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Acquisition of Spanish Gender Agreement in Two Learning Contexts: Study Abroad and At Home

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Abstract: *The goal of this study is to describe the acquisition rate for gender acquisition in Spanish and to show whether individual variability and language contact may affect this rate. The participants were intermediate second language Spanish (first language English) learners in the study abroad and at-home contexts over a 4-month period. The participants received grammaticality judgment tests coded for morphological class of the modified noun as well as attributive and predicative adjectives. Data were also collected on social behavior and language contact in Spanish and English in order to explain data outcome. The findings suggest that no difference exists between the two learning contexts and that social behavior and language contact abroad have minimal influence on acquisition rate.*

Key words: *Spanish, individual variability, language contact profile, second language acquisition, Spanish gender agreement, study abroad*

Introduction

Second language (L2) learners who study abroad in an immersion context may or may not show linguistic development. Research has shown that immersion in the target culture is of great value to learners, especially in improving oral production ability (Brecht, Davidson, & Ginsberg, 1993; Collentine, 2004; Freed, Segalowitz, & Dewey, 2004; Isabelli-García, 2003; Kaplan, 1989; Lennon, 1990; Liskin-Gasparro & Urdaneta, 1995; Milleret, 1990; Polanyi, 1995; Segalowitz & Freed, 2004). There are, however, inconsistencies in study abroad research because claims are made based on different acquisition aspects and distinct amounts of time spent abroad. Frequently, claims also lack a comparison to performance in a non-study-abroad context to ensure that the context of learning accounts for linguistic gains or lack of such gains.

The present study of learners' linguistic development in the study abroad context provides information about what can be expected from students' performance during one semester and compares the results to those of learners who study in the traditional, at-home context. The scope focuses on gender-agreement

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development in the interlanguage of Spanish L2 learners that have a first language (L1) of English, a language lacking grammatical gender. Gender-agreement acquisition by these learners can be irregular and not as easily acquired as number agreement. Because number agreement is acquired more easily than gender (Bruhn de Garavito & White, 2002; Dewaele & Véronique, 2001), this study focuses on the more difficult aspect, gender. Examples of gender agreement are listed in (1a) and (1b). FS denotes Feminine Singular, and MP denotes Masculine Plural.

- (1a) *la biblioteca famosa*
the-FS library-FS famous-FS
[the famous library]
(1b) *los sombreros negros*
the-MP hat-MP black-MP
[the black hats]

In (1a), in Spanish, because “library” is feminine, the definite article “the” and adjective “famous” must also be feminine. This is not the case in English, as articles or adjectives possess no gender. In (1b), because the noun *sombreros* is plural, the definite article *los* and modifying adjective *negros* are also plural.

Noun form and meaning also affect gender-agreement acquisition. This influence can be seen in example (2) with nouns that are gender-marked by the endings *-a* and *-o*.

- (2a) nouns gender-marked by the *-a*
profesora-FS
[professor]
(2b) nouns gender-marked by the *-o*
niño-MS
[boy]

These examples show that the Spanish nouns that are gender-marked by the endings *-a* and *-o* are morphologically marked for gender and can serve as a cue for agreement (Finneman, 1992). When L2 learners are unsure of the appropriate morphological marker, they tend to “resort to default gender marking [masculine]” (Bruhn de Garavito & White, 2002, p. 172; see also Harris, 1991)

and they tend to overgeneralize the masculine forms more often than they do the feminine ones (Alarcón, 2006; Bartning, 1999; Bruhn de Garavito & White, 2002; Cain, Weber-Olsen, & Smith, 1987; Finneman, 1992; Franceschina, 2001, 2005). As cited in Fernández-García (1999):

This predominance of the masculine form of the modifier has led researchers to consider it as the “unmarked” form or default value. According to Karmiloff-Smith (1979), the masculine form is a more “universal” morphological form for gender, and it will therefore be the first acquired; the feminine or “marked” form will be acquired as it is differentiated from the masculine one. (p. 4)

Another aspect that influences L2 gender-agreement acquisition is adjectival categories. These categories, attributive adjectives and predicative adjectives, differ in that attributive adjectives are located in the noun phrase, and predicative adjectives are linked to the noun by the copulas *ser* or *estar* [to be]. Much of the research on adjectival categories is thoroughly presented in Bartning (2000). Examples of these categories are listed in (3).

- (3a) attributive adjectives, located in the noun phrase
la biblioteca famosa-FS
[the famous library]
(3b) predicative adjectives, linked by copulas *ser* or *estar* [to be]
la biblioteca es famosa-FS
[the library is famous]

The focus on adjectival categories in L2 acquisition is relevant because there appear to be contradictory claims as to which category is acquired first. Bartning’s (2000) and Pienemann’s (1998a, 1998b) data showed that attributive adjectival agreement in the noun phrase is acquired before predicative adjectival agreement, and Chini’s (1995) research on L2 Italian learners also suggested that gender agreement in predicative adjectives is acquired late. On the other

hand, Dewaele and Véronique's (2001) study presented contradictory conclusions in which L1 Flemish advanced learners of L2 French do not have significantly different accuracy rates for attributive adjectives and predicative adjectives.

