THE EFFECTS OF SPEECH RATE ON SPANISH ORAL EXAM RESULTS

by

ARTHUR HERMAN WENDORF II

(Under the Direction of Margaret Lubbers Quesada)

ABSTRACT

This study examines the effects that speech rate has on the perception of communication, fluency, grammar, vocabulary and pronunciation in university undergraduate Spanish oral exams. First, speech samples were obtained from students of advanced undergraduate Spanish courses. Then, five ten-second selections were made from selected student samples, and these selections were accelerated by 15% and 30%. Copies of these modified and unmodified samples were then randomly presented to listeners who rated them on 5-point scales. The results indicate that speech rate does indeed significantly affect the perception of communication and fluency, and to a lesser degree, vocabulary and pronunciation. The perception of grammar was not affected by speech rate. Additionally, it was found that whether or not a student had studied Spanish in an immersion environment also significantly affected how they were perceived by the listeners, though the gender, position and nativeness of the listeners did not have a significant effect on the overall results.

INDEX WORDS: Communication, Fluency, Grammar, Vocabulary, Pronunciation, Spanish, Oral examinations, Speech Rate, Study Abroad, Immersion, Gender, Nativeness, Position, Second Language Acquisition, Language Testing, ACTFL Proficiency Guidelines

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ARTHUR HERMAN WENDORF II

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ARTHUR HERMAN WENDORF II

Major Professor:	Margaret Quesada
Committee:	L. Chad Howe Gary Baker

Electronic Version Approved:

Maureen Grasso
Dean of the Graduate School
The University of Georgia
May 2008

DEDICATION

This work is dedicated to my wife and children.

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Special thanks to my wife and children for their patience.

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CHAPTER 1

INTRODUCTION

1.1. The problem to be studied

Spanish second language acquisition pedagogy in the United States often involves some form of oral evaluation of the abilities of the students. Although these oral evaluations, or examinations, can be carried out using different formats, there are many that are based on the ACTFL Proficiency Guidelines (Briener-Sanders et al. 2000). Due to the fact that these guidelines are used in oral examinations throughout the country it is important that their validity be examined, and several studies have been performed with this end. One notable aspect of these guidelines is that they require the administrator of the examination to evaluate the speech of the student not as a whole, but as a product of five different and distinct language skills. These language skills are communication, fluency, grammar, pronunciation and vocabulary. To guide in the evaluation process, the guidelines provide lists of characteristics of these skills that are considered characteristic of speakers whose proficiency is superior, advanced, intermediate and novice. In order to facilitate their use, these characteristics can be listed on scales that range from superior to novice. Now, according to these scales the only skill that should be affected by speech rate is that of fluency. One of the goals of this work is to test the extent to which this restriction is observed by our participants, and the extent to which speech rate affects their perceptions of the communication, grammar, pronunciation and vocabulary skills in addition to the fluency skill. Additionally, the effects of the gender, teaching experience and nativeness of

the listeners, as well as the effects of the Spanish immersion experience of the listeners, will be observed. Therefore, the primary focus of this work is to examine something of the subjectivity of oral evaluations that are based on the ACTFL Proficiency Guidelines, and the results obtained from performing this study indicate that speech rate does play a significant role in the perception of all language skills other than grammar, and that whether or not a language learner had studied in an immersion environment can be correlated with the perception of all five language skills. There were, however, no significant differences between any of the listener groups.

1.2. Justification

By investigating potential subjectiveness in the ACTFL Proficiency Guidelines the present work follows the precedence established by other researchers, such as Salaberry (2000), who have taken issue with different aspects of the guidelines. Additionally, the present study builds on previous research, which will be cited in chapter 2, which has investigated various aspects of fluency and its relationship with second language acquisition. Although an acceptable definition of fluency has yet to be provided by such research, it has shown that fluency is an important factor in second language acquisition and in the perception of successful language acquisition. Additionally, research has shown that fluency can be significantly correlated with speech rate and that changes in fluency can affect the perception of comprehensibility and accentedness in non-native speech, which are aspects of speech that do not entail that speech rate be used to evaluate them. Given that issue has been taken with some of the aspects of oral evaluations based on the ACTFL proficiency guidelines, and that past research has shown that fluency can affect the perception of aspects of speech not directly related with it, it is proposed that research is needed to determine to what extent fluency may affect the objectivity of the

evaluation of the non-fluency language skills evaluated in oral evaluations that are based on the ACTFL Proficiency Guidelines. The present study will seek to do so by emulating methodologies piloted in other studies and by taking into account the potential confounding effects of sociolinguistic variables considered in other research.

1.3. Questions to be studied

As mentioned earlier, the primary question asked in this investigation is whether or not speech rate affects the perception of communication, grammar, pronunciation and vocabulary in addition to that of fluency, in Spanish oral exams that are based on the ACTFL proficiency guidelines. As fluency has been shown to affect the perception of elements of speech that are arguably independent from it, such as accentedness, it was hypothesized that increasing the rate of speech, as a measure of fluency, of non-native Spanish speakers would be positively correlated with improved perceptions of the other four aspects of their speech evaluated by the ACTFL Proficiency Guidelines. The next question that is investigates is the extent to which having studied in a Spanish immersion program can be correlated with better perceptions of the five language skills. It is hypothesized that those students who did study in an immersion environment would be perceived as more effective users of all five language skills. Finally, the last question asked was to what extent three sociolinguistic characteristics of the listeners would affect their perception of the speakers' speech samples. For the first two of these characteristics, the present study sought to compare the perceptions of males with females, and of graduate student instructors with university faculty. It was hypothesized that male listeners would rate the speakers more severely than would the female listeners and that graduate students, as the more inexperienced instructors of Spanish, would rate the speakers more positively than would the

more experienced faculty listeners because similar results had been documented by Earline (1992). For the third sociolinguistic variable the perceptions of native Spanish speakers were compared with those of non-native Spanish speakers. In this case it was hypothesized that there would be no statistically significant difference between the results, in accordance with the findings documented by Kormos and Dénes (2004).

1.4. Methodology

In order to answer these questions, undergraduate students of upper level university Spanish courses at the University of Georgia were recruited to provide speech samples by telling a story depicted by a series of drawings. Each speech sample of the twelve speakers who scored within one standard deviation of the overall speaker average on a grammar and vocabulary test then had five ten-second segments extracted from them. These segments were accelerated electronically using Praat by 15% and 30%. The listeners were then asked to listen to randomly organized modified and unmodified speech samples and rate them for either communication, fluency, grammar, pronunciation or vocabulary. After listeners had finished rating all of the speech samples, comparisons were made between the ratings given the speech samples at the normal speech rate, the 15% accelerated speech rate and the 30% accelerated speech rate. The results confirmed that on average speech rate did significantly affect the perception of all of the language skills, with the exception of grammar. Moreover, whether or not a speaker had participated in a Spanish immersion program was found to be significantly correlated with the perception of all five language skills. However, contrary to what was expected, there was no correlation between the position of the listener and their perception of the language skill, and gender was only found to correlate with the perception of fluency, and in this case males were

unexpectedly found to be the group of participants who perceived the listeners more favorably. Finally, as expected, there was no difference found between the perceptions of native and non-native listeners.

1.5. Structure of thesis

The structure of the rest of the thesis is as follows:

Chapter 2 will focus exclusively on reviewing the pertinent literature that has both inspired and guided the present study. First literature about studies in fluency will be examined. Next a review of literature which investigates the effects of fluency on the perception of nonnative speaker speech will be made. Finally the literature relating to oral testing in second language acquisition will be reviewed briefly.

Chapter 3 will present the methodology employed in this study. First attention will be given to the methods employed in recruiting and selecting participants for the study. Then a detailed explanation will be provided of the various instruments used in the data elicitation and examination. Finally, the method for analyzing the data will be presented.

Chapter 4 presents the results obtained and discusses their significance. First the overall results of the effects of speech rate will be examined. Next the results according to the different language skills will be presented. Finally, the results of the investigation of the effects of the sociolinguistic aspects of the participants will be examined.

Chapter 5 will summarize these findings and discuss their significance. The nature of fluency and its relevance in Spanish oral examinations will be discussed. Finally, potential avenues for future research will be proposed.

CHAPTER 2

LITERATURE REVIEW

2.1. Introduction

This review will cover three main topics that have already been treated to varying degrees in the relevant literature. First, studies in fluency itself will be discussed. This discussion will include the importance of studying fluency, the general methodologies involved in such studies, the different components of fluency, the factors that affect the acquisition of fluency, and the factors that can affect fluency itself. Secondly, a review will be made of the research that has investigated the effects of fluency on the perception of non-native speaker (NNS) speech. The material covered in this section will include discussions about why such research is important, how such research has been carried out, including detailed discussions about the speakers, listeners, speech samples and the evaluation of speech samples in such research, and the results of said research. Finally, a brief review of some of the relevant research relating to oral testing in second language acquisition (SLA) will be made. This final section will include discussions about the purpose of such testing and current issues that relate such testing with the present study. After this final section, some concluding remarks will be made about how all of this literature ties together to indicate the need for a study such as the present one.

2.2. Fluency

2.2.1. Why Study Fluency?

The obvious first question that must be asked is: why should fluency and its relationship with SLA be studied? To answer this question we need to consider the fact that it is a commonly accepted belief that the attainment of fluency is the principle objective of all serious students of a second language (Kormos and Dénes 2004). However, in spite of its importance to SLA, there exists no general consensus about what fluency is (Chambers 1997). Testament of this lack of general consensus is the fact that not even language teachers, who are those primarily concerned with helping language learners acquire fluency, seem to be able to agree on what fluency is or how to detect its presence (Chambers 1997). This discord is largely due to the fact that too little is known about what fluency is to even permit its effective teaching in the L2 classroom (Hieke 1985). Lack of appropriate instruction then leads to fairly common "mild to massive failures in the acquisition of fluency" which can resist correction after even prolonged exposure to the target language (Hieke 1985). These failures in the acquisition of native-like fluency in an L2 are easily and commonly noted as the tendency for L2 students who can fluently speak their first language (L1) to speak much more slowly in the L2 (Munro and Derwing 2001). Therefore, one important reason for the study of fluency is that we need to know what it is so that we can help our students fully develop it in their L2 speech (Chambers 1997). This is especially important for L2 students since fluency already plays such an important part of L2 oral evaluations (Hieke 1985; Kormos and Dénes 2004). Additionally, the presence of fluency as a major component of L2 oral exams, in spite of not being fully understood, is a direct result of the fact that L2 speakers will inevitably be judged by native speakers on the basis of their fluency (Riggenbach 1991). Furthermore, it has been shown that it is not only the perception of an L2 speaker's

fluency that is affected by their fluency, but that the perceptions of both their accentedness and comprehensibility, which are considered to be independent of fluency, can also be affected (Trofimovich and Baker 2006). Indeed, it has been proposed that the mastery of suprasegmentals that affect fluency may be more important than that of segmentals for nativelike L2 speech (Trofimovich and Baker 2006). To conclude, it is important to study fluency and its relationship with SLA because it is important for L2 learners both inside and outside of the classroom, and there is no accord about what it really is. Kormos and Dénes (2004) have proposed that this lack of accord is a direct result of a lack of studies about fluency, and the remedy is, therefore, more studies on fluency and its relationship to SLA.

2.2.2. How is Fluency Studied?

The next question that should be asked is: how can fluency and its relationship to SLA be studied? The answer to this question is somewhat more difficult to come by. This is due to the fact that in order to study fluency some general guidelines for identifying the presence or absence of fluency in L2 speech must be established without having a clear definition of what fluency is. Nevertheless, there is a method for carrying out such a study, and it is to have professionals, usually educators, identify L2 speech that they consider to be highly fluent and L2 speech that they consider to be highly disfluent, eliminate the evaluations of any of these judges who evaluate any speech samples significantly differently than the other judges, and then to compare and contrast the two respective groups of speech in search of features that strongly correlate with the judgments made about them (Chambers 1997; Riggenbach 1991). This method, however, is time consuming and the results are highly dependent on the particular aspects of the speakers' speech that the investigators have chosen to examine since no study can

examine all possible aspects of speech. Nevertheless, such studies provide valuable information about what factors can contribute to the perception of fluency in L2 speech. When studying the relationship between SLA and fluency, however, a somewhat different approach is needed. In this case, trained judges still evaluate the L2 speech of students for fluency, but the results are not necessarily analyzed for the specific linguistic components of the speech that can be correlated with the listeners' judgments. Instead, the actual contexts in which acquisition took place for each of the speakers are compared and the results therefore indicate what learning contexts are the most conducive to the acquisition of fluency in an L2. Among such studies are those that compare the fluency results for language learners who had, and had not, studied the target language (TL) in a study abroad context. Invariably these studies have been performed with the hypothesis that the fluency of students who had studied the TL in immersion environments would be perceived more positively than would their peers, which hypothesis was confirmed (Lennon 408-409; Segalowitz and Freed 175; Trofimovich and Baker 5).

2.2.3. What is Fluency?

Given the fact that it is known how to study the nature of fluency and the fact that such studies have been carried out, the questions that arise next are: what components of speech have been found to correlate with fluency and why has a satisfactory definition of fluency not yet been offered (Hieke 1985)? To answer the first question, it should first be pointed out that there is a difference between the way that linguists conceive of fluency and the way that most other people do. In the former case, fluency is generally accepted to be those aspects of speech production which are related both to temporal and smoothness aspects of language (Bell 2003; Chambers 1997; Kormos and Dénes 2004; Lennon 1990; Segalowitz and Freed 2004), while in the latter

case fluency is usually considered to have a more broad definition, which can generally be equated with overall oral proficiency (Lennon 1990; Chambers 1997). Thus, the components which linguists identify as correlating with the perception of fluency are generally those which best correlate with the actual speed and effortlessness, indicated by such things as the lack of pauses, corrections and hesitations, of speech production (Chambers 1997), and the variables found to correlate in this way will be the topic of the rest of this section.

