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**The Learning of the Grammatical Gender in a Second Language**

A Thesis Presented

by

**Heidy A. De Jesús**

to

The Graduate School

in Partial Fulfillment of the

Requirements

for the Degree of

**Master of Arts**

in

**Hispanic Languages and Literature**

**(Hispanics Linguistics)**

Stony Brook University

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Abstract of the Thesis

**The Learning of the Grammatical Gender in a Second Language**

by

**Heidy A. de Jesús**

**Master of Arts**

in

**Hispanics Languages and Literature**

**(Hispanics Linguistics)**

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This study investigates why and where within a sentence, non-L1 Spanish students still make mistakes when classifying the grammatical gender after being exposed to the grammar explanations. Thirty-six L1 and non- L1 English speakers from two Spanish beginner college level class were asked to complete five different experiments, in which students had to match the gender of the noun with the correspondent article and make the gender of the nouns agree by writing or selecting the correct descriptive adjective. Results showed that (1) at a very early stage, students' Cultural Language Perception could interfere with the learning of the grammatical gender. (2) Students will have difficulty when making gender agreement in a nominal phrase rather than in an adjective phrase

## **Dedication**

**To Jeff C. Victor, for being my light at the end of the tunnel**

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## **List of Abbreviations**

Target Language: TL

First Language: L1

Second Language: L2

Second Language Learning: L2 Learning

Conscious Raising: CR

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Once my grandmother said to me, be careful when asking our Lord for patience because patience is synonymous with “longsuffering”. My grandmother then opened the Bible and showed me the following scripture, “*as for that in the good soil, they are those who, hearing the word, hold it fast in an honest and good heart, and bear fruit with patience*” (Luke 8:15). And indeed she was right, after endless nights with no sleep and long hours at my then current job, I poured my heart to God and asked for patience and strength and bore the fruits of my labor with the completion of my thesis.

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## **Introduction**

As a Spanish teacher, one phenomenon that constantly occurred inside my classrooms was the inaccurate classification of the grammatical gender made by adult learners whose first language was not Spanish, especially at a beginner level. In addition, even after learners were exposed to the gender classification rules in Spanish, their gender mistakes kept appearing in specific places within a sentence or discourse. These places were concentrated in the articles (definite or indefinite), in the nouns or in the adjectives. In fact, even after passing the beginner level classes, I found inaccurate usage of the gender in Spanish to be an ongoing problem. It was the search to determine the reason why non-L1 Spanish speakers still made mistakes after being exposed to an instruction of the grammatical gender that drew me to investigate and write this thesis.

My thesis is divided into six chapters; the first chapter deals with what the process of learning is and goes on to address learning inside the classroom. Also, it touches upon topics like input and its different types, teaching methodologies and the role of instruction inside the classroom. At the end of this chapter, research questions and hypotheses are proposed.

Chapter Two introduces the concept of gender in a grammatical system. Then, it goes on to introducing two kinds of gender identified in languages: the natural gender and the grammatical gender. Lastly, the chapter mentions some languages aside from Spanish and English whose gender classification might be similar to either the English natural gender or the Spanish grammatical gender. Chapter Three talks about the participants chosen for this study, and the procedures used to divide the participants into groups. This chapter also addresses the

Instruments, which explain how each of the experiments used in this study were designed as well as the purpose of each activity. Chapter Four mainly discusses classroom methodologies; as the name entails, this part deals with the different types of methods used by the teachers in charge of each group in the classroom. Also, the chapter goes on to explain the teaching sequence used for each lesson where the grammatical gender appeared.

Later on, Chapter Five deals with the detailed analysis of the five experiments implemented with the participants inside the classroom. Experiment # 1 tests the cultural language perception that some students might have before the formal explanation of the grammatical gender in Spanish. After students were exposed to a formal introduction of the grammatical gender, experiment 2 was given. It deals with the concept of using morphological word markers in adjectives when describing animate nouns. Furthermore, Experiment #3 is about the classification of inanimate objects within a nominal phrase (*art + noun*). Experiment # 4 deals with the full gender agreement (*art + noun + adj*) in simple sentences, the experiment is looking to find out where within a sentence structure students will find the most difficulty. Experiment #5 deals with the description of a person using descriptive adjectives in a free response task. This means that students had the opportunity of choosing who they wanted to talk about and the adjectives of their choice.

Lastly, Chapter six talks about the findings of this investigation by answering and discussing the research questions and hypothesis. In addition, the chapter goes on to explain some limitations of this research and provide some observations that could be taken into consideration when doing future research.

## **Chapter 1**

### **CLASSROOM SECOND LANGUAGE LEARNING**

#### **1.1 Introduction**

The following chapter introduces the concept of learning; also it talks about how the learning process differs from the process of acquisition. The chapter goes on to address learning inside the classroom and the teaching methodologies and styles used by the teachers. The chapter then defines input, detailing the various types of input and its role towards learning in the L2 classroom. The chapter will focus on the input source in question which is the input of instruction. Once instruction is explained, the chapter addresses the types of learning errors that L2 learners may develop. Lastly, the research questions and hypothesis for this investigation are presented.

#### **1.2 Definition of the Acquisition and Learning Process**

Learning and acquisition are two processes that occur in one's first language as well as in their second language. The linguist Krashen defines both processes very well in his "Acquisition-Learning Hypothesis". Krashen defines acquisition as a "Subconscious process identical in all-important ways to the process children use when acquiring their first language. In addition, he states that the process of learning is a conscious process that results in knowing about a language" (Krashen 1985: 1). Even though both acquisition and learning are ways to develop the ability to speak in a second language, there is a fundamental difference between both of these processes. For the purpose of this investigation, it is necessary to be able to address the differences between these two.

### 1.3 Contrasts between Learning and Acquisition in a Second Language Classroom

Applying the terms of *acquisition* and *learning* into a second language classroom, the learning process, as Krashen defines it above, is a “conscious process”. The word conscious, when used in a L2 classroom context, means that students are aware, paying close attention and comprehending what the instructor is trying to explain in a formal instruction. On the other hand, the process of acquisition, as Krashen describes it, is a “subconscious process”, which means that students are not aware of their language learning. Ellis and Wilkins added to this notion by stating that “the process of acquisition will happen as a result of natural and largely random exposure to the (target language) TL” (Ellis 1990:41, Wilkins 1974:26). In other words, we could say that learning occurs when an individual knows how to explain any given concept while acquisition occurs when the individual knows by intuition what that concept is but does not know how to explain it.

Furthermore, when discussing the definition of acquisition in a second language, Krashen states that “the acquisition is identical in all important ways to the process children use when acquiring their first language” (Krashen 1985: 1). But we must remember that when it comes to a second language within a classroom context, there are many factors that must be taken into consideration and that could prevent acquisition from happening. Some factors mentioned by Ellis include “individual differences like first language (L1) background, aptitude, learning style, motivation, personality” (Ellis 1997:107) and many others. Due to the length of this research, all of the factors cannot be addressed, however, factors like “individual differences like first language (L1) background”, the amount of time spent in the classroom exposed to the L2 and the students’ cultural language bias are factors that are addressed.

The first to be addressed is the factor of individual differences in the L1 when learning a second language. One issue that arises is that students might not have certain grammatical structures as part of their first grammar which would then inhibit their ability to acquire grammatical structures. For example, it is a known fact that for a student whose L1 is English, trying to acquire the classification of the grammatical gender in Spanish will be challenging because they do not have the grammatical gender classification<sup>1</sup> in their own L1.

A second issue arises when addressing the amount of time spent in the classroom exposed to the L2. To be able to acquire a L2 in a classroom setting, one of the requirements is that an individual must be submerged in the language for long periods of time. If students are only exposed to the TL for two hours twice a week, as is the case of the participants of this investigation, it is not enough time for certain structures to be acquired.

The third and final issue is the students' cultural language bias. Most languages by nature carry some type of cultural bias rooted within them. Cultural bias is the act of comprehending a given statement or situation based on previous prejudices and ideas subconsciously or consciously acquired through one's culture. For example: society's tendency to associate certain inanimate objects to a biological sex, i.e. a dress, which is commonly associated with females and a tie, is commonly associated with a male. Even though these items are associated to a biological sex by tradition, grammatically, in Spanish for instance, they might be classified differently; this difference in the perception of the "grammatical gender can influence the manner in which speakers of languages that have this feature perceive certain entities" (Tight 2006: 151). Due to this and all the previous factors mentioned, the term acquisition will not be used for this investigation.

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<sup>1</sup> The grammatical gender classification will be discussed in depth in chapter 2.

### **1.3.1 Learning in a Second Language Classroom**

Within a classroom, as stated by Ellis, referring to Stern's definition, it "is the learning which has been induced or influenced by some form of deliberately planned social intervention" (Ellis 1985:2, Stern 1983:19). This means that in order for learning to take place in the classroom, the instructor must find a way to facilitate or promote the process of learning. Therefore, teachers must use certain types of tools like teaching methodologies or teaching styles to implement this social intervention. To test if knowledge was achieved, two things are considered: first, the teacher must ascertain that the input was understood, and second, students must be able to reproduce the grammatical structure correctly in their output<sup>2</sup> in order to show that they learned a particular grammatical structure.

### **1.4 Teaching Methodologies and Teaching Styles inside a Second Language Classroom**

According to Cook, "teaching methods usually incorporate a view of L2 learning whether implicitly or explicitly" (Cook 1991:2). Teaching methods consist of a group of theories that seek a better insight into learning a TL. A method like "grammar-translation", according to Cook,

Emphasizes explanations of grammar points because this fits in with its view that L2 learning is the acquisition of conscious process. Then there is the communicative teaching method, which makes sure that students constantly interact with each other because this method is seen as an L2 learning that grows out of communication" (Cook 1991:2).

Another teaching method is the audio-lingual method, which by definition is the act of teaching while emphasizing the spoken language through dialogue and drills. The dialogue usually consists of an ordinary day situation such as buying shoes in a shoe store. The situation is usually played out on tape or read by a teacher and the learners are then instructed to repeat the

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<sup>2</sup> Output by definition "is the input that learners produce"( Long 2005:26)

dialogue question by question and act out the motions involved. Simultaneously, the teachers will drill the grammatical points associated with the dialogue, this way the drill can repeatedly practice a structure with only minor variations to the vocabulary involved. The audio-lingual method is also the method that most closely reflects habit formation. Habit formation is the belief that language resembles a set of habits. Like riding a bicycle, there is a need to “try and try again”. In doing this, the dialogues concentrate on unconscious structures rather than conscious rules (Cook 1991:35-36).

Once a teacher has been exposed to the various teaching methodologies, he/she is able to pick and choose those best suited for their class. This then becomes the teacher’s “teaching techniques” which Cook cited from Clark (1984) when Clark defined teaching techniques as “the label for what we do as teachers” (Cook 1991:132). The combination of these techniques is what is called “teaching styles”.

### **1.5 The Role of Input in a Second Language Classroom**

For the learning process to take place in a second language classroom, it is necessary to have some type of input. Input by definition is the information that students received inside a classroom. According to Wong, “input refers to samples of language that learners are exposed to in a communicative context or setting” Wong (2005:24). However, input does not have to come only from a formal instruction, as soon as the teacher steps into the classroom and greets the students in the TL the students are exposed to input. Other forms of input according to Wong, include watching a film in the TL, listening to a song, looking at advertisements or magazines and interacting with the instructor and other fellow students inside the classroom” Wong (2005:24, 25).

### **1.5.1 The Interactional and Non-Interactional Input**

Wong agrees with Rod Ellis (1994) when he says that the input could be classified into two categories: “interactional input and non-interactional input”. According to Wong, the interactional input is the one that actively happens in the classroom. Interactional input “Is the one that is received in the context of interaction where there is a kind of communicative exchange involving the learner and at least one more person” Wong (2005: 24, 25). This means that when interaction is taking place in the classroom, students have more opportunity to actually use the language and to practice in the TL.

On the other hand, the non-interactional input is the one that “occurs in the context of non-reciprocal discourse” (Wong 2005: 24, 25). The non-interactional input is when a student passes from being active to passive. In this input, the student would listen to everything that the instructor is saying without answering. Most of the time, this type of input is practiced when students are listening to audio activities (Wong 2005: 24, 25). The non-interactional input does not require students to actually practice the language orally. In this type of input, just like there are students who will only learn an L2 by interacting with other students, there are those other types of students who feel that interaction is not that necessary and would therefore prefer to have a more passive role in the classroom while still learning the TL.



## 1.6 The Role of Instruction

Input must come from a source and this source is called instruction. A possible definition for instruction could be the manner in which a teacher conveys input (messages) in a classroom; this input could affect the student's learning in a positive or in a negative way. Ellis states that teaching can be viewed in two different ways: the first is by "interaction" and second is by "formal instruction" (Ellis 1990:93). Ellis defines interaction as "the process by which samples of the TL become available to the learner for interlanguage<sup>3</sup> construction through classroom interaction" (Ellis 1990:93). Another way to define interaction could be the oral exchange that happens between a student and a teacher. The second way of viewing teaching is by formal instruction, which is "the attempt to intervene directly in the process of interlanguage construction by providing samples of specific linguistic features for learning" (Ellis 1990:93), which means that the formal instruction might help the student's interlanguage construction and enable them to reproduce what they have learned in the TL.

According to Ellis, "the formal instruction does more than just teach a specific item it also exposes learners to features which are not the focus of the lesson" (Ellis 1990: 94). For many researchers, formal instruction is related with what is called a "consciousness raising<sup>4</sup>" (CR) which means that the formal instruction helps to raise students' awareness of certain types of linguistic features that students will normally just ignore making these features easy for students to grasp. Ellis explains a study conducted by Long (1983b) regarding formal instruction: "Long reviewed a total of eleven studies that examined the effect of formal instruction on the rate/success of L2 acquisition. The study's goal was to show if L2 instruction actually makes a

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<sup>3</sup> Interlanguage "is the language of a L2 learner, it is considered as a system of language in its own right rather than as a defective version of a TL" Cook (1991:5).

<sup>4</sup> Consciousness Raising (CR) by definition is "the deliberate attempt to draw the learner's attention specifically to the formal properties of target language" Rutherford (1985:107).

difference or not. As for the results, Ellis agreed with Long when he claimed that there was a considerable evidence to indicate that L2 instruction does make a difference” (Ellis 1990:130; Long 1983b:374).

Long discovered that “the instruction was not only beneficial for children but also for adults, and also for students in the intermediate level and advance levels.”(Ellis 1990:130). At the end, both types of instruction must be present in the class at all times. One cannot work without the other; there must be a balance. The interaction will always be necessary inside the classroom not only as a way to break the ice but to help build a relationship with the TL. The formal instruction on the other hand, helps the students to be more aware of certain grammatical rules that must be taken into consideration when using the second language.

### **1.7 Second Language Instruction and Adult Learners**

Learning in general does not fall solely under the responsibility of the instructor, but also falls under the responsibility of the learner since the student needs to be ready to understand the linguistic feature that the instructor is trying to explain inside the classroom. But at times the instructor spends long periods of time trying to teach a grammatical structure and if the learner is not internally ready to comprehend the structure, he/she simply will not learn it.

Moreover, Ellis quotes Lightbown (1985c:102) when he says that the instruction of certain grammatical structure may be understood at the beginning of its explanation by the students but after a period of time, the same grammatical structure tends to disappear. Ellis (1990) follows the idea of Lightbown when he says: “the learners heard and practiced certain language items in class and for a period of time outside the class, they appeared to know these forms in the sense that they used them correctly in the appropriate context. Later, however, some

of these correct forms disappeared from the learners' language and were replaced by simpler or developmentally earlier forms" (Ellis 1990:166). As we know, this happens in many L2 classrooms, at the beginning, learners appeared to have understood; they could have even answered all the activities correctly directly after the explanation. However, once the practice ceased and the class resumed the next day, students tended to not remember what was previously taught in the class. This happens because students might have mimicked the explanation during the lesson but did not comprehend the complete input.

### **1.8 Learning Errors inside the Second Language Classroom**

Errors are another problem that learners tend to have while in the learning process of learning a second language. Errors are natural processes that every second language student must face in order to be able to learn and communicate in the second language. For a very long time errors inside the classroom were rectified by making an immediate correction, ignoring the fact that no matter how many corrections the instructor gave, the errors would always remain part of the learning process.

Ellis (1990) agrees with Corder (1967) when he "suggested that it was much more important that L2 learners be allowed to discover their own errors rather than be corrected by the teacher" (Ellis1990:36). "He argues that it puts the learners on the defensive and encourages them to avoid difficult structures and to focus on form rather than meaning" (Ellis 1990: 73). Also like Edmonson (1985), Ellis argues "that bringing errors to the learner's attention helps learning" (Ellis 1990:74). Ellis states that the teacher as facilitator must know which errors to focus on correcting.

According to Ellis, there are two types of errors inside the classroom, they are called “intralingual” and “interlingual”. By definition, Ellis says that “intralingual” errors are caused by the grammatical structure within the same L2 while the “interlingual” is the result of the L1 transference” (Ellis 1990:46). For this investigation, the types of error that students made most of the time were from the interlingual type. This was concluded because the students, especially those that had English as their L1 were dealing with a grammatical structure, for example, the gender classification that existed only in the TL not in their L1.

### **1.9 Research Questions**

Research has shown that when it comes to the learning of the correct classification of the grammatical gender in Spanish, L2<sup>5</sup> learners will tend to have a certain degree of difficulty when making full gender agreement, especially in a beginner level course. This investigation deals primarily with adult learners whose L1 is English, but includes L1 speakers of: French, Bengali, Urdu, Malayalam, Vietnamese, Arabic, and Korean.