One could say that this aspect is problematic for L2 learners because gender agreement does not exist in the learners' previous knowledge. Furthermore, any success that an L2 learner does have with gender agreement cannot be said to transfer from the L1 (non-Romance) to L2 (Romance). Problems with gender, however, are not an effect of the L1 (Bartning, 2000; Bruhn de Garavito & White, 2002; Dewaele & Véronique, 2001; Fernández-García, 1999) because L1 Romance learners also have problems learning L2 Romance gender agreement.

Fernández-García (1999) speculated that language learners' experience in the natural setting may explain their preference for the unmarked agreement form and recommends that future studies control for the amount and type of language exposure learners have had outside of class. Alarcón (2006) stated, "To date, there has been no published investigation examining the L2 acquisition of gender by adult learners in immersion situations, and no study contrasting the L2 acquisition of gender in different learning contexts" (p. 92).

The present study researches the developmental changes in gender agreement with L1 English learners of L2 Spanish in two contexts: the study abroad context (Abroad) and the U.S. university classroom context (At Home). The labels used for the two contexts are based on those used by Collentine and Freed (2004).

The design of the present study does not use oral data; rather, it employs written grammaticality judgment tests collected from both the Abroad context and the At Home context. Data were collected from learners studying the L2 in the target culture (Abroad context), where they often live with host families. This living arrangement allows them more opportunities to participate in informational exchanges with native

speakers. This environment also offers more opportunities to read and listen to the target language. Data were also collected from learners studying in the traditional context, where students often attend a class in the target language for 50 minutes and once they leave the classroom, the target language is no longer used or heard. Assuming that context affects students' linguistic performance, one would expect to see differences in performance between the two categories.

Another design difference is that the participants in the present study were intermediate learners in the Abroad and At Home contexts, as opposed to being from a range of proficiency levels (intermediate, pre-advanced, and advanced) in the At Home context. In addition, the data were collected on different morphological classes of the modified noun as well as of the attributive and predicative adjectives. Finally, the present study measured individual variability and language contact in Spanish and English in order to determine if those tokens have an effect on gender acquisition.

The goal of this study is to describe the rate of gender acquisition and to show whether individual variability and language contact may affect this rate. More specifically, the following research questions are addressed:

1. Does the rate of acquisition vary for morphological classes of modified nouns?
2. Does the rate of acquisition vary for attributive and predicative adjectives?
3. Is there a relationship between individual student variability and the rate of acquisition of gender agreement?
4. Is there a relationship between language contact abroad and the rate of acquisition of gender agreement?

Methodology

Participants

The participants for this study were recruited from the Abroad and At Home

TABLE 1

Participants' Background Information

	Abroad	At Home		
Gender				
male	4	2		
female	8	10		
Self-rated L2 ability	1 ^a	1 ^a		
Average age	19.9	20		
OPI rating	Pre-OPI	Post-OPI	Pre-OPI	Post-OPI
IL ^b	6	0	7	7
IM	6	5	5	5
IH	0	2	0	0
A	0	5	0	0

^a0 = poor, 1 = good, 2 = very good, 3 = native-like
^bIL = Intermediate Low, IM = Intermediate Mid, IH = Intermediate High, A = Advanced (per ACTFL Proficiency Guidelines–Speaking, 1999)

contexts in order to present contrasting L2 gender-acquisition figures, data that seem to be lacking in second language acquisition (SLA) studies (Alarcón, 2006). With these data, one can correct anecdotal assumptions concerning the type of mistakes that learners “should not” be making after studying abroad for one semester. The experimental group for this study consisted of 12 university learners of L2 Spanish studying abroad. A second group of 12 At Home language students controlled the extent to which the context of learning had an impact on SLA. Participants in both groups had an Intermediate oral proficiency rating (ACTFL Proficiency Guidelines–Speaking, 1999). English was their first language, and Spanish was their only second language. All participants self-rated their language ability as “good” on a rating scale that included “poor,” “very good,” and “native-like.” There were no statistically significant differences between the two groups at the onset of the study with regard to pre-language contact and individual

variability. In addition, there were no statistically significant differences between the pretests of the two groups in regard to accuracy in gender agreement. Table 1 summarizes the participants’ background information.

Data Collection: Tools and Analysis

The Abroad data collection took place over a period of 4 months (one academic semester), when the participants were attending a small private university in Spain. The population at the university was mostly U.S. university-level students with native-Spanish-speaking professors, and the participants attended one advanced and two intermediate Spanish content courses that were taught exclusively in Spanish. The At Home data collection took place during an academic semester at a private U.S. university; the informants had never studied abroad and were in one intermediate and/or advanced Spanish content course taught exclusively in Spanish.

