The Effect of Listening Strategy Instruction on Post-Secondary Beginning Spanish Language Learners: A Quantitative Methods Section

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#### Background Literature

In her review of the literature on listening comprehension strategies, Berne (2004) notes that there is a paucity of research on the topic of listening strategies and their effective use by beginning language learners. This is especially true for experimental research involving post-secondary world language learners. A few studies (Teichert, 1996, Vandergrift, 2003) have explored the effect of listening strategies on listening comprehension. While these studies have shown a significant relationship between the use of listening strategies and a student's improved performance in the target language, little testing has been done to measure the student's metacognitive awareness of the use of said strategies. To explore a language learner's metacognitive awareness of listening strategies, Vandergrift, Goh, Mareschal and Tafaghodtari (2006) developed a Metacognitive Awareness Listening Questionnaire (MALQ). They report that the MALQ is a valid and reliable measure and that there is a need for more research to determine if teaching listening strategies has a positive effect on a student's metacognitive awareness.

#### Research Questions

A few prior studies have shown that listening strategy instruction does improve listening comprehension of post-secondary beginner and intermediate language learners (Teichert, 1996, Vandergrift 2003). Recently, there has been a new direction in the research of listening strategies that seeks to explore a learner's metacognitive awareness of language learning strategies. Recent research suggests that learners with high degrees of metacognitive awareness and self regulation are better at processing and storing new information (Vandergrift, Goh, Mareschal, & Tafaghodtari, 2006). This study therefore, is intended to replicate and extend the research of Teichert (1996),

Vandergrift (2003) and Vandergrift, Goh, Mareschal, and Tafaghodtari (2006) by asking the following research questions:

- 1. Does the implementation of listening strategies of prediction, monitoring, evaluating, and problem solving have a positive effect on listening comprehension of beginning level post-secondary language learners?
- 2. Are there gender differences in the effect of listening strategies on listening comprehension?
- 3. Does the metacognitive awareness of learning strategies of post-secondary beginning language learners' improve when listening strategy instruction is integrated in classroom instruction?

#### Method

The present study is an intervention to determine the effect of listening strategy instruction on the listening comprehension of beginning post-secondary language learners and to determine the effect of listening strategy instruction on the language learners' metacognative awareness for using listening strategies.

## Design

This study employed random assignment of four beginning level, second-semester Spanish classes to one of two treatment groups using a pre post test design. Random assignment of individual participants within the courses was not possible due to scheduling conflicts. The random selection of the four courses (two control groups and two experimental groups) was from a population of professors and adjunct faculty who were already contracted to teach secondsemester beginning Spanish courses and who had consented to being possible participants in the study.

## Sample

The sample (N= 80) participants for this study are beginning level post-secondary language learners. The control group is comprised of 38 students (21 females and 17 males) who have enrolled in two sections of a second semester Spanish course that are taught by two different instructors. The experimental group is comprised of 42 students (25 females and 17 males) who have also enrolled in two sections of a second semester Spanish course that are also taught by two different instructors.

*Setting.* Participants are undergraduates enrolled at a large Mid-Atlantic university that currently has a 0-12 credit language requirement for baccalaureate degrees in the College of Arts and Sciences. Undergraduate students who seek a baccalaureate degree from the College of Arts and Sciences are required to demonstrate proficiency in a world language that is equal to four semesters of beginner study. The requirement for 0-12 credits of a language depends on the student's earned score on the language placement exam. Students who place at or above the fourth semester level have met the requirement and are not obligated to take additional courses. Students who place at lower levels are required to complete a language course sequence that ends with a fourth semester course. Currently, the Department of Modern and Foreign languages offers 4 semester sequences in Arabic, Chinese, Japanese, Italian, German, French, and Spanish.

The university has a total population of approximately 29,000 students. Data collected from 97% of the total population reveal that 54% are female and 43% are male. Ethnic and racial diversity data were collected on approximately 90% of the total population. The ethnic/racial data represent 134 countries and are reported as follows: 56.2% Caucasian American, 7.6% African American, 12.9% Asian American, 6.3% Hispanic American, 0.3% Native American, and 5.9% are Resident Aliens. Of the total population, approximately 18,900 are undergraduates.

The age of the undergraduate population is reported as: 13,900 are 25 years old or younger, 2,760 are over 30 years old, and 1,390 are between 25 and 30 years old. Lastly, 75.1% of the undergraduate population attends full-time while 24.9% are enrolled as part-time students taking nine or less credits per semester.

