-making process during second language reading needs to be explored.

Carrell (1983b) distinguished three different dimensions of schemata: linguistic (language knowledge), content (knowledge of the topic), and formal (previous knowledge of the rhetorical structures of different types of texts). Carrell contends that each of these dimensions plays a role in the interaction among the text and the reader and that when one or all are missing, reading can be problematic. In a study that examines text type (stories and essays) and comprehension Horiba (2000) reports that non-native readers are affected by text type. The present study attempted to control for linguistic knowledge and text type in order to examine the effects of passage content on reading comprehension by gender.

L2 Reading and Gender

During reading many interactive processes are occurring. These actions may vary by reader, and the fact that readers engage in different activities while reading does not automatically mean that their comprehension of the text will be different, and vice versa. One variable in the reading process is *activation*. As indicated earlier, research has shown that readers' knowledge and experiences influence the realization of meaning, and if relevant schemata are activated during the reading process, then the reader may better comprehend the text. Alderson (2000) contends that readers may differ in their knowledge and experiences, and therefore the products of reading will also differ. In a discussion of stable reader characteristics, he lists the gender of the reader and sites only *one* study to support his claim that test designers need to be cautious not to bias assessment tasks toward one gender. Because of the lack of L2 reading studies that consider gender, it is difficult to provide evidence to support Alderson's suggestions. What can be said, though, is that gender as a variable in L2 reading deserves more attention.

Only a small number of L2 reading studies have been conducted where gender is examined in the procedures and analysis and the findings reported in these studies are inconsistent. With high school students, Bugel and Buunk (1996) examined gender differences in L2 reading comprehension on a national foreign language exam in the Netherlands ($n = 2980$). On this exam, they found that males scored significantly better on the multiple choice comprehension items for essays about laser thermometers, volcanoes, cars, and football players. Females achieved significantly higher scores on the comprehension tests for essays on text topics such as midwives, a sad story, and a housewife's dilemma. The researchers concluded that the topic of a text is an important factor in explaining gender-based differences in second language reading comprehension. Young and Oxford (1997) conducted a study with native English speaking men and women ($n = 23$ males and 26 females) to examine comprehension and strategies involved in reading two Spanish texts and one English text. The reading passages were taken from the textbooks used at the course levels of the participants. Text topics were economics, the presence of foreign cultures in work, leisure, and history. No significant differences by gender were reported with recall scores for all text topics, and there were no self-reported differences by gender in the familiarity ratings with passage topics or background knowledge of any of the passages.

With second-year university level male and female students of German ($n = 23$ males and 27 females), Schueller (1999) tested the effects of top-down and bottom-up reading strategies instruction on the comprehension of two different literary texts. To control for the effects of passage content, Schueller utilized two topics that included German tourists exploring New York City and a re-telling of the "Little Red Riding Hood" fairy tale. Overall, a higher degree of reading comprehension among females was reported. More specifically, every female group scored higher on comprehension than the male groups regardless of strategic training and comprehension assessment task with only one exception: males with top-down strategy training did better than females on multiple choice (but not on recall). Brantmeier (2003) reported significant interactions between readers' gender and gender-oriented passage content with comprehension among intermediate second language learners of Spanish at the university level ($n = 29$ males and 49 females). The two passages utilized in this study were authentic narratives about a boxing match and a frustrated housewife. Results indicated a significant gender difference with comprehension assessed via multiple choice as well as written recall. Males scored higher on both tasks with the boxing match text topic and females outperformed males on the frustrated housewife passage topic. Self-reported topic familiarity ratings were also significant by gender and text topic. This study provided evidence that readers' gender and passage content interact in ways that affect second language reading comprehension. With the same participants and reading passages, gender differences do not account for difference in strategy use when reading a second language (Brantmeier, 2003). Brantmeier suggested that at the intermediate level it may not be linguistic factors (the Spanish language) that impede second language comprehension but rather the unfamiliar content of the text. Previously, Brantmeier (2002) utilized the same passages and comprehension assessment tasks with two groups of students from advanced university grammar and literature courses ($n = 23$ males and 53 females for grammar courses; $n = 9$ males and 47 females for literature courses). Across both levels, male participants reported being more familiar with the topic of boxing than the females did, and female participants indicated being more familiar with the topic of a frustrated housewife than the males did. Furthermore, results showed no significant gender differences in comprehension of the gender-oriented passages at the more advanced stages of acquisition. These results

indicate that while significant differences in topic familiarity are maintained across instruction levels, the effects of passage content on L2 reading comprehension by gender are not maintained when the intermediate level text is read by more advanced learners. Brantmeier concluded that successful second language reading comprehension depends on a variety of factors, and with students from the intermediate courses of Spanish two important interacting factors are the readers' gender and gender-oriented passage content.