The Abroad and At Home participants were selected based on the following qualities: (1) they did not speak/study another foreign language, (2) they had a pre-program simulated oral proficiency interview (SOPI) level of Intermediate, (3) they did not have any prior study abroad experience, and (4) they were not exposed to a language other than English (e.g., by living in a multilingual community, visiting a community for purposes of study abroad or work, or exposure through family members).

The goals of the present study are to describe the rate of gender acquisition in two contexts and to show whether individual variability and the amount and type of language exposure learners have had outside of class may have affected this rate. The quantitative measurements used to achieve these goals were derived from four sources given at two intervals, pre- and post-program: a SOPI (*ACTFL Proficiency Guidelines–Speaking*, 1999), a grammaticality judgment test (Fernández-García, 1999), an individual variability questionnaire (Ely, 1986), and a language contact profile (Freed, Dewey, & Segalowitz, 2004). Gathering data from the various sources mentioned above can demonstrate “the complex relationship between motivation, acculturation, and the development of social networks that ultimately provide opportunities for exposure to the target language and extended interactions that may be the driving force behind language acquisition in the SA [study abroad] context” (Isabelli-García, 2006, p. 257). To focus only on one aspect does not acknowledge that a learner’s motivations, anxieties, personality, and activities outside the classroom could play a vital role in SLA.

The first data collection tool, the SOPI (*ACTFL Proficiency Guidelines–Speaking*, 1999), assured that all participants were at the same oral proficiency level (Intermediate) because the number of semesters exposed to the target language does not necessarily result in equivalent proficiency levels among learners. This interview was double-rated for intrascore reliability.

In order to measure acquisition of gender agreement in the two contexts, a second data collection tool was used: a 56-question grammaticality judgment test. Learners’ responses were coded for morphological class of the modified noun similar to Fernández-García (1999). The coded modifiers included attributive and predicative adjectives as well as determiners (both definite and indefinite articles). The morphological classes of the modified noun, as listed in (4), included categories such as nouns gender-marked by the *–a* and *–o* endings; non-gender-marked nouns ending in *–e*, a consonant, and deceptively marked nouns.¹

(4) Morphological classes of modified nouns:

(a) nouns gender-marked by the *–a* and *–o*

profesora-FS [professor], *niño*-MS [boy]

(b) non-gender-marked nouns ending in *–e* and consonant

leche-FS [milk], *maíz*-MS [corn]

(c) deceptively marked nouns

día-MS [day], *poema*-MS [poem]

The first category, (4a), nouns gender-marked by the *–a* and *–o*, tends to cause less difficulty for L2 learners, and the last two, (4b) and (4c), non-gender-marked nouns, cause more difficulty. One can explain this discrepancy by the fact that (4b) and (4c) do not offer morphological cues to aid in recognizing or memorizing rules for agreement (such as *–a* for feminine and *–o* for masculine).

On the grammaticality judgment test, the participants judged whether a sentence was correct and were instructed to modify the incorrect responses. An example can be seen in (5).

(5) *La biblioteca de Madrid es *famoso.*

[The-FS library-FS of Madrid is famous-*MS]

In example (5), the test question incorrectly includes the token masculine adjective *famoso* [famous], used to modify the feminine noun *biblioteca* [library]. The

TABLE 2**Sample Questions From the Individual Variability Questionnaire (Ely, 1986)**

Language risk-taking	"I like to wait until I know exactly how to use a Spanish word before using it."
Language class sociability	"I don't enjoy talking with the teacher and other students in Spanish."
Language discomfort	"At times, I feel somewhat embarrassed when I'm trying to speak."
Strength of motivation	"Learning Spanish well is not really a high priority for me."

aim was for the participant to correct *famoso* with the insertion *famosa*, which is the correct feminine modifying adjective. The researcher calculated the mean and standard deviation of the corrections (either correct or incorrect) for four groups: attributive adjectival agreement for gender-marked and non-gender-marked nouns, and predicative adjectival agreement for gender-marked and non-gender-marked nouns. The test questions focused on only one token per sentence, and the researcher disregarded corrections on any other part of the sentence other than the token word.

A third tool explained variability in linguistic performance due to any type of learner apprehension or confidence about learning the language. A 22-question individual variability questionnaire (Ely, 1986) coded responses for the following: language risk-taking (6 questions), language class sociability (5 questions), language discomfort (5 questions), and strength of motivation (6 questions). The self-rating used a Likert 6-point response scale. Sample questions are listed in Table 2.

The researcher calculated the mean and standard deviation for each category and for the pre- and posttest. The Kolmogorov-Smirnov statistical test determined whether the Abroad and At Home pretest datasets differed significantly. This test ensured that both groups shared similar attitudes toward the language at the onset of

the study. A second statistical test, the Wilcoxon Matched-Pairs Signed Rank, was performed on the Abroad data to determine whether any significant change occurred in the categories as a result of study abroad. A Pearson correlation determined if there was a statistical relationship between posttest individual variability and the pre- and posttest performance on gender-agreement accuracy.

