

**NORTHERN ILLINOIS UNIVERSITY**

Linguistic Gains During Short Term Study Abroad: Examining the Role of  
Initial Proficiency

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## Introduction

Study abroad experiences are widely considered to be beneficial to second language (L2) development and acquisition but many learners want to know when is the best time to go. On the one hand, research has reported no gains or marginal gains for less-experienced learners (e.g., Collentine, 2004; Davidson, 2010; DeKeyser, 2010; Isabelli-García, 2010; see Yang, 2016 for a meta-analysis) and moderate to large gains for more-experienced learners (Howard, 2001; Llanes & Muñoz, 2009; Mora & Valls-Ferrer, 2012; Serrano et al., 2011; see Yang, 2016 for a meta-analysis) in terms of grammatical accuracy and complexity, suggesting that learners with more language experience have an advantage. In other words, they recommend students to go when they are at a higher level of L2 acquisition rather when they have a lower grasp. They believe these students will ultimately make the most out of their study abroad experience. On the other hand, researchers have posited a “less is more” theory in which lower proficiency learners, who are able to make more obvious gains, experience greater linguistic development (e.g., Juan-Garau, 2014; Llanes & Muñoz, 2009). These researches believe the opposite and suggest that students with a basic understanding of the L2 will make the most linguistic gains over the course of their study abroad experience.

Given these opposing notions (“more is more” vs. “less is more”) it becomes very difficult recommending L2 learners the proper time to study abroad, especially in time a when these programs are growing in popularity. To be specific, short-term study abroad programs are growing in popularity however there are many unknowns as to how truly effective they are. The growth in popularity might be due to the common assumption that these programs automatically makes individuals fluent in the L2. People often think that the exposure students

get through these programs surpass the classroom structure and allows them to learn more. This assumption however has never been clearly proven despite having over 20 years of extensive research. (Grey, 2015). Previous studies have shown mixed results which might be the reason why this assumption still stands to this day.

The present study sought to explore linguistic development among learners participating in five-week study abroad programs in Spain designed for (a) beginning learners and (b) advanced learners, respectively. The overall purpose of the study was to determine whether linguistic gains were made at all over the course of the short-term study abroad period and to determine the right time to go. Our study primarily focused on answering the following questions: (1) Do beginner and advanced learners experience significant gains in linguistic abilities during a five-week study abroad program? (2) Is there a relationship between initial proficiency and linguistic gains during a five-week study abroad program?

### **Motivation for Present Study**

Robert DeKeyser, from the University of Maryland, performed a similar study to ours in which he recruited a group of 16 US learners, traveled to South America (Argentina), and completed a 5-week study abroad program. (DeKeyser, 2010). The group of students he recruited were all categorized as intermediate learners however it was very unclear as to how he defined their level of expertise in the L2. In other words, there wasn't a hard measure used to describe the level of experience his participants had prior to the program or even during the program. His participants were asked to complete a series of tasks to test their linguistic gains over the course of the 5-week program.

Based off his findings he concluded that individuals that know more get better at using what they know and can add new knowledge through input and interaction (DeKeyser, 2010). In addition, he claims that “students must have adequate basic knowledge of the structure of the language if they are to have any meaningful practice experience abroad.” (DeKeyser, 2010). This could be interpreted as students who have a good linguistic foundation can acquire more skills based off their prior experience. DeKeyser’s results appear to align with the notion of more is more. Even though his results suggest this, there is still no clear evidence as to which group makes the most linguistic gains (advanced learners or beginner learners) because there was no descriptive data on his participants prior to the start of the program and there was also no data provided on the tasks after the program was complete. This makes it very difficult to compare his group of learners to other groups in similar studies across the field.

Sarah Grey also had a similar study in which she recruited a group of 26 Spanish learners for a five-and-a-half-week program in Spain and looked at linguistic gains. Grey’s participants averaged about 6.4 years of Spanish experience prior to the program and were required to take 2 advanced courses in college prior to the program (Grey et al., 2015). Their level of language exposure however, wasn’t reinforced with an external measure of proficiency which doesn’t allow us to truly know her participant’s level of knowledge in the L2. By not measuring their levels of proficiency with an external measure, we can’t really compare her participant’s initial level of proficiency or the gains they made through the program to our study either.

Given the foundation of the previous work and the remaining open questions in the field, the present study put forth the following research questions:

RQ1: Do beginner and advanced learners experience significant gains in linguistic abilities during a five-week study abroad program?

RQ2: Is there a relationship between initial proficiency and linguistic gains during a five-week study abroad program?

In order to address these questions, the study employed a short-term longitudinal design, allowing for the assessment of behavioral and processing changes that occurred over the course of one semester of university-level language study. Three testing sessions were administered: (1) a cognitive session, in which declarative, procedural and working memory were assessed, as well as (2) a baseline language session and (3) a follow-up language session, in which L2 performance and processing were assessed at the beginning and end of the semester, respectively. Each element of the study is described below.