The above L2 reading studies examined whether a reader's gender accounts for differences in reading comprehension, but there are important differences in the research design methods of each study: Bugul and Buunk (1996) utilized high school participants and the passages were essays; Young and Oxford's (1997) participants were from the intermediate level of instruction at the university and the passages were essays taken from textbooks; Schueller (1999) used participants from second-year university courses and the passages were gender-neutral narratives; and Brantmeier's (2002, 2003) participants were from intermediate and advanced levels and the passages were authentic, gender-oriented short stories. Even though there are disparities among participants and data collection instruments, it is fairly clear that there are few if any significant gender differences in reading comprehension as such. A more appropriate generalization that can be made from prior research is that male and female readers comprehend better what has personal relevance.

Research Questions

The present study was conducted in order to examine the relationship between reader's gender, topic familiarity, violence-oriented passage content, and L2 reading comprehension with participants from courses taken directly before entering the literature courses. The following research questions guide the present study and are formulated for the two different reading passages utilized:

1. Are there gender differences in comprehension with two different violence-oriented passages as measured by written recall?
2. Are there gender differences in comprehension with two different violence-oriented passages as measured by multiple choice questions?
3. Are there gender differences across the two texts?
4. Do gender, text, and question type interact?
5. Does topic familiarity play a role?

Methodology

Participants

A total of 68 students (19 men and 49 women)² enrolled in Spanish 307, an advanced grammar and composition course at a private midwestern university participated in the investigation. Part of the advanced level course consists of reading short stories written by Hispanic authors from a literary anthology. The course also serves to review and expand upon all Spanish grammar elements studied in first- and second-year courses, and it is the first of a two-course sequence of advanced grammar and composition. This course was not a requirement, and in fact, at the university where data was collected there is no language requirement. One

² Chavez (2001) reports that females outnumber males 4 to 1 in upper level Romance Language courses across the USA.

goal of the course is to prepare learners for the level of reading, writing, and speaking necessary to be successful in the advanced literature courses.

To help control for linguistic schemata (language knowledge) 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 and students who achieved the appropriate score on the in-house departmental placement exam. Because many of the students at this private institution have had 4 yrs or more of Spanish before entering the university, the majority of students who take the in-house placement exam test into this level of language instruction. Therefore, many of the participants are in their first-year of university studies and are enrolled in the Advanced Spanish Grammar and Composition courses. This made it impossible to control for previous Spanish courses taken at the university.

Reading Passages

As part of the course requirement, students had previously read three short stories, and therefore they were familiar with the narrative structure of the texts, or the formal schemata. The vignettes were both taken from short stories and they consisted of approximately 700 words. For this study, the first passage was taken from a short story, *La gallina degollada* ("The Decapitated Chicken"), by Horacio Quiroga. The second passage by Mempo Giardinelli was taken from a short story entitled *Carniceria con siesta* ("Slaughter at Naptime"). Both stories were third-person narratives.

The short story about the decapitated chicken involves a female victim and the assailants are male. The story begins with a female servant killing a chicken as four local adolescent males watch. When everyone leaves the house except for the two daughters, the boys in the kitchen kill one of the daughters in the same way that the chicken was killed. The short story about a naptime slaughter is about an adolescent boy who decides to end his dog's life. While his parents are taking an afternoon nap, the boy takes a machete and brutally tries to kill his dog. His father tries to stop him as his mother frantically screams.

To control for authenticity of passage selection, both passages were excerpts from longer texts, but neither was simplified or abridged. The passages were retyped and formatted so that glosses could be supplied to aid the reading process. To determine which words needed to be glossed, both passages were given to students in an introductory literature course to identify words that caused them difficulty. Instructors for the course were also consulted about the glossed words. Both passages had approximately the same number of glossed words.