Fernández-García (1999) speculated that language learners' experience in the natural setting may explain their preference for certain forms and may be influenced by the amount and type of language exposure learners have outside of class. The fourth data collection tool attempted to measure this exposure by using the language contact profile (Freed, Dewey, & Segalowitz, 2004), which measured the number of hours per day and times per week that participants self-rated using Spanish and English on specific tasks. The tasks included speaking, reading, writing, and listening to Spanish and English. Example (6) shows how this question was presented.

- (6) This semester, outside of class, I tried to speak Spanish to a host family, Spanish roommate, or other Spanish speakers in the dormitory . . .
- (a) Typically, how many days per week?
 - (b) On those days, typically how many hours per day?

The researcher multiplied the response for (6a) by (6b) for an estimate of the hours per week on task. The mean and standard deviation for the product of each category provided descriptive information of the participants' language use abroad. In addition, a Pearson correlation determined if there exists a statistical relationship between the amount of English or Spanish spoken abroad and the pre- and posttest performance on gender agreement accuracy.

The pre-language contact profile questionnaire verified that the participants in the experimental and control groups had equal language contact prior to participating in the study. The posttest was administered only to the Abroad students with the assumption that language contact was going to change in the study abroad environment. The At Home participants did not receive the posttest, as it was assumed that their language contact remained constant throughout the semester and therefore would not offer distinct information from that obtained in the pretest. Based on personal contact with the At Home participants, this in fact was the case.

Results and Discussion

This section presents the learners' performance on attributive adjectival agreement and predicative adjectival agreement. This

information is followed by a comparison of which of the two proved to be more problematic and a comparison of the performance based on context. A discussion follows on the description of the participants' social behavior: individual variability and language contact. The section concludes with a report on any correlation that exists between any improvement in gender agreement and social behavior abroad. This report informs readers if a learner's personal variability and activities outside of the classroom while abroad play a role in the acquisition of gender agreement.

Attributive Adjectival Agreement

Table 3 outlines the performance of both groups in this category. Although there was no statistical significance in the difference between the pre- and posttests for either group, there is value in describing the performance. The Abroad score for gender-marked nouns showed a small but negative difference between the pre- and posttests of -0.33 and the non-gender-marked nouns of -0.17 .

Although the drop in performance was more pronounced in the gender-marked category than in the non-gender-marked, the posttest score was near perfect, with 10.67 out of 11 correct. The non-gender-marked nouns had less fluctuation between

TABLE 3

Scores for Attributive Adjectival Agreement

Noun type (range)	Mean (standard deviation)				Difference
	Pretest		Posttest		
Gender-marked (1–11)					
Abroad	11	(0)	10.67	(.49)	– .33
At Home	11	(0)	11	(0)	0
Non-gender-marked (1–33)					
Abroad	28.25	(1.60)	28.08	(1.98)	– .17
At Home	30.3	(2.21)	29.3	(3.74)	– 1

the two tests, with an average pre- and posttest score of 28.2 out of 33.

The At Home participants' performance reflected no change in score between the pre and posttests for gender-marked nouns and a -1 difference for the non-gender-marked nouns. Although the difference was more pronounced for the At Home students on the non-gender-marked nouns as compared to the -0.17 of the Abroad group, the At Home group scored higher, with an average of 29.8 out of 33 correct, as compared to 28.2 for the Abroad group.

For adjectives that appear within the noun phrase, which are closer to the noun than they are to the modifying word, the data showed that the nouns morphologically marked for gender proved to be easier for both groups. This finding concurs with previous research, specifically Finneman (1992), that Spanish nouns gender-marked by the gender endings $-a$ and $-o$ serve as a cue for agreement.

The data presented for the non-gender-marked noun comprised data from three subcategories, which are not listed in Table 3: nouns that end with $-e$, a consonant, and deceptively marked nouns. No significant

difference was found between the pre- and posttests for either group, but, again, it is interesting to point out which of the three subcategories proved problematic for the learners. Table 4 shows the difference in performance in the three subcategories for non-gender-marked nouns.

In Table 3, both groups showed negative development in the area of non-gender-marked nouns. Table 4 illustrates the same results, except for the one positive development seen in the Abroad group for deceptively marked nouns. A 0.5 difference exists between the pretest mean of 5.5 and the posttest mean of 6. Although there was an improvement, a Wilcoxon Matched-Pairs Signed Rank test showed that this difference was not significant.

In addition, note that although there was an improved performance with the deceptively marked nouns, the learners made more mistakes in this area than they did in the others. The less-difficult morphological class were the nouns ending in $-e$, as shown by the uniformly higher correction rate measured by the grammaticality judgment test. The morphological class that was weakest at the onset of the study abroad

TABLE 4
Scores for Attributive Adjectival Agreement—Non-Gender-Marked Nouns

Noun type (range)	Mean (SD)				Difference
	Pretest		Posttest		
-e ending (1-12)					
Abroad	11	(.60)	10.92	(.90)	- .08
At Home	11.4	(.84)	10.9	(1.85)	- .05
Consonant ending (1-13)					
Abroad	11.75	(.75)	11.17	(.94)	- .06
At Home	11.7	(.95)	11.6	(1.58)	- .1
Deceptively marked (1-8)					
Abroad	5.5	(1.24)	6	(1.28)	.5
At Home	7.2	(1.55)	6.8	(1.81)	- .4

program had more room for improvement, albeit a small improvement.