### **Method**

Two groups of beginner and advanced level learners were recruited to study abroad in Spain. The beginner learners had already completed 2 semesters of basic Spanish at a university level prior to the 5-week study abroad program. This group studied in Santander, Spain where they completed an intensive course that covered second-year Spanish material (n = 18). The advanced group had completed 5-6 semesters of college level Spanish prior to the program and they studied in Alicante, Spain. There, this group completed 3-4 Spanish courses covering grammar, linguistics, and other content over the course of the 5-week program (n = 7). Our learners were tested in Spain during weeks one and five to measure any change after the

program was complete. The participants' grammatical abilities and overall proficiency were assessed by having them complete the tasks described below.

The Acceptability Judgment Task (AJT) was used to measure grammatical sensitivity or violation (accuracy). Our participants read sentences in Spanish on a computer screen and indicated whether each sentence was "bien" (good) or "mal" (bad) via mouse click. A list of 104 pseudo-randomized experimental stimuli (13 of each of four violation types plus correct controls) was presented at Week 1, and another counterbalanced list of 104 new stimuli were presented at Week 5. The objective was to see if there was any change in their accuracy sensitivity. Below are some samples of the AJT stimuli used to assess the participants in the study.

Table 1. Sample stimuli sentences from AJT

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<p><b>Adjective Agreement:</b> Lupe lleva su blusa bonito*/bonita. "Lupe wears her blouse <sub>fem</sub> pretty <sub>masc</sub> /pretty <sub>fem</sub>."</p>
<p><b>Article Agreement:</b> A Ramón no le gusta *el/la corbata. "Ramon does not like the <sub>masc</sub> /the <sub>fem</sub> tie <sub>fem</sub>."</p>
<p><b>Subject-Verb:</b> Ellos contesta*/contestan las preguntas del policía. "They <sub>plural</sub> answer <sub>sing</sub> /answer <sub>plural</sub> the officer's questions."</p>
<p><b>Semantic:</b> Samuel juega azucar*/beisbol con su padre. "Samuel plays sugar/baseball with his dad."</p>

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The second task our participants completed was the Elicited Imitation Task (EIT) which measured overall proficiency (speaking). The EIT requires examinees to listen to and then repeat a stimulus, usually at the sentence level (Bowden, 2016). Our participants had to listen to 30 Spanish sentences and had to repeat them as they increased in length and complexity. Their responses were transcribed and scored such that each response could earn 0-4 points. Different versions of the task were administered at Week 1 and Week 5 to measure any change in overall proficiency.

My role was to settle any discrepancies between rater 1 and rater 2 after they completed transcribing the recordings. Once there were no more discrepancies between the rater's transcriptions, I was responsible for then rating everyone's individual responses using a rating scale ranging from 0-4, 4 being a perfect score (Bowden, 2016). The scale I used was designed by Bowden and has been used by many other professionals in the field making it a good external measure for proficiency (The tool I used to rate is demonstrated in the image below). After rating all the participants' scores, a 4<sup>th</sup> individual compared their ratings to mine and we sat down and resolved each individual discrepancy. The maximum score these participants could've reached on this task was 116 overall points.

Table 2. Sample stimuli sentences from EIT

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**Target 1: Quiero comerme el huevo.**

Response score (2): *Comer quiero la huevo.*

Response score (3): *Quiero comer el huevo*

**Target 30: Hay mucha gente que no toma nada para el desayuno.**

Response score (2): *Hay mucha gente que no toma desayuno.*

Response score (3): *Hay mucha gente que no come nada para el desayuno*

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Table 3. Scoring criteria for EIT

Score	Criteria
4	Perfect repetition.
3	Meaning preserved; use of synonyms or (grammatical or ungrammatical) changes in grammar that do not affect meaning.
2	More than half of content preserved; slight changes in content that make content inexact, incomplete, or ambiguous.
1	Half or less of content repeated; important content is left out; meaning may be unrelated or opposed to stimulus.
0	Silence, unintelligible content, or only one content word.

The task began with Target 1, which was the most simplistic Spanish sentence our participants had to repeat which meant “I want to eat the egg” when translated to English. Target 30 was at the opposite end of the spectrum and it was the most difficult and complicated sentence for them. When translated to English the phrase says, “There are many people that don’t drink anything for breakfast.”

## **Results**

We first calculated average scores for each learner group on the AJT and the EIT at Week 1 and at Week 5. Next, in order to address our first research question: *Do beginner and advanced learners experience significant gains in linguistic abilities during a five-week study abroad program?*, we ran paired-samples t-tests to determine whether significant gains took place. The beginning level learners experienced about a 9.6% increase in their AJT scores from week 1 to week 5 and about a 9.3 point increase in EIT scores (out of a maximum of 116 points)

from week 1 to week 5. Paired samples t-tests revealed that these gains were significant. When looking at the advanced learners AJT scores we see only about a 2.2% average increase and an average gain of 4.5 points on the EIT. Paired samples t-tests revealed that these gains were not significant. Values for performance on Both results came out as insignificant gains once running the paired samples t-test. Thus, after analyzing both tasks, the results showed that the beginner level students made the significant gains in both the EIT and AJT, whereas the advanced learners did not make significant gains on either task. Mean values, standard deviations, ranges of scores at Week 1, Week 5 and Change from Week 1 to Week 5 for each group and task are presented in Table 4, along with results from the paired samples t-tests.