One of the quantifiable variables of speech production that correlates remarkably well with both the perception of the speed of oral production and with fluency is that of the quantifiable measurement of speech rate (Bell 2003; Chambers 1997; Hieke 1985; Kormos and Dénes 2004; Lennon 1990; Riggenbach 1991; Towell 2002; Towell et al. 1996; Trofimovich and Baker 2006). Nevertheless, there is some discord related to the best methodology to employ in the measurement of speech rate. While some investigators maintain that the best method for determining speech rate is to calculate the words uttered per second (Bell 2003), the vast majority of researchers have opted instead to employ the more current method of measuring speech rate in terms of syllables per second (Chamber 1997; Hieke 1985), especially since some problems have been found with the use of the unit of words per second (Hieke 1985). Deciding how to calculate the speech rate of speech samples is important in such studies, because it is necessary in order to compare the ratings given to different speakers or speech samples. The present study, however, avoids this question altogether by simply not comparing ratings between different speakers or speech samples, but rather between speech samples and their electronically modified duplicates. Other temporal phenomena such as the proportion of time spent speaking, known as phonation time ratio, and the mean length of runs, or segments of uninterrupted speech, have also been positively correlated with the perception of fluency (Kormos and Dénes

2004; Towell 2002; Towell et al. 1996), but the results with these latter variables have been less consistent and dramatic than those relating speech rate to fluency. Chambers has also shown that the ability to use "automatised chunks or clusters of words combined with newly assembled strings of words", which permit the speaker more time while speaking to plan what they will say, is significantly correlated with fluency scores (1997: 542). Finally, several researchers have found that knowledge and skill, specifically when they are translated into automatic production, in any and all linguistic areas, such as lexicon, morphology and syntax, are significantly correlated with fluency (Chambers 1997; Kormos and Dénes 2004; Lennon 1990; Munro and Derwing 2001).

Also less consistent and less dramatic have been the results correlating the effortlessness of speech production with the perception of fluency. Among those quantifiable variables in this category that have been significantly correlated with fluency are the frequency, location and duration of filled and unfilled pauses (Chambers 1997; Hieke 1985; Kormos and Dénes 2004; Lennon 1990; Riggenbach 1991; Towell 2002; Towell et al. 1996; Trofimovich and Baker 2006), the frequency, function and type of repair (Hieke 1985; Lennon 1990; Riggenbach 1991), and the length and complexity of speech segments (Chambers 1997; Riggenbach 1991; Towell 2002; Towell et al. 1996; Trofimovich and Baker 2006). Nevertheless, there is much less accord about how to measure these phenomena, and results have been more mixed than those provided by the temporal variables, especially speech rate. Therefore, it is advisable that any study that is going to investigate fluency, or the interaction of fluency with other speech phenomena, should at least include speech rate as one of the variables used to determine fluency since fluency has been found to more strongly and consistently correlate with speech rate than with any other variable studied thus far, thus arguably making speech rate one of the most important factors in

the perception of fluency (Bell 2003; Hieke 1985). The present study, therefore, manipulated only speech rate when seeking to modify fluency, but asked the listeners to rate fluency according to the Likert scales provided them that were based on the criteria provided by the ACTFL Proficiency Guidelines. In the final chapter, though, some discussion on the nature of fluency will be presented.

2.2.4. What Factors affect the Acquisition of Fluency?

Identifying the factors that have been found to affect SLA is useful because it allows those investigating fluency in a second language to differentiate between groups of participants based on factors known to affect SLA and thus avoid the effects of these factors on the their results for fluency. The factor that has been found to correlate most strongly and consistently with the acquisition of fluency has been that of the age at which acquisition begins, with those learners who began at the earliest possible age being the most fluent (Birdsong and Molis 2001; Flege et al. 1995; Guion et al. 2000; Long 1990; Trofimovich and Baker 2006). This factor, though not of much use in SLA itself, is important to take into consideration when grouping participants for comparison. Gender is another factor that should be taken into consideration as it has been found that women tend to be more fluent than men (Flege et al. 1995). However, like age of acquisition, this variable is more difficult to manipulate. The next variable that affects the acquisition of fluency in a significant way, however, can be more easily manipulated to suit the purposes of SLA. This variable is that of the context in which acquisition occurs (Segalowitz and Freed 2004). In this regard it has been found that those students who study in an immersion environment tend to acquire fluency better than those students who study in a more traditional, non-immersion, environment. Thus, the best way to aid the acquisition of fluency in SLA is for

learners to begin to study the L2 as early as possible, and in as much of an immersion setting as possible, and these factors also need to be taken into consideration when conducting research on fluency.

2.2.5. What Factors can affect Fluency?

Context also needs to be taken into consideration during the production speech when that speech's fluency is being examined. Notable in this regard is the fact that even native speakers of a language tend to speak with less fluency when they are in a context in which they are either speaking about an unfamiliar subject or being monitored and having their speech evaluated, or both (Richards and Schmidt 1983). Given that contextual factors can affect the fluency of native speaker speech, it seems likely that context will play a similar, if not more exaggerated, role in the fluency of the speech of non-native speakers, and this, as it turns out, is indeed the case. As in the case of native speakers, the type of production task has also been shown to affect the fluency of L2 learners, with said learners producing more fluent speech the more comfortable they are with the context in which they are speaking and the more interested they are in the given topic (Doughty and Long 2000; Towell 2002). Additionally, it is important to note that speakers tend to produce more fluent speech when they are participating in a dialogue rather than a monologue (Bell 2003), though, in this case, the fluency of a speaker also tends to match that of their interlocutor (Giles and Smith 1979). Finally, it has been found that having more planning time before speaking is positively correlated with fluency in L2 speech (Ortega 1999; Mehnert 1998). These findings firmly establish that it is important to take into consideration the context in which a speech sample is produced when evaluating the fluency of the speaker, and that all speakers that are being compared should produce their speech in the same context. For the

present study, speakers were given one minute of preparation time and produced their speech as a monologue, as the use of dialogues would have potentially involved overlapping of the speech of the two interlocutors.

2.3. The Effects of Fluency on the Perception of NNS Speech

2.3.1. Why Study the Effects of Fluency on the Perception of NNS Speech?

Perhaps the best argument that can be made in favor of studying the effects of fluency on the perception of non-native speaker (NNS) speech is that the specific effects that fluency has on the perceptions of many different individual aspects of speech are, as yet, unknown (Munro and Derwing 2001; Schmidt et al. 1998), but fluency, in the guise of speech rate (SR), has been shown to be a reliable index of overall oral proficiency (Munro and Derwing 1998). This is true because, although certain aspects of speech are considered important to SLA (Munro and Derwing 1998), including its comprehensibility, the perception of the difficulty involved in understanding a particular L2 speaker, and accentedness, the extent to which an L2 speaker's speech is perceived to differ from native speaker norms, there is a lack of studies that correlate fluency measurements with such perceptions (Munro and Derwing 1998). Therefore, it is important that studies that compare the fluency of L2 speech samples with the perceptions of its various features be carried out (Munro and Derwing 2001).

2.3.2. How are the Effects of Fluency on the Perception of NNS Speech Studied?

2.3.2.1. Speakers

The first methodological decision to be made in studies that investigate the influence of fluency in the perception of NNS speech is that of deciding who will be the NNSs whose speech

will be examined. In this regard, Munro and Derwing decided to study NNSs of English studying English in an immersion environment in Canada in both of their studies (1998; 2001), while Kormos and Dénes, in contrast, studied learners of English in a non-immersion, or traditional study at home, setting (2004). Earline, on the other hand, did not specify what type of setting her speakers were in (1992). In spite of these differences with regards to the context in which the speakers were studying the target language, one common feature among all of these studies was that all of the speakers were young adult students of the TL whose numbers were fairly well balanced between males and females (Earline 1992; Kormos and Dénes 2004; Munro and Derwing 1998; Munro and Derwing 2001). The present study will also use learners from this age group, but as male volunteers were hard to come by, only female speakers will be examined. Finally, since studying both language learners who have studied in an immersion environment and those who have not done so have their merits, the present study will compare the results obtained from speakers from both of these groups.

2.3.2.2. Listeners

In all of the studies examined, for the other group of participants, that of the listeners or judges, the principle defining characteristic has been their expertise in judging L2 speech. With respect to this issue, Munro and Derwing (1998; 2001) have chosen to use students recruited from different university classes who are native speakers of the TL and who are inexperienced judges of language with little to no experience with the students' L1s. At the other end of the spectrum are the investigations by Earline (1992) and Kormos and Dénes (2004) that used teachers or professors of the TL, both native and non-native, who were extremely experienced judges of the given L2. Munro and Derwing defend their methodology by arguing that, in the

end, it is the perception of L2 speech by inexperienced native speakers of the TL that is the most relevant to real-life use of the TL by the speakers (1998). Kormos and Dénes argue, on the other hand, that it is language instructors who have to assess this aspect of speech production in the classroom and that therefore it is their perceptions that are the most applicable to the language learners (2004). Since both of these arguments are equally defensible, it is important that each investigator select the type of listener that is most appropriate for the purposes of their study, and this decision therefore will depend directly on the types of research questions asked. Since the present study seeks to investigate somewhat the validity of the ACTFL Proficiency Guidelines, and these are only employed by language instructors, it is only language instructors that will be examined in the present study. However, comparisons will be made between graduate student instructors, who have less experience judging language proficiency, and university faculty who have more experience in that field.

2.3.2.3. Speech Samples

The next methodological decision that must be made is that of how to elicit the speech samples from the speakers, and how to present these samples to the listeners. There is a great deal more variety found in the methodological decisions made in this regard than in regards to the characteristics of the speakers and listeners. Yet, all of the possible methods of eliciting speech samples can be organized along a continuum of naturalness of speech sampled. Such an ordering, from least natural to most natural speech, is as follows: the reading of a short narrative after practice (Munro and Derwing 1998), the reading of sentences after practice (Munro and Derwing 2001), the reading of scripts containing blanks which the speakers had filled in prior to recording (Earline 1992), and the telling of a humorous story as depicted in a set of cartoons

(Kormos and Dénes 2004). This wide range of possibilities is partially a result of the two conflicting needs of such studies to test natural speech, and to test speech samples that are comparable. A potential resolution for this dilemma, however, was piloted by Munro and Derwing who used computers to create digitally accelerated and decelerated copies of speech samples while keeping all other aspects of speech, such as pitch, unchanged (1998; 2001). By doing so, they were able to compare perceptions of speech samples that were identical in every way other than speech rate. By doing so, they were able to factor out all possible confounding effects of differences between speech samples because the only differences between the samples that they were comparing was the speech rates. This methodology therefore eliminated the need of having speech samples that are lexically, syntactically, phonetically or semantically identical. This new technique thus allows researchers to test exclusively for the effects of fluency, in the guise of speech rate, on the perceptions of any aspects of speech, including communication, fluency, grammar, pronunciation and vocabulary.

2.3.2.4. Evaluation of Speech Samples

The most important methodological decision to be made, however, is that of deciding which questions listeners will respond to regarding the speech samples they are listening to. As with the previous decisions, this decision should be based on the purposes of the study. In spite of this dependence on the goals of the study, however, there has been a surprising uniformity in the manner in which the listeners in previous studies have been asked to evaluate the speech samples, and even, though to a lesser degree, in the variety of aspects of language that they are asked to judge. With regards to the former, every study reviewed herein has asked the listeners to record their perceptions on open-ended 5-, 6- or 9-point Likert scales (Earline 1992; Kormos

and Dénes 2004; Munro and Derwing 1998; Munro and Derwing 2001). With regards to the aspect of language that the listeners are asked to judge, in these studies they have either been asked to judge the fluency of the speech samples themselves (Kormos and Dénes 2004; Munro and Derwing 1998), or to judge the comprehensibility and the accentedness of the speech samples (Earline 1992; Munro and Derwing 1998; Munro and Derwing 2001). Because the use of these scales has been found to provide pertinent information regarding judgments of fluency, the present study will employ a similar scale. However, with regards to the aspects of language that the listeners are asked to judge, it is proposed that in addition to the perception of fluency, and in place of the perception of comprehensibility and accentedness, the perception of communication, grammar, pronunciation and vocabulary will be evaluated in the present study.

2.3.3. Results

With regards to the judgments about fluency, it was universally found that speech rate was a very good predictor of fluency ratings by listeners (Earline 1992; Kormos and Dénes 2004; Munro and Derwing 2001). In the studies that investigated the effects of fluency on the perception of comprehensibility and accentedness, it was found that faster or increased speech rate, and therefore it was argued better fluency, was significantly correlated with greater comprehensibility and lower accentedness scores (Munro and Derwing 1998; Munro and Derwing 2001). It was also found that there was no significant difference between the ratings of native and non-native judges (Kormos and Dénes 2004), and that females and experienced judges of language tended to rate NNS more harshly than males and inexperienced judges of language respectively (Earline 1992). These results indicate that fluency can indeed exercise great influence on the perception of aspects of speech that would not seem to be directly related

to it, such as the perception of comprehensibility and accentedness, and that it is important to take the characteristics of the listener-judges into consideration since females and experienced judges have been found to rate speakers more harshly than males and inexperienced judges have.

2.4. Oral Testing in SLA

Oral exams are important not only in their purpose to test learners' functional competency after having taken a given class (Breiner-Sanders et al. 2000), but also in their ever-increasing function as a portion of the entrance and exit requirements for foreign language university programs (Lee 2000). Because these oral exams are generally intended to test not only for fluency, but also for grammatical accuracy, communication, lexical variety and pronunciation in a naturalistic setting (Breiner-Sanders et al. 2000; Kormos and Dénes 2004), and they rely heavily on the perception of these aspects by both relatively experienced and inexperienced judges, it would seem important to determine to what extent judgments in each of these categories can be influenced by increasing or diminishing the speaker's rate of speech (Salaberry 2000).

2.5. Conclusion

As has been demonstrated by the foregoing material in this chapter, there exists a substantial amount of prior research that is relevant to the present study. However there has, as yet, been no study conducted to determine the effects of fluency on the different aspects of speech specifically examined in Spanish oral exams, and this is what the present study will do. Particularly foundational for this study are those studies that have investigated fluency and its effects on the perceptions of different aspects of speech. As has been shown, it is important to

study fluency both because it is little understood, and because it has been shown to have great relevance in SLA. The present investigation, therefore, studies fluency by providing more information about how fluency affects the perception of grammar, vocabulary, pronunciation and communication in L2 speech. As it has been shown that fluency can be reliably represented solely by speech rate in studies such as the present one, this is the methodology that is employed herein. The research analyzed in the present chapter also indicated that context and age of initial exposure are important factors that influence the acquisition of fluency and that the nature of the oral task and the context in which it is performed can greatly influence the fluency of oral production, and therefore these factors will be kept constant for all of the participants in the present study. Finally, this chapter has also reviewed the previous research that has attempted, as does the present study, to evaluate the effects of fluency on the perception of different aspects of NNS speech. This type of research is important because it provides more information on how listeners are affected by fluency in their judgments of aspects of speech production that are not directly related to fluency itself. In order to perform such studies so that their results are applicable to as many university students as possible, it has been argued that it is best to use both speakers who have and have not had experience studying the TL in an immersion environment, to use listeners who are teachers of the TL and therefore also experienced judges of NNS speech in the TL, and to use speech samples which are elicited with the use of cartoons, which allow the students to be creative but still to be restricted to the use of similar lexical items and grammatical structures, and to present the speech samples thus derived, and digitally modified copies of the same, to the listeners to rate for grammar, vocabulary, fluency, pronunciation and communication on open-ended Likert scales. By so doing, this study will provide reliable and comparable results correlating fluency with the other four factors of speech production.