Comprehension Assessment Tasks

Prior research has shown that the type of comprehension measurement task may affect the achievement scores (Shohamy, 1984; Lee, 1987; Wolf, 1993). Alderson (2000) contends that while constructing comprehension assessment tasks, we should pay close attention to the relationship between text and test question. To increase the probability that the results of comprehension are a true measure of the understanding of the texts utilized in the present study, two different comprehension assessment tasks were created: a written recall task as well as multiple choice questions. Prior research has also shown that when the readers are allowed to use their native language in the comprehension assessment 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; and Wolf, 1993).

Written Recall

The validity of the written recall as a true measure of reading comprehension continues to be questioned because of intervening variables such as memory, writing ability, etc. However, L2 reading researchers continue to utilize the written recall task because when students are allowed to write freely they are not confined by the pre-determined and created assessment tasks (Barnett, 1986; Carrell, 1983b; Lee, 1986a; 1986b; 2002; Brantmeier, 2002, 2003; among others). The written recall protocol requires readers, without looking back at the passage, to recall and write down as much as they can of what they have just read. This free written task does not deny the role of the reader in constructing meaning. Bernhardt (1991) claimed that performing the free recall does not influence a reader's understanding of the text in any way. She contends that when multiple choice or open-ended questions are administered, additional interaction takes place among texts, reader, questioner, and among the questions themselves.

In the written recall the focus is on the quantity of correct information recalled. In this study the written instructions on the recall page told the learner to try to recall main ideas, as well as details, and it also indicated that the emphasis was on the quantity of ideas recalled. The written recall measure was administered before the multiple choice questions and students were instructed not to look back at any previous pages while reading and completing all tasks.

Multiple Choice Questions

Most readers who have been educated in the United States are familiar with the multiple choice comprehension questions and this task is also an uncomplicated measure for the researchers to score. However, creating the multiple choice questions is often a difficult undertaking. Bernhardt (1991) claimed that multiple choice tests can be problematic if they are not passage-dependent, that is, the reader does not always need to read a passage in order to choose the correct answer. Wolf (1991) wrote multiple-choice questions that met the following criteria: (1) that all items are passage dependent, and (2) that some of the items require the reader to make inferences. It was also necessary that all the distracters in the multiple choice questions were plausible (or believable) in order to prevent participants from immediately disregarding responses. These guidelines were meticulously followed while creating the multiple choice items for the present study. In addition, the researcher of the present study developed a third condition: the test-takers were not able to determine correct responses by looking at the other questions on the page. To verify all conditions the questions and passages were given to instructors and were randomly given to students enrolled in other Spanish courses. For each of the 10 multiple choice questions, three possible responses were created: one correct response and two distracters. The reason for using only 3 possible answers instead of the standard 4 was because this was the format that the instructors of the courses used to design the multiple choice questions for prior reading assessment. The students were accustomed to completing comprehension-based multiple choice questions that had only 3 answers.

Topic Familiarity

After reading each passage, subjects self-reported their degree of familiarity with the passage topic. The question asked students to indicate their level of familiarity with the topic of the text. A likert scale that ranged from "really familiar" to "not familiar at all" was utilized, with a range from 1 to 5. The lower the mean score the more familiar the subjects were with the passage topic. The topic familiarity questionnaire was completed after both comprehension tasks.

Procedures

All subjects read both passages and completed all measurements for both passages on two different days. The order of presentation of the readings was counterbalanced according to passage content and reader's gender. In other words, half of the females read the DC passage on the first day and the other half read the SN passage on that same day, and the males did the same. In all sections subjects received a packet containing the following: a consent form, a reading passage, a recall comprehension task page, a multiple-choice comprehension test, and a questionnaire. Before beginning the experiment, subjects were asked first to sign the formal consent form stating that they agreed to participate in the study by allowing the described exercises to be used for research. Subjects were then told that they would read a passage in Spanish and that once they read it and began the following sections that they were not allowed to look back at the passage.