Predicative Adjectival Agreement

The second adjectival category studied here is predicative adjectival agreement, which occurs when an adjective is found after the copula *ser* or *estar* [to be]: for example, “*La casa de mi hermano es hermosa* [The house of my brother is beautiful].” It is assumed that achieving this kind of agreement can prove difficult for learners because they tend to follow the Minimal Distance Principle (Clark & Clark, 1977). The learner will focus on the noun (*hermano*) closest to the adjective *hermosa* rather than on the gender of the subject noun (*casa*), which is farther away from the adjective. This judgment would result in a presumptive mistake of *La casa de mi hermano es hermoso* rather than *hermosa*.

Due to a small number of token questions in the subcategories of morphological classes, I discuss these subcategories as a whole instead of as individual groups. Table 5 shows the statistically insignificant differences between the pre- and posttests in both groups.

The Abroad participants did not show improvement for gender-marked nouns ending with *-a* and *-o*, but their accuracy did change positively for non-gender-

marked nouns. On the other hand, the At Home group’s improvement proved insignificant for both adjectival categories. It also can be seen that both the gender-marked and non-gender-marked predicative adjectives showed a high rate of accuracy, both before and after the program. Respondents got an average 10.92 correct out of 13 tokens and 5.96 out of 8 tokens. These conclusions support those of Alarcón (2006), that intermediate and advanced learners are not constrained by the Minimal Distance Principle. Instead they correctly identify the subject nouns of the sentences that contain predicate adjectives.

Individual Variability

The individual variability questionnaire (Ely, 1986) coded responses for language risk-taking, language class sociability, language discomfort, and strength of motivation. Data were collected to see if (1) individual variability changed as a result of study abroad, and (2) there was a relationship between changes in individual variability and pre- and posttest gender accuracy rates. Table 6 reports the learners’ self-rated individual variability before and after the study abroad experience.

The statistical Wilcoxon Matched-Pairs test was performed for the pre- and posttest

TABLE 5

Scores for Predicative Adjectival Agreement—Abroad

Noun type (range)	Mean (SD)				Difference
	Pretest		Posttest		
Gender-marked (1–13)					
Abroad	11.17	(1.27)	10.67	(1.37)	– .5
At Home	10.8	(1.03)	10.9	(1.2)	.1
Non-gender-marked (1–8)					
Abroad	5.92	(1.24)	6	(1.21)	.03
At Home	6.4	(1.17)	6.7	(1.34)	.3

TABLE 6
Difference in Individual Variability Pre- and Post-Study-Abroad Experience

Item	Range	Mean (SD)		Wilcoxon Matched-Pairs test	
		Pretest	Posttest	D	z
Language risk-taking	1–36	22.41 (4.44)	19.50 (5.02)	– 2.916	– 3.288*
Language class sociability	1–30	11.41 (4.42)	8.33 (3.02)	– 3.083	– 3.301*
Language discomfort	1–30	19.58 (5.69)	17.25 (5.32)	– 2.333	– 3.242*
Strength of motivation	1–36	8.33 (1.61)	8.08 (2.46)	– .5	– 3.099*

* $p < .05$

means to determine if the two datasets differed significantly. According to the pre- and posttest self-rated data, the posttest data changed for the positive. For the category “language risk-taking,” the mean went from 22.41 to 19.50. This finding suggests that respondents took more risks in using the language after going abroad than they did before. Language class sociability went from 11.41 to 8.33. This finding suggests that Spanish-class socialization became less important than outside-of-class sociability. Language discomfort scores decreased, suggesting more comfort with the language. Finally, although the strength of motivation scores showed a decrease from 8.33 to 8.08, this result actually was positive because questions in this section included negative statements such as “I don’t really feel that learning Spanish is valuable to me.” The fact that the mean slightly increased shows that the learners were disagreeing with the comments regarding their lack of motivation to learn Spanish.

A Pearson correlation determined if a relationship existed between gender-accuracy performance and the external factor of individual variability while abroad.

The closer the correlation value r is to $+/- 1$, the stronger the relationship, and a score of $r \geq \pm .5$ suggests significance at the $p = .05$ level. None of the r values were greater than .495. Therefore, one can conclude that there was not a strong relationship between the score for gender agreement and individual variability. Although there was no correlation, it was nice to note, however, that the study abroad context did positively affect individual variability as measured in this study.

Language Contact Abroad

The Abroad learners spent approximately 4 months abroad, which is equivalent to one academic semester. Table 7 ranks in descending order the number of hours per week that the participants spent in Spanish and English on various tasks while abroad.