CHAPTER 3

METHODOLOGY

3.1. Introduction

The purpose of this study is twofold. First, it attempts to determine if changes in speech rate affect the perception of all five of the language skills evaluated in Spanish oral exams that are formatted based on the ACTFL proficiency guidelines. It is hypothesized that increases in speech rate will be positively correlated with improved ratings given by the listeners for all of the language skills. Secondly, it examines the effects of four sociolinguistic variables on the oral exam results. The first of these variables is that of the immersion experience of the language learners, distinguishing learners who had experience studying Spanish in an immersion environment from those who had no such experience. It is hypothesized that language learners who participated in immersion programs will be rated more favorably than will their counterparts. The next three sociolinguistic variables were used to differentiate between different types of listeners. Males were differentiated from females, graduate students were differentiated from faculty, and native speakers of Spanish were differentiated from non-native speakers. It is hypothesized that males and the relatively inexperienced graduate students will rate the speakers more favorably than females and faculty members respectively. Also, it is hypothesized that there will be no difference between the ratings given by the native and non-native judges. In order to test these hypotheses, both language learners and language instructors needed to be recruited who filled the necessary criteria, and several different instruments needed

to be used to collect, present and analyze the data. The purpose of this chapter, then, is to present the methodology employed in the present study to test the aforementioned hypotheses. This will be done by first presenting the methodologies used in the recruitment and the selection of the two groups of participants: the language learners and the listeners, and then by presenting and discussing the various instruments used in the collection, presentation and subsequent analysis of the data.

3.2. Participants

3.2.1. Language learners

All of the language learners were recruited exclusively from the Department of Romance Language at the University of Georgia. This department, which is one of the largest departments at the university, provides instruction in several Romance languages, including Spanish. The Spanish program for the department has undergraduate courses divided into beginner, intermediate and advanced courses, with the advanced courses usually only being taken by those undergraduate students who are studying Spanish as either their major or minor. In addition to providing these types of courses at the campus located in Athens, GA, the department sponsors, both independently from and collaboratively with other departments, several study abroad programs which have as one of their objectives the providing opportunities for students to study Spanish in immersion environments. These study abroad programs are quite large and well attended at the university, and consequently a large percentage of the undergraduates that are in upper-level Spanish courses have participated in Spanish immersion programs. Because one of the purposes of the present study was to compare test results between undergraduate students who had and had not studied in Spanish immersion environments, recruitment was done from

among all of the undergraduate students of upper-level Spanish courses. Recruitment of language learners was done by emailing a recruitment letter to all of the instructors of the upper-level Spanish courses and asking those instructors to forward the letter on to their students. No attempt was made at this point to control for the individual characteristics of the language learners who participated. The recruitment letter explained that an investigation into the validity of a certain type of Spanish oral exam was being performed and that volunteers were needed to participate in the study. The letter also asked that any interested persons contact the investigator via email to set up a time to participate. All of the 25 students who volunteered to participate in the study were allowed to participate as outlined in 3.3. Nevertheless, after all of the 25 volunteers had participated, it was decided that, as only four of the participants were male, only speech samples from female language learners would be presented to the listeners in the main body of the experiment. Speech samples from the male participants were therefore only presented to the listeners in the practice portion of the experiment. Additionally, in order to reduce listener fatigue, it was determined that it would be better to reduce the number of tokens presented to the listeners by using fewer than the remaining 21 language learners. Therefore, the results from a grammar and vocabulary test (see 3.3.2 below) were compared for the female language learners, and those participants whose scores did not fall within one standard deviation of the average female score were discarded. By following this procedure, the number of language learners whose speech samples were presented to the listeners was reduced to 12 female speakers. As this core group of speakers was composed of all female speakers with comparable grammar and vocabulary scores, it was determined that they would be sufficiently similar so as to allow for comparability between their oral exam results. Results from a questionnaire filled out by each of these 12 language learners indicated that seven of them had

never studied in a Spanish immersion environment and five of them had done so. Therefore these 12 language learners were able to be fairly evenly divided according to their immersion experience, which would allow for greater comparability.

3.2.2. Listeners

The listening participants were recruited from among those employed to teach Spanish courses by the Department of Romance Languages at the University of Georgia. Recruitment of these participants was carried out by sending a personalized email to each teaching assistant, instructor, lecturer, and professor at the Department of Romance Languages whose language focus, according to the department's website, was that of Spanish. These personalized emails explained that a study was being performed on the validity of a specific format of Spanish oral exam, and that their participation would be greatly appreciated. Additionally, the email asked the recipients who were interested to reply via return email with the dates and times that they would prefer to participate in the study. Using this method, a total of 39 listeners were recruited from among the faculty and the graduate student instructors of the department. Of the listeners, 19 were graduate student instructors, while 20 were faculty members. Of the graduate student instructors, eleven were female and eight were male, while nine of the faculty participants were female and eleven were male. Also, of the graduate student instructors, thirteen were nonnative Spanish speakers and six were native Spanish speakers, while of the faculty, only nine were nonnative Spanish speakers and eleven were native Spanish speakers. These participants were deemed to be fairly equally divided between faculty (20) and graduate student instructors (19), males (19) and females (20), and native (17) and nonnative (22) Spanish speakers because there were at least three listeners in each cell (see Appendix F). Additionally, since all of the listening

participants reported having experience administering Spanish oral exams, and there was a significant difference between the faculty members' average of 4.975 years experience and the students' average of 1.3667 years experience ($T(59) = -4.714$, $p < 0.001$), it was deemed that this group of participants was acceptable for the goals of this study and therefore all of data collected from all of the listeners was used in the final analyses.

3.3. Instruments

3.3.1. Language learner questionnaire

The first thing that language learners were asked to do, apart from signing the IRB consent form, was to fill out a brief questionnaire (see Appendix A). This questionnaire asked the participants to provide information about their gender, age, Spanish immersion experience, and the previous and current number of upper-level Spanish courses taken. Although age information and information about the number of upper-level courses was eventually disregarded as not pertinent to the study, the information about gender was used to remove male participants from the sample, and the information about Spanish immersion experience was used to differentiate between language learners when data analysis was performed. In order to be able to identify which questionnaire went with which grammar and vocabulary test scores and with which speech recordings, each language learner was given a randomly generated three digit code, and all three of these items for each speaker were identified using this code.

3.3.2. Grammar and vocabulary test

After students had completed the questionnaire, they were asked to log on to their university WebCT account, which is an e-learning environment. When in their personal account,

they were asked to enter a new page which had been made available to them and which contained a grammar and vocabulary test. This grammar and vocabulary test was taken from a recent edition of the intermediate Diploma de Español como Lengua Extranjera (DELE) test (see Appendix E). The DELE is a standardized test administered by Spain's Ministry of Education, Culture and Sport to nonnative learners of Spanish as an L2 for accreditation in a determined degree of fluency (DELE, 2007). The intermediate level of this test was used due to the fact that a pilot study performed by the investigator had indicated that it would be the most appropriate for testing upper-level non-native students of Spanish. Only the grammar and vocabulary sections of the test were used as they were the only sections that could be administered using strictly multiple choice questions and would thus be the only sections that could be consistently scored by a computer. The questions and answers were input into a quiz on WebCT which allowed the participants 30 minutes to answer the 60 questions, though the participants in fact only took an average of 23.8 minutes to complete it. WebCT then automatically scored each test and the results were copied to an Excel spreadsheet for comparison and analysis. The average DELE score for all female participants was 35 out of 60 questions answered correctly, with a standard deviation of 5.22. Therefore, only the data from female language learners who scored between a 31 and 40, inclusively, was presented to the listeners. This process of elimination resulted in the data of 12 female language learners being presented to the listeners.

3.3.3. Recording of the language learners

After taking the grammar and vocabulary portion of the DELE test, the language learners were recorded in the Language Resource Center at the University of Georgia. Participants were recorded in a sound-attenuated space with high-quality digital recording hardware and software.

The elicitation technique followed Bell (2003), who used the same picture story used in the present study (see Appendix B). Language learners were given one minute to look over the story and ask for clarification of any vocabulary items. Then they were asked to tell the story in Spanish into the microphone while still having the picture story in front of them. As they spoke they were digitally recorded on the computer using the recording program known as Audacity. The average length of each of the twelve key participants' recordings was 1 minute and 32 seconds. Since variations on this particular method for eliciting oral samples has been used successfully in similar studies in addition to that of Bell (Derwing & Munro 1997; Kormos 2004; Munro & Derwing 1995; Riazantseva 2001) it was considered to be an appropriate methodology to employ for the present study. After being recorded, the language learners were debriefed about the true purpose of the experiment, given a chance to have any questions answered, and as their participation was no longer needed they were excused. In the end, each language learner participated in the study for approximately 40 minutes.

3.3.4. Listener questionnaire

When they began their participation, the listeners were told that they would be participating in a study of the validity of a specific type of Spanish oral exam. As with the language learners, no reference was made to speech rate at this point in their participation. After the listeners signed the IRB consent form, they were asked to fill out the questionnaire shown in Appendix C, which asked them for their gender and age, whether or not they had hearing difficulties, what their current position at the University of Georgia was, their level of Spanish proficiency, and how much experience they had had in administering and evaluating different kinds of Spanish oral examinations. Each questionnaire was then tagged with a randomly

generated four-digit number and this same number was also used to identify the results of their evaluations of the speech samples during the next stage of their participation. Although the age information and the information about specific amounts of experience in administering different types of Spanish oral examinations was eventually disregarded, the information about the gender, university position, and fluency of the listeners was used to compare between different groups of listeners in search of patterns of variation when the data was being analyzed.

3.3.5. E-Prime

After the listeners had completed filling out the questionnaire, they sat down in front of an individual computer console and asked to follow the directions provided them on the screen for the remainder of the experiment. Each of these computers was running a pre-prepared E-Prime program. This program guided the listeners through rating speech samples in six different blocks. Each block began with a set of instructions which informed the listener that they would hear 36, or eight in the case of the practice block, ten-second speech samples presented in a random order, and that they would be tasked with rating each speech sample according to the scale provided for that block, which scale was displayed on the instruction screen and also appeared on their screen while they were listening to and rating each speech segment. After they had read and acknowledged the instructions by pressing the space bar, the block would begin, and would continue until they had finished rating each of the speech segments for that block, at which point the instructions for the next block would appear. The six blocks were presented to each listener in the same order, namely: Practice Block, Communication Block, Grammar Block, Fluency Block, Vocabulary Block and finally Pronunciation Block. Since there was no attempt in the present study to compare results between blocks, it was determined that presenting the

blocks in a fixed order would help ensure that all of the listeners would have had the same amount of experience with the experiment with each block. With the exception of the Practice Block, in each block the listener was exposed to 36 randomly organized seven to ten second speech segments. These speech segments were taken from the speech samples of the speakers who had been selected as indicated in 3.2.1. The speech samples from these twelve language learners had five ten-second segments selected from each of them, which were saved as independent WAV files using Audacity under names that included the numerical code for the language learner who had produced the sample and another number indicating whether the speech sample was the first, second, third, fourth or fifth one taken from the original speech sample. The selection of these speech segments was made by the researcher using only the criterion that each segment begin with a complete clause. As no comparisons were being made between the results given to different speakers according to their individual speech rates, speech rate was not calculated nor taken into account in the selection of speech samples. These speech samples were then normalized for their average intensity using Praat. Finally, Praat was again used to make two digitally modified copies of each ten-second speech segment. The first of these modified copies had a speech rate that was 15% faster than the original, and the second modified copy had a speech rate that was 30% faster than the original, while all other factors, such as pitch and segmental features, were kept constant. Each speech sample was tagged for its speech rate as it was created. Finally, the modified speech samples were checked to make sure that they did not sound unnatural, before they were transferred into the E-Prime program. The first ten-second segment of speech that was taken from each language learner's speech sample, along with its two modified copies, was presented to the listeners in the Communication Block. In this block they were asked to decide whether the speaker had either communicated with ease,

handled topics adequately, handled topics minimally, not communicated some parts of the message, or not communicated by pressing either 1, 2, 3, 4 or 5 respectively on the computer's keyboard. These rating criteria, along with those of all of the subsequent blocks, were simplified versions of the criteria used on the ACTFL Proficiency Guidelines and the oral exam rubric provided by the Department of Romance Languages at the University of Georgia to its graduate student instructors of Spanish and can be found, as presented to the listeners, in Appendix D. In the Grammar Block, the listeners were exposed to the original and modified copies of the second ten-second selection from each language learner, and were asked to rate them according to whether the speaker had exceptional control and correctness, made some mistakes but was reasonably correct, made more serious mistakes but their meaning was understood, had their meaning frequently obscured by grammar mistakes, or had their meaning completely obscured by grammar mistakes. In the Fluency Block the listeners were exposed to the third set of speech segments, and were asked to rate the speech as either completely fluent, somewhat fluent, somewhat disjointed, very disjointed, or totally disjointed. In the Vocabulary Block, listeners rated the fourth set of speech samples as either having excellent control of vocabulary, good control of vocabulary with mistakes not affecting the meaning, some mistakes that gave unintended meaning, meaning frequently obscured by mistakes, or meaning totally obscured. Finally, for the Pronunciation Block, listeners listened to the last set of speech samples, and rated them as being either almost nativelike, having some mispronunciation, having a pronounced foreign accent, having their meaning frequently obscured by poor pronunciation, or as often incomprehensible. The 36 segments presented in each segment were randomly organized by E-Prime within their corresponding blocks, and thus no two listeners were presented with the speech segments in the same order, even though the order of the blocks and the segments

presented within each block was fixed. Although the order of presentation of the blocks was arbitrary, it was kept fixed so that listeners would have the same amount of practice leading up to each block. Additionally, the speech segments were all presented sequentially with the goal of making them as similar to each other as possible by having each segment in relatively the same place in the story being told. For the Practice Block, on the other hand, the listeners were exposed to eight ten-second segments of speech taken from the male language learners' speech samples, which were presented only at their original speech rate. In the Practice Block the listeners were asked to rate the speech segments as being either very good, good, average, poor or very poor. Their responses for each block were automatically recorded by E-Prime as they were made using the keyboard. After the listeners had finished judging all of the speech samples, a process which took on average around 45 minutes, they were debriefed about the true purpose of the experiment, given a chance to have any questions answered and excused. Finally, using E-Prime, the results from each participant were combined into a single data file for analysis.