The experiment was conducted in subjects' regular classrooms during regular class time. All subjects were tested during the 8th week of classes during the second semester. The experiment days were written in the syllabus as normal "lectura" days. The reason for waiting until mid-semester was to ensure that students were accustomed to the rhythm and routine of the class, and that they would not be doing the study immediately after a long semester break. Furthermore, as noted earlier, all students had previously read several short stories as a part of the class requirements, so they were familiar with this type of text. The researcher or research assistants were present at all data-collection sessions in order to give the same instructions to all subjects in the study. During the experiment, the researcher ensured that none of the participants looked back at the reading passage while completing the assessment tasks. To provide a more natural classroom environment, the regular course instructors remained in the room during the investigation. To provide more homogeneity among the population sample, only students whose native language was English were included and only those students who completed all tasks on both days were included in the study.

Data Analysis

Riley and Lee's (1996) criteria to identify each "unit of analysis," which is an idea, proposition, or a constituent structure, was used to score the written recalls. The units included both literal and inferential ideas recalled. The researcher and a second rater created a scoring template for both passages. The total number of possible idea units or propositions for the passages were the following: DC passage = 64; SN = 58. The "total number of units recalled correctly" was identified as the dependent variable used to measure comprehension for the recall task. Both the researcher and an outside rater individually identified the idea units recalled correctly on each written recall for each participant, and then these identified units were then compared to the template. Finally, the researcher and rater compared their results for recalls of both passages for each participant, and the percentage of scoring agreement between the two raters was 97%. The range of scores among the participants for the DC passage was a minimum score of 4 and a maximum score of 33. For the SN passage the minimum recall score was 3 and maximum score was 34. The multiple choice questions were scored according to the total number of correct responses out of the ten questions.

Results

The independent variables were readers' gender and passage content and the dependent variable was comprehension of each passage measured by written recall and multiple choice. In

order to compare several means simultaneously and to assess interaction effects, data were submitted to a two-way Analysis of Variance (ANOVA)³ procedure for research questions One to Four. The ANOVA procedure showed the between-subject main effects and the within-subject main effects. The alpha level was set at .05.

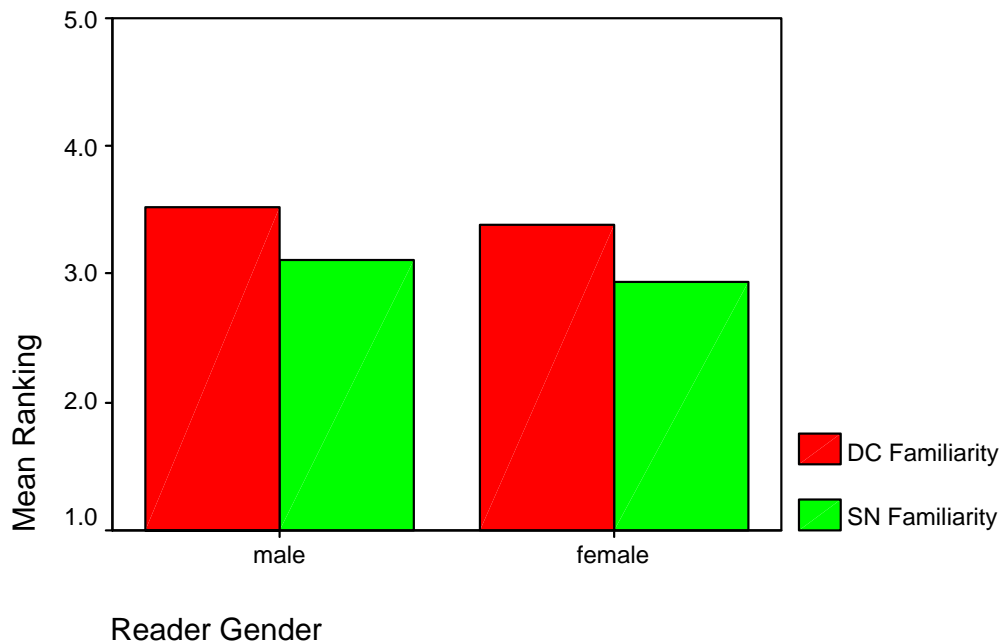
For research question Five, the independent variable was readers' gender, and the dependent variable was topic familiarity. Data were submitted to a Kruskal-Wallis non-parametric one-way analysis of variance procedure (ANOVA).⁴

Topic Familiarity

Mean scores for reported degrees of topic familiarity with passage topic are graphically displayed in Figure 1.