The focus of this study is to investigate where within a simple sentence structure learners find the most difficulty. To find a possible explanation, I present the following research questions:

- A.** Can cultural perception be one possible reason students at a nascent level in the learning process of the grammatical gender classification have difficulty showing understanding?
- B.** Is it within a nominal phrase or in an adjective phrase where students find the most difficulty when classifying the grammatical gender?
- C.** Will the learners whose first language is not English do relatively better than the native English speakers?

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<sup>5</sup> This investigation also deals with L3 Learners.

**D.** Can a classroom methodology intervene in a positive way with the learning of the grammatical gender?

### **1.10 General hypothesis**

Learners of Spanish whose first language does not have noun-gender specifications will have various levels of difficulty when learning how to classify the grammatical gender.

Following the general hypothesis we could say that:

- a)** At a very early stage while learning the grammatical gender in Spanish, cultural perceptions (the associations of nouns with gender) might interfere with the proper classification of the grammatical gender.
- b)** When making an agreement between the noun and the adjective, a learner of Spanish whose L1 is English will have difficulty when using morphological endings while describing animate nouns.
- c)** Learners of Spanish tend to do better when they encounter a noun phrase by itself as opposed to when they encounter more gender agreement variables within a given adjective phrase.
- d)** L2 and L3 learners of Spanish will find difficulty when making gender agreement in a nominal phrase rather than in an adjective phrase.

## Chapter 2

### THE NATURAL AND GRAMMATICAL GENDER: CONTRAST BETWEEN THE SPANISH AND THE ENGLISH LANGUAGE

#### 2.1 Introduction

The following chapter introduces the concept of gender in a grammar system. The chapter then goes on to introducing the two kinds of gender identified in languages, the natural gender and the grammatical gender. In addition, the chapter focuses on the classification of the grammatical gender in a language by mentioning three aspects, the morphological, the syntactic and the semantic. Moreover, after discussing the grammatical aspects of the language, the chapter makes a contrast between the natural gender in English and the grammatical gender in Spanish. Lastly, the chapter goes by mentioning other languages that might be similar to either the English natural gender or the grammatical gender.

#### 2.2 Definition of Gender

According to Corbett, gender, out of all the grammatical categories out there, is one of the most complicated one (Corbett 1991: 1). It is a topic that has not only been under investigation by many linguists, but also, by language teachers. “For many languages out there, gender is a fundamental element of classification; while in other languages, gender seems to be completely irrelevant” (Corbett 1991:1). The word “gender” in Latin was *genus* and formally, meant sort or kind. It is defined by *la Real academia de la lengua* as the class into which pronouns and nouns belong within the indo- European languages. Gender is a classification that depending on the language, all nouns have. According to Tight, there are two kinds of gender that has been identified in languages, the natural gender and the grammatical gender. (Tight 2006:149).

### 2.3 The Natural Gender in English

The natural gender belongs to a “semantic system, where the meaning of a noun determines its gender” (Corbett 1991: 8). An example of a language that uses the natural gender as part of its grammar system is English. The natural gender is characterized by having nouns that stand for male animate beings as masculine, for female animate beings as feminine and those being referred as inanimate are classified as neuter (Tight 2006:149, Konishi 1993:520). In other words, Tight states that the natural gender system is linked more to a biological sex in the physical world while the grammatical gender deals with arbitrary classification of things. These characteristics are seen in languages like English. (Tight 2006:149)

According to Hellinger, the present Modern English is the one that has no grammatical gender, while the Old English (Anglo-Saxon) had three gender classes within its grammar. These classes were masculine, feminine and neuter. However, due to “decay of inflectional endings and the disintegration of declensional classes” by the end of the 14<sup>th</sup> century the category of grammatical gender was lost. Nowadays, the English language is one of the languages that possess a natural gender classification Hellinger (2001:107).

Brinton states that the gender in English is expressed by the personal pronouns in the third person singular *he, she, it*. When it comes to classifying the gender of nouns, English tends to have “a covert category shown by the co-occurrence of relevant pronouns: the boy...he, the girl...she. Note that there is nothing about the morphological form of the nouns boy and girl which would indicate that they are masculine or feminine gender” (Brinton: 2000:105).

In addition, another characteristic of the English language is that it does not display any type of gender classification in its articles. The article *THE*, could be used to accompany animate

nouns as well as inanimate nouns. For instance: the teenager, the book. In addition, even though the majority of the nouns in English do not have a morphological ending that could also determine the gender of a noun, according to Brinton, “English speakers would still know how to distinguish when talking about “an animate noun like (the { women, dog } who..) and inanimate things and lower animals like (the { ant, stone } which..)” Brinton (2000:105)

Brinton writes that even though “English does not usually mark the gender of the noun morphologically, there is always an exception to the rule. There are some cases when nouns in English, expresses overtly their gender”. Brinton (2000:106) For instance:

(1) By derivational suffixes, as the feminine suffixes –ine for nouns like “hero/heroine”, -ess “god/goddess”, and -rix aviator/aviatrix- -ette suffragist/suffragette”. (2) “By compounds nouns, as lady- woman-, girl-, female-, male-, gentleman- man”.(3) “By separate forms for masculine, feminine, and common gender as boy/girl/child or rooster/chicken”. (4) “By separate forms of masculine and feminine genders, like niece/nephew, horse/mare or even in people’s names like Joseph/Josephine etc. Brinton (2000:106).

Moreover, even though the English language just like Spanish overtly expresses the gender of some of its nouns, it does not mean that students could fully understand the concept of the grammatical gender in another language if they do not possess the concept in their language in the first place.

## **2.4 The Grammatical Gender in Spanish**

The grammatical gender, “is characterized by a formal system” (Tight 2006: 149, Konishi 1993:520); “where each noun belongs to a grammatical class” (Tight 2006:149, Lyons 1968:283). In many languages, “the grammatical gender distinguishes nouns in two or more classes. This is according to the morphological modifications they require in words that are syntactically associated with them” (Cubelli, Paolieri, Lotto, Job, 2011:449). Moreover,



according to Brinton, “the grammatical gender is a system that appears to be completely arbitrary. In this system, gender it’s not linked to an actual sexual category of an object unlike the natural gender of English. Instead, the grammatical gender is just a way of sub-classifying nouns as masculine, feminine”. (Brinton 2000:105).

Historically, just like the current English language, Spanish used to have a third gender grammatical class called neuter, but this no longer exists. The neuter in Spanish was reduced to *lo, esto*, which could be close equivalents of the pronoun IT in English. A possible reason why Spanish no longer has a neuter form could be traced back to Latin. Latin was a language that had a three-gender classification; masculine, feminine and neuter. However, as Latin started to evolve, the neuter disappeared dividing itself between the feminine and masculine gender.

## **2.5 The Classification of the Grammatical Gender in Spanish**

According to Ibrahim, there are three modules that must be taken into consideration when classifying the gender in a language. These modules are “morphologic, syntactic and semantic” (Ibrahim 1973:37). In Spanish, the three aspects exist and must be taken into consideration when classifying the grammatical gender:

### **2.5.1 The Morphological Module of the Grammatical Gender in Spanish**

According to Ibrahim, in this module, “noun classes possess a certain word makers more for inanimate nouns than for animate nouns”. However, Ibrahim stresses that even though “word markers are crucial for inanimate nouns, there are some nouns that are not marked for their respective genders” (Ibrahim 1973:97). In Spanish, those word markers are –A and –O. The -A is used to classify most of the animate/inanimate feminine nouns while the –O is used to classify

the majority of the animate /inanimate masculine nouns. An example of an inanimate noun without word marker is *suéter* (sweater).

Moreover, in Spanish, marking the gender of the nouns is a must; therefore, Whitley states that “Spanish native speakers since their childhood have the opportunity to acquire the grammatical gender structure due to the amount of exposure in the language” Therefore, according to Whitley, it is very unlikely to find a native Spanish speaker saying *la vestido blanco* instead of *el vestido es blanco* (the dress is white) (Whitley 1986:146). However, students who are studying Spanish as L2 or L3 do not have the same amount of exposure to the grammatical gender as a native speaker would have, resulting only in the learning of the gender, not in the acquisition of it. Fortunately, as confirmed by Whitley, “the grammatical gender in Spanish could be partially predictable by certain clues that are found in the spelling and pronunciation (phonetics)” (Whitley 1986:146); he also discusses how Bull came up with a very specific statistics on gender classification according to the ending of different nouns shown in Table 1.

However, Table 1 only reflects the noun endings that are the easiest to remember for L2 or L3 learners; it does not contain any type of exceptions. In addition, the table does not reflect nouns ending in a Z. according to Whitley, for this particular table the nouns ending in Z were not statistically significant. Nouns ending in Z could pertain either to the masculine classification or the feminine one (Whitley 1986:146). Thanks to tables like this one, students then could form acronyms like the famous NORSEL (Whitley, 1986:146, LaMadrid et al. 1974:104) or LONERS (Whitley, 1986:146, Bricoe et al. 1978:2) to make the learning of the masculine classification easier to remember.

-N (not counting -ción, -sión)	-O	-R	-S (not counting -tis, -sis)	-E	-L	-A	-D	-ción, - Sión	-Sis, -Tis
96.3% are M	99.7% M	99.2% M	92.7% M	89.2% M	96.6% M	98.9% F	97% F	100% F	99.2% F

Table: 1 Bull's statistics regarding gender classification nouns endings.

According to Whitley, table 1 shows that there is a 96.6% for the nouns that ends with an “L” Whitley argues that “it is very possible that students who does not have Spanish as their L1 will guess or predict that the words that ends with an “L” are classified as masculine. While only 3.4% of the times students might think that some words that ends in “L” will be classified as feminine” (Whitley 1986: 146). Also, the same table shows that 99% of the nouns that have an –O and –A as a word maker are classified respectively as either masculine or feminine, which means that the remaining 1% of the words are consider exceptions in Spanish.

As a general rule, exceptions are those nouns that carry within the nominal phrase an article that does not agree with the word maker. In other words, exceptions are nouns that have a masculine article while the noun carries a feminine word maker or vice versa. For example *el mapa* “the map” which carries a masculine article “EL” even though the noun *mapa* “map” has a feminine word marker. Another example is *la mano* “the hand” which carries a feminine article “LA” accompanied by noun that has a masculine word marker. Nouns like this do not follow the traditional classification and therefore are called exceptions to the Spanish grammatical gender rule. In Table 2, Whitley displays nouns that are exceptions to the NORSEL acronym (Whitley 1986:147):

-N = F	Armazón, imagen, opinión, región, religión, razón, sartén, virgen.
-O = F	Mano, moto, foto, polio.
-R = F	Flor, labor, mujer.
-S = F	Diabetes, res, sintaxis, tos, caries.
-E = F	Calle, clase, carne, costumbre, fuente, ingre, leche, llave, muerte, noche, nube, sangre, superficie, tarde.
-L = F	Cárcel, col, piel, sal, señal, vocal.
-A = M	Clima, delta, día, drama, mapa, planeta, poema, problema, programa, síntoma, sistema, tema, tranvía.
-D = M	Ardid, ataúd, césped.

Table 2: Exceptions to the NORSEL rule.

Unfortunately, the exception nouns are not the only concern students experience when learning the grammatical gender. Whitley discusses another complication in the Spanish grammatical system, nouns called “transvestite”, in this type of nouns LA becomes EL if the noun begins with /a/. For example, for nouns as *el agua, el arma, el agila, el alma, el ave, el alma*” Whitley (1986:150). Historically, this /el/ it’s not masculine, but a relic of the earlier feminine form /ela/, which contracted to *EL* in these cases but of *LA* in all others (including those nouns with initial unstressed /a/ as in *la acera, habilidad, atmosfera*. Due to this type of nouns, students while in the process of learning the classification of the grammatical gender finds it very difficult; especially, knowing that when students are first introduced to the gender classification, they learn that the article /el/ is the one used to classify the masculine gender. Whitley (1986:150).

## 2.5.2 The Syntactic Module of the Grammatical Gender in Spanish

According to Ibrahim, the syntactic aspect is “when a noun aside from belonging to a gender class, agrees with other parts of the sentence” Ibrahim (1973:37). In Spanish, when the nouns agree with other parts of a sentence, is called gender agreement. According to Corbett, gender agreement “commonly refers to some systematic covariance between a formal property and a formal property of another” Corbett (1991:105).

In Spanish, the gender agreement must come from two elements; the combination of a noun with an article or the combination of the noun with an adjective. A good example could be the nouns *chico* (boy) and *chica* (girl). These two nouns are differentiated by the word markers –A and –O. Like it was mentioned previously, we could agree the nouns *chico* and *chica* by adding an article, or by adding an adjective<sup>66</sup>. When making an agreement using only an article, we must first look at the noun’s word marker; the noun *chico* ends with an –O which means that in most cases the corresponding article is masculine /*el/* or /*un/* “the or a/an” *el/un chico*.

For the noun *chica*, the majority of the time, the corresponding article will be feminine /*la/* or /*una/* “the or a/an” *la/una chica*. When the agreement is between the noun and an adjective, “The agreement is established by arbitrarily matching the same referent differentiators” Bull (1965:103). An example of the same referent differentiator, are the adjectives *malo/mala* (bad). When these adjectives are combined with a noun, it should look like *chico malo* or *chica mala* (bad boy or bad girl). However, not every adjective has the –A or the –O as a word marker. According to Harris, the adjective that does not have a word marker of –A

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<sup>66</sup> “Just “like determiners and other noun modifiers, adjectives have no inherent gender; they do however, show gender concord with the noun they modify” Harris (1991:34).

or –O belongs to an “outer core”. “This core does not have word markers but may have an /e/ for syllabicity” Harris (1991:32). For example *chico fuerte* (strong boy).

### 2.5.3 The Semantic Module of the Grammatical Gender in Spanish

The third aspect of the gender classification is the “semantic module”, in this module, “gender markers do not add anything to the meaning of inanimate nouns but certainly they are semantically significant in animate nouns” (Ibrahim 1973:97). Whitley displays “four main morphological patterns” (Whitley 1986:148), these patterns could be utilized to exemplify semantically significant animate nouns.

The first pattern is characterized by different stems: “*el padre/la madre, el hombre/la mujer, el yerno/ la yerna, el tío/la tía*”. (2) pattern shares stems with “idiosyncratic derivational suffixes like: *el actor/la actora, el poeta/la poetisa, el rey/la reina*”. (3) patterns with the same word, “with gender assigned according to the referent’s sex like *el idiota/la idiota, el pianista/la pianista, el artista/la artista*”. (4) “pattern with the same stem but with a femininizing –A added to the masculine (and replacing its –E or –O) like *el abuelo/la abuela, el hijo/la hija, el monje/la monja, el señor/la señora, el español/la española*” and many others. Whitley 1986:147-48).

### 2.6 Contrasts between the Natural Gender and the Grammatical Gender

At the end, the differences between the English and Spanish language are completely clear. The English is characterized by a natural gender system, in this system, gender is determined semantically by associating the gender with a biological sex, for example: the boy equals masculine and the girl equals feminine; for inanimate things English classifies them with the pronoun it. On the other hand, the Spanish language has a grammatical gender system where aspects like the morphology, the syntax and the semantics are taken into consideration before classifying the gender of a noun. When classifying gender in Spanish, animate and inanimate will fall under two categories, masculine or feminine, there is no neuter. When it comes to the

grammatical agreement, it is not necessary in English but is a must in Spanish, as part of the gender agreement, articles as well as adjectives must agree with the noun morphologically. These differences and many others make the learning of the grammatical gender difficult for students whose L1 is English.

## **2.7 The Gender in other Languages**

In this investigation, because some of the Spanish learners have as their L1 languages like French, Malayalam, Arabic (Moroccan), Vietnamese, and Hindi as their L1, it is important to know if the gender classification system of these languages is either similar to the English natural gender or to the Spanish grammatical gender. By knowing this information, it will help to determine in later chapters if having grammatical gender already in their L1 will help the students to better understand the grammatical gender in the TL which in this case is Spanish.

### **Malayalam:**

This language pertains to the Dravidian languages, “has a gender classification made on the basis of a rank instead of a sex, with one class which includes being of a higher status and the other being of an inferior status to which inanimate objects and sometimes women are assigned” Colombia Electronic Encyclopedia (2011).

### **Moroccan Arabic:**

“Moroccan Arabic has two grammatical genders, feminine or masculine. Adjectives, verbs, pronouns, and prepositions are in agreement with the gender of the noun. Adjectives always follow the noun they modify and they correspond in number and gender. The Moroccan Arabic verb is very complex; it carries a substantial amount of semantic information which

allows it to be an independent sentence in its own right” (Hellinger 2001:28). As mentioned earlier Moroccan Arabic has two grammatical genders (masculine or feminine). One important thing to notice is that not all feminine genders end in the suffix-a. In addition only the feminine words are marked for gender. Masculine words on the other hand are not marked for gender, and these words are identified by a zero suffix. Also:

Nouns in Moroccan Arabic are either feminine or masculine. Adjectives can be marked as feminine or masculine and they must agree in gender with the noun they modify” (Hellinger and Bußmann 2001:31). Furthermore “in general, feminine nouns are derived from masculine nouns. Attaching ‘a’ to masculine nouns almost invariably turns them feminine. This process of word formation is quite heavily exploited in professional nouns. For example, the word *tbib* is considered masculine but when ‘a’ is added to the end of the word ( *tbib-a* )it’s considered feminine at that point (Hellinger 2001:36).