3.4. Data analysis

In order to perform the analyses, each response in E-Prime was tagged for the listener, the gender of the listener, the position of the listener at the University, the fluency of the listener, the speaker, the study abroad experience of the speaker, the category that the speech segment was rated for, and the speech rate, whether normal, 15% accelerated or 30% accelerated, of the speech sample that had been rated. E-Prime was then used to export the results to Excel in order to be graphed and statistically examined. Finally, SPSS was employed to statistically analyze the overall effects of the speech rate, and whether or not each of the sociolinguistic factors of the

language learners and listeners had any effect on the perception of the five different language skills through the use of mixed design ANOVAs. Additionally, post hoc paired samples t-tests were used to determine the statistical significance of the differences between the different speech rates for each analysis made.

3.5. Conclusion

It is hoped that the methodology presented in this chapter will provide results that will help to answer the question of whether or not speech rate affects the perception of all five language skills evaluated in Spanish oral examinations that are based on the ACTFL Proficiency Guidelines. Additionally, it is hoped that this methodology will provide reliable results for the analysis of the effects of the different sociolinguistic variables examined on the perception of the language skills of the language learners examined. Finally, it is hoped that having presented the methodology in a clear manner will allow for replicability of the present study.

CHAPTER 4

RESULTS AND DISCUSSION

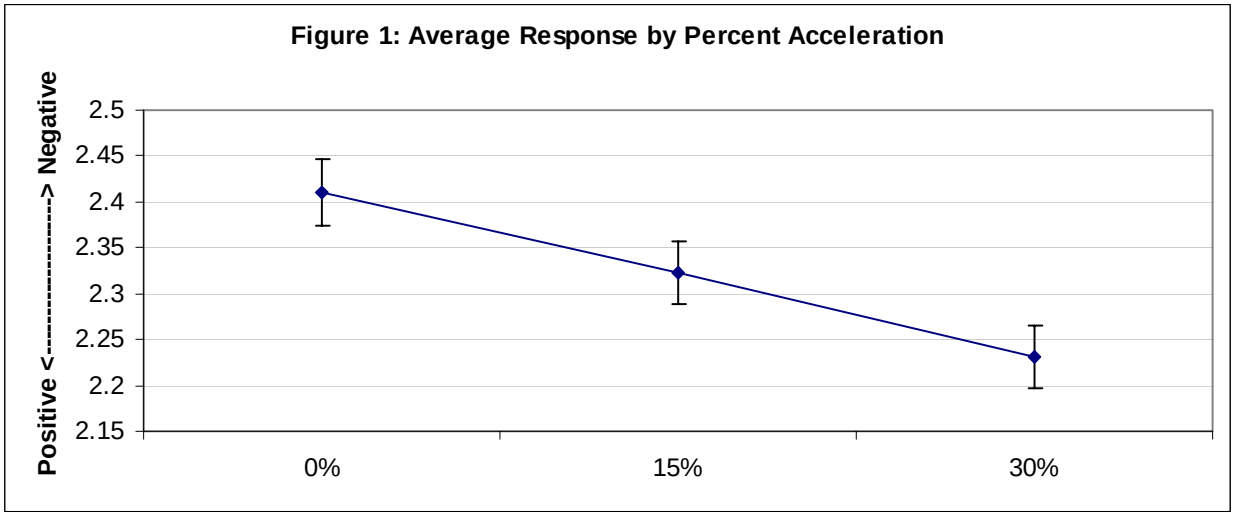
4.1. Introduction

In this chapter, the results that were obtained in carrying out the methodology previously explained will be presented and discussed. First the effects of speech rate on the overall oral exam results will be presented and discussed. Next, the effects of speech rate on the perceptions of communication, fluency, grammar, pronunciation and vocabulary in this study will be presented and discussed separately. Finally, variation in the results among the different groups of speakers and listeners will be presented and discussed to determine if there exist any patterns of variation between the different groups.

4.2. General results

The first set of results discussed herein is that of the overall average ratings given by all listeners for all speech segments across all evaluative criteria according to the speech rate, whether it was normal, 15% accelerated or 30% accelerated (see Figure 1). What was found was that the average rating given across listeners for speech segments presented at the normal speech rate was 2.41, while that given for the 15% accelerated speech segments was 2.32 and that given for the 30% accelerated speech segments was 2.23. As smaller numbers for ratings indicated more favorable perceptions of the speech on the part of the listeners, these ratings indicate that the listeners in this study, on average, perceived the speech at the normal rate significantly less

favorably than the speech at the 15% accelerated rate ($T(2339) = 4.288$, $p < 0.001$). Speech that had been accelerated by 15%, in turn, was perceived significantly less favorably than the speech that was at the 30% accelerated rate ($T(2339) = 4.517$, $p < 0.001$). Moreover, a mixed design ANOVA revealed that these findings confirmed that the effect of speech rate on the perception of overall speech was significant ($F(2, 62) = 49.599$, $p < 0.001$). Given that speech rate has been shown in previous research, as indicated in 2.2.3, to be significantly correlated with the perception of fluency, and given that fluency was one of the five language skills tested for explicitly in this study, this result is what would have been expected. Therefore, in order to determine if language skills other than fluency were perceived differently when the rate was increased the ratings given for each of the different language skills must be examined separately.

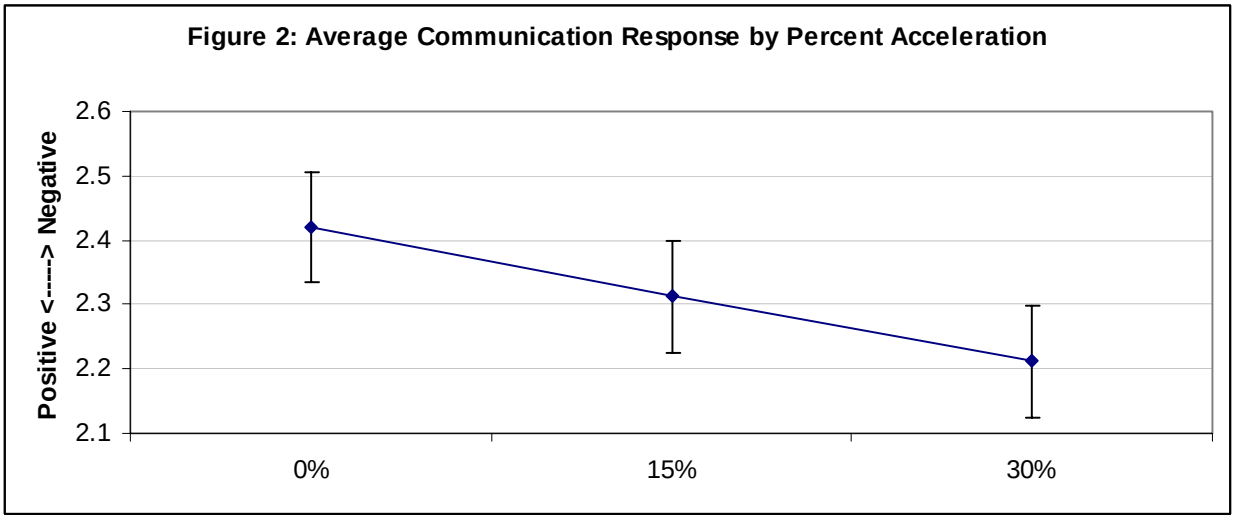


4.3. Results by language skill

4.3.1. Communication results

The first language skill that will be examined separately from the rest is that of communication (see Figure 2). For this skill, speech that was presented at the normal rate was given an average score of 2.42, which was significantly less than the average score of 2.31 for

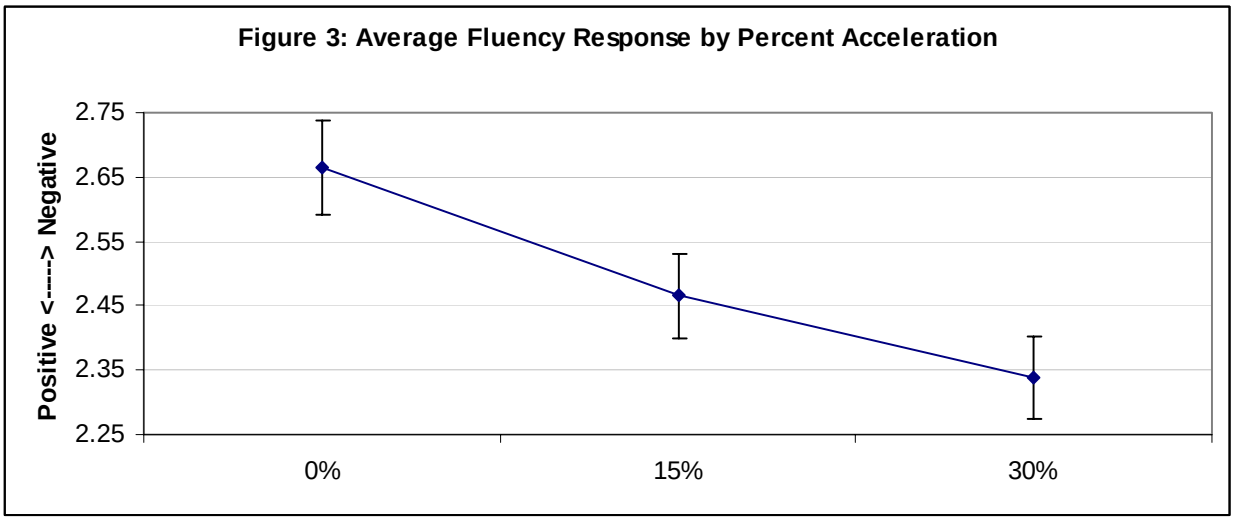
speech that was accelerated by 15% (T(467) = 2.414, p < 0.016). This in turn was also significantly less than the average score of 2.21 for speech that was accelerated by 30% (T(467) = 2.156, p < 0.032). Moreover, the overall effect of speech rate on the perception of communication was found to be statistically significant (F(2, 62) = 19.578, p < 0.001). These results confirm the hypothesis that the speed at which the speakers' speech was presented to the listeners affected the listeners' perception of the speakers' ability to communicate effectively in Spanish. This result suggests speech rate may affect the perception of communication in all such oral exams.



4.3.2. Fluency results

Even more affected than the perception of communication by changes in speech rate, however, was the perception of fluency (see Figure 3). The average fluency score given by listeners for the speech segments was 2.66, which was significantly less than the average score of 2.47 given for the segments that had been accelerated by 15% (T(467) = 5.205, p < 0.001). The perception of fluency at the 15% accelerated rate was also rated significantly less than the average score of 2.34 given for the segments that had been accelerated by 30% (T(467) = 3.328,

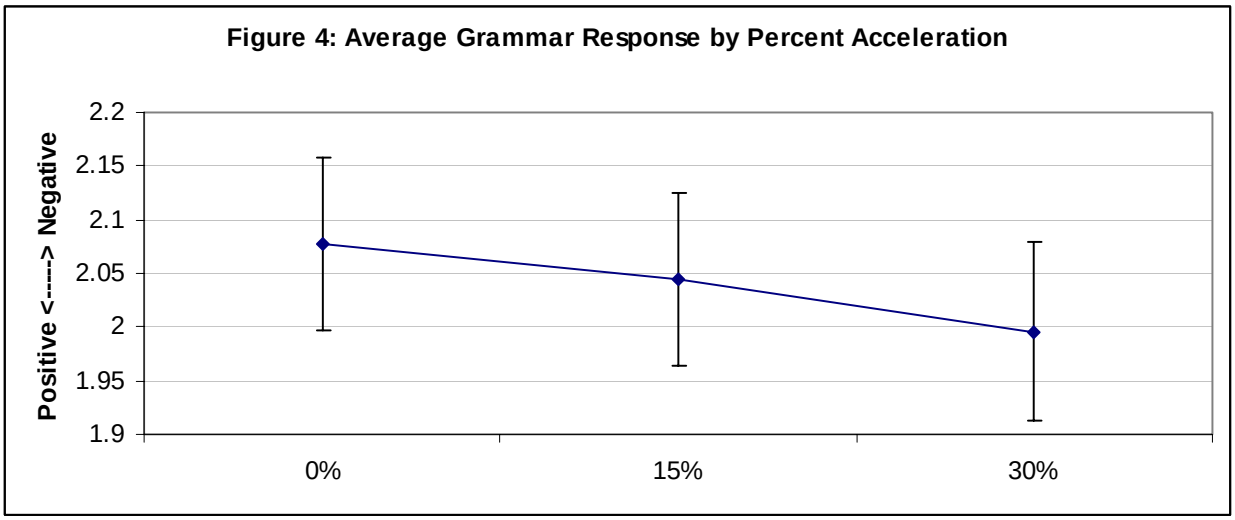
$p < 0.001$). Finally, the mixed design ANOVA revealed that the overall effect of speech rate on the perception of fluency was significant ($F(2, 62) = 26.604$, $p < 0.001$). Therefore, these results confirm that speech rate did indeed significantly affect the perception of fluency in the present study and therefore these results support both the similar findings from other studies, and the hypothesis proposed that speech rate would affect fluency.



4.3.3. Grammar results

Grammar results, however, did not confirm the hypothesis that the perception of grammar is significantly affected by the speech rate of the speakers (see Figure 4). The average rating of 2.08 given for grammar at the normal speech rate was not significantly different from the rating of 2.04 given for speech at the 15% accelerated rate ($T(467) = 0.621$, $p < 0.535$). Neither was this rating significantly different from the average rating of 2 for speech at the 30% accelerated rate ($T(467) = 0.896$, $p < 0.371$). Moreover, there was not even a significant different between the average ratings for the speech samples at the normal and 30% accelerated rates ($T(467) = 1.438$, $p < 0.151$). Finally, mixed design ANOVA results indicated that speech rate did not significantly affect the perception of grammar in this study ($F(2, 62) = 2.034$, $p < 0.14$).