Figure One: Topic Familiarity by Gender

Note: The lower the bar the more familiar



³ A one-way ANOVA and a bivariate regression model with a dichotomous independent variable are precisely the same (King, 1986). The only substantive difference is that in the ANOVA case one only reports whether there exists a significant difference or not, and therefore to answer the research questions in the present study the ANOVA was calculated. In a bivariate regression the magnitude of the difference is reported, but in the present study the reported sample means by group (i.e. gender) reveal the magnitude, and the ANOVA shows whether the difference is significant or not.

⁴ The non parametric ANOVA procedure was used because the topic familiarity scores were ranked levels. The nonparametric procedure does not make strong assumptions about the shape of the distribution of data.

Both females and males reported being more familiar with the passage about the naptime slaughter than they did with the passage about the decapitated chicken. The non-parametric ANOVA revealed no significant main effects of readers' gender and topic familiarity with both passages. The differences in mean score ratings for topic familiarity were not significant by gender.

Interaction of Gender and Passage Content on Comprehension

The sample means and standard deviations for the main effect of passage content on both comprehension tasks are listed in Table I. Sample means indicated better overall performance for both assessment tasks on the Slaughter at Naptime passage.

TABLE I
Descriptive Statistics for Between-Group Variable (Gender) and Within-Group Variables (Passage Content and Comprehension Test Type)

	<u>Decapitated Chicken</u>		<u>Slaughter at Naptime</u>	
	Recall	MC	Recall	MC
Maximum Possible	64	10	58	10
<i>MALES (n = 19)</i>				
Range	0-17	2-9	3-24	3-10
Mean (SD)	7.0 4.7	6.7 1.9	14.2 5.9	8.3 1.6
<i>FEMALES (n = 49)</i>				
Range	3-33	4-10	4-34	4-10
Mean (SD)	10.2 5.8	7.9 1.3	16.4 5.9	8.4 1.5

Note: MC=Multiple Choice

The results of the ANOVAs (Table II) demonstrated a significant main effect of passage content on both recall and multiple choice comprehension tasks across both passages ($p < .05$).

TABLE II
Summary of One Between/Two Within Repeated Measures ANOVA for Comprehension Across Texts

Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>
RECALL					
Passage	1	1231.88	1231.88	37.70	.00*
Gender	1	202.77	202.77	6.20	.01*
Passage X Gender	1	9.93	6.93	0.21	.65
Residual	64	4313.69	32.68		
MULTIPLE CHOICE					
Passage	1	29.30	29.30	12.79	.05*
Gender	1	9.73	9.73	4.25	.04*
Passage X Gender	1	8.12	8.12	3.54	.06
Residual	64	302.44	2.29		