### **Hindi:**

“Hindi is among the most widely spoken languages in the world today” (Bußmann and Hellinger 2002:137). “In many Hindi dialects only animate nouns referring to females are considered feminine. In addition, because Hindi is a kind of communication amalgam, speakers generally exhibit neutral attitudes toward variations in speech, grammatical gender notwithstanding. But the gender variability described above leads Simon to make the interesting claim that the employment or non-employment of standard agreement sometimes serve as a register marker, indexing the speaker’s gender” (Bußmann and Hellinger 2002:138). Furthermore, in Hindi, nouns have a two way gender system (masculine or feminine) as well as a two way plural system (singular or plural). When dealing with animate nouns the gender has to agree with the noun to a certain extent. However with inanimate nouns the gender noun agreement is “arbitrary”.



“Hindi nominal forms are classified as either direct nominative or oblique with the latter normally signaled by the presence of a postposition. “A” endings signals masculine singular, *-e* masculine plural, *-ī* signals feminine singular and *iyā̃* signals feminine plural; in the oblique case these ending become *-e, -Ō, -ī and -iyŌ* respectively”. “Masculine forms of inflecting adjectives end in *-ā* in the singular direct and *-e* in the plural direct, singular oblique, and plural oblique cases; the feminine forms always end in *-ī*, whether singular or plural, direct or oblique” (Hellinger and Bußmann 2002:140).

### **Vietnamese:**

Vietnamese does not have a grammatical gender. “It is a classifier language which demands the use of a classifier when the noun is combined with a numeral. The choice of classifier depends on features such as animateness, humanness, social position and attitude of the speaker” For example *con* is used for animals and insects (*con kiến* ‘an ant’) and *cái* is used for inanimate objects (*cái ban* ‘a table’). (Hellinger and Bußmann 2002:283). Furthermore “Vietnamese is a monosyllabic language. Each syllable usually constitutes a word. The canonical syllable structures are (C) (W) V ©, where V can be a vowel or a diphthong. Any consonant can occur initially, but only a limited number of consonants can occur finally. In addition, Vietnamese is morphologically isolating and makes use of modifiers rather than of affixes to express tense and voice of verb forms” (Hellinger and Bußmann 2002:283).

## French:

“French has two genders, masculine and feminine. The neuter gender of classical Latin in many cases merged with the class of masculine as early as Vulgar Latin. Diachronically speaking, the masculine acquired a wider function from Latin to French through the absorption of many neuter words. In contemporary French, the concept of neuter remains semantically only in indefinite pronouns. The genders are marked on nouns, adjectives, determiners, and pronouns. With few exceptions, participles are gender-marked only in spelling, for example *il est venu* ‘he has come’ vs. *elle est venue* ‘she has come’ ”. (Hellinger and Bußmann 2003:90).

In addition, in the French language “the masculine and feminine genders are expressed either phonologically or morphologically on the noun itself, or manifest themselves lexically or morphosyntactically as well as by agreement.

Furthermore, “in the French language possessives agree in gender and number with the following noun regardless of the gender of the possessor”. (Hellinger and Bußmann 2003:91).

Also, in the French language “syntactic units are solely motivated by the grammatical gender of the possessor and not by the referential gender of the possessor as in English. In addition the opposition between masculine and feminine can be neutralized through the plural forms (definite, indefinite), demonstrative and possessive. ”. (Hellinger and Bußmann 2003:91).

## Chapter 3

### PARTICIPANTS AND EXPERIMENTS DESCRIPTION

#### 3.1 Introduction

This chapter has been divided into three sections: the first section is about the participants and provides detailed information regarding the participants' ages, their first languages, their interest in the language of study and their proficiency levels. The second section is on the procedures and explains the division of participants in two different groups and when and how the activities were collected. Lastly, the third section deals with the instrument design and explain the purpose of each activity.

#### 3.2 Participants

The participants for this study were Stony Brook University students selected from two different beginner level Spanish classes. Each class had 27 students in total 18 students 9 males and 9 females were pulled from each class to carry out the study. The classes were labeled as *experimental group* and *control group*. *The experimental group* was the group of participants who were exposed to explicit formal instruction on how to classify the grammatical gender. *The control group* was the group of participants who were not exposed to explicit formal instruction on the classification of grammatical gender. In addition, both groups were divided into subcategories. These included students who spoke English as their first language and students who spoke English as their second language. A few learners spoke Vietnamese, Malayalam, French, Arabic, and Hindi as their first language.

As far as their proficiency level, *the experimental group* had 10 students who had never taken a Spanish language class before, 6 students who had up to two years of Spanish class

experience in high school and 2 students who had taken Spanish language classes for up to four years. In addition, *the control group* had 8 students who had never taken a Spanish class before, 8 students who had taken up to two years of Spanish classes prior to this study and 2 students who had taken up to four years of Spanish classes. Moreover, although most of the participants had previous experiences in the language, some of the participants felt that the exposure to the language in high school was not enough and decided to retake a beginner-level class at the university. At the time, the university did not require an entry placement exam to the course but, if students performed well while interacting in the language, they were sent to an intermediate class. However, if the students performed poorly in the language, they were required to stay in the beginner-level class.

### **3.3 Procedures for Data Collection**

The data was collected during the first 8 weeks of classes out of the 16 weeks of the regular university semester. *The experimental group* had their classes on Tuesdays and Thursdays and *the control group* on Mondays and Wednesdays. The activities' data were collected on the second day of scheduled classes after the students had been exposed to an explanation of a gender related grammatical structure on the previous day. In addition, in the event that there was a school closing or holiday the activities were collected during the next scheduled session.

On the first day of data collection, the intentions for this investigation were explained to the participants. Shortly after, a sheet that requested the student's demographic information was distributed to the class (see appendix A). The demographic sheet contained information such as a student's first language, a selection of students' academic status, for example: freshman, sophomore, junior, senior, graduate or auditing the class, the sheet also requested the location

and length of previous language study and if they had any contact with the language outside the classroom. Furthermore, the participants needed to specify their reasons for taking the language and their desire, if any, to continue their education once the course was finished. The students took no more than 10 minutes to fill out the sheet.

### **3.4 Instrument Design**

The data collection instrument consisted of five tests: test 1 was given to the participants before they had any formal exposure to the grammatical gender<sup>7</sup>. In addition to all the tests given to the students, there was also an oral exam; the corrected answers of the oral exam was not analyzed in a graph like the rest of the tests, due to the amount of spontaneity that every participant used in their discourse. Instead, the overall results of the oral exam were mentioned as a reference to support the final findings of the investigation.

Test 1, “*Students’ Cultural Language Perception*”, the main goal of the Test number one was to find out how students who do not speak Spanish as their first language perceive the classification of grammatical gender in Spanish for inanimate things. The test consisted of ten pictures of different objects: “a house”, “a car”, “a hand”, “a pencil”, “a map”, “lips”, “a tie”, “a dress”, and “a dress shirt”. Each picture had the name of the object written next to them. Every object’s name was written in English. As part of the activity, the participants had to select what gender either (masculine or feminine) the object was in the language of study. Moreover, aside

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<sup>7</sup> The data collection started with a cultural perception test (test 1), For this particular activity, an extra five minutes was taken to give a brief and very superficial explanation to the participants about classifying grammatical gender to objects in the second language before distributing the first activity. After the brief explanation, the students took no more than ten minutes to complete the activity. Ten minutes was also the allotted time given to any other activity involved in the investigation.

from the selection, the participants had to explain the reason for their answers. An example of this can be found in Appendix A.

Test 2, “*Gender agreement with Descriptive Adjectives*”, in this test student needed to describe a celebrity by the use of adjectives. The main goal of test number two was to find out if students were able to match grammatically an adjective to the person they were trying to describe. In this posttest participants had to look at 6 pictures and had the option of selecting one or more adjectives to provide describe the physical description of each celebrity’s picture. There were three feminine celebrities and three masculine celebrities. The participants had a selection of twenty-six different adjectives to choose from. Some of those were “*rubio/rubia*” “blonde”, “*moreno/morena*” “dark-skinned”, “*alto/alta*” “tall”, and many others. All the adjectives except for two had canonical endings of –O for masculine and –A for feminine. An example of this can be found in Appendix B.

Test 3, “*Gender Classification through Picture Recognition*”, was an activity of picture recognition. The activity consisted of six pictures of different objects: “a pencil” *un lápiz*, “a map” *un mapa*, “a hand” *una mano*, “a dress” *un vestido*, “a dress shirt” *una camisa* and “a tie” *una corbata*. Participants needed to write down the name of the object in the picture along with the corresponding definite article “*EL / LA*” “the”. The goal of the activity was to see if students were capable of recognizing the words associated with each picture and classifying the gender of the noun. An example of this activity can be found in Appendix C.

Test 4, “*Classification and Agreement of the Grammatical Gender*”, Test number four was about *La ropa* (clothing), for this test the participants were expected to know a significant amount of lexicon. The main goal of this activity was to find out where students tend to have the

most difficulty when making full gender agreement in simple sentences, such as; *un abrigo negro*. If the student failed to make the correct gender agreement, two other options were given, the classification of *article + noun* “*un abrigo*” or the agreement of a noun to an adjective “*abrigo negro*”.

The activity consisted of ten pictures of different types of clothing, the pictures on the activity were distributed to the students in color; each picture was a representation of a type of clothing the students needed to describe. To complete this activity, the appropriate indefinite article *UN, UNA, UNO, UNAS*, needed to be chosen, then the participants had to look at the pictures and select from a list of nouns and adjectives located in a box. The students were asked to pick one noun and one adjective that best fit each picture and were asked to write a complete sentence describing each picture. Some examples of nouns were *vestido* “dress”, *camisa*, “dress shirt” *abrigo* “coat”, and some examples of adjectives were *rojo* “red”, *amarillo* “yellow” *morado* “purple” etc. For this activity a total of 14 adjectives were used. Five adjectives had canonical –A endings, 5 adjectives had canonical -O endings and 4 adjectives were completely neutral, for example; *verde* “green” *gris* “gray” *marrón* “brown” etc. An example of this can be found in Appendix D.

Test 5, “*Gender Agreement with Animate Nouns*”, was a written composition; in this activity students needed to describe the physical appearance and the personality of somebody of their choice. The goal of the activity was to see if students were capable of using descriptive adjectives in the written form. An example of this activity can be found in Appendix E.

### 3.5 Scoring Process

A total of 5 activities were distributed to the participants. The majority of the activities except for the written composition were calculated using the same basic formula. This formula was: the total amount of correct answers divided by the total amount of participants who took the activity. The result that comes from dividing the two previous components was multiplied by a hundred. The results of the multiplication represent an overall percentage of students who were able to answer each question correctly.

#### Test #1 Cultural Language Perception

Activity number 1 (see appendix A) had a total of 10 nouns, each noun was calculated individually by counting how many students were able to respond correctly to each noun. The sum of the correct answers from each noun was divided by the number of participants in the study. The results of the multiplication represent an overall percentage of students who were able to answer each question correctly. Por ejemplo: en el grupo experimental hay 18 estudiantes en total.

#### Test # 2 Gender Agreements of Descriptive Adjectives.

This activity had a total of 6 incomplete questions (see Appendix B). To complete the sentences, the participants needed to choose 26 combinations of adjectives from the selection list. To grade this activity, the same formula that was used in the first activity was used. The formula was the sum of correct answers made by students, followed by the division of the sum by the number of participants. The total division was multiplied by a hundred. The result of this operation was the percentage of students who were able to complete the test.



### Test # 3 Gender Classifications through Picture Recognition

Activity number 3 had a total of six pictures (see appendix C). To complete this activity, students had to write below each picture the article and the noun that corresponded to each picture. To score Test 3, the same formula applied in the first and second activities was used.

### Test # 4 Complete Gender Agreements in Simple Sentences

Activity number 4 had a total of 10 pictures (see Appendix D). The students needed to create simple sentences that included one verb, one noun and an adjective. For example, if the student had a picture of a dress, the student needed to write *es un vestido blanco* “it’s a white dress”. To score this activity, two types of graphs were used. The first type of graph was used to determine the central measurements of the activity “the mean and the mode”.

The mean was used to determine in a general way the total percentage of students who were able to fully agree the sentence, the percentage of students who were able to classify the grammatical gender of the noun, the ones that were able to agree the nouns with the adjectives and the ones who were not able to agree the sentence at all, and lastly the students who left questions empty. It was calculated by adding all the percentages acquired from the sentences and dividing it by the total number of sentences. The second measurement is called the mode; this one calculated the categories where students typically failed

The second type of graph was used to determine the percentage of students who were able to agree the sentences fully. If they could not agree the sentences, the option of making an agreement between the article and the noun or making an agreement between the noun and the adjectives was given. To create the second type of graphs, the formula applied in Test 1, 2 and 3 was used. This formula was the sum of correct answers made by students, followed by the

division of the sum by the number of participants. The total division was multiplied by a hundred. The result of this operation was the percentage of students who were able to complete the test.

#### Test # 5 Gender Agreements with Animate Nouns

Activity number 5 had a total of two questions (see Appendix E). In the first question, students needed to describe the physical appearance of a person of their choice. In the second question, students needed to describe the personality of the person of choice using the correct set of adjectives. To score this activity, three sentences were chosen. Those students who were able to use correct adjectives in all three sentences were categorized in one column; this number was divided by the total number of students and multiplied by a hundred. Moreover, students who were not able to use the correct form of adjectives in all three sentences were categorized in a separate column. This was then divided by the total number of students and multiplied by a hundred.

## Chapter 4

### CLASSROOM METHODOLOGY AND TEACHING SEQUENCE

#### 4.1 Introduction

The chapter has been divided into three sections. Section number one is the textbook methodology, it provides basic information like the name of the book used for the entire semester, how many chapters does it have and which of those chapters were used to explain the grammatical gender for this investigation. Also, this section introduces in detail the topics for each chapter that talks about the grammatical gender. The second section is called “Classroom Methodologies”, and as the name entails, this part deals with the different types of methods used by each teacher of each group, the *experimental* one and the *control group* one in the classroom. The third section is called “Teaching Sequence”, and it explains and tracks how each lesson was taught and the number of minutes spent on them.

#### 4.2 Textbook Methodology

The textbook used for the entire semester was called “DOS MUNDOS comunicación y comunidad seventh edition” by Terrell, Andrade, Egasse and Muños . The book is divided into “Paso A”, “Paso B”, “Paso C” and then Chapters 1 through 15. Basic level Spanish classes only covered “Paso A” through Chapter 6. “Paso A” through “Paso B” were the only chapters in the book where the grammatical gender was being explained in a very explicit way. The data was collected from “Paso A and B”. A total of five tests were given to the students every week or every two weeks until the end of the semester. It is important to mention that “Paso A” out of all the other chapters was the one that really covered the topic of gender classification in depth, for this reason, the learning of “Paso A” was imperative for the students. In “Paso A” students were

introduced for the first time to the definition of a noun in Spanish and how the nouns were classified as either masculine or feminine.

Furthermore, in “Paso A”, the students were introduced to adjectives for the first time, when they had to describe people’s physical appearances. Also, the students were exposed to articles when they were introduced to the part of *los colores y la ropa* “the colors and clothing”. In “Paso B”, students learned how to describe people’s personalities. They also learned about the adjective-noun agreement and the correct placements of adjectives. Therefore, the students were able to better understand how to make full agreement in a sentence by the end of “Paso B”.

### **4.3 Classroom Methodology**

As mentioned before, the participants for this study were taken from two different Spanish classes. Based on differences in their teaching methodology, the two different classes were labeled as *the experimental group* for one class and *the control group* for the other. The instructor in charge of *the experimental group* was the researcher of the investigation and was also a native Spanish speaker. On the other hand, the one in charge of *the control group* was not a native Spanish speaker but had a Spanish linguistics background.

Moreover, for this investigation, both of the teachers in charge of *the experimental* and *the control group*, incorporated different types of techniques instead of focusing in one teaching methodology. Their different techniques are briefly mentioned in the following section.

#### **4.3.1 Classroom Methodology of the Experimental Group**

The methodology used for *the experimental group* was a combination of formal instruction, oral responses, media, TPR (Total Physical Response), and communicative activities. Formal instruction was utilized when any type of grammar structures needed to be explained to the students. Also, when the grammar was explained, marks were used to emphasize word endings while underlines were used to emphasize the articles. The oral responses were oral reports given by the students when they had to answer questions made by the teacher.

The media like power point presentations were mainly used for vocabulary presentations or some class activities. The TPR was another way to present vocabulary words, for example, different pieces of clothing when the students needed to learn the clothing vocabulary or even using real body parts when explaining the lesson regarding body parts. The communicative activities were used to pair up students with classmates and practice in the oral form what the teacher had just explained in the class. The main focus in *the experimental group* was the explicit explanation of grammar structures which in this case was the classification of the grammatical gender.

#### **4.3.2 Classroom Methodology of the Control Group**

The methodology used by *the control group* on the other hand leaned more to the audio lingual method which means that its main focus were oral activities such as the use of media like movies, songs, listening activities such as, conversations of native speakers in a radio, and online games for each lesson. The grammar explanations done in the class were not as explicit as the ones in *the experimental group* instead; communicative activities were used in replacement of

most of the grammar explanations. The oral activities were used after explaining vocabulary or grammar explanations.