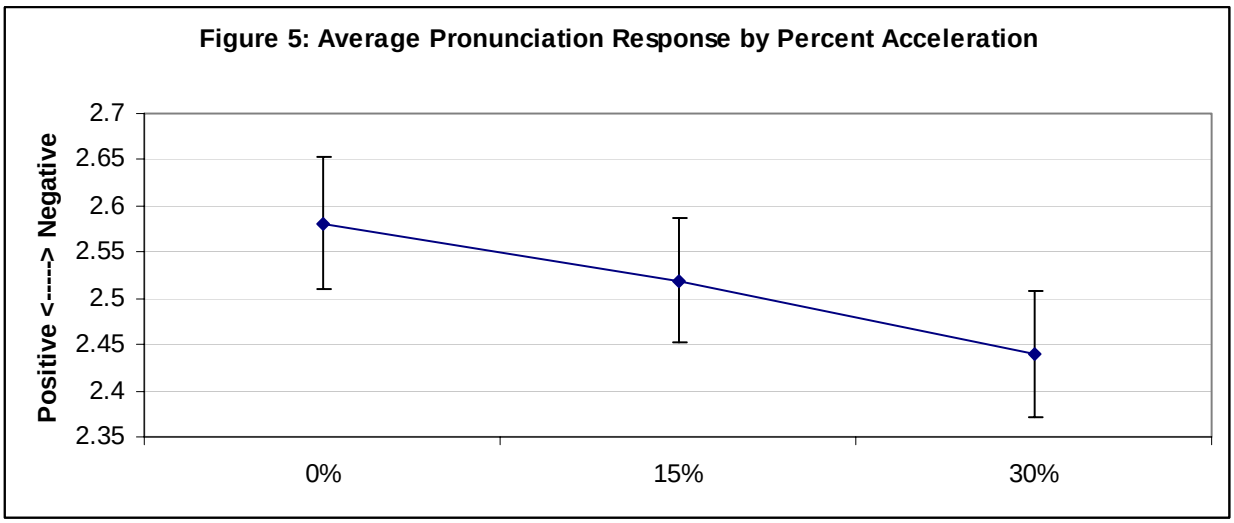
Therefore, the grammar results from this experiment indicate that the hypothesis that speech rate would affect the perception of grammar was not supported by the data collected, and instead indicate that the perception of grammar is not subject to be influenced by speech rate.



4.3.4. Pronunciation results

Pronunciation results were a little more ambiguous than those of the three language skills already examined (see Figure 5). Although the difference between the rating of 2.58 given for pronunciation at the normal rate was not significantly different from the rating of 2.51 given for pronunciation at the 15% accelerated rate ($T(467) = 1.476$, $p < 0.141$), the difference between this later average and the average rating of 2.44 for speech segments at the 30% accelerated rate was significant ($T(467) = 2.066$, $p < 0.039$). Moreover, the mixed design ANOVA revealed that the overall effect of speech rate on the perception of pronunciation was significant ($F(2, 62) = 9.011$, $p < 0.001$). These results for pronunciation, like those for communication, show that while the rating scale for pronunciation did not imply that speech rate should be taken into consideration in measuring pronunciation, the perceptions of the listeners of the pronunciation of the speakers was indeed significantly affected by the speech rate in the speech samples.

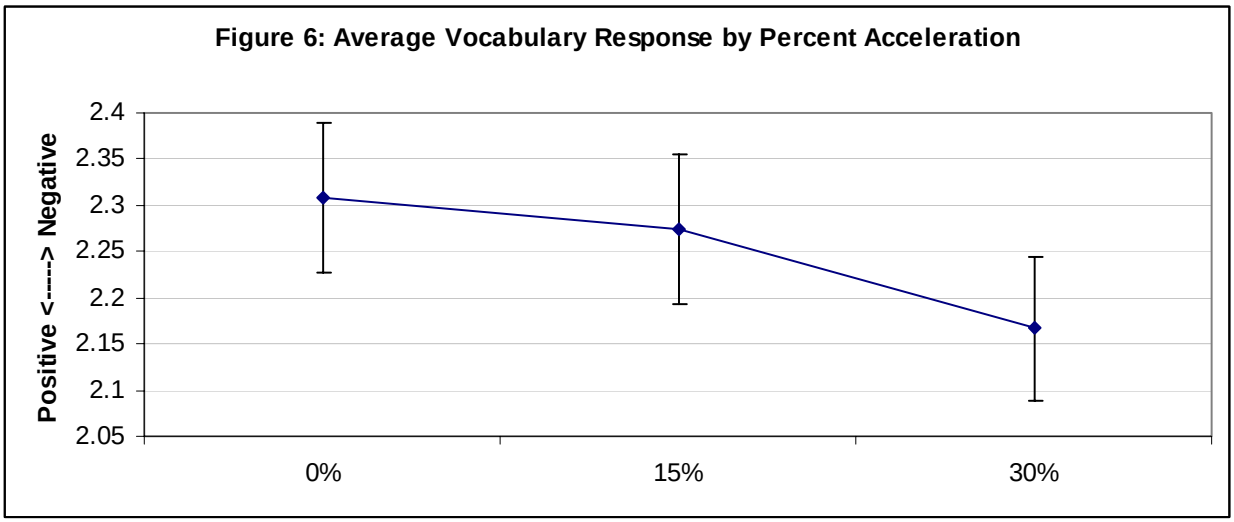
Therefore, the aforementioned hypothesis that speech rate would affect the perception of pronunciation is confirmed, and this suggests that speech rate could exercise an effect on the perception of the pronunciation of students during Spanish oral exams. However, it should be noted that this significant effect was not felt until the speech rate was accelerated by 30%.



4.3.5. Vocabulary results

A similar result to that found for the pronunciation results was also forthcoming from the overall vocabulary results (see Figure 6). The listeners rated the vocabulary for speech at normal speed with an average of 2.31, which was not significantly different from the average rating of 2.27 given to the speech samples that were accelerated by 15% ($T(467) = 0.7$, $p < 0.484$). However, as with the pronunciation results, this later rating was significantly different from the average rating of 2.17 given to the speech samples that had been accelerated by 30% ($T(467) = 2.193$, $p < 0.029$). Also as with pronunciation, mixed design ANOVA results for vocabulary also indicated that the overall effect of speech rate on the perception of the speakers' vocabulary was significant ($F(2, 62) = 7.248$, $p < 0.001$). The results for the perception of vocabulary then, like the results for the perception of pronunciation, indicate that the hypothesis that the

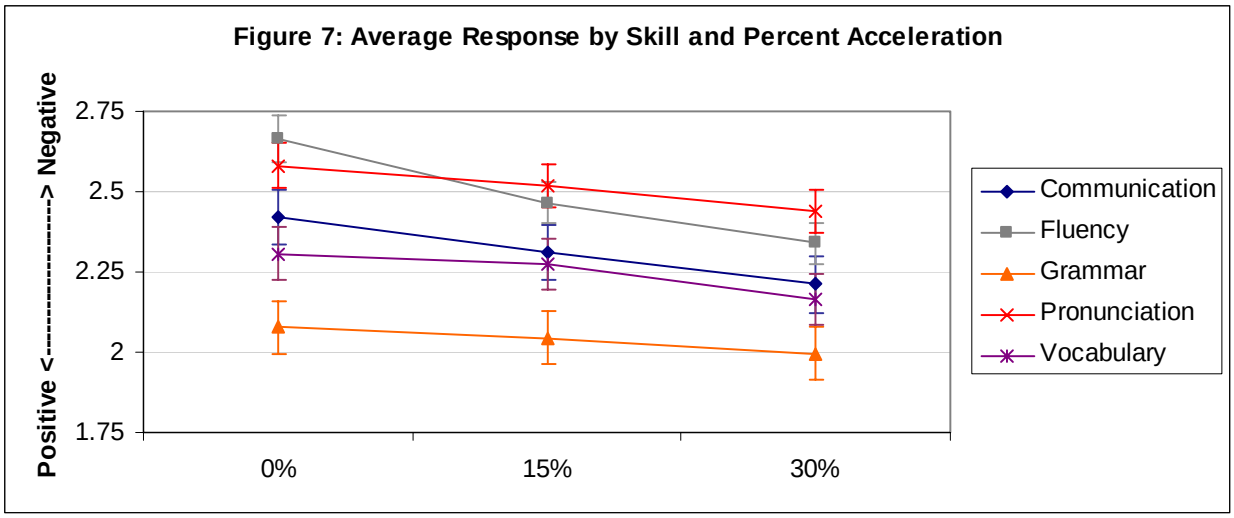
perception of this skill would be affected by speech rate is true. However, this significant effect was not detected until the speech rate had been accelerated by 30%, a fact that is discussed further in the following section.



4.3.6. Combined results

The five language skills that were examined in this study can now be grouped into three categories according to the extent to which the perception of them was affected by speech rate (see Figure 7). In the first category we have the skills of communication and fluency which were both perceived as statistically different among all speech rates, and which had a significant relationship between their scores and their speech rates. In the second group we have pronunciation and vocabulary, which, although significantly affected by speech rate, did not have a statistically significant difference among the ratings for their normal and 15% accelerated rates. Grammar makes up the final group, as the only skill that was completely unaffected by speech rate. By dividing the language skills in this manner it can be seen that speech rate does not affect the perception of all of the language skills to the same extent. As a potential explanation for this result, it is proposed that these groups of language skills can be similarly

grouped according to their relative degrees of subjectiveness. Thus, it is proposed that the perception of fluency and communication is more subjective than the perception of vocabulary and pronunciation, which in turn is more subjective than the perception of grammar. If this hypothesis can be confirmed by further research, then this would imply that the evaluation of different aspects of language learner speech should be evaluated in different ways, rather than just having listeners listen to and rate for all language skills at the same time and in the same way. More attention to this will be given in the last chapter of this thesis.



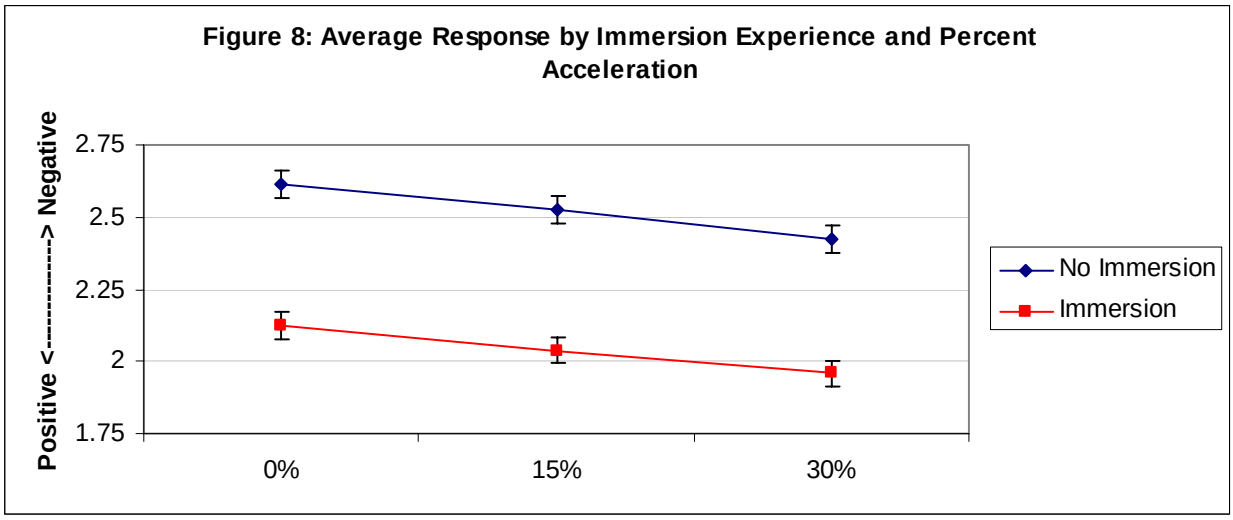
4.4. Variation among participants

Attention is now turned to the variation in the results caused, not by speech rate, but by the differences among groups of participants. First, the variation in results correlated with whether or not the language learners had participated in a Spanish immersion program will be examined, followed by an examination of the variation in results correlated with whether the listeners were faculty or graduate students, native or non-native Spanish speakers, and either male or female.

4.4.1. Immersion vs. non-immersion

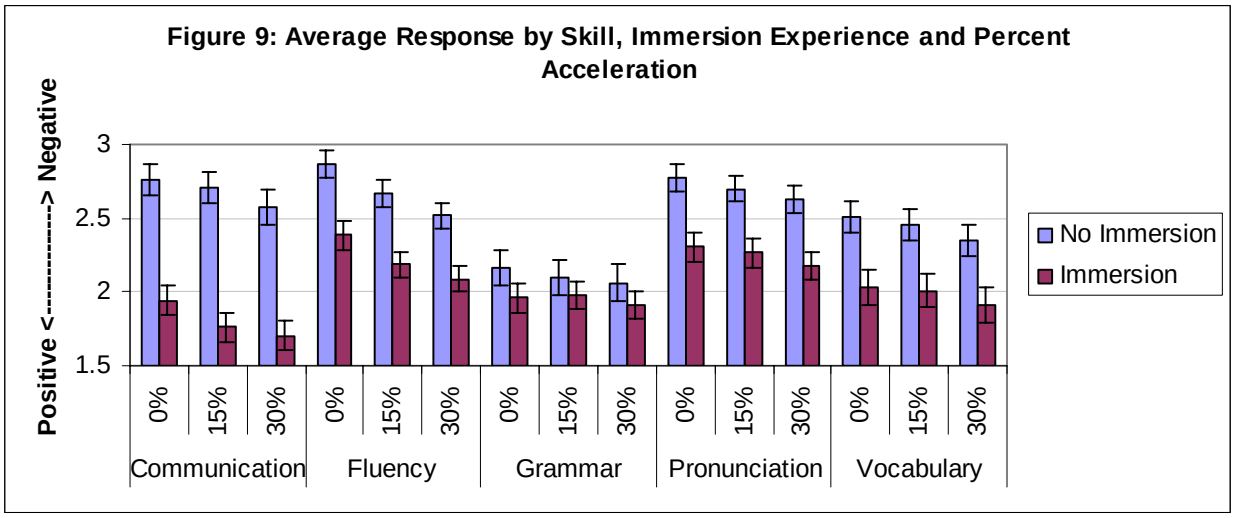
4.4.1.1. Immersion vs. non-immersion overall

The one factor that was able to be used to differentiate participants in the relatively homogenous group of language learners was whether or not they had self reported as having studied Spanish in an immersion environment at some point prior to participating in this experiment. Of the twelve speakers whose speech samples were used, five of them had studied in an immersion environment for between one and seven months, while the other seven speakers reported never having studied in a Spanish immersion environment. Comparing these two groups, then, we are able to determine to what extent having spent time in an immersion program can be correlated with the overall ratings given by the listeners, who were completely unaware of whether each speaker had spent time in an immersion environment (see Figure 8). By doing so we are no longer looking for the effects of speech rate, which have been factored out, but rather the effect of having studied in an immersion environment on the overall perception of the language learners' language skills. The results from such an analysis reveal that the overall rating of 2.52 given to those language learners who had participated in an immersion environment was significantly different from the average score of 2.04 given to those who had not done so ($F(1, 31) = 196.948$, $p < 0.001$). This result confirms the hypothesis that those students who had studied in a Spanish immersion environment would be perceived significantly more positively overall than would their peers.