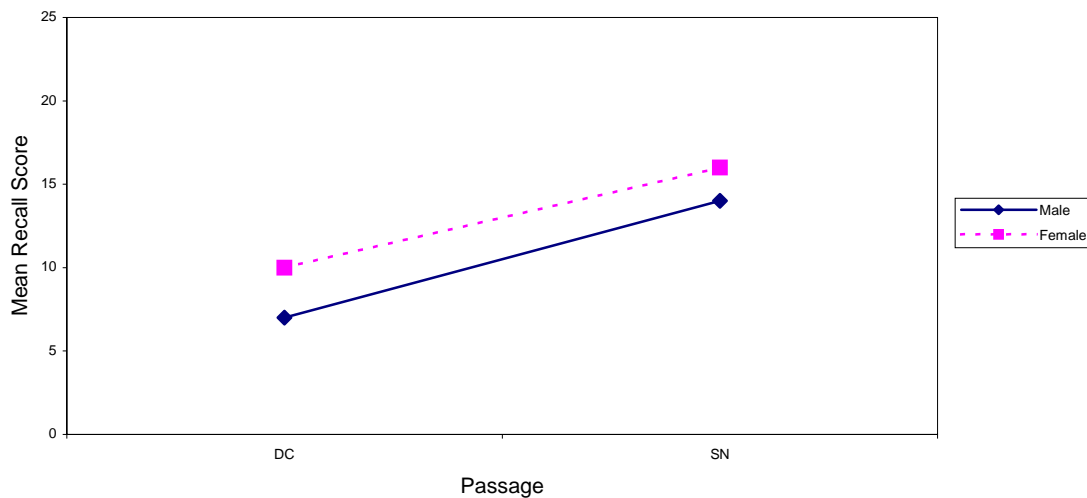
Note. $n = 68$; 19 men and 49 women

* $p < .05$

The sample means and standard deviations for the main effect of readers' gender on both comprehension tasks across passages are presented in Table I. Mean scores indicated better performance by females on both comprehension tasks for the DC passage, and females also achieved higher scores than their male counterparts on recall for the SN passage. Males and females scored almost the same on multiple choice for the SN passage. The results of the ANOVAs (Table II) showed a significant difference between mean scores for males and females on comprehension across both passages ($p < .05$). Overall, females seemed to show better reading comprehension, both in recall (which is expected from previous research) and in multiple choice (not expected from previous research). However, when the results are analyzed according to passage, it is not reading comprehension in general but the content being read that is highlighted.

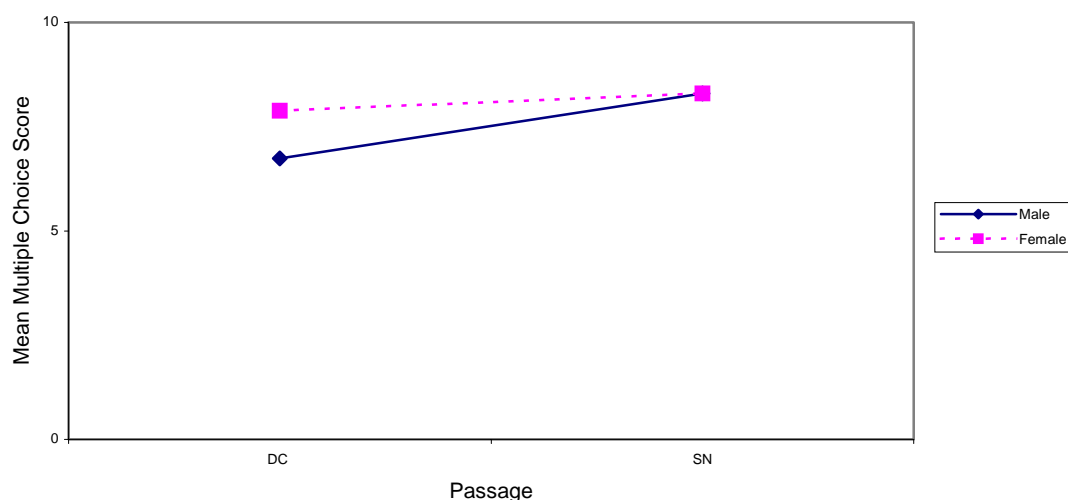
The results of the 2-way ANOVAs (Table II) yielded no significant interactions between independent variables readers' gender and passage content as they affect dependent variables recall and multiple choice questions. Results are presented graphically in Figures 2 and 3.

FIGURE 2:
Gender and Passage Content for Recall



Note: DC = Passage about decapitated chicken
SN = Passage about slaughter at naptime

FIGURE 3:
Gender and Passage Content for Multiple Choice



Note: DC = Passage about decapitated chicken
 SN = Passage about slaughter at naptime

To further explore the effects of readers' gender and passage content on the two different comprehension tasks, four one-way ANOVAs were calculated. The results of the one-way ANOVAs revealed the following: (1) a significant main effect of readers' gender on recall for DC passage ($F(1,66) = 4.70, p = .04, \eta = .07$); (2) a significant main effect of readers' gender on multiple choice for DC passage ($F(1,66) = 7.90, p = .01, \eta = .11$); (3) no significant main effect of readers' gender on recall for SN passage; and (4) no significant main effect of readers' gender on multiple choice items for SN passage.

Summary of Results

No significant gender differences were reported for topic familiarity levels with each separate passage. No significant gender differences were found by gender for comprehension of SN. Results yielded significant gender differences in both types of comprehension for DC.