#### **4.4 Teaching Sequence**

For the present project, due to the level of explicitness that the grammatical gender had in the first two chapters of the book, all tests were taken from “Paso A” and “Paso B” only, but were collected throughout the semester. Having said this, the following teaching sequence for both *the experimental group* and *the control group* explains every step that was taken when explaining the lessons that contained structures where the grammatical gender was present.

##### **4.4.1 Teaching Sequence of the Experimental Group**

For “Paso A” the teacher in charge of *the experimental group* started the lesson with *adjetivos de descripción física* “adjectives for physical description”. For this lesson, the first thing that was taught was the formal instruction of the grammatical gender classification in Spanish; the grammar explanation took ten minutes. While the grammar explanation was in session, the subjects of the sentences were marked and the adjectives accompanying the nouns were underlined in the board. For instance: Pedro Ruiz es altO “Pedro Ruiz is tall” and Paula Saucedo es delgadA “Paula Saucedo is skinny”, Don Eduardo es viejO “Mr. Eduardo is old” Doña Rosita es viejA “Mrs. Rosita is old”. Also, an emphasis on pronunciation was made to differentiate when an adjective was describing a feminine noun or a male noun.

The vocabulary of *los adjetivos de descripción física* “descriptive adjectives” was presented right after the grammar explanation in a power point presentation. The presentation showed 4 different types of people, and for each person that was shown, the students were asked one or two questions, for example, *¿Cómo es Pedro físicamente? ¿Es altO o es altA? ¿Es*

*gordo o es flaco? ¿Cómo tiene El pelo? ¿Tiene EL pelo corto o tiene el largo? Y Maria, ¿Cómo es físicamente? “How is Pedro physically? Is he tall? Is he skinny or fat? How does his hair look like Does he have long hair or short hair? And Maria how is she physically?”* The vocabulary presentation took another fifteen minutes. Following the power point presentation, an oral activity from the book’s communicative activities section was given. Students were asked to describe the physical appearance of six people, using three feminine nouns and three masculine nouns; for this particular activity the entire class participated by answering not only the questions from the book but also answering based on random examples given by the teacher . The oral activity lasted ten minutes. As a closure activity, each student stood up in front of the class and was told to describe themselves as well as a classmate from their opposite sex. The closure activity lasted five minutes<sup>8</sup>.

The second part of “Paso A” *los colores y la ropa* “the colors and the clothing” was presented to the students on the second day of class. The lesson started with the presentation of new vocabulary words. For the presentation, the method used was TPR (Total Physical Response), which means that actual physical pieces of clothing that represented the vocabulary of the lesson were, was brought to the class and students had the opportunity to touch the pieces of clothing while they learned the meaning of them in Spanish; the presentation took no more than fifteen minutes. Every time a piece of clothing was shown to the class, the teacher would repeat: *es UNA camisa, es UN vestido* “it’s a dress shirt, it’s a dress” making oral emphasis on the articles and the noun endings. After the vocabulary presentation was over, the grammar explanation followed. The grammar explanation of the day was the noun- adjective agreement;

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<sup>8</sup> The minutes mentioned in the teaching sequence only reflects the time spent teaching sections of the grammatical gender. The remaining minutes were dedicated to other topics that were introduced in the class.

this explanation took ten minutes due to the different types of examples given by the teacher to make the explanation easier to grasp. The explanation was done by pronouncing the clothing items along with their colors. For example, the instructor asked the students: *¿De qué color es LA camisa?* “What color is the dress shirt?” *LA camisa es blanca.* “the dress shirt is white” *¿y el vestido? ¿De qué color es EL vestido? EL vestido es negro.* As a closure activity, the students needed to find a partner to describe the type of clothes they were wearing that day. Due to time limitations, the closure activity lasted no more than eight minutes, it was completely oral and only half of the class participated.

“Paso B” started with the presentation of the vocabulary words from *las cosas en el salón de clase* “things in the classroom”. The vocabulary was taught by showing the students a picture of classroom objects, the objects were taken from the book *Dos Mundos*. Every object was accompanied by an indefinite article; the presentation took ten minutes. For example, *es UNA ventana, es UN escritorio* “it’s a window, it’s a desk”. After the explanation of the vocabulary words, guided participation with communicative activities was added. For the activity, the students needed to mention all the objects that were located in the classroom; the guided participation lasted five minutes. For the grammar section of the lesson, the teacher reviewed one more time the explanation of adjective-noun agreement and the placement of adjectives; the grammar section lasted five minutes. After the explanation, another guided activity was given. In this guided activity, students had the chance to answer one or two questions made by the teacher. For example: *teacher: ¿Qué hay en el salón de clase? Student 1: hay UNA ventana. Teacher: ¡muy bien! Teacher: y de qué color es la ventana? Student 1: LA ventana es blanca* “teacher: what object can you see in the classroom? Student 1: there is a window. Teacher: very



good! Teacher: and what color is the window? Student 1: the window is white”. For this activity no writing was required and it lasted around eight minutes.

For the second part of “Paso B” *el cuerpo humano* “the human body”, the presentation of the body parts was very similar to the presentation of the classroom objects, but instead of using the objects of the classroom, the teacher used her own body as the example; this method made it easy for the students to comprehend the new vocabulary. The presentation lasted five minutes. For the grammar section of the lesson the only outstanding things that were mentioned to the students were that in Spanish, body parts do not go by the gender of the person, instead body parts have their own gender classification. For example, *La barriga de Pedro* “Pedro’s belly”, just because the belly belongs to Pedro, it does not mean that when classifying the gender of belly it should be marked as masculine. The noun *barriga* “belly” follows the gender classification rule because this noun ends in A, therefore the article must be feminine. Exception like *LA mano* was also mentioned as part of the explanation. The explicit grammar instruction section lasted ten minutes.

After the grammar explanation, a follow up activity was given to the students in a form of a game called *Simon dice* “Simon Says”. Simon Says was a game in which students needed to respond by show by touching the body part that Simon says to touch. For example, *Simon dice toquense los ojos* “Simon says touch your eyes”, after this phrase was said, the students needed to touch their eyes. The game itself is an efficient oral activity that will help the students memorize, identify and classify the body parts in Spanish. This activity lasted ten minutes and it was part of their closure activity.

The third part of “Paso B”, *las descripciones de las personas: personalidades*. “Description of people’s personalities”, was introduced during on the next class session. The lesson began with the presentation of the new vocabulary. The vocabulary presentation lasted no more than ten minutes, and right after the brief vocabulary explanations, the grammar section started. In this section, the students learned that the adjectives used to describe the personality of a person must agree with the noun just like any other adjectives. Also they learned that the adjectives of personality could end with an –O if they were describing a masculine noun or with an –A if they were describing a feminine noun. In addition, the teacher made sure to point out those adjective that could be used to describe both gender, masculine or feminine. These adjectives were called neutral adjectives, for example, *optimista* “optimist” *idealista* “idealist”. The grammar section lasted ten minutes. After the grammar explanation ended, students had the opportunity to put what they just had learned into practice. In this class activity, groups of two or three were formed, and these groups needed to choose at least five words from the vocabulary list included in the book *Dos Mundos* with the help of their partners; then they needed to choose three words from the five to describe themselves in an affirmative way and two words that they considered not to be part of their personalities. For example *Soy simpaticA/O, talentosO/A y sincerO/A. no soy mentirosO/A ni agresivO/A* “I am nice, talented and sincere, I’m not a liar or aggressive”. This activity lasted ten minutes.

#### 4.4.2 Teaching Sequence of the Control Group

For “Paso A”, the teacher in charge of *the control group* started the lesson by teaching the vocabulary *los adjetivos de descripción física* “adjectives of physical description”. The presentation lasted ten minutes. After the presentation, the first grammar explanation about the classification of the grammatical gender followed. As part of the explanation, it was mentioned that in Spanish the words are classified as masculine or feminine depending on their endings. For instance, the masculine words most of the time but not always tends to end in an –O and that the words that are classified as feminine usually end in an –A. In addition, a reminder to pay attention to words that fell in the category of exceptions was made, because those words do not follow the rules of the words ending in –O or –A and needed to be memorized. The grammar explanations lasted about ten minutes. After the grammar explanation, a communicative activity taken from the book followed. In the activity students were paired up and looking at the pictures located in the book, they needed to describe two people using more than two adjectives. This activity lasted five minutes.

On the second day of class, the second part of “Paso A” *los colores y la ropa* “the colors and the clothing” were presented. The new vocabulary words were taken from the *Dos Mundos* book, and the presentation took no longer than 10 minutes. As part of the presentation, while showing the pictures of pieces of clothing, the teacher made sure to emphasize the articles and the endings of all the nouns; the emphasis was made orally. For example, *es unA corbatA* , *es unA camisA* “ it’s a tie”, “ it’s a dress shirt”. Then, in the second part of the presentation colors were incorporated into the presentation. For the grammar section of the lesson, the noun gender agreement and the placements of adjectives were explained to the students. For example *es unA camisA blancA* “it’s a white shirt”.

The grammar explanation took no more than five minutes. After the grammar explanation, as a guided participation activity, the students had the chance to describe what they were wearing and the type of clothing a classmate of their choice was wearing as well. The activity took eight minutes. As a closure activity, pictures with 6 individuals were shown to the class. Students were required to look at the pictures and describe what the people were wearing. This activity lasted no more than five minutes, also, due to the time limitation only a few students participated in the activity.

“Paso B” is about *las cosas en el salon de clase y el cuerpo humano* “things in the classroom and the human body”. One more time, the lesson started with the presentation of the new vocabulary followed by the grammar section. In the presentation of the vocabulary, the objects used to explain the meaning of the vocabulary were the ones mentioned in the book, the presentation took eight minutes. An example of the objects were *El librO*, “the book” *LA mochila* “the book bag”, *El escritoriO* “the desk” etc. For the grammar section, the use and the placement of adjectives was emphasized, the grammar explanations lasted no more than five minutes. For the guided participation, students were asked to describe the objects that were in the classroom using indefinite articles, this activity took five minutes.

The second part of part B *las partes del cuerpo* “the body parts” was taught another day, and as always, the lesson started with the presentation of the new vocabulary words. For the presentation, a picture of a body was drawn in the board and the body parts were explained through there. The presentation of the body parts was done orally just as the rest of the vocabulary presentations and it took no more than ten minutes. In the grammar section of the lesson a reminder was made regarding the use of adjectives. Adjective are used to describe things. In this section the grammar was not explicit; the grammar explanation took three minutes.

For the guided participation, students had a listening activity where they were required to listen to the physical body descriptions of different people, and select or circle which person the listening activity was referring to; this activity took four minutes. After explaining the body parts, the topic of *las descripciones de las personas: personalidades* “Description of people’s personalities” was introduced. The presentation took five minutes.

After introducing the vocabulary list, students were paired in two. They needed to select five words from a vocabulary list and, working with their partner, they were told to choose three words from the five provided to describe themselves in an affirmative way and two words that they considered they were not. For example *Soy simpaticA/O, talentosO/A y sincerO/A. no soy mentirosO/A ni agresivO/A* “I am nice, talented and sincere, I’m not a liar or aggressive”. This exercise lasted 10 minutes and at the end there was no closure activity.

#### **4.5 Contrast of Methodologies between the Experimental and the Control Group**

Overall, it is important to mention that the methodology used for *the experimental group*, and the one used for *the control group* when compared with one another, had both differences and similarities. Starting with the similarities, both groups used well thought- out activities that improved the communication and pronunciation among the participants. At times the teachers would use activities from the book *Dos Mundos*, and at times the activities were created. On the other hand, when it came to the grammar aspect of each lesson, it seemed that *the experimental group*’s main focus was the explicit explanation, or formal instruction. And by explicit explanation, it is meant that the teacher in charge of the group would mark the articles and underline the endings every time grammar was being explained.

However, *the control group*'s main focus was on the communicative activities rather than on explicit grammar explanations. However, there were instances where the audio lingual method was used inside the classroom. For example, when students were exposed to a correct sentence structure where full gender agreement was made and the only thing students needed to do was to repeat it until they were able to produce it spontaneously by themselves. Both the explicit grammar instruction and this method have something in common, and that is that both are trying to find ways to facilitate the learning of the language itself and certain grammar structures that most students would find difficult to grasp by themselves. Both approaches used different methods to achieve the same goal, which was the acquisition of the grammatical gender. The question at the end would be which of the two methods had the highest success in facilitating the understanding of the grammatical gender.

## Chapter 5

### EXPERIMENT: RESULTS AND ANALYSIS

The goal of chapter 5 is to analyze in detail all the experiments involved in this investigation. There are five tests in total. Test #1, “*Students’ Cultural Language Perception*”, deals with the cultural perception of every student; the goal is to find out how students will perceive the classification of the grammatical gender in general in the language of study. Test #2, “*Gender Agreement of Descriptive Adjectives*”, deals with descriptive adjectives; its goal is to find out if students understand the concept of using morphological word markers in adjectives when describing a person.

Test #3, “*Gender Classification through Picture Recognition*”, deals with gender classification of objects; its goal is to find out whether the students, after having been exposed to the different stages of the grammatical gender classification, still find it difficult to classify the gender of objects.

Test 4, “*Classification and Agreement of the Grammatical Gender*”, deals with full gender agreement in simple sentences; the goal is to find out where within a full gender agreement sentence students have the most trouble and whether their cultural language perception interferes when trying to fully agree a sentence.

Test #5, “*Composition: Gender Agreement*” deals with the description of a person using descriptive adjectives. The difference between Test number 2 and this one is that this test was taken under pressure and that students needed to produce without any help all the sentences without any help; its goal is to find out if students until this point understood the classification and agreement of the grammatical gender until this point.

Furthermore, at the beginning of each test, a more detailed description of what the test was about will be given, followed by the results and tables for each of the groups. Apart from the introduction of the tests, all descriptions starts with the analysis of the performance by the L1 English speakers and non-L1 English speakers from *the experimental group*, followed by the analysis of the L1 English speakers and non-L1 English speakers from *the control group*. At the end of each test a final analysis and contrasts of both experimental and control group is given. Note that depending on the test, the formatting of the analysis could change.



## **Experiment 1: Experimental and Control Group Students' Cultural Language Perception**

### **5.1 Introduction of Experiment 1**

The goal of test #1 was to find out how students whose L1 is not Spanish perceive the classification of grammatical gender in objects. The test consisted of ten pictures of different objects: “a house”, “a car”, “a hand”, “a pencil”, “a map”, “lips”, “a tie”, “a dress”, and “a dress shirt”. Each picture had the name of the object in English written next to them. As part of the activity, the participants had to select what gender, either masculine or feminine, the object belonged to in the language of study (Spanish). Moreover, aside from the selection, the participants had to explain the reason for their answers.

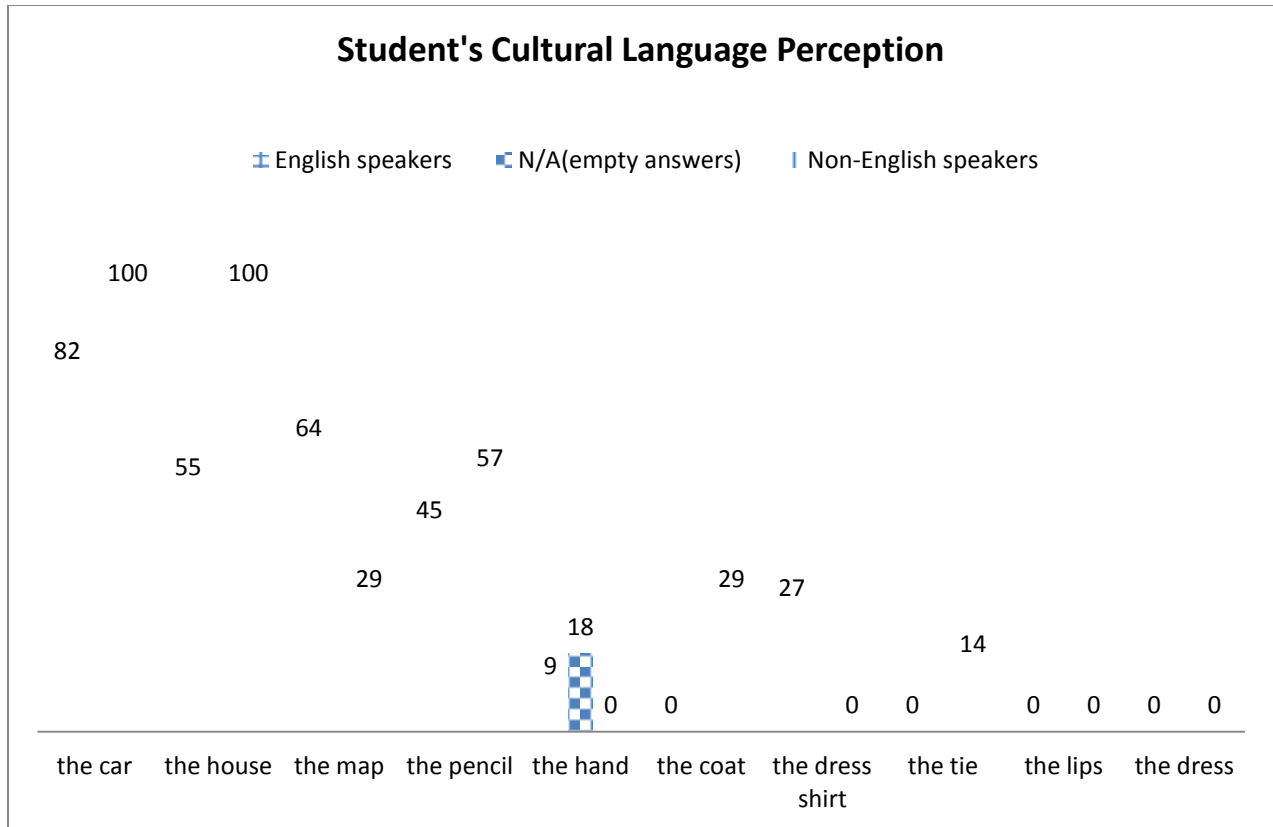
The graphs below describe the percentage of students who had expected answers based on their cultural language perception. The groups that were being investigated were the experimental group and the control group. The participants from each group were divided into L1 English speakers and non- L1 English speakers. In figures 1 and 2, the numbers above each bar represents the percentage of students who were able to select the correct gender classification used for each noun.