4.4.1.2. Immersion vs. non-immersion results by language skill

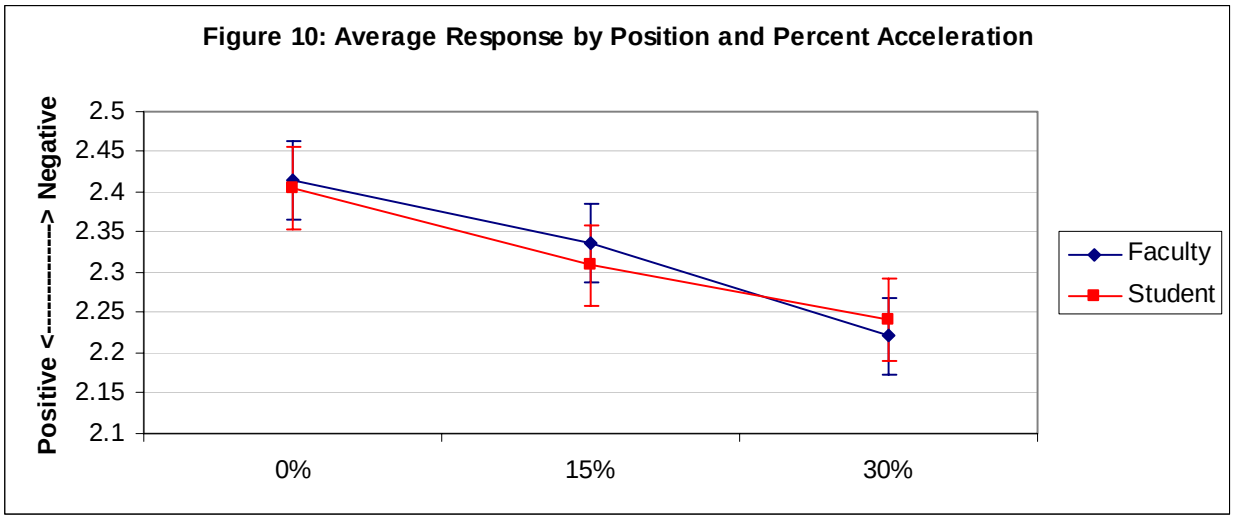
The effect of having studied in an immersion environment on the perception of language learners' ability to use Spanish can be further investigated by examining the effects it has on each of the individual language skills while factoring out the effects of speech rate (see Figure 9). When this was done, a mixed design ANOVA revealed that whether the language learners had studied in an immersion environment or not was a significant predictor of their average communication ($F(1, 31) = 185.994$, $p < 0.001$), fluency ($F(1, 31) = 163.334$, $p < 0.001$), grammar ($F(1, 31) = 6.694$, $p < 0.015$), pronunciation ($F(1, 31) = 54.905$, $p < 0.001$), and vocabulary ($F(1, 31) = 28.558$, $p < 0.001$) results. These results indicate, therefore, that not only did immersion experience affect the overall ratings given to the language learners, but also that immersion experience affected the perception of each of the individual language skills. This finding confirms the potential benefits of studying Spanish in an immersion environment because it indicates that all language skills can be significantly improved by doing so.



4.4.2. Faculty vs. graduate students

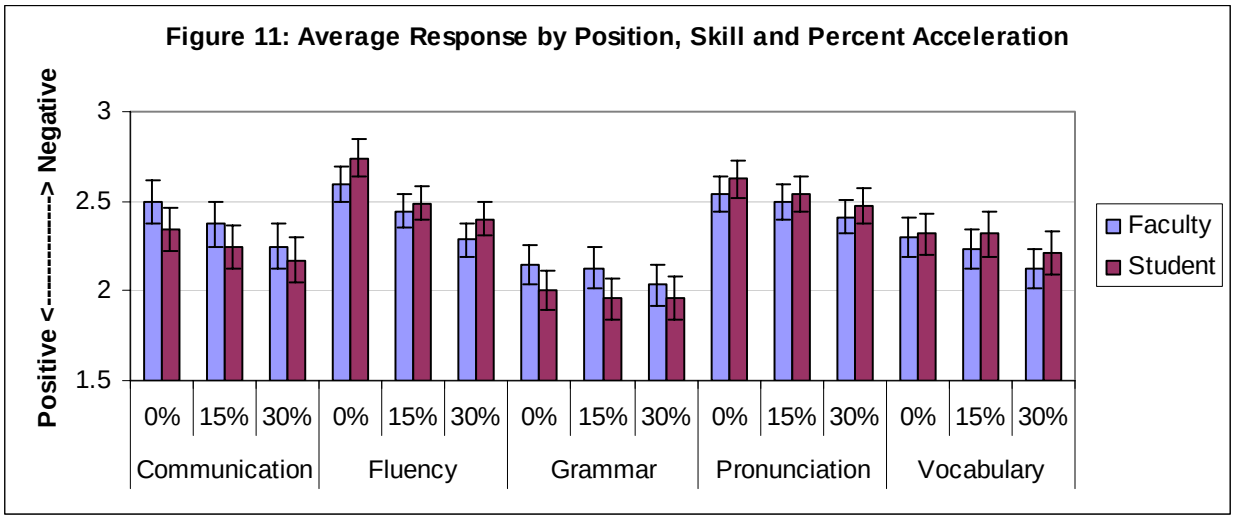
4.4.2.1. Faculty vs. graduate students overall

The first comparison of listener groups that will be made is that of comparing the overall ratings given by faculty members with those given by graduate students when the speech rate and immersion experience of the speakers, along with the gender and nativeness of the speakers are factored out (see Figure 10). What is found when this is done is that the difference between the ratings is not significant according to the mixed design ANOVA ($F(1, 31) = 0.286$, $p < 0.596$). This result does not support the hypothesis that the more experienced faculty would rate the speakers more harshly than would the less experienced graduate students. However, it should be noted that this hypothesis was based on the findings of Earline who had actually compared more experienced faculty with graduate students that did not have any experience whatsoever in evaluating language ability (1992). Moreover, by proving this hypothesis wrong, the results suggest that there is significant comparability between the overall ratings given by faculty and graduate students in Spanish oral exams at the University of Georgia.



4.4.2.2. Faculty vs. graduate students by language skill

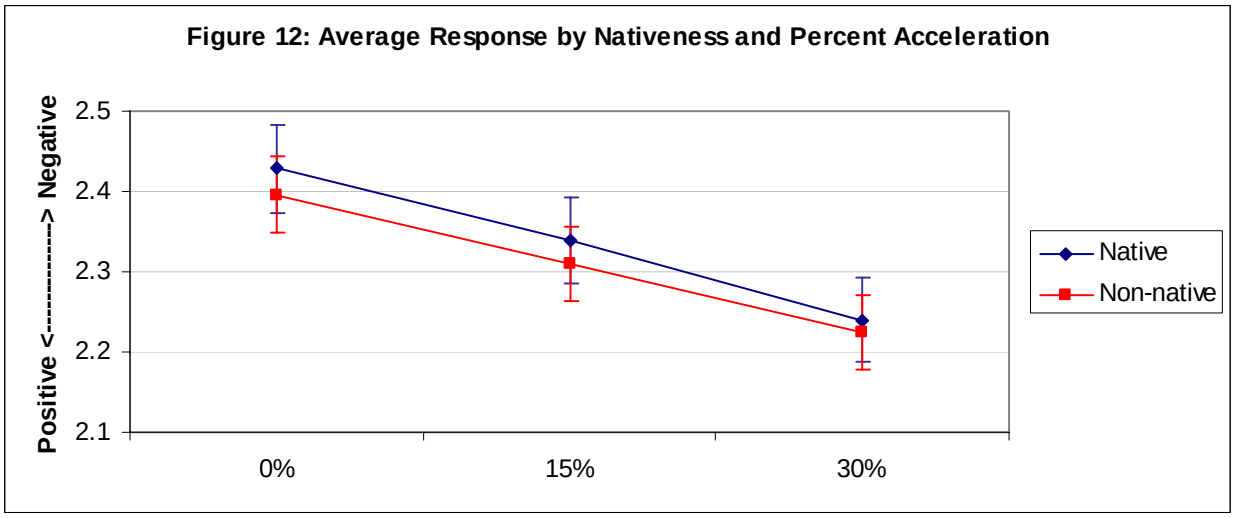
To take the comparison of the ratings given by faculty and graduate students one step further, the differences between these two groups for each language skill, when all other factors, such as speech rate and the immersion experience of the language learners, are factored out are now examined (see Figure 11). Results from this comparison, analyzed using a mixed design ANOVA, indicate that there is no significant difference between the communication ($F(1, 31) = 0.436$, $p < 0.514$), fluency ($F(1, 31) = 1.071$, $p < 0.309$), grammar ($F(1, 31) = 0.322$, $p < 0.574$), pronunciation ($F(1, 31) = 0.578$, $p < 0.453$), or vocabulary ($F(1, 31) = 0.000$, $p < 0.998$) scores of these two groups of listeners. Again, while this result does not confirm the hypothesis proposed before the study began, it does suggest a high degree of comparability between these two different groups of raters.



4.4.3. Natives vs. non-natives

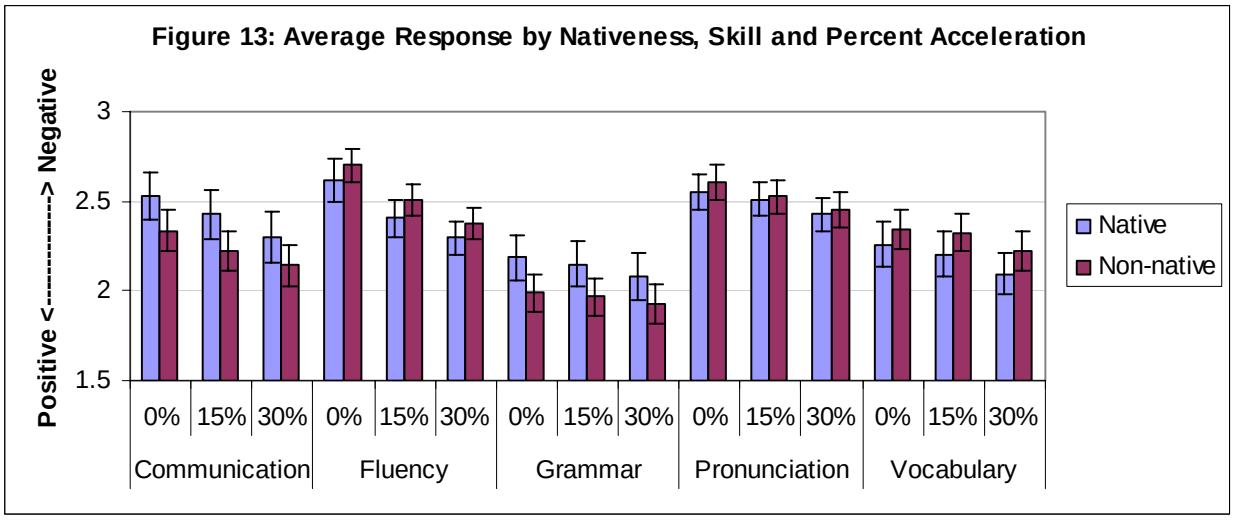
4.4.3.1. Natives vs. non-natives overall

While still accounting for all other potentially confounding effects, comparison is now made between the ratings given by the native and non-native Spanish speakers (see Figure 12). As pointed out in chapter 2, Kormos and Dénes did not find any significant difference between the ratings of their native and non-native speakers (2004) and therefore it was hypothesized that there would be no difference found between those who participated in this study either. When the two groups' overall ratings were compared using a mixed design ANOVA, what was found was that they were not significantly different ($F(1, 31) < F\ 0.001$, $p < 0.987$) as hypothesized. Apart from suggesting inter-rater reliability as the results from 4.4.2 did, this result also suggests a correlation between the findings of this study and that of Kormos and Dénes, which lends more support to the findings of both.