*Students*. The participants (N=80) are undergraduate students who individually and independently registered for one of nine available second-semester Spanish courses using standard registration procedures. Student participants had no prior knowledge of the present research study prior to registering for their courses. The researcher conducted random selection of course sections after the registration process was completed.

With little variation, the participants are representative of the general university population of undergraduates. Of the 80 students, 52 were Caucasian Americans, 8 were African Americans, 5 were Asian Americans, and 7 students were Hispanic Americans. There were also 8 students who have Resident Alien status. The mean age was 22 years of age and the average grade point average (GPA) was 2.9 of a possible 4.0. Student participants have either tested at the second-semester level on the Spanish placement exam, or they have earned a D grade or higher in a first-semester Spanish course.

*Teachers*. Prior to the random selection of second-semester course sections, the researcher obtained consent from 9 of the 10 instructors. The consent form specified the possibility of being chosen for the study in the random selection process. The four sections were chosen by randomly distributing nine envelopes to the nine instructors. Two of the envelopes contained information for the control groups and two contained information for the experimental group.

Pseudonyms have been assigned to the instructors that were randomly selected. Mary and Karen were selected for the two control group sections. Mary is a 10-year veteran adjunct instructor with a Masters degree in Spanish Literature. She is originally from Colombia, but has resided in the United States for 25 years. Her control group section consists of 18 student participants. Karen is a recent addition to the full-time faculty of professors. She is a non-native speaker who has earned a Doctorate in Spanish Linguistics. Prior to joining this university, she had taught beginner level Spanish courses for 4 years during her doctoral studies. Karen's control group consists of 20 student participants.

Dave and Lori were randomly selected to instruct the experimental groups. Both have been adjunct instructors at this university for 4 and 3 years respectively. Dave is a non-native speaker who holds a B.A. in Spanish and a Masters degree in Education. In addition to his experience teaching at the post-secondary level, Dave has 20 years of teaching experience in the K-12 arena. His experimental group consists of 19 student participants. Lori has taught beginner level courses for 7 years. The first 4 years were as a graduate teaching assistant, a position she held while earning a Masters in Spanish Literature. Her experimental group consists of 23 students. Additional demographics for both control groups and both experimental groups can be found in Tables 1.1 and 1.2

Table 1.1

Instructor	Female	Male	Total
Name	Students	Students	Students
Mary	11	7	18
Karen	10	10	20
TOTAL	21	17	38

Control Group Student Demographics

## Table 1.2

Instructor	Female	Male	Total
Name	Students	Students	Students
Dave	12	7	19
Lori	13	10	23
TOTAL	25	17	42

### Experimental Group Student Demographics

### Materials

*Both conditions.* The Beginning Spanish Program consists of 4 semesters of language study. As part of their language study, the students are expected to develop the 4 skill areas of speaking, writing, reading and listening. Each instructor is expected to follow a department-made syllabus which predominantly follows the chapters in the *Dímelo Tú* textbook and ancillary materials by Rodríguez, Samaniego, Blommers, Lagunas-Solar, and Ritzi-Marouf (2006). The textbook provides a communicative approach to language learning. Students are expected to read grammar explanations and skill development instructions at home so that classroom time is devoted to using the target language in communicative activities. The ancillary materials for listening strategy instruction include an audio compact disc that contains dialogues for each chapter. There is also a video with clips that follow the cultural topics of each chapter. Although the textbook provides process-oriented activities for the development of receptive skills (listening and reading), these activities are not part of the syllabus and an informal investigation has revealed that prior to this study, none of the instructors had been using them.

Both the control and experimental groups in this study continued to follow the department-made syllabus, continued use of the *Dímelo Tú* course materials, and used the department-made chapter tests for formative evaluations. Specifically for this study, both groups completed Chapters 5-9 in the *Dímelo Tú* textbook. In Chapter 5, the cultural focus is on the

products and perspectives of Argentina. The grammatical focus begins with a review of the present tense verbs, the use of por and para, and a review of ser and estar. The new grammar concept introduced in this chapter is the comparison of inequalities. The vocabulary focus is on family and relationships.