Discussion and Suggestions for Future Research

In the present study, both male and female readers self-reported similar degrees of familiarity with the topic, but male and female readers did not achieve the same comprehension scores with two different violence-oriented L2 texts. For both passages participants reported being somewhat familiar with the topic. Prior research showed that lack of topic familiarity in L2 reading inevitably results in comprehension difficulties (Bugel & Buunk, 1996; Brantmeier, 2002, 2003; etc.). Overall, the results of the present study indicate that L2 comprehension does not appear to be hindered by text topics of violence when both men and women are somewhat familiar with the subject matter.

A related inquiry that deserves discussion is that female readers may be better at writing recalls, and therefore the test-method effect could be a contributing factor in this study. Females and males reported almost equal familiarity levels for both passages, but females recalled more idea units per passage (for DC passage mean score for females = 10 and males = 7; for SN passage mean score for females = 16 and males = 14). There were almost no gender differences

in comprehension for the multiple choice questions for the SN passage (females = 8.4, males = 8.3), and for the DC passage the females averaged only one more point than the males. It is possible that females may be exposed to writing recall-like narratives more than males. In the present study, the directions on the recall task asked subjects to recall as many ideas as they could from the passage. The instructions also told them to write the recall in English, their native language. Most subjects chose to recount the story in a narrative fashion. Evidence from a plethora of first language studies has shown that females have better verbal abilities than males (Feingold, 1993; Halpern, 1986; Hines, 1990; Tyler, 1965; and more). More specifically, Hyde and Lin (1988) conducted a meta-analysis of gender differences on a standardized exam in the United States and reported that females have generally better L1 essay-writing skills than males. With participants from the United Kingdom, Sunderland (1995) claimed that girls tend to do better on essays and boys achieve higher scores on multiple choice questions. It is possible that females are better equipped with the writing skills needed for the recall testing procedure, and consequently they outscored the males on the recall in the present study. The recall task may favor women, however it is too early to make this generalization because of the scarcity of studies on gender differences in language production tasks such as the written recall (Chavez, 2001).

To control for bias of assessment tasks in the present study two different tests were utilized, however a closer look at the style and form of recalls that male and female participants chose to utilize (narrative-like, list of ideas, or outline) may reveal interesting gender differences. Additionally, a third comprehension assessment task, such as open-ended questions or sentence-completion items may yield different findings.

A close examination of comprehension scores for each passage reveals differences in comprehension by gender. Women did not report being more familiar than males with the DC passage, but they performed better than males on both comprehension tasks with the passage. Females outperformed males on both recall and multiple choice for DC but not for SN. In DC a female is the victim, and perhaps females identified better with the passage involving a female victim and therefore this passage was more memorable for women than for men. Character identification has been an issue in L1 reading studies, and Orellana (1995) claims that students identify with the characters in their reading, and they recreate themselves in their writing. Conceivably, female readers would associate more with the female victim and therefore could write better recalls, but it is too early to make this assertion. Subsequent research could reverse the genders of the victim and assailant to see if the gender difference disappears. In other words, would males show better comprehension when the victim is male? In the present study, it is unclear whether the difference is due to a personally relevant schema. More importantly, future research could use a range of passages to determine the extent to which one would expect men and women to attend more to particular passages or characters.

The idea unit template for the recall measure had a maximum of 64 idea units for the DC passage and 58 for the SN passage, and observed scores peaked at 33 and 34. A possible explanation for this phenomenon is the length of the passages (700 words). Many L2 reading studies that utilize the written recall use passages that consist of about 200 words, and the participants are from basic levels of language instruction. In the present study the readers were from advanced level courses and were accustomed to reading 700 word passages for homework. A closer look at the written recalls reveals that participants recalled main ideas from the texts and left out specific details, and this could be due to the size of the texts.

A point worthy of attention is whether the results are particularly relevant in the L2 context with students at the advanced stages of acquisition. Would the same results be found with students at intermediate stages of language instruction?