In Graph 1 as well as Graph 2, the *experimental* and *control group* had been divided into L1 English speakers and non- L1 English speakers. The N/A in the graph represents the number of participants from the L1 English speakers who left questions unanswered. Also, this figure does not reflect the percentage of students' incorrect answers.

### **5.1.1 Results of the L1 English Speakers and Non-L1 English Speakers from the Experimental Group**

As observed in Graph 1, the highest percentage of correct answers lies on the left side, and the least percentage of correct answers lies on the right side of the graph. As we could observe, the only noun which the majority of L1 English speakers was able to classify was the noun “car” with 82%. Secondly, the noun “map” had a percentage of 64%. However, as the students were introduced to new nouns, the percentage of correct answers began to decrease. We could observe this result in nouns like “house”, “pencil”, “hand”, where only half or less than half of the students were able to correctly identify their gender. As far as the remaining nouns, the percentages continued to decrease to the point of reaching no correct answers at all.

However, as the results display, non-L1 English speakers showed a high percentage (100%) of correct answers when it came to classifying the gender of the nouns “the house” and “the car”. After these first two nouns the percentage of correct answers started to reduce. For example, in the noun “the map” only 29% of the non-L1 English speakers were able to classify the gender of the noun correctly, as compared to over 64% of the L1 English speakers. In the noun “the tie”, only 14% of the non-L1 English speakers were able to classify the gender of the noun correctly, but still did slightly better than the L1 English speakers at 0%. As for the remaining nouns like “the lips”, “the dress”, and “the dress shirt”, very few or none of the groups were able to classify their gender correctly.



Graph 1: Student’s Cultural Language Perception from the Experimental Group

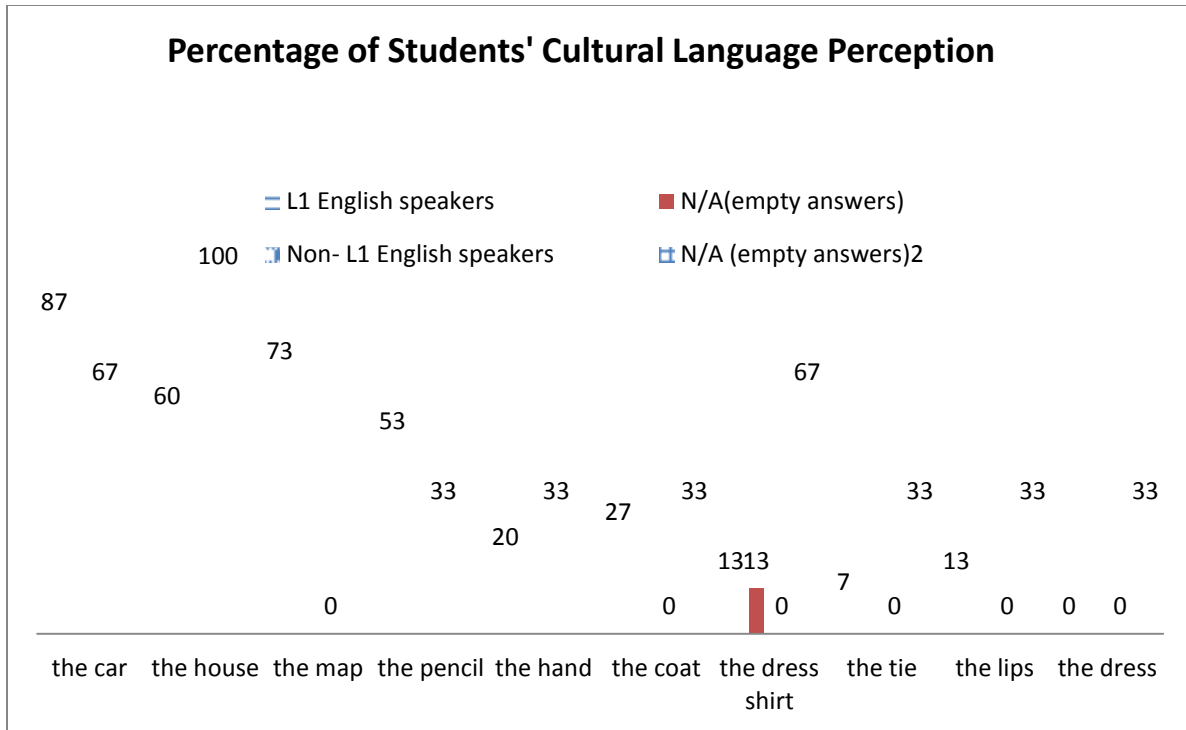
### 5.1.1.1 Contrast of L1 English Speakers and Non-L1 English Speakers from the Experimental Group

The result show that the entire group of non- L1 English speakers group was able to classify the noun “the car” (masculine) and “the house” (feminine) with the correct gender classification in Spanish, while 82% of the L1 English speakers were able to classify these nouns correctly. However, if we compare the noun “map” between non-L1 and L1 English speakers, the results show that more participants from the L1 English speakers were able to classify the noun “map” by a 64% versus 29% of the non- L1 English speakers. Perhaps, however, a possible explanation for such a difference in percentage was that the majority of the L1 English speakers associated the map with masculine. Most of the L1 English speakers justified their answers by saying that “man travels first, therefore, map should be masculine” while the non-L1

English speakers said that “map is associated with the mother land”. Due to these types of reasoning the L1 English speakers were able to classify or guess that the noun “map” was masculine in Spanish. For the remaining nouns, results show that both groups simply struggled to find a correct classification for the nouns, and only half or less than half of the class was able to correctly classify nouns like “pencil”, “coat”, “dress shirt” for the rest of the nouns it was simply 0%.

### **5.1.2 Results for the L1 English Speakers and Non-L1 English Speakers from the Control Group**

In graph 2, the numbers above each bar represents the percentage of students who were able to select the correct gender classification used for each noun in the Spanish language. In the graph, *the control group* has been divided into L1 English speakers and non-L1 English speakers. The L1 English speakers are represented by the light horizontal pattern fill and the non-L1 English speakers are represented by the plaid pattern fill. The N/A represents the number of participants who left questions unanswered. Furthermore, as observed in the former graph, the side with the highest percentage is the left side while the side with the lowest percentage is the right side. The results showed that for the nouns “the car”, “the map”, and “the pencil”, the L1 English speakers group had the highest percentage of students who classified the nouns with the correct gender as compared to the non-L1 English speakers.



Graph 2: Student’s Cultural Language Perception from the Control Group

### 5.1.2.1 Contrast of L1 English Speakers and Non- L1 English Speakers from the Control Group

The results showed that for the first noun “the car”, the L1 English speakers were able to classify the noun with the correct gender unlike the non-L1 English speakers’ group. For the second noun “the house”, the group with the highest number of participants that had a correct answer was the non-L1 English speakers over the L1 English speakers. For the noun “map” the group that had the highest percentage was the L1 English speakers with a 73% of students versus a 0% of the non-L1 English speaker group. For the noun “pencil”, the group with the highest percentage was the L1 English speaker group versus the non-L1 English speakers. As far as the remaining nouns “the hand”, “the coat” “the dress” “shirt”, “the tie”, “the lips” and “the dress” results show that both groups, the L1 English and non-L1 English, simply struggled to find a

correct classification for the nouns, and only less than half of the class was able to correctly classify the given nouns.

### **5.1.3 Overall Analysis and Contrast between the Experimental and the Control Group**

Overall, the results showed that in *the experimental group*, the students that had the highest percentage of students with correct answers were the non-L1 English speakers. In *the control group*, the students with the highest percentage with correct answers were the L1 English speakers. The results also showed that when it came to the noun “car” it was easier for the non-L1 English speakers in *the experimental group* to classify the noun with the correct gender than for the L1 English speakers. This could mean that at least for the non-L1 English speakers group, the cultural bias was not the problem.

A possible explanation for this result could be attributed to the grammatical gender itself. All of the non-L1 English speakers have as their L1 French, Arabic, Hindi, Malayalam and Vietnamese. These languages, except for Vietnamese, by nature, have some type of grammatical gender classification. The gender classification in their grammar makes it easier for the students to grasp certain gender concepts easier than the L1 English speaker as a language does not have a grammatical gender classification. Instead, it language runs by a concept called natural gender<sup>9</sup>.

On the other hand, in *the control group*, the students who had the highest percentage in the noun “car” were the L1 English speakers. A possible reason for why the L1 English speakers did not get a perfect score in both groups could be explained by the linguist Brinton. She mentioned that for many L1 English speakers “the marked use of the feminine gender with ships, cars, countries, fortune, art, music and nature in Modern English is it better seen as a kind

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<sup>9</sup> According to Brinton (2000), natural gender depends on the sex of the object in the real world. In this system, we distinguish masculine, feminine, common or dual (m or f), and neuter (sexless) genders.

of personification” (Brinton, 2000). Having said this, it was expected to have more participants classify the noun “car” as feminine rather than as masculine. Instead, they classified it as masculine however, even though in English this personification is true. I believe that when people have the choice to assign a gender, in this case the gender of a “car” the majority of people will assign a masculine as a default gender. This is one of the reasons why the L1 English speakers were in the 87% range. For the noun “house”, the only group who had more than 85% of students with correct answers was the non-L1 English speakers of *the experimental group*.

For the noun “pencil” in *the experimental group* the group students who were able to classify the gender correctly were the non-L1 English speakers as compared to *the control group* where the L1 English speakers had the lead over the non-L1 English speakers. When it came to classifying this noun into feminine or masculine, it seemed that for many of the participants of both groups, the noun was very confusing judging on the types of comments students made when they were asked the reason of their classification, even though the L1 English speakers in *the control group* had a 20% advantage the non-L1 English speakers. For example: L1 English speakers said that for the noun “pencil” “it was impossible to classify the gender of a pencil”. “A noun like the pencil tended to be a plain object used mainly by men back in the days”. Also, “the noun pencil was associated with a writing complex that made them identify the object with masculinity”. And other participants considered the pencil to be “a phallic symbol.”

The nouns “hand”, “coat” “dress shirt” “tie”, “lips” and “dress” received a lower percentage of correct answers if compared to the latter nouns, “car” and “house”. These nouns are also perhaps the most difficult ones from this list to actually guess the grammatical gender. For example, for the noun “hand”, the first thing that might come to somebody’s mind is that

hand equals men but in Spanish the noun *La mano* is grammatically classified as feminine. Some of the reasons why participants went by classifying this noun as masculine was because: “a hand resembles power and violence when used by men”, and because “they are used to build, they are meant for hard work”. But in fact, even in Spanish the noun “hand” *la mano* tends to confuse students, another noun that works the same way is “map” *el mapa*; both nouns do not follow the general rule of classifying nouns into masculine and feminine. As discussed in chapter 2 these two nouns along with others that are not tested in this research are call exceptions. Exceptions like “hand” in Spanish carry a feminine article even though the ending –O which means that should be masculine. The same happens with *el mapa* “map”. The ending is and –A which mean that the article should be feminine but instead is masculine. Even though students do not know that “hand” and “map” are exceptions, both groups the experimental and the control, did not do very well on them.

For the noun “coat” one of the reasons why both groups had such a low percentage of students classifying the correct gender, participants said “ when I saw a coat I think of fashion”; which means that for them, a coat could be classified as feminine. Fashion for most of the participants equals to a female but in Spanish, “coat” *el abrigo* is classified as a masculine noun. The same mentality occurred when they had to classify a “dress shirt”. Anybody who sees a dress shirt will automatically say that it is for men, but in Spanish it was the opposite; it is classified as a feminine noun. At the end of this analysis it seems that students’ cultural language biases, specifically more L1 English speakers than non-L1 English, might interfere with the classification of grammatical gender.



## **Experiment 2: Experimental and Control Group**

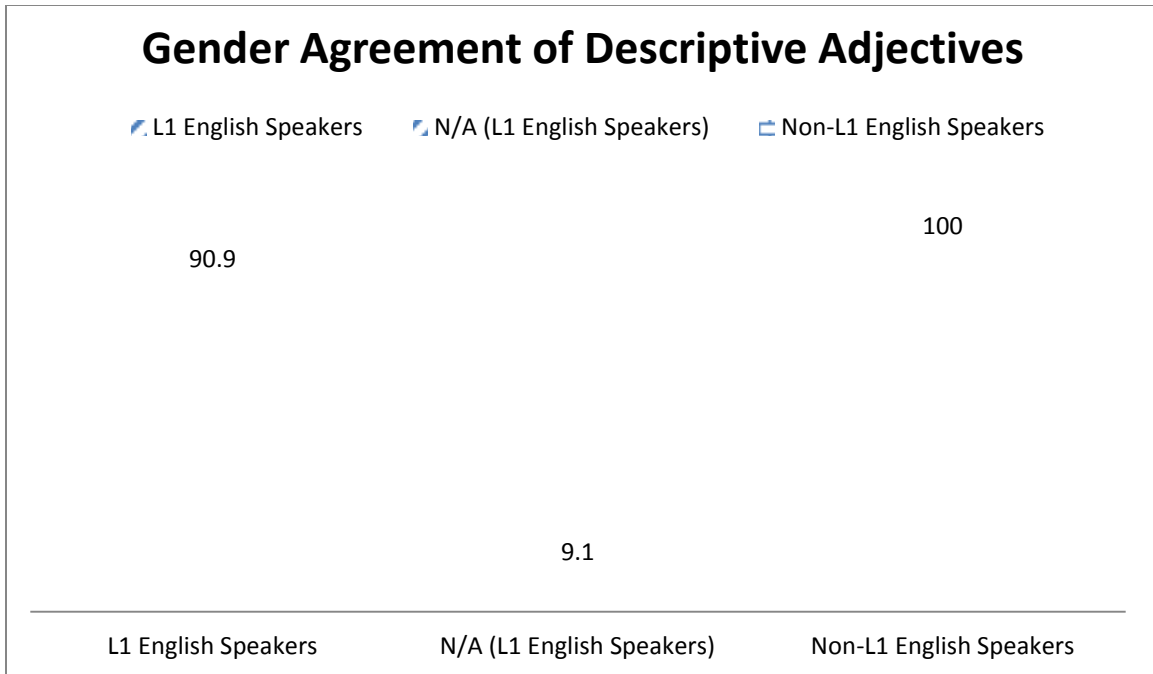
### **Gender Agreement of Descriptive Adjective**

#### **5.2 Introduction of Experiment 2**

The goal of Test # 2 was to find out if students were able to match grammatically a descriptive adjective to an animate noun. This test is the first one given to the students after being exposed to the explanation of the grammatical gender. In this test, students needed to describe a celebrity. Moreover, participants had to look at 6 pictures with the option of selecting one or more adjectives to be able to give the physical description of each celebrity's picture. The participants had a selection of twenty- six different adjectives to choose from.

#### **5.2.1 Results for the L1 English Speakers and Non-L1 English Speakers from the Experimental Group**

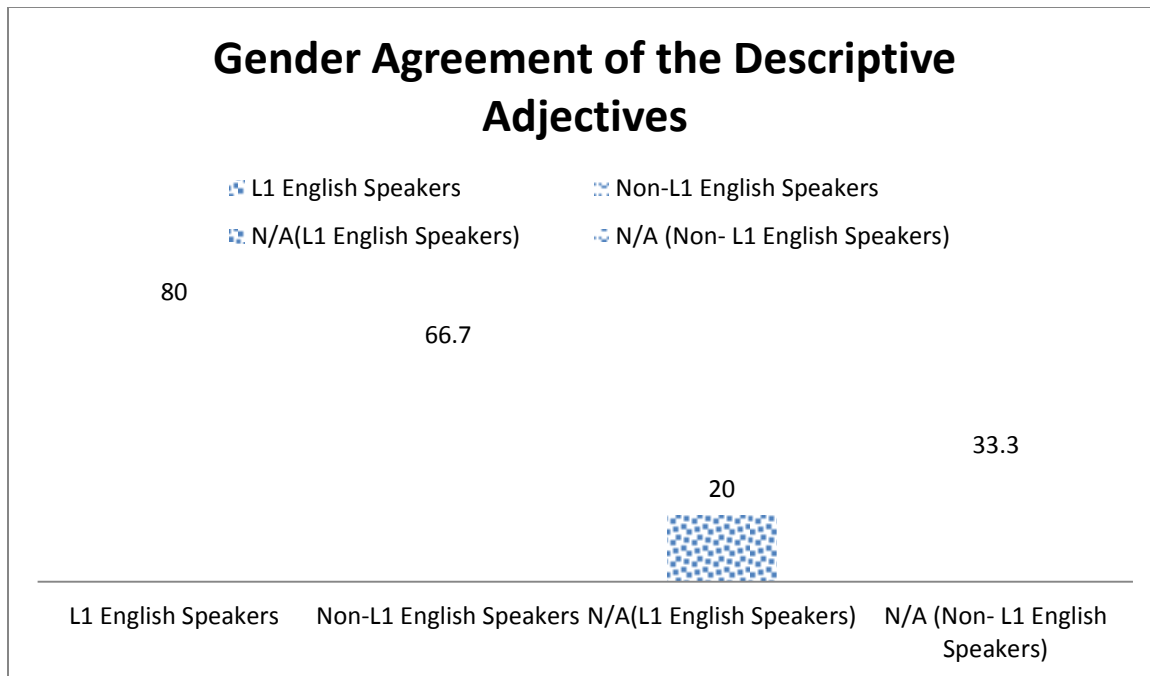
According to Graph 3, the numbers above each bar represent the percentage of students for each group who were able to answer 100% of all the questions correctly. The L1 English speakers are represented in the graph by a wide upward diagonal pattern fill and the non-L1 English speakers are represented by a horizontal brick pattern fill. The N/A in this case for the L1 English speaker group represents the group of students who left unanswered questions. The results showed that both groups (the L1 English and non-L1 English speakers) asserted with a good percentage all the questions, but if the L1 English and the non-L1 English speakers are compared, the 100% of the non-L1 English speakers were able to agree an adjective with the corresponded noun versus 90% of the L1 English Speakers. An example of the test is as follows: *Justin Timberland es guapo*, (Justin Timberland is handsome). It seemed that for this type of activity the non-L1 English speakers did relatively better than the L1 English speakers.