Although there was a high deviation in learners’ estimates on time spent on task, a trend is noticeable. The majority of hours per week were spent on reading and writing (44.92 hours) in Spanish and listening (44.67 hours) to Spanish. Reading and writing in English were ranked third, at

TABLE 7**Language Contact Information
During the Study Abroad Experience**

Task	Number of hours/week
	Mean (SD)
1. Reading and writing in Spanish	44.92 (11.71)
2. Listening to Spanish	44.67 (13.02)
3. Reading and writing in English	38.50 (13.66)
4. Speaking Spanish	34.67 (12.95)
5. Speaking English	33.25 (8.51)

38.5 hours a week. Spanish was the most often chosen language to be spoken abroad, with Spanish at 34.67 hours a week and English at 33.25 hours.

This indicates that more time was spent reading and writing in English than speaking in Spanish. Even though one would hope to see that learners speak more Spanish in the study abroad context, the data clarify where the learners use their language most abroad: reading, writing, or listening.

The researcher then correlated the language contact data with the difference in performance on the rate of acquisition for the different morphological classes and adjectival categories. The statistical Pearson correlation function was run on the data to determine a correlation coefficient between the two datasets and to determine if a relationship existed between the two properties (language contact and rate of gender agreement accuracy). In addition, the researcher calculated strength of relationship to determine the overlap between the two measures.

The only significant correlation was the significance between the number of hours the Abroad learners spent reading and writing in Spanish and their improvement on predicative adjectival agreement for non-gender-marked nouns ($r = -.656$). A score of $r \geq \pm .5$ suggests significance at the $p = .05$ level. Moreover, the strength of relationship, used to measure the amount of variability one variable has on another, proved also to be strong ($r^2 = .431$). No other correlations were found.

Conclusions

Overall, the learners' performance in both groups on gender-marked and non-gender-marked attributive adjectival categories showed a high rate of accuracy. A near-perfect performance was seen with gender-marked attributive nouns, and the weakest performance was seen with deceptively marked attributive nouns. The acquisition rate for the different morphological classes, although high overall, proved to be most distinct in the predicative non-gender-marked category.

The performance in the gender-marked and non-gender-marked predicative adjectival category also showed a high rate of accuracy for both groups. Predicative and attributive adjectival agreement proved not to benefit significantly from the study abroad experience as compared to the formal language classroom. The findings of the present study support the conclusions of Alarcón (2006), that grammatical knowledge does not significantly affect advanced learners whose grammatical knowledge is uniformly higher as compared to that of beginning and intermediate learners.²

The At Home students showed a slightly higher correction rate for attributive and predicative adjectives at the onset and end of the study. This finding may suggest that the At Home students give more attention to form than meaning throughout the semester. On the other hand, the Abroad students are in an environment where they have to make themselves

understood in Spanish in all contexts of their daily lives. In the study abroad context, meaning will always trump form. Native speakers are sympathetic listeners when they know they are speaking with foreign students, so they will be less likely to correct any mistake in form. In a normal conversation, it is the meaning that the student is trying to convey that is important. This conveying of meaning may lead the Abroad students to focus more on meaning as a survival tactic.

The goal of the present study was to answer the four research questions presented at the beginning of the article. Here I revisit the research questions and answer them based on the data analyses.

1. Does the rate of acquisition vary for different morphological classes of modified nouns?

The data support a different rate of acquisition for one morphological class of modified nouns and support conclusions from other research (Brisk, 1976; Fernández-García, 1999; Finneman, 1992). Specifically, learners showed fewer mistakes with noun endings that have a strong association with one of the genders (such as *-o* for masculine, *-a* for feminine nouns) than in those cases where there is not a clear association, in this case with deceptively marked nouns.

2. Does the rate of acquisition vary for attributive and predicative adjectives?

The data do not support a different rate of acquisition for attributive and predicative adjectives. The performance in both categories was uniformly high for both the experimental and control groups. This performance suggests that Intermediate High (*ACTFL Proficiency Guidelines-Speaking*, 1999) learners' grammatical knowledge includes a strong grasp of gender agreement rules for attributive and predicative adjectives. This conclusion supports research by Dewaele and Véronique (2001). Their study concludes that gender-

agreement accuracy for attributive adjectives is not higher than that for predicative adjectives.

3. Is there a relationship between individual variability and rate of acquisition for overall gender agreement?

The data collected do not support a relationship between a learner's individual variability and rate of acquisition. However, the study abroad learners in this study did benefit from the study abroad experience in that it appears that they became greater risk-takers in using the language, Spanish-classroom sociability became more important, learners' language discomfort decreased, and their motivation to speak Spanish increased.

4. Is there a relationship between language contact abroad and rate of acquisition for overall gender agreement?

There was a minimal relationship between the number of hours that the study abroad students spent reading and writing in Spanish and their performance on predicative adjectival agreement for non-gender-marked nouns. The amount of Spanish or English the learners chose to use to carry out activities in the study abroad context did not relate to their pre- and posttest grammatical knowledge.