Practical Implications

The present study contributes to the database of literature that examines variables that impact L2 reading comprehension, and more specifically, it explores the effects of violence-oriented passages on L2 comprehension by gender at the advanced levels. The literary canon for works written in Spanish consists of many different short stories and novels with violent subject matter, and it is important to note that having a schema of topics of violence with culture in the USA may not be the same as a schema of violence within Hispanophone culture. Based on results from the present study, both male and female readers have existing background knowledge on topics of violence but pre-reading activities may reinforce and motivate them to read the text, and pre-reading activities may also help to build on the pre-existing knowledge structures. Furthermore, if there is gender-specific violence in the text, instructors may want to address this through pre-reading activities where learners interact in the classroom and learn from each other as this might motivate deeper reading and richer comprehension at this crucial level of language instruction. Alderson (2000) contends that every attempt should be made to allow background knowledge to facilitate performance, rather than allowing its absence to inhibit performance (p. 29), and this assertion should be considered even in the courses that are taken directly before the literature classes.

Instructors should utilize a variety of tools to assess comprehension. In the present study, females perform better on written recalls for a text topic with which both genders are equally familiar, but male and female readers scored almost the same on multiple choice. Instructors should consider this when evaluating comprehension and should know that the written recall may be a gender-biased testing instrument. More studies of this nature need to be conducted before avoiding the written recall as a measure of comprehension.

In the advanced grammar courses it is common for instructors to assign a written composition that is based on the reading. If readers are provided with the skills to comprehend a text, then perhaps the task of writing will be easier. As stated earlier, male and female readers may associate with different types of violence, and if they are recreating themselves through their writing, then the topic of text should be considered when grading compositions. Another suggestion for this level would be to give students a short list of suggested readings and assign readers to choose their own texts based on their own interests. Furthermore, test makers should realize the importance to comprehension of topic/content familiarity and examine the existing standardized instruments (both texts and tests) to make appropriate changes where warranted. More research should be conducted on the impact of violence-oriented content of the target culture to see if male and female readers perform the same on comprehension assessment tasks so that test constructors can consider the effects of topics of this nature on standardized exams. As Alderson (2000) points out, test constructors cannot change the gender of the reader, but they can be careful not to bias their tests towards either gender.

Limitations of the Present Study and General Discussion

An examination of the quality of recalls may reveal some schema interference. The present study does not address the quality of recalls in this respect. Moreover, a further analysis of the written recalls could reveal information about inferences generated. The type of inferences

could be examined to explore the multiple levels of representation (Halldorson & Singer, 2002; Murray & Burke, 2003). Furthermore, future studies of this nature should account for L1 reading knowledge as well as L2 language knowledge (Bernhardt & Kamil, 1995). In the present study L2 language knowledge was accounted for via the in-house Spanish language placement exam, but no measure of L1 reading was considered.

An issue that could be a limitation of the present study and that merits further investigation is how to distinguish comprehending from remembering. Memory constraints may be a significant factor in the L2 writing recall protocol. The recall task has been under careful scrutiny for some time, and consequently, future studies might examine the role of memory in the written recall assessment task. Halpern (1992) suggested that females may be more proficient in the quick access of information held in memory (processes involved in comprehension) and males may be more skillful at manipulating information in memory (processes involved in solving novel problems) (p. 224). In the present study the written recall was completed directly after the participants finished reading the passage. It may be that female readers were able to rapidly access the new information more so than the male readers. Future studies need to be conducted to examine whether there are gender differences in memory and/or quick retrieval of new information in the written recall protocol.

There is no hierarchy of variables that affect L2 reading comprehension. The database has shown that L2 linguistic abilities, assessment measures, and text topics interact and affect L2 reading at different levels of instruction. A few studies have also shown that a stable characteristic, readers' gender, can also influence L2 reading comprehension at the beginning levels. We can conclude that the interactive nature of L2 reading is sophisticated and complex (Bernhardt, 1991). Future investigations may reveal more about the interrelationships among the variables as well as what *the* most important contributing variable is. At this point, it is clear that readers' gender is not one of the most significant contributing factors in L2 reading.

All in all, understanding how the reader interacts with other variables in L2 reading provides a richer and more meaningful explanation of the manner in which gender may influence successful reading comprehension. Finding answers to inquiries on gender differences is not an easy task, and consequently, the conclusions are not simple. Reading performance by men and women depends on many interacting variables. The present study shows that with students from advanced language instruction, testing materials may affect L2 reading performance. The overall findings indicate that females may have an advantage over males in the free written recall procedure. More research needs to be conducted on matters of gender and domain-specific abilities in L2 reading comprehension.

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