4.4.3.2. Natives vs. non-natives by language skill

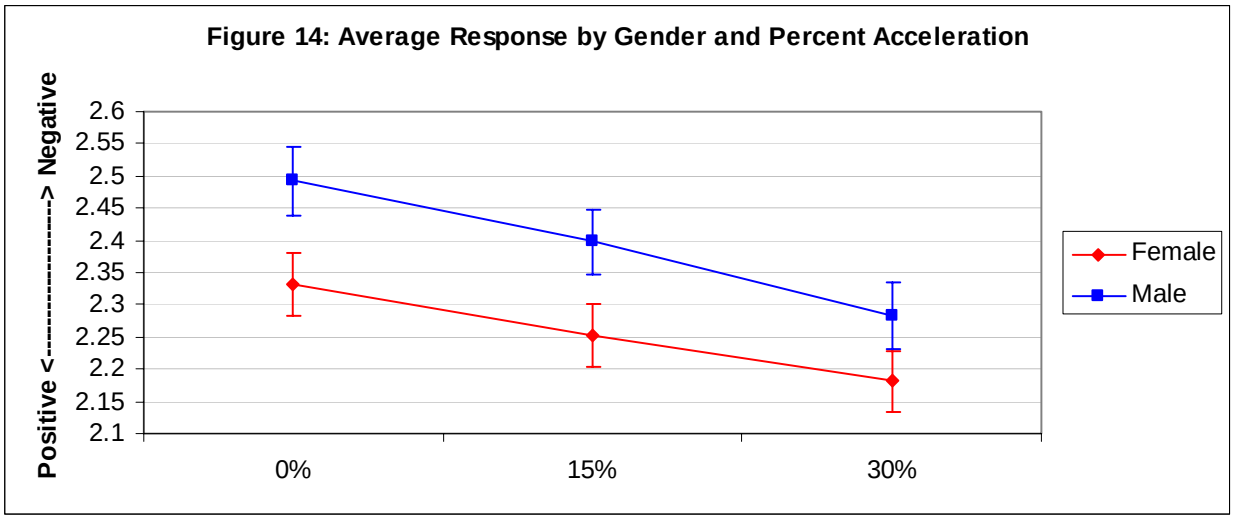
To ensure that the lack of significance in the difference in the ratings given by native and non-native Spanish speakers is not a result of differences in ratings according to different language skills, however, one more step is taken to determine if there are any skills that are in fact rated significantly differently by the two groups (see Figure 13). The data show, however, that the ratings given by the native and non-native Spanish speakers are not significantly different for communication ($F(1, 31) = 1.379$, $p < 0.249$), fluency ($F(1, 31) = 1.355$, $p < 0.253$), grammar ($F(1, 31) = 2.427$, $p < 0.129$), pronunciation ($F(1, 31) = 1.303$, $p < 0.262$), nor vocabulary ($F(1, 31) = 0.156$, $p < 0.696$). Again, this result suggests that there is a strong degree of inter-rater reliability to be found among the native and non-native instructors of Spanish at the University of Georgia, even when the effects of speech rate, the immersion experience of the speakers, the position and gender of the listeners, and the potential confounding effects of the different language skills are factored out. However, future research will need to be conducted to determine to what extent this degree of inter-rater reliability exists in other institutions.



4.4.4. Males vs. females

4.4.4.1. Males vs. females overall

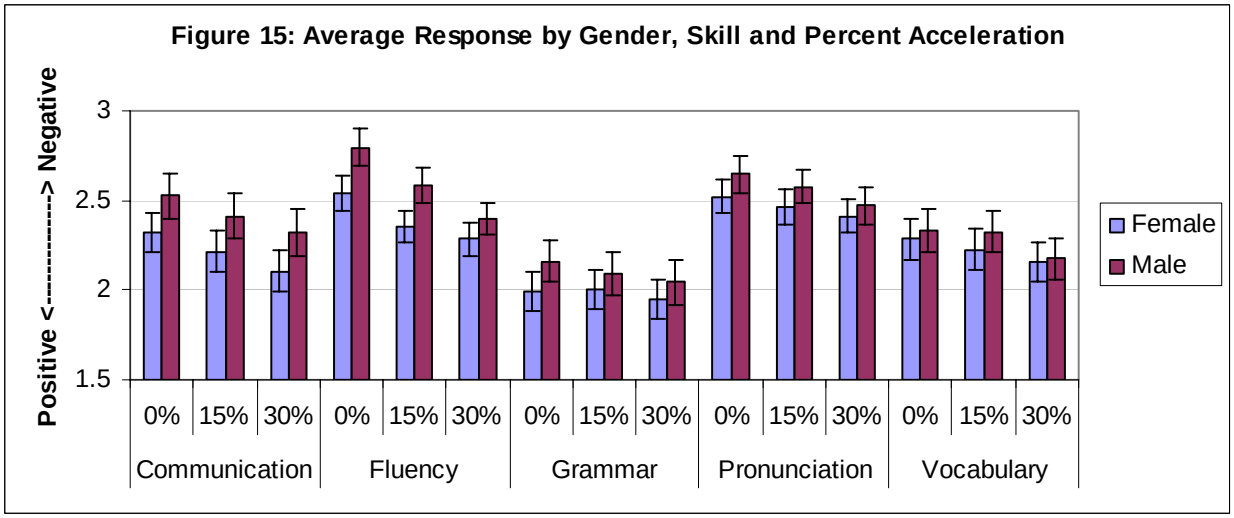
In looking for rater differences between the male and female raters, SPSS was again used to run a mixed design ANOVA that would factor out the potentially confounding effects of all other factors examined (see Figure 14). When comparing this last grouping of listeners, it was done with the hypothesis that there would the same significant difference between the two groups that was found by Earline, and that, as she found, the females would rate the speakers more harshly than would the males (1992). However, when the results were analyzed, it was found that there was no overall difference between the male and female raters ($F(1, 31) = 2.129$, $p < 0.155$). Although this result does not agree with that of Earline, and by so doing proves the hypothesis incorrect, it does, yet again, indicate a strong degree of inter-rater reliability.



4.4.4.2. Males vs. females by language skill

When the differences between the ratings by males and females are compared across language skills, however, the inter-rater reliability breaks down with one of the language skills (see Figure 15). What is found is that while the differences between these two gender groups is still insignificant for communication ($F(1, 31) = 2.075$, $p < 0.16$), grammar ($F(1, 31) = 0.484$, $p < 0.492$), pronunciation ($F(1, 31) = 0.364$, $p < 0.551$) and vocabulary ($F(1, 31) = 0.426$, $p < 0.519$), the difference is significant for the fluency ratings ($F(1, 31) = 4.419$, $p < 0.044$). Additionally, what the data show is that in the case of fluency, not only is the difference between males and females significant, it is the females who rate the speakers less harshly than do the males, which is the opposite of what Earline found in her study (1992) and of what was hypothesized would happen in this study. Given that fluency has been found to be significantly influenced by all but two of the factors examined in this study, while other factors such as grammar were more resistant to such influence, it is proposed that fluency is perhaps the most difficult of the five language skills examined in oral exams that are based on the ACTFL Proficiency Guidelines to

evaluate objectively, and thus the most likely to be subject to variability. A more detailed discussion of fluency is given is, however, reserved for the following chapter.



4.5. Conclusion

Examination of the data obtained in carrying out the present study reveals that only some of the hypotheses proposed before the study began were confirmed. To begin with, the hypothesis that speech rate would affect the overall perception of the listeners was confirmed. Additionally, it was found that speech rate did significantly affect the perception of each language skill other than grammar. Variation in the overall results, and in the results for each language skill, was also found to be significantly correlated with the immersion experience of the speakers. However, when different groups of listeners were compared, there was no significant difference found in the overall ratings of faculty and graduate students, of native and non-native Spanish speakers, or of male and female raters. Additionally, when the results from these same listener groups were compared across language skills, the only skill that was significantly affect was that of fluency, and it was only affected when male raters were compared with female raters. A discussion of the significance of all of these findings will be given in the next chapter.

CHAPTER 5

CONCLUSIONS

5.1. Summary of findings

5.1.1. Findings on speech rate

The primary purpose of the present study was to determine to what extent speech rate, as a component of fluency, could be correlated with the results in Spanish oral exams that are based on the ACTFL proficiency guidelines. It was hypothesized that speech rate would not only correlate with the overall oral exam results, but also with the results for the individual language skills evaluated by such exams. As it turned out, speech rate was found to correlate significantly with the overall oral exam results and with the overall results for each of the language skills, excluding grammar. However, the results for pronunciation and vocabulary were only significantly correlated with speech rate once the rate had been accelerated by 30%, and not just by 15%. On the other hand, the results for fluency and communication were significantly correlated with speech rate even at the 15% acceleration. Thus, the perception of fluency and communication were the percepts most affected by speech rate, while those of pronunciation and vocabulary required a greater change in speech rate in order to be affected, and while the perception of grammar seemed to be resistant to any effects caused by speech rate. Therefore, these results indicate that speech rate does affect the perception of all of the language skills other than grammar, but that it does so to varying degrees.

5.1.2. Findings on sociolinguistic factors among participants

With regards to the non-linguistic variables that were used to distinguish among the various groups of participants, there were two main results. In the first place, it was found that whether or not a language learner had participated in a Spanish immersion program prior to participating in the study was significantly correlated both with the overall listener ratings, and with the listener ratings for each of the individual language skills. This result confirms the findings of other investigators that immersion studies will improve the perception of oral abilities. Secondly, the data showed that there was no significant difference between the overall results given by faculty and graduate students, by native and non-native Spanish speakers, or by male and female listeners. Additionally, when each of these pairs of listeners was compared to determine if there were any significant differences between how they rated each of the individual language skills, it was found that the only groups that rated any skill significantly differently were the male and female listeners, and that they only did so for the skill of fluency. These results therefore indicate a high degree of inter-rater reliability, while once again singling out fluency from among the five different language skills examined.

5.2. Significance of findings

5.2.1. Significance for fluency

Fluency, as was established in chapter 2, is a vital element of language, and, crucially for this study, fluency, and the perception of fluency, are also vital elements in the acquisition of a second language. Why then has it been so difficult to come to a consensus about what fluency is? Why is it that a group of raters that shows so much inter-rater reliability can still have a significant difference in how they perceive of fluency? And why is it that speech rate, an

acknowledged component of fluency, can significantly affect the perception of communication, pronunciation and vocabulary, even when one might suppose that the perception of these three language skills should not be affected by fluency or any of its components? I propose that what the results from this study suggest is that fluency, as understood by the participants in this study, is not a language skill that can be differentiated from the three other language skills examined in the ACTFL Proficiency Guidelines that were found to correlate with speech rate. That is to say, fluency should not be a separate skill to be evaluated when administering oral exams, because communication, pronunciation and even vocabulary entail aspects of fluency. Whether or not a message is communicated may depend, to a certain extent, on how 'fluently' the message is communicated. Additionally, *what* is communicated may depend on the rate of the communication, as well as any hesitation phenomena used. For example, compare the messages communicated in examples 1 and 2 below:

1. I love you.

2. I…love you.

The pause in 2 communicates something quite different than the sentence in 1, uttered without any pauses. A similar argument can be made for the appropriate selection of lexical items. That is to say, it is proposed that certain words may seem more appropriate when presented with different degrees of fluency. For example, compare the appropriateness of the lexical choices made in examples 3 and 4 below:

3. I'm in a hurry. (Spoken quickly.)

4. I'm in a hurry. (Spoken slowly.)

With regards to pronunciation, it seems likely that the rate of phonetic production may actually affect the quality of the production. For example, it was mentioned to the investigator by two of

the listeners after they had been debriefed that they had heard two identical segments of speech back-to-back and that one had seemed to have somewhat better pronunciation, and the supposed improvement in the rolling of the Spanish [r] was especially highlighted. Thus, I propose that fluency not be considered a separate language skill distinct from communication, pronunciation and vocabulary, but rather as the element of speech that entails the rate and effortlessness of speech and by so doing, directly affects the language skills of communication, pronunciation and vocabulary.

5.2.2. Significance for oral exams

Having shown that the ACTFL Proficiency Guidelines, as presented to the listeners in the present study, are significantly biased by fluency beyond what the guidelines imply that they should be, it is proposed that revisions to the guidelines, or at least to the methodology employed in putting the guidelines to work, need to be made. Either fluency needs to be removed as a separate language skill, or the evaluations need to be carried out in such a manner so as to reduce the interference of fluency with the perception of the other language skills. Possible methods for this latter solution may include ensuring that evaluation does not take place in real time, but rather involves the recording and transcription of oral productions, which is an unpleasant solution at best. In any case, care must be taken to ensure that those administering the oral exams receive proper training on how to overcome, as much as possible, the confounding effects of fluency in their perception of the other language skills.

5.3. Avenues for future research

Given that the present study is the first of its kind to be performed, future research should be conducted to verify the findings presented, especially those relating to the effects of speech rate on the perception of the other language skills. Additionally, further research is needed to determine how comparable the inter-rater reliability documented for the listeners recruited from the Department of Romance Languages at the University of Georgia is with that for participants from other institutions. Moreover, more research needs to be performed on the nature of fluency and its relationship with the communication, pronunciation and vocabulary language skills. Finally, there is a great need for research to be performed on new methods for testing the oral production of second language learners in order to continue to improve the inter-rater reliability and the accurateness of the results, both overall and according to language skill.

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APPENDIX A

QUESTIONNAIRE FOR SPEAKERS

1. Please circle your gender: Male / Female

2. Please write your age: _____

3. Have you ever studied or lived in a Spanish immersion environment? Yes / No

4. If you answered "Yes" to question 3, please briefly describe your immersion experience:

   How long did the experience(s) last:_____

   What did you use Spanish for:_____

   What did you not use Spanish for:_____

5. How many advanced level university (3000 and 4000) Spanish courses have you taken prior to this semester?_____

6. How many advanced level university (3000 and 4000) Spanish courses are you currently taking this semester?_____

APPENDIX B

PICTURE STORY FOR SPEAKERS

APPENDIX C

QUESTIONNAIRE FOR LISTENERS

1. Please circle your gender: Male / Female

2. Please indicate your age:_____

3. Do you have any hearing difficulties? Yes / No

4. Please indicate your current position at the University of Georgia:_____

5. Please indicate your level of proficiency in Spanish:_____

6. Please indicate how many years experience you have in administering and evaluating oral exams and interviews from each level:

Undergraduate lower-level:_____

Undergraduate upper-level:_____

Graduate admissions interview:_____

Other (Please specify):_____

APPENDIX D

EVALUATION TOOLS FOR LISTENERS

Overall Impression				
Very good. 1	Good. 2	Average. 3	Poor. 4	Very poor. 5

Communication				
Communicates with ease. 1	Topics handled adequately. 2	Topics handled minimally. 3	Parts of message still not understood. 4	Unsuccessful communication. 5

Grammatical accuracy				
Exceptional control and correctness. 1	Makes some mistakes but reasonably correct. 2	Makes more serious mistakes but meaning understood. 3	Meaning frequently obscured by grammar mistakes. 4	Meaning completely obscured by mistakes. 5

Fluency				
Speech completely fluent. 1	Speech somewhat fluent. 2	Speech somewhat disjointed. 3	Speech very disjointed. 4	Speech totally disjointed. 5

Vocabulary				
Excellent control of vocabulary 1	Good control of vocabulary; mistakes do not affect meaning. 2	Some mistakes give unintended meaning 3	Meaning frequently obscured. 4	Meaning totally obscured. 5

Pronunciation				
Almost native-like. 1	Some mispronunciation. 2	Pronounced foreign accent. 3	Meaning frequently obscured by poor pronunciation. 4	Often incomprehensible. 5

APPENDIX E

INTERMEDIATE DELE GRAMMAR AND VOCABULARY SECTION

Question 1 (1 point)

Complete el siguiente texto (preguntas 1 a 20) eligiendo para cada uno de los huecos una de las tres opciones que se le ofrecen.