Conclusions from Dewaele and Véronique's (2001) study suggested that "the amount of teaching has less effect on target-like gender assignment and agreement than frequency of authentic communication in the TL [target language] outside the classroom. The TL must be used actively in situations of spontaneous communication with native speakers for correct gender agreement to be acquired" (p. 292). Flege and Liu (2001) similarly suggested that "adults' performance in an L2 will improve measurably over time, but only if they receive a substantial amount of native speaker input" (p. 527). The data from the present study seem to contradict these suggestions.

According to Collentine and Freed (2004), "The study abroad (SA) context [is] where learners study the L2 in the target culture and often live with host families. Studying abroad heavily involves both communicative and learning contexts which may entail a hybrid communicative-learning context" (p. 156). Results from Segalowitz and Freed's (2004) study showed that "in general, out-of-class contact [time on task] does not explain the differential gains [in oral performance] between the AH [At Home] and SA [Study Abroad] groups" (p. 192). They offered an explanation that the amount of contact may simply be too little, that one semester may be insufficient, and that the number of contacts may be too few for potential gains to be realized.

With a larger sample group, oral data solicitation, and increased questions in the questionnaire, data may or may not support the conclusions that social activity in the L2 differentiates the Abroad learners' performance from that of the At Home learners. It was shown here that social activity did not differentiate the learners' pre- and post-study-abroad experience performance and that the performance of the At Home students was comparable to that of the Abroad group. Collentine and Freed (2004) supported this claim by arguing, "Education folklore has proclaimed that SA [study abroad] and IM [immersion] contexts would accelerate acquisition," but data collected in study abroad context could "offer some unanticipated surprises" (p. 158). Data in the present study demonstrated similar findings; no significant differences were found.

Although the number of questions in the non-gender-marked morphological categories for both adjectival classes was low, a picture emerges on the non-effects of short-term study, in either context. Future studies should include more sentences in each of these non-gender-marked morphological categories and include both beginning and intermediate students in the data collection process. This current lack may account for

the limited variation in the uniformly high grammar test scores of the advanced learners. A final suggestion would be to follow the two groups of students for two academic semesters. This amount of time may prove to be sufficient to foster different agreement acquisition rates as compared to a control group at home.

The purpose of this study was not to explain why study abroad programs do not provide students with opportunities to develop their skills to greater extents (many accredited programs do provide these opportunities). The data show that spending a semester abroad practicing the target language does not speed up the process of acquiring gender-agreement accuracy in the learners' interlanguage. During a one-semester period, whether the student is immersed in a culture and surrounded by the target language for a great deal of the day or attending a class in Spanish grammar and composition for 3 hours a week does not affect the process of acquiring gender agreement accuracy.

We as educators must remember an implication that such results will have for language teaching in general. As stated succinctly by Chastain (1981), "If an error occurs as the learner attempts to communicate . . . fault may not result from any lack of knowledge or incomplete comprehension . . . the important goal is the ability to exchange information with a native speaker rather than perfect, native-speaker language" (p. 288).

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Notes

1. Also referred to as natural gender and grammatical gender (Alarcón, 2006; Bruhn de Garavito & White, 2002; Franceschina, 2005).

2. Alarcón (2006) defined advanced learners as Spanish majors and minors enrolled in Spanish content courses. Beginning and intermediate learners are those enrolled in the first- and second-year language program. Therefore, Alarcón's advanced learners are comparable to the present study's Intermediate learners, who were categorized as such based on the ACTFL SOPI test but who were Spanish majors and minors.