In Chapter 6, the cultural objective is to gain an understanding of the products and perspectives of Guatemala. For grammar, the objective is mainly on the uses of preterit tense. In this chapter, the vocabulary focuses on the media and reporting the news. In Chapter 7, the cultural focus is on the products and perspectives of Colombia. The grammatical focus is on the use of direct object pronouns and a review of the verbs ser and estar. The use of direct object pronouns is applied to verbs in both the present indicative and the preterit tenses since the students have already learned them. The vocabulary in this chapter focuses on relationships and dating.

In Chapter 8, the cultural objectives are to gain an understanding of the products and perspectives of Chile. The grammatical focus begins with a review of the verbs gustar and encantar followed by an introduction to indirect object pronouns. The vocabulary for this chapter focuses on food and dining out. In Chapter 9, the cultural focus is on the influence of the products and perspectives of Spanish speaking populations within the United States. The grammatical focus is on reflexive verbs and the affirmative informal imperative forms. The vocabulary focuses on reflexive verbs and describing daily routines. A summary of the chapter objectives is provided in Table 1.3.

Table 1.3

Objectives for Chapters 7-9 in Dímelo Tú

Chapter	Cultural	<b>Grammatical Focus</b>	<b>Vocabulary Focus</b>
Number	Focus		

5	Argentina	Comparisons of	Family and
		Inequalities	relationships
6	Guatemala	Preterit Regular and	Newspapers and
		Irregular Verbs	News Programs
7	Colombia	Direct Object Pronouns	Dating and
			Relationships
8	Chile	Indirect Object	Food and
		Pronouns	Restaurants
9	Spanish Populations	Reflexive Verbs /	Reflexive Verbs and
	within the United	Informal Affirmative	Daily Routines
	States	Imperative Forms	

In addition, both groups were given a pre post test using the Metacognitive Awareness Listening Questionnaire (MALQ) to determine if metacognitive awareness of learning strategies improved when listening strategy instruction was integrated in classroom instruction.

*Control condition.* The two control groups, instructed by Mary and Karen, did not incorporate listening strategy instruction in their classroom lessons. They followed the department-made syllabus using the *Dímelo Tú* textbook and conducted their classroom lessons as they had done in previous semesters. Table 1.3 contains information that was covered in each of the 5 chapters. The ancillary listening materials were not used at all during class time.

Although the control group instructors had different teaching styles, they both shared similar teaching philosophies. They each believed that their classroom activities should allow their students a place and time to use the grammar and vocabulary in meaningful, real-life situations. Because both instructors strictly followed the department-made syllabus, their classes were very similar in format. A typical class in both control groups would begin with a review of the homework that was assigned according to the syllabus. Then, the instructors would assign small group activities where the students applied the vocabulary and grammar in communicative activities that mirrored real-life situations. Depending on the syllabus and the time constraints, the cultural components of each chapter were integrated throughout the communicative

activities. The last few minutes of class were spent reviewing the homework for the next class and addressing any other concerns by either the instructors or the students.

*Experimental condition.* The format of each class period of the two experimental groups mirrored that of the control groups with the exception of listening strategy instruction. Although the instructors of the experimental groups have their own teaching styles, they, like the instructors of the control group, believe that their students should be given classroom opportunities to use the target language in meaningful, real-life situations. For listening strategy instruction, both experimental instructors used the activities provided in the *Dímelo Tú* textbook and ancillary materials. The *Dímelo Tú* textbook contains two sections in every chapter for the development of pre-listening strategies that include prediction and monitoring and post-listening strategies for evaluation and problem solving.

According to the instructions provided in the Instructor's version of the *Dímelo Tú* textbook, each listening section begins with a few questions that are designed to activate the students' prior knowledge. For example, before listening to a dialogue in a restaurant, students are asked to brainstorm a list of words and phrases they would expect a waiter to say in the target language. After listening to an audio selection or viewing a video clip (provided as ancillaries to the textbook), the instructor then facilitates and reviews various post-listening activities for evaluation and problem solving that are provided in the textbook. For example, after listening or watching the restaurant audio/video from Chapter 8, the students are asked to put in sequence a list of events based on what they heard.