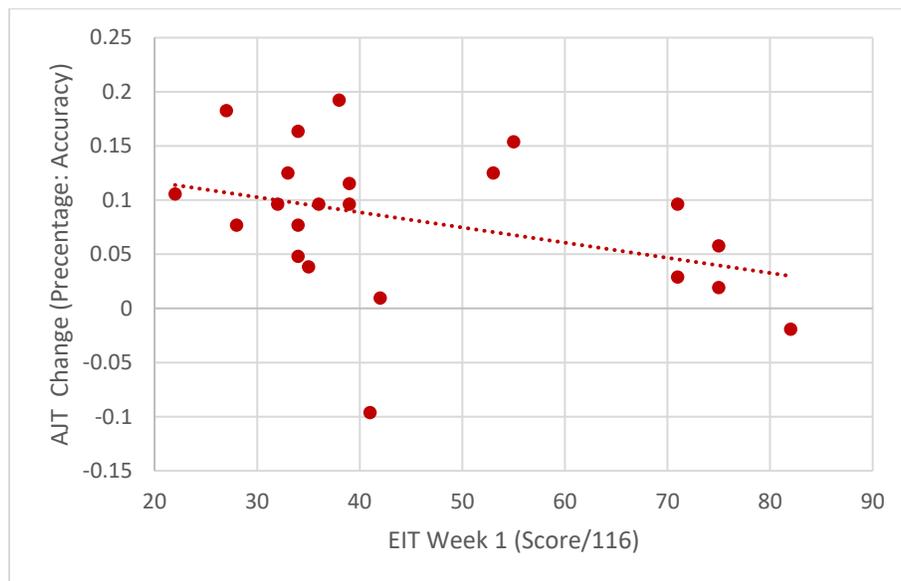
**Table 4. Learner performance on AJT and EIT**

	<b>Week 1</b>	<b>Week 5</b>	<b>Change</b>	
	<i>Mean (SD)</i> <i>Range</i>	<i>Mean (SD)</i> <i>Range</i>	<i>Mean (SD)</i> <i>Range</i>	Paired samples t-test
<b>Beginner</b>				
AJT	.607 (.084) .433 - .740	.704 (.090) .606 - .885	.096 (.065) -.096 - .192	$t(17) = -6.271, p = .000^{***}$
EIT	36.250 (8.466) 22 - 55	45.563 (11.419) 31 - 74	9.310 (4.990) -1 - 19	$t(15) = -7.466, p = .000^{***}$
<b>Advanced</b>				
AJT	.815 (.129) .548 - .933	.837 (.136) .558 - .952	.022 (.045) -.038 - .096	$t(6) = -1.282, p = .247$
EIT	69.330 (13.981) 42 - 82	73.830 (15.536) 51 - 93	4.500 (10.968) -8 - 18	$t(5) = -1.005, p = .361$

*Note.* EIT data from three participants were excluded due to the following reasons: Failure to follow instructions (translate instead of repeating at Week 1 (1), and excessive background noise that interfered with ability to complete task (2).

In order to address our second research question: *Is there a relationship between initial proficiency and linguistic gains during a five-week study abroad?*, we wanted to examine relationships between our external measure of proficiency (the EIT) and our experimental task (the AJT). Specifically, we ran a correlation between EIT score at Week 1 (a measure of initial proficiency) and change in AJT score from Week 1 to Week 5 (a measure of linguistic gains). For this correlation, we included learners from both the beginner and the advanced groups. As can be seen in Figure 1, there was a negative relationship between initial proficiency and AJT change, such that learners with *lower* initial proficiency experienced the *most* improvement in the AJT scores, and learners with higher initial proficiency experienced more modest gains in their AJT scores. Results from the correlation indicated that this negative relationship was marginally significant:  $r = -.370$ ,  $p = .090$ .

Figure 1. Scatterplot showing the relationship between initial proficiency and linguistic gains



## Conclusion

Our results support the “less is more” theory of L2 development during study abroad: We found (1) significant gains for Beginner (but not Advanced) learners on both tasks and (2) significant/marginally significant negative correlations between initial proficiency and AJT change. Interesting enough our results do not align with the previous studies we examined which bring us back to the original question, when is the best time to study abroad? Although the answer to the question might not be clear just yet because, we are getting closer to an answer by figuring out the tools and pieces of information necessary to examine future short term study abroad programs.

For future research, there will be an attempt to gather an equal number of participants for both advanced and beginner groups to strengthen their statistical power. This study compared a group of 18 beginner level learners to a small group of 7 advanced level learners which might've had an impact on the overall results of the study. The results in this study were also very limited to assessments of grammatical accuracy (AJT) and spoken proficiency (EIT) in turn only allowing us to see a small scope of information. Future research that explores multiple aspects of L2 development is needed to better understand the role of initial proficiency and in helping to determine linguistic gains during study abroad. The ultimately goal is to provide a clearer understanding as to when is the best time to study abroad.

## References

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