References

- ACTFL proficiency guidelines—Speaking. (1999). Yonkers, NY: American Council on the Teaching of Foreign Languages.
- Alarcón, I. V. (2006). *The second language acquisition of Spanish gender agreement: The effects of linguistic variables on accuracy*. Munich, Germany: LINCOM GmbH.
- Bartning, I. (1999, June). *L'attribution et l'accord du genre des déterminants et des adjectifs en français parlé – apprenants avancés vs apprenants préavancés [Attribution and gender agreement of determinants and adjectives in spoken French – advanced learners vs. pre-advanced learners]*. Paper presented at the 9th meeting of EUROSLA, Lund, Sweden.
- Bartning, I. (2000). Gender agreement in L2 French: Pre-advanced vs. advanced learners. *Studia Linguistica*, 54, 225–237.
- Brecht, R., Davidson, D., & Ginsberg, R. (1993). Predictors of foreign language gain during study abroad. *NFLC Occasional Papers*. Washington, DC: National Foreign Language Center. (ERIC Document Reproduction Service No. ED360828)
- Brisk, M. E. (1976). The acquisition of Spanish gender by first grade Spanish-speaking children. In G. D. Keller, R. B. Teschner, & S. Viera (Eds.), *Bilingualism in the bicentennial and beyond* (pp. 143–160). New York: Bilingual Review.
- Bruhn de Garavito, J., & White, L. (2002). L2 acquisition of Spanish DPs: The status of grammatical features. In A. T. Pérez-Leroux & J. Liceras (Eds.), *The acquisition of Spanish morphosyntax: The L1/L2 connection* (pp. 153–178). Dordrecht, the Netherlands: Kluwer.
- Cain, J., Weber-Olsen, M., & Smith, R. (1987). Acquisition strategies in a first and second language: Are they the same? *Journal of Child Language*, 14, 333–352.
- Chastain, K. (1981). Native speaker evaluation of student composition errors. *Modern Language Journal*, 65, 288–294.
- Chini, M. (1995). Un aspect du syntagme nominal en italien L2: Le genre. *AILE*, 5, 115–142.
- Clark, H. H., & Clark, E. V. (1977). *Psychology and language. An introduction to psycholinguistics*. New York: Harcourt Brace Jovanovich.
- Collentine, J. (2004). The effects of learning contexts on morphosyntactic and lexical development. *Studies in Second Language Acquisition*, 26, 227–248.
- Collentine, J., & Freed, B. F. (2004). Learning context and its effects on second language acquisition. *Studies in Second Language Acquisition*, 26, 153–171.
- Dewaele, J. M., & Véronique, D. (2001). Gender assignment and gender agreement in advanced French interlanguage: A cross-sectional study. *Bilingualism: Language and Cognition*, 4, 275–297.
- Ely, C. (1986). An analysis of discomfort, risktaking, sociability and motivation in the L2 classroom. *Language Learning*, 36, 1–25.
- Fernández-García, M. (1999). Patterns of gender agreement in the speech of second language learners. In J. Gutiérrez-Rexach & F. Martínez-Gil (Eds.), *Advances in Hispanic linguistics* (pp. 3–15). Somerville, MA: Cascadia Press.
- Finneman, M. D. (1992). Learning agreement in the noun phrase: The strategies of three first-year Spanish students. *International Review of Applied Linguistics in Language Teaching*, 30, 121–137.
- Flege, J. E., & Liu, S. (2001). The effect of experience on adults' acquisition of a second language. *Studies in Second Language Acquisition*, 23, 527–552.
- Franceschina, F. (2001). Morphological or syntactic deficits in near-native speakers? An assessment of some current proposals. *Second Language Research*, 17, 213–247.
- Franceschina, F. (2005). *Fossilized second language grammars: The acquisition of grammatical gender*. Philadelphia: Benjamins.
- Freed, B. F., Dewey, D. P., & Segalowitz, N. (2004). The language contact profile. *Studies in Second Language Acquisition*, 26, 349–356.
- Freed, B. F., Segalowitz, N., & Dewey, D. P. (2004). Context of learning and second language fluency in French: Comparing regular

- classroom, study abroad and intensive domestic immersion programs. *Studies in Second Language Acquisition*, 26, 275–301.
- Harris, J. (1991). The exponence of gender in Spanish. *Linguistic Inquiry*, 22, 27–62.
- Isabelli-García, C. (2003). Development of oral communication skills abroad. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 9, 149–173.
- Isabelli-García, C. (2006). Study abroad social networks, motivation and attitudes: Implications for second language acquisition. In E. Churchill & M. DuFon (Eds.), *Language learners in study abroad contexts* (pp. 231–258). Clevedon, UK: Multilingual Matters.
- Kaplan, M. A. (1989). French in the community: A survey of language used abroad. *The French Review*, 63, 290–299.
- Karmiloff-Smith, A. (1979). *A functional approach to child language*. Cambridge: Cambridge University Press.
- Lennon, P. (1990). The advanced learner at large in the L2 community: Developments in spoken performance. *International Review of Applied Linguistics*, 28, 309–324.
- Liskin-Gasparro, J., & Urdaneta, L. (1995). Language learning in a semester abroad: The spring 1995 University of Iowa Universidad de los Andes program in Mérida, Venezuela. Conference manuscript published in *Research Perspectives in Adult Language Learning and Acquisition-Study Abroad: Research on Learning Language and Culture in Context* (pp. 138–160). Columbus, OH: The Ohio State University, National Foreign Language Resource Center.
- Milleret, M. (1990). Evaluation and the summer language program abroad: A review essay. *Modern Language Journal*, 74, 483–488.
- Pienemann, M. (1998a). *Language processing and second language development. Processability theory*. Amsterdam: Benjamins.
- Pienemann, M. (1998b). Developmental dynamics in L1 and L2 acquisition. Processability theory and generative entrenchment. *Bilingualism, Language and Cognition*, 1, 1–20.
- Polanyi, L. (1995). Language learning and living abroad: Stories from the field. In B. F. Freed (Ed.), *Second language acquisition in a study abroad context* (pp. 271–292). Philadelphia: Benjamins.
- Segalowitz, N., & Freed, B. F. (2004). Context, contact, and cognition in SLA. *Studies in Second Language Acquisition*, 26, 173–199.