Graph 3: Gender Agreement of Descriptive Adjectives from the Experimental Group

### 5.2.2. Results for the L1 English and Non-L1 English Speakers from the Control Group

In graph 4, the numbers above each bar represents the percentage of students for each group who were able to answer 100% of all the questions correctly. The L1 English speakers are represented in the graph by a large confetti pattern fill and the non-L1 English speakers are represented by a wave pattern fill. The N/A represents the group of students who left unanswered questions. The N/A for the L1 English speakers is represented by the same pattern fill and the N/A for the non-L1 English speakers is presented by the wave pattern fill the non-L1 English speakers group have. The results showed that 80% of the L1 English speakers were able to answer 100% of all the questions correctly versus a 66.7% of the non-L1 English speakers. This means that for this exercise the L1 English speakers did better than non-L1 English speakers by a 13%. An example for this activity was that the non-L1 English speakers wrote *Jessica Simpsons es rubio* (Jessica Simpsons is blonde) instead of writing *Jessica Simpson es rubia*.



Graph 4: Gender Agreement of Descriptive Adjectives from the Control Group

### 5.2.3 Overall Analysis and Contrast between the Experimental and the Control Group

The results showed that in the experimental group, the students that had the highest percentage of students who had correct answers were the non-L1 English speakers with a (100% of students). In the control group, the students that had the highest percentage of correct answers were the L1 English speakers with (80% of the students). If the groups are compared within the same category, the results show that the percentage of students whose first language was English in the experimental group did better than the L1 English speakers in the control group by a 10% difference. Following the L1 English speakers group were the non-L1 English speakers from the experimental group who did better than the non-L1 English group in the control group by a 33.3% of difference.

It is too early to assume that the class methodology implemented in the class had some type of influence over the results of each group; instead, a possible explanation of why the L1

English speakers had a relatively high score even though not high enough to be compared to the non- L1 English speakers of the experimental group. In the case of the non-L1 English speakers it was observed that the experimental group did relatively better with 100% of the class getting a 100% of correct answers than the ones in the control group. One possible reason for this type of results could be that in the experimental group the non- L1 English speakers are formed by speakers whose first language are French, Arabic, Hindi, and Malayam. All these languages have a certain type of agreement in their language even though, they do not agree the same way as the agreement would be in Spanish. In the case of the non-L1 English speakers from the control group it is important to highlight that not all of the learners in this group had a certain type of gender agreement in their language.

### **Experiment 3: Experimental and Control Group Gender Classification through Picture Recognition**

#### **5.3 Introduction of Experiment 3**

Test number three was a picture recognition activity. The activity consisted of six pictures of different objects: “a pencil” *un lápiz*, “a map” *un mapa*, “a hand” *una mano*, “a dress” *un vestido*, “a dress shirt” *una camisa* and “a tie” *una corbata*. Participants needed to write down the name of the object in the picture along with the corresponding definite article “*EL/LA*” “the”. The goal of the activity was to see if students were capable of recognizing the words associated with each picture and classifying the gender of the noun.

The nouns were corrected based on three categories: *article + noun* or nominal phrase, which meant that students were able to associate the gender of the noun with a corresponding article. The second category was called “no agreement” and the third one was called *N/A* (non-applicable). The “no agreement” category was used when no type of agreement was done by the students, while the *N/A* represented those students who did not fit into any of the categories mentioned before, or simply left empty questions in the activity. The numbers on the table represents the percentage of the class who were able to fit in one of the categories.

### 5.3.1 Results of the Experimental Group

#### 5.3.1 Results of the L1 English Speaker from the Experimental Group.

For the first category of the nominal phrase *article + noun*, table 3 shows that only 49% of the class was able to classify the gender of the nouns given in Test number three. Then, 35% of the students who were not able to fit in the first category fell into the category of *no agreement*. The remaining 17% were those students who left unanswered pictures. Those students fell in the third category called *N/A*.

Categories	Categories	Class mean	Class mode
First category	Art+ Noun	48.7	55
Second category	No agreement	35	18.2
Third category	N/A	16.7	18.2

Table 3: Total Class Percentage per Category of the L1 English Speakers from the Experimental Group

While Table number 3 displayed the overall percentage of students who were or were not able to classify all the nouns in general, Table 4, shows the percentage of students' correct gender classification, as well as the mistakes that students might have made for each noun. For the first category, *article + noun*, Table 10 shows that 73% of the students were able to classify the noun *la camisa* "the dress shirt" without any problems. After the noun *la camisa*, the table shows how the percentage of students started to decrease as they continued classifying the rest of the nouns. First, 64% of the students were able to classify the noun *el vestido* and then it continues to decrease when classifying *el lapiz* and *la corbata* with a 55%. In addition, the results display that students made the most mistakes when classifying the noun *la mano* and *el*

*mapa*. Note as already discussed shortly before and at the beginning that the latter nouns are considered in Spanish exception to the gender classification rule.

Categories		El lápiz	El mapa	La mano	El vestido	La camisa	La corbata
First category	Art+ Noun	55	27.2	18.2	64	73	55
Second category	No agreement	45.4	55	64	18.2	9.1	18.2
Third category	N/A	0	18.2	18.2	18.2	18.2	27.2

Table 4: Class Percentage per Noun of the L1 English Speakers from the Experimental Group

### 5.3.1.2 Results of the Non-L1 English Speakers from the Experimental Group

Table 5 shows that for the first category of nominal phrase *article + noun*, 86% of the class, was able to classify the correct gender of all the nouns. Then, 12% of the class who were not able to fit in the first category fell in the second one due to their mistakes, while 2% of the class left the pictures in blank.

Categories	Categories	Class mean	Class mode
First category	Art + Noun	85.8	100
Second category	No agreement	12.0	0
Third category	N/A	2.4	0

Table 5: Total Class Percentage per Category of the Non- L1 English Speakers from the Experimental Group

Table 6, shows that for the first category *art + noun* the entire non-L1 English speakers group was able to classify the gender of *el lápiz* “the pencil” and *la camisa* “the dress shirt” by making the agreement between the noun and the article. Following the two latter nouns, Table 12 shows a decrease of 14% in the number of students who were able to classify the gender of the

nouns *el mapa* “the map” and *el vestido* “the dress” correctly. Following the latter nouns, the percentage continued to decrease even more showing that only 71% of the class was able to classify the nouns *la mano* “the hand” and *la corbata* “the tie”. Note that the percentages began to further decrease once students started to classify the exception nouns, this also happened in Table 10. In addition, it seemed that *el mapa* has a higher amount of correct gender classification than *la mano*.

	<b>El lapis</b>	<b>El mapa</b>	<b>La mano</b>	<b>El vestido</b>	<b>La camisa</b>	<b>La corbata</b>
<b>Art+ Noun</b>	<b>100</b>	86	71.4	86	<b>100</b>	71.4
<b>No agreement</b>	0	14.3	<b>29</b>	14.3	0	14.3
<b>N/A</b>	0	0	0	0	0	14.3

Table 6: Class Percentage per Noun of the Non-L1 English Speakers from the Experimental Group

### 5.3.2 Results from the Control Group

#### 5.3.2.1 Results of the L1 English Speakers from the Control Group

For the first category of nominal phrase *article + noun*, Table 7 shows that a little over than half of the class was able to classify the gender of the nouns given in the test. For the second category, less than half of the class who were not able to fit in the first category fell in the category of *no agreement*. Aside from the first and second category, the table shows that 15% of the students who left questions answered fell in the N/A category.



Categories	Class mean	Class mode
<b>Art + Noun</b>	<b>56.7</b>	80
<b>No agreement</b>	28.9	13.3
<b>N/A</b>	14.7	7

Table 7: Total Class Percentage per Category of the L1 English Speakers from the Control Group

Table 8 shows that for the first category *article + noun*, the noun with the highest percentage was *el vestido* with a 86%, followed by *el lápiz* and *la camisa* with an 80%. The lowest percentage in this category comes from *la mano* with a 26% and *la corbata* with 27%. However, it is interesting to mention that more students were able to classify the gender of the noun *el mapa* than with the noun *la mano*.

	<b>El lapis</b>	<b>El mapa</b>	<b>La mano</b>	<b>El vestido</b>	<b>La camisa</b>	<b>La corbata</b>
<b>Art+ Noun</b>	80	40	<b>26.6</b>	<b>86.6</b>	80	27
<b>No agreement</b>	13.3	53.3	66.6	6.6	20	13.3
<b>N/A</b>	7	7	7	7	0	60

Table 8: Class Percentage per Noun of the L1 English Speakers from the Control Group

### 5.3.2.2. Results of the Non-L1 English Speaker of the Control Group.

For the first category of nominal phrase *article + noun*, Table 9 shows that only 33% of the class was able to classify the gender of the nouns given in the test. For the second category, we see that 61% of the students who were not able to fit in the first category fell in the category of no agreement. The remaining 5% which were the students who left questions answered fell in the N/A category.

Categories	Categories	Class mean	Class mode
First category	Art + Noun	33.4	33.3
Second category	No agreement	61.3	67
Third category	N/A	5.6	0

Table 9: Total Class Percentage per Category of the Non-L1 English Speakers from the Control Group

Table 10 shows that for the category of *article + noun*, 67% of the class were able to classify the gender of the nouns *la camisa* “the dress shirt” and *la corbata* “the tie” correctly. Following these two nouns, less than half of the class was able to classify the nouns *el lápiz* “the pencil” and *el vestido* “the dress”; however, when it came to the nouns of *el mapa* and *la mano*, none of the non-L1 English speakers from the control group were able to classify the gender of the nouns correctly.

Categories		El lápiz	El mapa	La mano	El vestido	La camisa	La corbata
First category	Art+ Noun	33.3	0	0	33.3	67	67
Second category	No agreement	67	67	100	67	33.3	33.3
Third category	N/A	0	33.3	0	0	0	0

Table 10: Class Percentage per Noun of the Non-L1 English Speakers from the Control Group

### 5.3.3 Overall Analysis and Contrast between the Experimental Group and Control Group

Results from Experiment Three show a difference in performance for the experimental versus control group; also, differences are illustrated for L1 English Speakers versus non-L1 English speakers. For the experimental group, non- L1 English speakers were better able to classify the correct gender of the nouns in the sample pictures. In contrast, results from the

control group demonstrate that the L1 English speakers were better able to classify the gender of the nouns of the nouns in the sample pictures. Overall, after analyzing the results, it is possible to conclude that for Experiment number 3, the group who showed the most understanding when classifying the gender of a noun was that of the non-L1 English speakers of the experimental group.

To further explain the results of this activity, I give the following possibilities for the experimental group: (i) most of the non-L1 English speakers already possess within their grammar a category of grammatical gender already, making it easier to classify the gender in another language. (ii) The L1 English speakers are not use to classifying the gender of inanimate nouns in English, neither, they have to agree their article to a noun. Therefore, when L1 English speakers encounter the possibility of having to classify the gender of inanimate things in another language while also making sure the article of choice agrees with the inanimate nouns like the Spanish language requires, they will tend to have a certain amount of difficulty. Some possibilities for the results in the control group are: (i) L1 English speakers knew their vocabulary very well. (ii) The teaching techniques used when explaining the grammatical gender in general went in favor for this group.

Furthermore, for this experiment, (i) students did not show a significant amount of difficulty when it came to classifying the gender of the nouns, except for the ones that fell in the exception category. (ii) Judging by the results of the test, the students' cultural perception that they might have for certain nouns did not interfere with the classification of the gender. For example, students were able to classify the gender of *el vestido* (the dress) as a masculine noun and *la camisa* (the dress shirt) as a feminine noun. (iii) The results showed that both L1 English and non-L1 English speakers will have a certain amount of difficulty when classifying the gender

of nouns that falls in the Spanish exception category. Note that for this experiment, when students tried to classify the gender of the exception nouns, they found it easier to classify the masculine gender of *el mapa* instead of *la mano*. It seemed that the masculine gender was the default gender<sup>10</sup> in general.

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<sup>10</sup> The default gender was determined by the class mode. It is important to remember that the class mode measured the sentences that showed the same percentages and occurred with the most frequency.

## **Experiment 4: Experimental and Control Group Classification and Agreement of the Grammatical Gender**

### **5.4 Introduction of Experiment 4**

In the following experiment two groups of students were shown a set of pictures consisting of an assortment of clothing. The students were then asked to pick an article, a noun and an adjective that best fit each picture from a selection box. Once the selection was completed, the students were asked to form simple sentences where they needed to demonstrate their understanding of the classification and agreement of the grammatical gender. To analyze the students' ability to execute the grammatical gender in simple sentences, two tables were created. Within each table, there were five categories that were used to locate where within the sentence structure the students showed a better understanding or committed the most mistakes. The categories were: *article + noun + adjective*, *article + noun*, *noun + adjective*, *no agreement* and *N/A* (non-applicable).

The first category describes the full gender agreement between the article, the noun and the adjective. The acronym for this is *art+ noun + adj*. Students were placed in this category if they were able to classify the gender of a noun with its corresponding article and simultaneously being able to agree the adjective to the noun with its correct morphological ending.

The second category consisted of nominal phrases. These phrases included the combination of the *article + noun* alone. This category was only taken into consideration if students did not make a full gender agreement. The third category is classified by the presence of an adjective phrase which is the combination of a *noun + adjective*. This construction was only taken into consideration, if students were not capable of making a full gender agreement *article + noun + adjective* and/or a partial agreement between the article and the noun. The fourth

category of *no agreement* is for students who were not able to make the full gender agreement. In other words, they were not able to classify or make any type of gender agreement in a simple sentence. The fifth category called *N/A* (non- applicable) represented those students who did not fit into any of the categories mentioned before, or simply left unanswered questions in the activity. Note that the percentages shown within each category represent the percentage of students of the class that were able to be classified within each category.

The first group of tables shows the detailed measurements of central location for each category. Aside from having the five previous categories, Table number one contains measurements called the mean and the mode. The mean was basically used to represent in a general way the total class percentage of students who were capable of making some type of gender classification or gender agreement for each category. The second measurement is the mode, which displays the percentage of those sentences where the students showed the most understanding. The latter measurements, the mean and the mode, will be used to support the validity of results and percentages that are shown in Tables 11, 13, 15 and 17.

On the other hand, the second group of tables, instead of focusing on the overall percentage per category, represents the percentage of students that were able to make some type of gender classification or gender agreement for each sentence within each category. Moreover, the ten pictures that were used in Experiment four were written out and represented in Tables 12, 14, 16 and 18. These sentences are *una corbata marrón* a “brown tie”, *una bota azul* a “blue boot”, *una chaqueta roja* a “red jacket”, *una camisa verde* a “green dress shirt”, *una blusa morada* a “purple blouse”, *un suéter rosado* a “pink sweater”, *un sombrero blanco* a “white hat”, *un vestido rojo* “a red dress”, *unos zapatos negros* “some black shoes” and *un abrigo verde* “a green coat”. The goal of this table is to find out in which gender structure (feminine article +

noun + adjective or masculine article + noun + adjective) do the students have the most difficulty producing gender agreement.

#### 5.4.1 Results from the Experimental Group

##### 5.4.1.1 Results of the L1 English Speakers from the Experimental Group

According to Table 11, in the first category *article + noun + adjective*, 57% of the L1 English speakers were able to make a full gender agreement in all the sentences. In addition, out of the students who did not fall into in the first category of *article + noun + adjective*, the results shows that 17% of them students displayed a certain degree of understanding when making an agreement between the noun and the adjective rather than between the noun and the article. This means that if we use a random sentence like *un sombrero rojo* (a red hat), students found it easier to agree *sombrero rojo* (red hat) than to classify the gender of the noun by writing *un sombrero* (a hat).