El ulama, así se llama el "tenis" precolombino. Es una especie de tenis sin red en el que participan de tres a cinco jugadores por equipo.
Hay tres modalidades: ulama de antebrazo o ulama de cadera, ____1____ la parte del cuerpo que se emplee,

a. de acuerdo b. según c. depende

Question 2 (1 point)

y ulama de mazo, llamado así por el ____2____ con el que se golpea la pelota.

a. instrumento b. herramienta c. material

Question 3 (1 point)

El formato de partido clásico ____3____ de tres o cuatro jugadores por equipo.

a. está b. es c. hay

Question 4 (1 point)

El tamaño del campo varía dependiendo de la modalidad ____4____ la que se juegue, pero siempre es alargado y estrecho.

a. por b. de c. a

Question 5 (1 point)

Hay una línea ____5____ pintada en el suelo, que divide el campo por la mitad.

a. central b. centrada c. céntrica

Question 6 (1 point)

La pelota para el ulama de antebrazo es ligera, de medio kilo, pero para el ulama de cadera, que es la modalidad ____6____ antigua,

a. muy b. tan c. más

Question 7 (1 point)

se usaba una pelota de cuatro kilos que ____7____ una fuerza mucho mayor.

a. exigió b. había exigido c. exigía

Question 8 (1 point)

La rutina del juego funciona ____8____ en el tenis: un equipo golpea la bola una vez y el contrario responde.

a. similar b. como c. igual

Question 9 (1 point)

Para sumar un punto hay que ____9____ que la pelota pase la línea del fondo del equipo contrario.

a. obtener b. conseguir c. realizar

Question 10 (1 point)

Si se __10__ la pelota con dos partes del cuerpo se considera falta

a. golpee b. golpeará c. golpea

Question 11 (1 point)

y es un punto ____11____ el contrario.

a. por b. con c. para

Question 12 (1 point)

La forma de contar es peculiar, ya que no se hace por suma de puntos, ____12____ restándoselos al contrario cada vez que se puntúa.

a. pero b. sino c. aunque

Question 13 (1 point)

Hay que llegar a ocho, pero _____13____ se va sumando y restando,

a. como b. a causa de c. debido a

Question 14 (1 point)

los partidos pueden ____14____ eternos.
En la actualidad se ha fijado un máximo de dos horas por partido y gana el equipo que más puntos tenga en ese momento.

a. ser b. siendo c. sido

Question 15 (1 point)

El ulama es una de las muchas modalidades de pelota a la que ____15____ los aztecas en la época precolombina.

a. tocaban b. hacían c. jugaban

Question 16 (1 point)

En la actualidad ____16____ practican en México trece juegos

a. se b. los c. lo

Question 17 (1 point)

o deportes que ____17____ existían en época de los aztecas.

a. ya b. aún c. todavía

Question 18 (1 point)

La mayoría de estos juegos sufrió modificaciones a partir de la ____18____ de los colonizadores españoles, especialmente los vascos, que llevaron su propia modalidad de pelota.

a. llegar b. llegando c. llegada

Question 19 (1 point)

En Mesoamérica han sido localizados más ____19____ mil quinientos campos de juego de pelota,

a. de b. que c. a

Question 20 (1 point)

____20____ da idea de la importancia que tuvo la actividad física desde tiempos antiguos.

a. lo que b. el que c. la que

Question 21 (1 point)

En cada una de las frases siguientes (preguntas 21 a 30) se ha marcado con paréntesis un fragmento. Elija, de entre las tres opciones de respuesta, aquélla que tenga un significado equivalente al del fragmento marcado.
Por ejemplo:

– No he hablado todavía con Javier porque el teléfono (está comunicando).

a) está estropeado
b) no da señal
c) está ocupado

La respuesta correcta es la c.

– Pero, ¿todavía no ha terminado Sandra el trabajo?
– (¡Qué va!) Y ahora está hablando por teléfono.

a. ¡Ni idea! b. ¡Claro que no! c. ¡Por supuesto!

Question 22 (1 point)

– Desde que ascendió en la empresa, (nos mira por encima del hombro).
– Pues no entiendo por qué.

a. ha crecido mucho b. no viene a vernos c. se cree superior a nosotros

Question 23 (1 point)

– ¿Qué tal está el pescado?
– Para mi gusto, (insípido).

a. muy rico b. bastante salado c. no tiene sabor

Question 24 (1 point)

– Al principio, aceptar este cargo directivo supuso un gran (reto) para mí. Pero ahora estoy muy satisfecho.
– ¡Cuánto me alegro!

a. desafío b. problema c. esfuerzo

Question 25 (1 point)

– ¿Quieres que salgamos esta noche?
– Lo siento, (pero tengo una cita).

a. he quedado con otra persona b. no me encuentro bien c. no tengo ganas

Question 26 (1 point)

– ¿Cómo te fue en el examen de conducir?
– Bueno, sólo (fallé) cinco preguntas.

a. me confundí en b. contesté c. respondí correctamente

Question 27 (1 point)

– Habla con Vera y dile lo que piensas (sin rodeos).
– ¡No es tan fácil! Vera me pone muy nervioso.

a. sinceramente b. directamente c. tranquilamente

Question 28 (1 point)

– ¡Deja de (canturrear)! No puedo concentrarme.
– Perdona, no sabía que estabas trabajando.

a. hacer ruido b. hablar c. cantar

Question 29 (1 point)

–Carlos, vete redactando el informe y, (entretanto), yo busco las facturas de los clientes.
– Vale, ahora mismo.

a. mientras b. después c. al final

Question 30 (1 point)

– ¿Sabes algo de Ana?
– Sí, nos llamamos (a menudo).

a. alguna vez b. con frecuencia c. en contadas ocasiones

Question 31 (1 point)

Complete las frases siguientes (preguntas 31 a 60) con el término adecuado de los dos o cuatro que se le ofrecen.

– ¿A qué día _____ hoy?
– A miércoles, 25 de mayo.

a. estamos b. es

Question 32 (1 point)

– ¿Sabes qué puso Andrés en el examen? ¡Que Vivaldi era pintor!
– _____ increíble. Como siga así no va a aprobar ni una.

a. Está b. Es

Question 33 (1 point)

– ¿Cómo _____ tu madre a los 16 años?
– Pues completamente diferente a mí. Dice mi abuela que nunca nos hemos parecido.

a. era b. fue

Question 34 (1 point)

– Mira qué nubes más negras. _____mí que va a llover.
– Pues en las noticias anunciaron buen tiempo.

a. Por b. Para

Question 35 (1 point)

– ¿Qué te parece Lucía para jefa de departamento?
– _____ un poco verde. Le hace falta más experiencia.

a. Es b. Está

Question 36 (1 point)

– ¿Por qué está Javi tan pensativo?
– Porque Ana se ha enfadado con él _____ no haber terminado el trabajo a tiempo.

a. para b. por

Question 37 (1 point)

– ¿Qué tal la novia de Luis?
– ¡Genial! _____ divertidísima. Sabe un montón de chistes.

a. Es b. Está

Question 38 (1 point)

– ¿Tienes un bolígrafo rojo?
– Creo que no tengo _____, pero espera que voy a mirar.

a. ninguno b. alguno

Question 39 (1 point)

– ¿Qué tal tu abuelo?
– Pues ayer me dijo que se _____ a Caracas a ver a unos amigos.

a. fue b. iba

Question 40 (1 point)

– Pero bueno, ¿no hay _____ que haya terminado el informe?
– Me temo que no.

a. nadie b. ningún

Question 41 (1 point)

– _____ me toque la lotería, hago un crucero por el Caribe.
– Pues yo, cambiaría de casa.

a. Porque b. Ya que c. Puesto que d. Como

Question 42 (1 point)

– Estamos _____ invierno y hace un calor insoportable.
– ¡Qué exagerado eres!

a. a b. en c. por d. hacia

Question 43 (1 point)

– _____ salí de clase, me encontré con César.
– Y ¿qué te dijo?

a. Nada más b. En cuanto c. Al d. Después de

Question 44 (1 point)

– ¿Te importa si invito a Serafina a la cena?
– No, haz _____ te parezca mejor.

a. lo que b. lo cual c. el que d. la que

Question 45 (1 point)

– Como no había ningún taxi tuvimos que ir al hotel _____ pie.
– ¡No me digas!

a. en b. a c. hacia d. para

Question 46 (1 point)

– T e lo contaré _____ no se lo digas a nadie.
– Que no, tranquila, que no se lo digo a nadie.

a. si b. como c. siempre que d. como si

Question 47 (1 point)

– Si pudieras volver a tu antiguo puesto de trabajo, ¿lo _____?
– La verdad es que lo he pensado mucho, pero no lo sé.

a. harás b. haces c. hicieras d. harías

Question 48 (1 point)

– ¿Vas a ir por fin a Argentina?
– No sé, depende _____ Javier. Todavía no sabe si tendrá vacaciones o no.

a. de b. en c. con d. a

Question 49 (1 point)

– Pide un deseo.
– A ver… Ya está: ¡que _____ Manuel la próxima semana!

a. venga b. viene c. viniera d. vendrá

Question 50 (1 point)

– Estás agotado, Andrés.
– Es que no estoy acostumbrado _____ hacer tanto ejercicio.

☐ a. a ☐ b. de ☐ c. en ☐ d. para

Question 51 (1 point)

– ¿Me dejas el libro que estabas leyendo ayer?
– Hasta que no lo _____ no, es que está muy interesante.

☐ a. terminaré ☐ b. termine ☐ c. terminara ☐ d. termino

Question 52 (1 point)

– Venga, ven conmigo al cine.
– ¡Ojalá ____ ! Pero tengo un montón de trabajo.

☐ a. pueda ☐ b. puede ☐ c. pudiera ☐ d. podría

Question 53 (1 point)

– ¿LLeváis mucho tiempo viviendo en Bolivia?
– Nos mudamos a La Paz cuando yo _____ 10 años.

☐ a. tenía ☐ b. tuve ☐ c. he tenido ☐ d. había tenido

Question 54 (1 point)

– ¿Te acostaste muy tarde anoche?
– Si, me quedé estudiando _____ las cinco de la mañana.

☐ a. a ☐ b. hasta ☐ c. desde ☐ d. por

Question 55 (1 point)

– ¿Cuándo te vas a cortar el pelo? Lo tienes larguísimo.
– Cuando _____. Ahora no tengo tiempo.

☐ a. puedo ☐ b. podré ☐ c. pueda ☐ d. pudiera

Question 56 (1 point)

– _____ he contado a Laura todos mis problemas.
– Seguro que ella te habrá dado buenos consejos.

☐ a. La ☐ b. Las ☐ c. Le ☐ d. Los

Question 57 (1 point)

– ¿Fuiste ayer a la cena de Sergio?
– No pude. Ojalá _____, me dijo Julio que estuvo muy bien.

☐ a. hubiera ido ☐ b. fuera ☐ c. haya ido ☐ d. vaya

Question 58 (1 point)

– Estoy preocupada. Omar lleva una semana fuera y todavía no ha escrito ni una sola carta.
– ¿Por qué no _____ escribes tú?

☐ a. se le ☐ b. se lo ☐ c. se la ☐ d. se te

Question 59 (1 point)

– ¿Dónde estuvo ayer tu madre? La estuve llamando toda la mañana.
– No sé, _____ en la piscina. Me dijo que tenía muchas ganas de ir.

☐ a. estaría ☐ b. estará ☐ c. estuvo ☐ d. estuviera

Question 60 (1 point)

– Me gustaría hablar perfectamente español y que no se me _____ el acento.
– Es cuestión de tiempo.

☐ a. notaría ☐ b. nota ☐ c. notara ☐ d. notará

APPENDIX F

LISTENER CELLS

		Male	Female
Native	Faculty	8	3
	Student	3	3
Non-native	Faculty	3	6
	Student	5	8

APPENDIX G

TOKEN CELLS

				Immersion			Non-Immersion		
				Normal	15% Accelerated	30% Accelerated	Normal	15% Accelerated	30% Accelerated
Communication	Male	Native	Faculty	35	35	35	49	49	49
			Student	20	20	20	28	28	28
		Nonnative	Faculty	15	15	15	21	21	21
			Student	25	25	25	35	35	35
	Female	Native	Faculty	15	15	15	21	21	21
			Student	15	15	15	21	21	21
		Nonnative	Faculty	30	30	30	42	42	42
			Student	40	40	40	56	56	56
Fluency	Male	Native	Faculty	35	35	35	49	49	49
			Student	20	20	20	28	28	28
		Nonnative	Faculty	15	15	15	21	21	21
			Student	25	25	25	35	35	35
	Female	Native	Faculty	15	15	15	21	21	21
			Student	15	15	15	21	21	21
		Nonnative	Faculty	30	30	30	42	42	42
			Student	40	40	40	56	56	56
Grammar	Male	Native	Faculty	35	35	35	49	49	49
			Student	20	20	20	28	28	28
		Nonnative	Faculty	15	15	15	21	21	21
			Student	25	25	25	35	35	35
	Female	Native	Faculty	15	15	15	21	21	21
			Student	15	15	15	21	21	21
		Nonnative	Faculty	30	30	30	42	42	42
			Student	40	40	40	56	56	56
Pronunciation	Male	Native	Faculty	35	35	35	49	49	49
			Student	20	20	20	28	28	28
		Nonnative	Faculty	15	15	15	21	21	21
			Student	25	25	25	35	35	35
	Female	Native	Faculty	15	15	15	21	21	21
			Student	15	15	15	21	21	21
		Nonnative	Faculty	30	30	30	42	42	42
			Student	40	40	40	56	56	56
Vocabulary	Male	Native	Faculty	35	35	35	49	49	49
			Student	20	20	20	28	28	28
		Nonnative	Faculty	15	15	15	21	21	21
			Student	25	25	25	35	35	35
	Female	Native	Faculty	15	15	15	21	21	21
			Student	15	15	15	21	21	21
		Nonnative	Faculty	30	30	30	42	42	42
			Student	40	40	40	56	56	56