Both instructors for the experimental groups (Dave and Lori) used these activities as a part of their classroom instruction. For each of the 5 chapters on the syllabus, the instructors agreed to give two 20-minute sessions of listening strategy instruction for a total of 200 minutes

of listening strategy instruction. They began each section with a brainstorming activity to activate the students' prior knowledge. They then played the video or the tape that are part of the ancillary materials. These selections were designed to replicate real life experiences. For example, the video in the first section of Chapter 6 was of a newscast that contained information about the U.S. President's recent visit to Guatemala, a plane crash that occurred in Mexico, the scores of international soccer games, and information on a recent concert by Marc Anthony. After hearing the selection twice, the students were asked to do a variety of post-listening activities that included evaluation and problem solving. These activities were part of the listening section of the textbook. For example, as an evaluative activity, the students were asked several true/false questions based on information provided in the newscast. As a problem solving activity, they were asked to do a follow-up story to either the President's visit or to the news of the plane crash.

Similar activities were conducted twice for each chapter with each of the experimental groups. Both Dave and Lori used only those listening materials provided in the textbook and followed the suggestions for pre-listening activities that were outlined in the Instructor's Manual of *Dímelo Tú*.

#### Data Sources

*Department-made tests.* To address the research question of the effect of listening strategy instruction on listening comprehension, test scores were compared between the control groups and the experimental groups. The tests for listening comprehension were part of the 3 department-made formative chapter tests and the end-of-semester summative written exam. On each test and on the final exam, student-participants in both the control and experimental groups listened to the same audio clip which the instructor played twice. The student-participants were then asked to answer five multiple choice listening comprehension questions. To determine if gender was a factor in the effect of listening strategy instruction on listening comprehension test scores, a separate analysis of test data was performed.

*The Metacognitive Awareness Listening Questionnaire (MALQ).* To answer the research question of whether the metacognitive awareness of learning strategies improved with the integration of listening strategy instruction, data was collected using pre post test scores. The MALQ is a 21 item questionnaire that asks students to rate their beliefs and perceptions of listening strategies using a 6-point Likert scale. The MALQ was given to all student-participants at the beginning and at the end of the 14-week semester.

#### Procedure

Prior to conducting any part of the present study, the researcher obtained the appropriate permissions from the university's Human Subject Review Board. This included obtaining the consent of all participants (instructors and students), the permission from the Provost, and permission from the Chairperson of Modern and Classical Languages.

*Both conditions.* First, random selection of four second-semester Spanish course sections was conducted. The random selection of course sections took place after course sections had been assigned to the nine instructors and student registration for the courses was complete. The researcher created nine envelopes, five contained blank sheets of paper, two contained information for the control groups, and two envelopes contained information for the experimental groups. These envelopes appeared identical from the outside. They were sealed and shuffled. The researcher then passed them out to the group of nine instructors. Of the nine potential participant-instructors, four were chosen based on the envelope they received.

On the first day of class, the researcher informed the students in each of the four sections of the present research study. Students were given the option to have their test data included or omitted from the study. The researcher was able to obtain a signed consent from 90 student-participants. However, during the drop-add period, there was an attrition of 10 student-participants.

At the end of the drop-add period, approximately 2 weeks after the start of the 14-week semester, the student-participants in each of the four sections were given the MALQ. The questionnaire was administered by the researcher. Each group received the same instructions for the questionnaire. There was no time limit. The researcher collected and stored the data for later analysis.

*Experimental condition.* During the first 2 weeks of the course, the researcher provided training to the two instructors in the experimental groups. The training focused on how to use the *Dímelo Tú* course materials to teach listening strategies. The training sessions included miniteaching demonstrations in which both instructors (Dave and Lori) were able to practice how they would present the material in their respective sections. It was determined that 20 minutes was sufficient time to teach and practice the strategies with the students. Since each chapter in the *Dímelo Tú* textbook contains two distinct listening activities, the instructors agreed to spend two 20-minute sessions per chapter on listening strategy instruction. The instructors also agreed not to share these specific listening skill instructional strategies with other instructors until after the study was completed.

Instruction of listening strategies with the two experimental groups took place over a 14week semester. The instructors followed the department-made syllabus with the exception of the implementation of listening strategy instruction. Department-made chapter tests were given to each section according to the syllabus. Each test contained a listening comprehension section where the students listened to a short audio clip in order to answer 5 multiple choice questions. The same type of listening activity was on the summative final exam. Instructors were advised not to alter these sections or the directions given to the students. On the last day of regular classes, the students in both experimental groups were asked to re-take the MALQ. As with the pre-treatment questionnaire, the researcher conducted the administration and data collection of the post-treatment questionnaire.