Categories		Class mean	Class mode
First category	Art+Noun+Adj	56.6	73
Second category	Art+Noun	4.5	0
Third category	Noun+Adj	17.3	9.1
Fourth category	No agreement	16.4	18.2
Fifth category	N/A	5.5	9.1

Table 11: Total Class Percentage per Category of the L1 English Speakers from the Experimental Group

According to Table 12, 73% of the class was able to make a full gender agreement *art+ noun+adj* in sentences like *un sombrero blanco* “a white hat”, *un abrigo verde* “a green coat” and *unos zapatos negros* “some black shoes”. As we can observe, all three sentences share the masculine gender. This classification was formed by adding a masculine article and a noun that has an -O as a morphological word marker<sup>11</sup>. Also, another important observation is that even though all three sentences have the masculine gender in common, one of the sentences contains within its structure the plural form. This plural was formed by adding the suffix -S to each of the sentence’s component. However, the presence of the -S in the sentence did not influence the results; students still were capable to make a full gender agreement. Apart from having a plural sentence present, we can see that *un abrigo verde* has an adjective that does not share the word marker of its noun; though that was a significant difference between the three sentences, the students were able to agree *un abrigo verde* like the rest of the sentences.

Furthermore, in the same category *art+ noun+ adj* 27% of the class was able to make a full gender agreement in *una corbata marrón* “a brown tie”, which is a lower percentage than the one in the former sentences. As we can observe, this sentence was formed by a feminine article followed by a feminine noun with an -A as the word marker and an adjective with no word marker. If this sentence is compared to *un abrigo verde*, the only difference between them is the gender classification of the article; *un abrigo verde* is masculine while *una corbata marrón* is feminine. And even though that was the only difference between them, more students fail to classify and agree the gender of *una corbata marrón*. As I mentioned before, students who fail to make a full gender agreement, fell in one of the four remaining categories. In this case, Table 12

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<sup>11</sup> According to Harris, J. W. (1985, 1991) the final -O and A of a noun belong to a set of seven or more morphemes that he called *word markers*. The primary morphological property of word markers is that their appearance marks a derivationally and inflectionally complete word; word markers cannot be followed by any other suffix, derivational or inflectional, except for plural -S.



shows those students who were not able to make a full gender agreement, but were able to show signs of understanding in the third category of *noun + adj*.

Categories		Una corbata marrón	Una bota azul	Una chaqueta roja	Una camisa verde	Una blusa morada	Un suéter rosado	Un sombrero blanco	Un vestido rojo	Unos zapatos negros	Un abrigo verde
First category	Art+Noun+Adj	27.3	55	45.5	36.4	64	64	73	55	73	73
Second category	Art+Noun	0	0	18.2	9.1	0	0	9.1	9.1	0	0
Third category	Noun+Adj	27.3	18.2	18.2	36.4	18.2	9.1	18.2	9.1	9.1	9.1
Fourth category	No agreement	36.4	18.2	18.2	18.2	9.1	18.2	0	27.3	9.1	9.1
Fifth category	N/A	9.1	9.1	0	0	9.1	9.1	0	0	9.1	9.1

Table 12: Class Percentage per Sentence of the L1 English Speakers from the Experimental Group

#### 5.4.1.2 Results for the Non- L1 English Speakers form the Experimental Group

As stated in table 13, for the first category *art + noun + adj*, 49% of the entire non-L1 English speaker group were able to make a full gender agreement in all the sentences. Also, out of the students who were not able to make a full gender agreement, the results show that 17% of the class was able to at least classify the gender of the nouns by adding the article to the noun. However, 21% of the students who did not make it into the first and second category started to display some type of understanding when having to match the noun with the adjective.

Categories	Categories	Class mean	Class mode
First category	Art+Noun+Adj	48.7	43
Second category	Art+Noun	17.2	14.3
Third category	Noun+Adj	21.4	14.3
Fourth category	No agreement	4.3	0
Fifth category	N/A	8.6	14.3

Table 13: Total Class Percentage per Category of the Non-L1 English Speakers from the Experimental Group

In accordance with Table 14, in the first category *art + noun + adj*, 71% of the class was able to produce a feminine full gender agreement between the article, the noun and the adjective in the sentence *una camisa verde*. As we can observe students were capable of not only classifying the gender of *una camisa* without thinking of the cultural and social perception that the object has, but also they were able to match the adjective *verde* with the noun *camisa* even though *verde* has no word marker. However, by looking at the results closely, it seems that as students moved on from one sentence to another, the percentages of students making full gender agreement kept getting lower as well. For example, for the sentences *una corbata marrón*, *una blusa morada*, and *unos zapatos negros*, the results shows that only 57% of the class was able to make a full gender agreement.

Nevertheless, looking at the sentences closely, we could notice that at least for *una corbata marrón*, just like *una camisa verde* if we compare this group with the L1 English speakers. The percentage for the non-L1English speakers is higher than for the L1 English ones. For *una chaqueta roja*, *un suéter rosado*, *un sombrero blanco*, *un vestido rojo* and *un abrigo verde*, only 43% were able to make the full gender agreement. And the percentages kept going down, as can be seen in the sentence *una bota azul* with only 29% of the class being able to fully agree this sentence. In addition, for the second category *art + noun* and the third category *noun + adj*, the results shows that students who were not able to make a full gender agreement at least showed some type of understanding when they had to agree the noun with an adjective instead of classifying the noun with an article.

Categories		Una corbata marrón	Una bota azul	Una chaqueta roja	Una camisa verde	Una blusa morada	Un suéter rosado	Un sombrero blanco	Un vestido rojo	Unos zapatos negros	Un abrigo verde
First category	Art+Noun+Adj	57.1	29	43	71.4	57.1	43	43	43	57.1	43
Second category	Art+Noun	14.3	0	43	14.3	14.3	0	28.5	28.5	14.3	14.3
Third category	Noun+Adj	14.3	57.1	14.3	14.3	14.3	28.5	14.3	14.3	14.3	28.5
Fourth category	No agreement	0	0	0	0	0	14.3	14.3	14.3	0	0
Fifth category	N/A	14.3	14.3	0	0	14.3	14.3	0	0	14.3	14.3

Table 14: Class Percentage per Sentence of the Non-L1 English Speakers from the Experimental Group

## 5.4.2 Results from the Control Group

### 5.4.2.1 Results for the L1 English Speakers from the Control Group

According to Table 15, results show that 64% of the L1 English speakers of the control group were able to make a full gender agreement *article + noun + adjective* in general. If the second and third category is compared, we can see that the category that expresses the most understanding is the third one, which presents the agreement between the noun and the adjective *noun + adj*. However, apart from having such a high percentage in the first category, Table 5 also shows that 17% of the class fell on the no agreement category. This means that 17% of the students were not able to agree the sentences in any way. Moreover, if we compare this group with the L1 English speakers of the experimental group we can observe that this group has more mistakes than the L1 English speakers from the experimental group.

Categories	Categories	Class mean	Class mode
First category	Art+Noun+Adj	64.1	60
Second category	Art+Noun	2.0	0
Third category	Noun+Adj	8.1	7
Fourth category	No agreement	17.3	16.6
Fifth category	N/A	8.7	6.6

Table 15: Total Class Percentage per Category of the L1 English Speakers from the Control Group

In Table 16, the results show that for the first category *article + noun + adjective*, 87% of the class was able to agree the sentences *un sombrero blanco* and *unos zapatos negros*. Both of these sentences are formed by a masculine article, noun and an adjective. Just like in Table Four, as students moved on from one sentence to another, the percentages of correct agreement kept lowering as well. For example, for *una camisa verde* only 80% of the class was able to agree the sentence fully, for *una chaqueta roja* 67%, *una blusa morada*, *un suéter morado*, and *un vestido rojo* showed only 60% of the class as being able to agree these sentences. For *un abrigo verde* the percentage was 46%, and the lowest percentage came from *una corbata marrón* with only 40% of the class being able to give full agreement.

For the second category *art + noun* and the third category *noun + adj*, the results shows that students who were not able to make a full gender agreement at least showed some type of understanding when they had to agree the noun with an adjective instead of classifying the noun with an article.

Categories		Una corbata marrón	Una bota azul	Una chaqueta roja	Una camisa verde	Una blusa morada	Un suéter rosado	Un sombrero blanco	Un vestido rojo	Unos zapatos negros	Un abrigo verde
First category	Art+Noun+Adj	40	53.3	67	80	60	60	87	60	86.6	46.6
Second category	Art+Noun	0	0	0	0	13.3	7.0	0	0	0	0
Third category	Noun+Adj	7.0	33.3	6.6	7	7.0	0	0	0	7.0	13.3
Fourth category	No agreement	40	0	20	6.6	13.3	26.6	6.6	27	0	33.3
Fifth category	N/A	13.3	13.3	6.6	6.6	6.6	6.6	6.6	13.3	6.6	7

Table 16: Class Percentage per Sentence of the L1 English Speakers from the Control Group

#### 5.4.2.2 Results of the Non-L1 English Speakers

The results for Table 17 shows that within the non-L1 English speakers of the control group, the category with the highest number of students was the fourth category of no agreement which is a 40% of the class. This is the first time in the entire test that the fourth category contained the highest results. A reason for this could be that students were not able to grasp the concept of the classification and agreement of the grammatical gender, making it harder for them to complete this exercise. Perhaps a possible explanation is that their level of English may have prevented them from following everything.

Another interesting result came from the first category *article + noun + adjective* and the second category *article +noun*. Both of the categories happened to have a percentage of 10%. This percentage is relatively low if compared to previous groups mentioned in this test. On the contrary, when the second category *article +noun* and third category *noun + adj* were compared, the students did better when classifying the gender of a noun than trying to match it to an adjective.

Categories	Categories	Class mean	Class mode
First category	Art+Noun+Adj	10	0
Second category	Art+Noun	10	0
Third category	Noun+Adj	6.7	0
Fourth category	No agreement	40.1	67
Fifth category	N/A	33.3	33.3

Table 17: Total Class Percentage per Category of the Non-L1 English Speakers from the Control Group

According to Table 18, for the first category *article + noun + adjective*, 33% of the class was able to fully agree the sentences *un sombrero blanco*, *unos zapatos negros* and *un abrigo verde*. However, 67% of the non-L1 English speakers in the control group were not able to fully agree the sentences *una corbata marrón*, *una blusa morada*, *un suéter rosado* and *un vestido rojo* in any way. For the second and third category, it seems that for the first time at least 10% of the non-L1 English speakers in the control group were able to classify the gender of *una chaqueta* “a boot” and *una camisa* through article agreement instead of making a gender agreement between the noun and the adjective.

Categories		Una corbata marrón	Una bota azul	Una chaqueta roja	Una camisa verde	Una blusa morada	Un suéter rosado	Un sombrero blanco	Un vestido rojo	Unos zapatos negros	Un abrigo verde
First category	Art+Noun+Adj	0	0	0	0	0	0	33.3	0	33.3	33.3
Second category	Art+Noun	0	0	33.3	67	0	0	0	0	0	0
Third category	Noun+Adj	0	67	0	0	0	0	0	0	0	0
Fourth category	No agreement	67	0	33.3	0	67	67	33.3	67	33.3	33.3
Fifth category	N/A	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3

Table 18: Class Percentage per Sentence of the Non-L1 English Speakers from the Control Group

### 5.4.3 Overall Analysis and Contrast between the L1 English and Non-L1 English Speakers from the Experimental and Control Group.

After closely observing the results from the tables of *the experimental* and *the control group*, they show that in general for the first category *art + noun + adj* the L1 English speakers from *the control group* showed the most understanding when making a full gender agreement. As was already mentioned in previous sections, the second category *art + noun* and the third category *noun + adj* were only used if students were not able to make a full gender agreement in the first category. Having said this, the results showed that for the second category *art + noun*, there was little to no understanding. On the other hand, for the third category *noun + adj* it was the L1 English speakers of *the experimental group* who displayed their understanding of the grammatical gender by making an agreement between the noun and the adjective.

When observing the class percentage per sentence, we can see observe that even though the tables showed a great number of students from both groups, who showed some level of comprehension in most of the sentences, none of the sentences displayed a perfect score on the amount of students who were able to fully agree in the first category. Therefore, it is possible to say that there are still many students struggling with the classification of the grammatical gender. However, even though there are many students struggling, the ones that did classify the gender class of the sentences showed that the masculine gender was the default gender over the feminine one. This fact could be observed in sentences like *un sombrero blanco, unos zapatos negros and un abrigo verde* from the L1 English speakers of *the experimental group*.

On the other hand, the majority of the L1 English speakers from *the control group* were able to fully agree sentences like *un sombrero blanco, unos zapatos negros and una camisa verde*. The mode which is the measurement of central location showed that there were less than half of students who were able to agree sentences like *un suéter rosado, un sombrero blanco, un*

*vestido rojo* and *un abrigo verde*. However, we can observe that all these sentences have something in common. All the sentences shared a masculine article, a noun that has an –O as their word marker and an adjective that concord with the nouns; except for *un abrigo verde*. Notice that the adjective that *un abrigo* uses does not have a word maker. These types of adjectives belong to what is called an outer core<sup>12</sup>.

Out of the remaining students who were not able to agree the sentence fully, it seemed that both the control and the experimental group of the L1 English speakers developed an understanding of the grammatical gender by making an agreement between the noun and the adjective versus the gender classification between the article and the noun. This means that students were able to write *suéter rosado* rather than *un suéter*. The same problem not only occurred with *suéter rosado*, but also with nouns like *corbata*, *chaqueta*, *vestido*, *bota* and many others.

Nevertheless, it is interesting that *the control group* was the only group who was able to have 80% of the students fully making an agreement in the sentence *una camisa verde*. Two possible reasons why the majority of the students were able to agree this sentence could be as follows: (1) The teaching techniques used to present the vocabulary or (2) because student knew very well what the noun *camisa* was. However, for the rest of the nouns like *corbata*, *chaqueta*, *vestido*, *bota*, perhaps, another reason that could justify the low percentage of students being able to fully agree the nouns or to classify their gender, could be linked to the student's cultural language bias.

In the beginning of this investigation, students were asked to fill out a test where they had to classify the gender of pictures; the reactions of students, once the instructions were

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<sup>12</sup> Outer core are those that do not have word markers (but may have [e] for syllabicity). (Harris,1991:32)



explained, was surprise because L1 English speakers are not used to giving a descriptive explanation for linguistic gender choices.

One of the pictures that they needed to classify was “a tie” *corbata*, and the majority of the students, if not all, were not able to classify the gender of the tie correctly. This may have happened because society's perception of a tie dictates that it is to be worn by a man. It is possible that L1 English students at a very early stage of the grammatical gender learning might have had a certain difficulty when classifying certain objects that are in one way or another associated with masculinity or femininity.

On the other hand, the non-L1 English speakers from *the control group* showed a low percentage of students in the first category if compared to the L1 English speaker. However, the non-L1 English speakers from *the experimental group* were the only group who were able to agree fully *una corbata marrón* with a high percentage.

The situation of the non-L1 English speakers is a little different than the L1 English speaker. Within the non-L1 English speakers of both groups their first languages are French, Arabic, Bengali, Urdu and Vietnamese. All these languages except for Vietnamese have something in common which is that all those language carry some type of gender classification. However, having this as an advantage, the percentage should have been higher but it did not happen. Out of the two non-L1 English groups, the one that showed a certain degree of understanding of the grammatical gender was that of the non-L1 English speakers of *the experimental group*. The only way I can account for this results, is the type of teaching methodology the students were exposed to. If the non-L1 English speakers from *the control group* had been exposed to a more explicit grammar explanation, it would have possibly helped them.

## **Experiment 5: Experimental and Control Group**

### **Composition using Descriptive Adjectives**

#### **5.5 Introduction of the Experiment 5**

For this activity, the students needed to write a composition. The topic was “description of the personality and physical description of a person of the student’s choice”; whether the person was male or female. The goal of this experiment is to find out how students after taking various activities where the gender classification and agreement were present would perform in a free response activity.

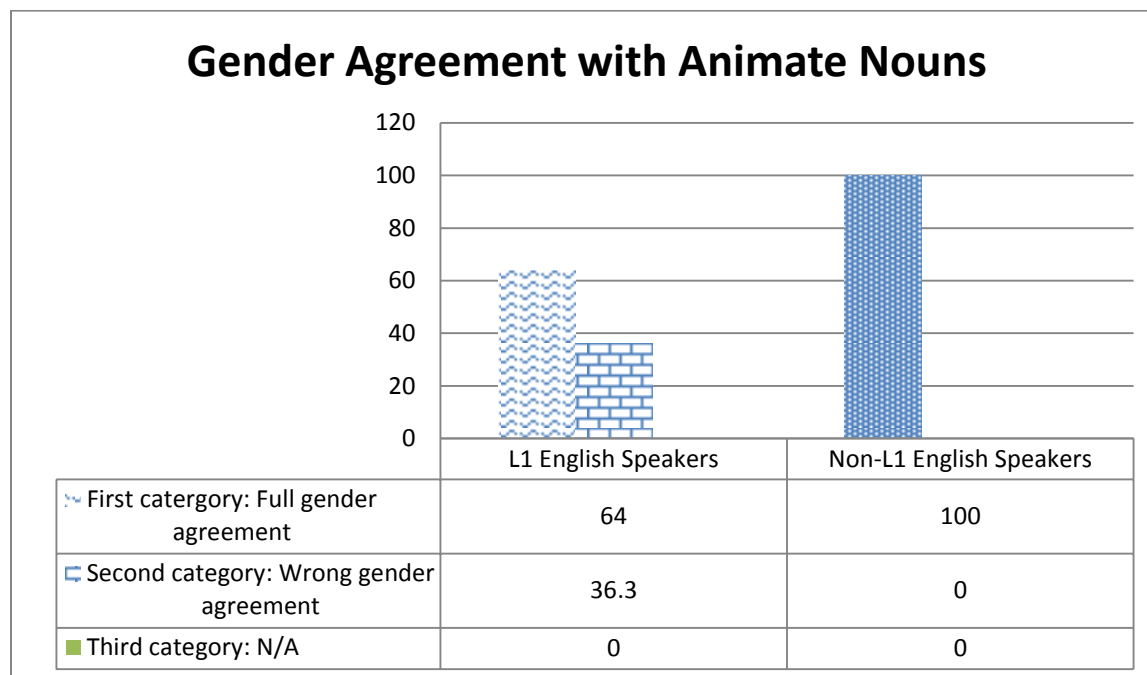
The results of the composition test are represented in two figures; the first figure pertains to the L1 English and non- L1 English speakers of *the experimental group*, while the second figure belongs to the L1 English and non-L1 English speakers of *the control group*. In addition, to analyze the student’s responses better, three categories were created. The first category is called “full gender agreement”, the second category is called “wrong gender agreement” and lastly, the third category is called *N/A* (non-applicable). Students will fall into the first category if all their adjectives agree with the person they are describing. If students were not able to fit in the first category because their adjectives do not agree with the person they are describing, then they will fall into the second category. However, if the participants failed to describe the person of their choice or simply left the essay empty, then they fell into the third category which is the *N/A*. The numbers shown in the graphs represents the percentage of students who were able to fit in any of the categories.