*Control condition.* The instructors in the two control groups (Mary and Karen) agreed to teach their second-semester Spanish courses as they had done in the past, without any implementation of listening strategy instruction. Unlike the instructors in the experimental groups, they did not receive any listening strategy instructional training at the beginning of the semester. Although the students in the two control groups had access to the same material in the textbook as the students in the two experimental groups, none of these activities were listed on the syllabus, nor were they covered during classroom instruction.

The control groups followed the same syllabus and were given identical departmentmade tests and final exam. The three tests and the final exam included identical listening comprehension sections as those given to the experimental groups. Instructors were advised not to alter these sections or the directions given to the students. Lastly, the MALQ was administered by the researcher to each control group at the beginning and at the end of the 14-week semester. *Reliability or Fidelity of Treatment* 

In previous studies for the effect of listening strategy instruction, the time allotted for instruction was a concern (Teichert, 1996). To ensure that each experimental group received equal instructional times, the researcher visited each of the experimental groups on the day that

listening strategy instruction took place. While the instructors did their best to adhere to the 20 minute allotment for listening strategy instruction, there were a three occasions where Dave needed an additional 1-4 minutes and two occasions were Lori needed an additional 5 minutes to complete the listening strategy activities. On one occasion, Lori finished the listening strategy activity in 17 minutes. These deviations were not considered significant by the researcher.

It was not possible for the researcher to attend each class session of the control groups. However, the researcher made eight unannounced visits to determine if these instructors had planned to implement listening strategy instruction. A fidelity checklist was used during the unannounced visits. At no time did the researcher find evidence of such instruction.

The researcher observed the administration of the listening sections of all 12 chapter tests (three tests to each of the four groups) and the four final exams. These sections of the exam were collected and corrected by the researcher. The sections were photocopied by the researcher. The copies were returned to the instructors and the originals were stored by the researcher in a secure location.

Lastly, the researcher administered the MALQ to all four sections after the first two weeks of classes and then on the last day of regular classes. Completed questionnaires were stored in a secure location. The scoring of the MALQ was conducted by the researcher after the final exam was administered at the end of the 14-week semester.

#### Scoring Procedures and Reliability of Scoring

The chapter tests were scored by the researcher using an answer key provided by the language department. The researcher listened to the audio clips in order to verify the answers on each one of the answer keys prior to their use. Test data were filed and stored at a secure location on campus by the researcher. The completed MALQ questionnaires were collected and stored at a secure location by the researcher. To prevent any preliminary biases, the researcher did not analyze the questionnaires until the semester was completed. The MALQ was scored by conducting an analysis of five factors: problem solving, planning and evaluation, mental translation, person knowledge, and directed attention.

Reliability of the test scores and the MALQ analysis was addressed by having both data sources reviewed by an additional scorer. The scorer re-scored 25% of the tests, 25% of the final exams, and 15% of the MALQ questionnaires.

## Data Analyses

The researcher used SPSS to perform standard descriptive statistics to determine the mean tests scores of both the control group and the experimental group. Graphing of the standard deviation showed that the variability of the test scores followed a normal distribution.

Inferential statistical procedures were chosen to compare the listening comprehension test scores of the two control groups and the two experimental groups. Because the distribution of variability among the test scores was normal, the researcher performed a t-test to determine if the differences in test scores were significant. To analyze the data on gender, an analysis of covariance was performed.

The results from the MALQ were analyzed using SPSS to perform a factor analysis for the five categories on the questionnaire.

# References

- Berne, J.E. (2004). Listening comprehension strategies: A review of the literature. *Foreign Language Annals*, 37 (4), 521-533.
- Rodríguez, F., Samaniego, F.A., Blommers, T.J., Lagunas-Solar, M., Ritzi-Maroug, V. (2006). *Dímelo Tú* (5<sup>th</sup> ed.). Boston: Thompson and Heinle.
- Teichert, H. U. (1996). A comparative study using illustrations, brainstorming, and questions as advanced organizers in intermediate college German conversation classes. *The Modern Language Journal*, 80, 509-517.
- Vandergrift, L. (2003). From prediction through reflection: Guiding students through the process of L2 listening. *Canadian Modern Language Review*, *59*, 425-440
- Vandergrift, L., Goh, C.M., Mareschal, C.J., & Tafaghodtari, M.H. (2006). The metacognitive awareness listening questionnaire: Development and Validation. *Language Learning*, 56 (3), 431-462.