### 5.5.1 Results of the L1 English and Non-L1 English Speakers for the Experimental Group

According to Graph 5, the results indicate that the non- L1 English speakers did relatively better than the L1 English speakers in *the experimental group*. As displayed in the graph, for the first category of full gender agreement, the entire non- L1 English speakers' group was able to describe the person of their choice using the corresponding adjective correctly as compared to more than half of the L1 English speakers. A possible reason for this significant difference could be that the participants who did not have English as their first language might have some type of gender agreement or gender classification in their first language making it easier for them to understand the Spanish grammatical gender better.

Furthermore, it is also interesting to mention that most of the L1 English speakers and also some of the non- L1 English speakers from the *control group* who fell into the second category used adjectives with canonical endings like *alto/lalta* “tall” as well as adjectives that could be used for both genders like *optimista*, “optimistic” or *realista* “optimistic” to describe the person of their choice; when using adjectives that could be marked with –O or –A endings the students used masculine adjectives as default. This means that when student was describing a female friend, they tended to use a masculine noun for their description. For example a student would write: *ella es simpático, y alto* (*she is friendly and tall*) instead of *ella es simpática and alta*. The cause of these mistakes could be linked to a couple possibilities.

One possible explanation for the latter mistakes could be that when the grammatical gender was taught in the classrooms, cognitively they temporary understood the agreement structure followed by a very close series of activities that dealt with the agreement of the grammatical gender, but once the explanations and practice of this structure stopped the students also stop making sense of it and stayed with the masculine gender agreement as default.

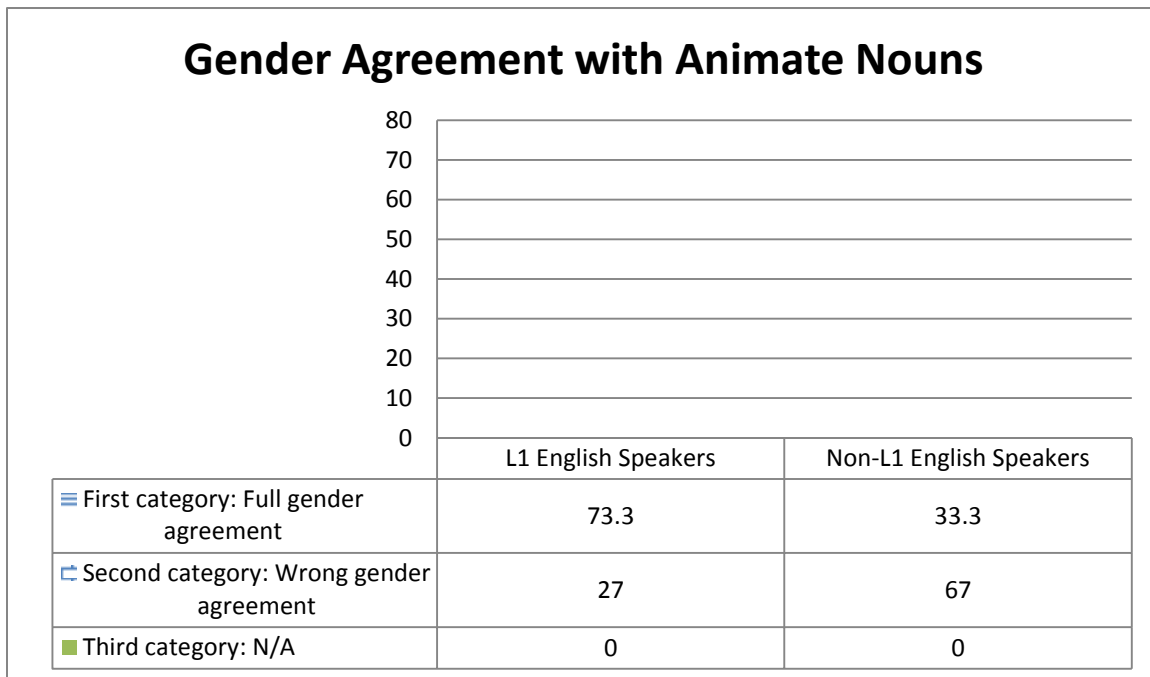


Graph 5: Results of Gender Agreement using Descriptive Adjectives from the Experimental Group

#### 5.5.2 Results of the L1 English and Non- L1 English Speakers from the Control Group

The results for Graph 6 show that for the first category of full gender agreement the L1 English speakers did significantly better than the non-L1 English speakers of *the control group*, which is the total opposite result from that observed in *the experimental group*. A possible reason for these results could be rooted in the different type of teaching methodology used for both the experimental and the control group. As a reminder, *the experimental group*, while learning about the grammatical gender, was exposed the entire time to explicit formal instruction where certain parts where the grammatical gender was more prominent, while the control group followed a more communicative approach with sections of audio lingual teaching methods. At the end of this test, it is possible to say that the teaching methodology could be one of the main reasons why the L1 English speakers did well.

As far as for the non-L1 English speakers, most of them do not carry a grammatical gender classification in their first language (just like the L1 English speaker). But if we look at the graph, the L1 English speakers did relatively well in *the control group*. Therefore, the only possibility that might be able to explain the results for the non-L1 English speakers could also be linked to the teaching methodologies used in the classroom. It seemed that the L1 English speakers were able to understand more with communicative activities while the non-L1 English speakers could have do better if more grammar was explained in the classroom. This would be a reinforcement of the grammatical gender that already exists in their language or just a learning preference.



Graph 6: Results of Gender Agreement using Descriptive Adjectives from the Control Group

### 5.5.3 Overall Analysis and Contrast between the Experimental Group and the Control group

Overall, if all the groups (L1 English and non-L1 English speakers of *the control* and *experimental group* in this investigation) are compared, it is possible to say that the group that showed the best understanding of the gender agreement in this test was the non-L1 English speakers of *the experimental group*. In the category of wrong gender agreement, the group who made the most mistakes came from the non-L1 English speakers of *the control group*. If we decide to compare only the L1 English speakers of both groups, we observe that the L1 English speakers of *the control group* showed signs of better understanding when it came to agreeing the adjective to a noun in this test. We also mentioned that a possible reason for these results could have been the type of teaching methodologies that they went through when learning the grammatical gender. However, it was only a certain amount of the L1 English speakers who were able to complete successfully, this part of the test, while the remaining students simply did not understand it for the reasons I mentioned in each of the group's results.

If we compared the results from the non-L1 English speakers of both *the experimental* and *the control group*, the results showed that the non-L1 English speakers from *the experimental group* had a better understanding of the gender agreement in this activity. This could be because of different factors; the teaching methodology implemented in the classroom did not intervene enough in the interlanguage of the non-L1 English speakers, as a consequence the non-L1 English speakers kept making the same mistakes. As mentioned earlier, Ellis and Lightbown stated that during class time students display an understanding of the materials being taught to them, however when time passes, students tend to forget what they have learned and revert back to the basic level understanding which was, continual marking as a morpheme an-O

which is used as the word marker to classify masculine gender Ellis (1990:166), which in this case is the continuous marking of a morpheme –O for either gender.

## Chapter 6

### FINDINGS AND DISCUSSION

#### 6.1 Final Discussion

At the beginning of this study, three hypotheses and four research questions were formed in order to find out a possible explanation why adult learners, especially in a beginner level class, faced difficulty when classifying the grammatical gender in Spanish. To support the three hypotheses and to answer the four research questions, five experiments were carried out and thirty-six human subjects were selected for this study.

Hypothesis #1: First, at an early stage, while learning the grammatical gender in Spanish, cultural language perceptions (the associations of nouns with gender) might interfere with the proper classification of the grammatical gender. The reason why I thought this hypothesis must be tested was because of the two types of participants chosen for this study. The participants were non- L1 English speakers and L1- English speakers. For the latter subjects, the concept/phenomenon of grammatical gender does not exist in their L1 grammar. Therefore, students might find other ways to grasp the concept of gender classification. For this study, a good starting point was the way students might perceive gender in their L1. My prediction for this hypothesis was that when students encounter certain types of inanimate nouns, they will be drawn to classifying them according to their cultural language perceptions.

According to Experiment #1, "*Student's Cultural Language Perception*," the first hypothesis was met. The results of Experiment #1 showed that only the first two nouns, "car" and "house", were classified correctly by a good percentage of students. However, as soon as the rest of the nouns, such as, "the map", "the pencil", "the hand" "the coat", "the dress shirt", "the tie", "the lips" and "the dress" were introduced to the students, the number of subjects who were



able to classify these nouns decreased drastically to the point where, for nouns like “the tie” and “the dress”, no learner from either *the experimental* or *control group* was able to classify the proper gender in Spanish. What do all the latter nouns have in common? All of them in some way were associated to masculinity or femininity.

This assumption is based on the students’ comments that were written on the activity when asked to explain the reason for their gender classifications. When students were asked to classify the nouns, their cultural language perceptions drew them to associate the nouns with an immediate possessor. For example, “a dress” was associated to a female while “a tie” was associated to a male, “a coat” was associated to a female due to its fashion connotations, and “a hand” was associated to a male because hands are used for hard work and to build things. However, when these nouns were classified grammatically in Spanish, they all took on opposite genders. For example, “a dress” is classified as masculine, “a coat” is classified as masculine, “a hand” is feminine and “a tie” is feminine. Therefore, this experiment showed that students’ cultural language perceptions could interfere at a very early stage when learning and classifying the grammatical gender.

Hypothesis #2: The second hypothesis states that when making an agreement between the noun and the adjective, a learner of Spanish will have difficulty in using morphological endings while describing animate nouns in a free response task. The reason why I thought this hypothesis must be tested was because L1 English speakers are not used to word markers in adjectives agreeing with the gender of a noun, such as: “pretty girl” or “handsome boy”. However, most of the Spanish adjectives agree with the gender of a noun, for example; *Chico bonito, Niña guapa*. Meanwhile, some of the non-L1 English speakers do use morphological word markings at the end of their adjectives, but some of the adjectives tend to differ in the way the morphemes are

added to the adjectives. For example, Hindi, which pertains to one of the L1 languages spoken by some of the Subjects. According to Hall, in the Hindi language, “masculine forms of inflecting adjectives end in –a in the singular direct and –e in the plural direct, while the feminine forms always end in –I, whether singular or plural” Hall (2002:140). To test Hypothesis #2, two different experiments were given to the participants of this study<sup>13</sup>. My prediction for this hypothesis was that depending on the way descriptive adjectives were presented to a learner, the level of difficulty could either increase or decrease. After analyzing the results of Experiment #2, “*Gender Agreement of Descriptive Adjectives*”, it is possible to say that Hypothesis #2 was not met. However, for Experiment #5, “*Gender Agreement with Animate Nouns*”, Hypothesis #2 was met.

Hypothesis #2 states that when making an agreement between the noun and the adjective, a learner of Spanish will have difficulty when using morphological endings while describing animate nouns in a free response task. In Experiment #2, “*Gender Agreement of Descriptive Adjectives*” students were provided with a list of adjectives where the only thing they needed to do was to choose and write the appropriate adjective. Students were not required to come up with their own adjectives. The percentages showed that the majority of the participants did not display difficulty when making an agreement using morphological word markings, except for the non-L1 English participants from the control group. One of the possible explanations for this result could be linked to the type of format used in the experiment. Because students had the choice of selection, the activity automatically became easier to do. Therefore,

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<sup>13</sup> Note that in both of the experiments; students had to match the animate noun with a descriptive adjective. The only difference between the experiments was the activity’s format. In experiment #2 students were guided to the answers by having to select their adjectives from a selection list, while Experiment #5 used a free response format, which required students to use an adjective of their choice.

due to the choice of selecting an adjective, the level of difficulty decreased in this activity, therefore, Hypothesis number #2 was not met.

Nevertheless, Experiment #5 does meet Hypothesis #2. For this experiment, students did not have an adjective selection; instead, the activity was made up of a free response task where they needed to choose who they wanted to talk about and which adjectives they were going to use to describe the person of their choice. At the end of this activity the results, compared to Experiment #2, showed that there was a certain amount of difficulty when students needed to come up with adjectives on their own. There are two reasons that may explain the results of this of Experiment #2 and #5. First, students will always find the selection format in an activity to be easier than the production of answers. Second, stated by Ellis referring to Lightbown (1985c:102) in Chapter One,

The instruction of certain grammatical structure may be understood at the beginning of its explanation by the students but after a period of time passes by; the same grammatical structure tends to disappear Ellis (1990) follows the idea of Lightbown when he says: “the learners heard and practice certain language items in class and for a period of time outside the class, they appeared to know these forms in the sense that they used them correctly in appropriate context. Later, however, some of this correct forms disappeared from the learner’s language and were replaced by simpler or developmentally earlier forms Ellis (1990:166).

Following Ellis and Lightbown’s thoughts, it seemed that students, who were not able to make the gender agreement in experiment #5 as well as experiment #2, kept using forms learned earlier.

Hypothesis #3: Learners of Spanish tend to do better when they encounter a noun phrase by itself as opposed to when they encounter more gender agreement variables within a given adjective phrase. My prediction for this activity was that participants, especially L1 English

speakers, would have difficulty classifying the gender in a noun phrase by itself and even more so in simple sentences where an adjective phrase is also present.

According to the results in Experiment #3, “Gender Classification through Picture Recognition”, this hypothesis was met but only under the following conditions. Hypothesis #3 states that learners of Spanish tend to do better when they encounter a noun phrase by itself as opposed to when they encounter more gender agreement variables within a given sentence. Which means that when students have to only classify the gender of a noun by adding the article to a noun, as is observed in *el vestido*, the groups displayed less difficulty than when they had to classify the gender of a noun as well as make a gender agreement in the same sentence as is observed in *es un vestido rojo*. To be able to illustrate this statement, we compared the percentages of students of Experiment #3 where students only needed to classify the gender of each noun by adding an article with the percentages of students of Experiment #4, where students needed to classify and make a gender agreement in a noun phrase and in an adjective phrase. The result of Experiment #3 “*Gender Classification through Picture Recognition*” result displayed that the L1 English speakers from the control group as well as the non-L1 English speakers from the experimental groups performed better when they only needed to agree or classify a noun phrase. In addition, hypothesis #3 was met if the percentages of students are compared to the ones in Experiment #4. Furthermore, if we examine the tables where the total class percentage per categories was displayed from each group, it is possible to say that the only students that were able to correctly classify the gender of the nouns were the non-L1 English speakers from the experimental group. As for the control group, the group who displayed a greater percentage of students classifying the gender of the noun was that of the L1 English speakers.

Hypothesis #4: states that, when writing a simple sentence that contains an article, a noun and an adjective L2 and L3 learners of Spanish will find difficulty when making gender agreement in a nominal phrase rather than in an adjective phrase. The reason why I thought this hypothesis must be tested was because, at least when it comes to the L1 English speakers, articles in their L1 grammar agrees in number with the nouns, however, they do not agree in gender. Therefore, when having to agree the articles in Spanish, L1 English students could display some difficulties. My prediction was that, due to grammar differences, L1 English speakers would perform better in adjective phrases than in nominal phrases. According to experiment #4 “*Classification and Agreement of the Grammatical Gender*”, the results showed that in fact Hypothesis # 4 was met. When students could not make a full gender agreement in a simple sentence (art + noun + adj), they opted to make a gender agreement between the noun and the adjective, rather than with the article and the noun. These results were not only seen in L1 English speakers but also in non- L1 English speakers. Therefore, Hypothesis # 4 was met.

## **6.2 The Role of Methodology inside the Classroom**

For Experiment #1, “*Student Cultural Language Perception*”, the role of methodology did not apply because students at that stage were not introduced to the formal explanation of the grammatical gender. This test was given to the students to find out how they would perceive the classification of the gender in general.

For experiment #2, “*Gender Agreement with Descriptive Adjectives*”, the role of methodology did not apply, because it was too early to determine if students had begun understanding the grammatical gender. Instead, the high percentage of students making the right agreement was linked to two things: first, the format of the test, as it was mentioned before,

because in Experiment #2 students needed to select the adjective from a selection box, and might have found the activity easier to complete because it did not require. Second, when it comes to adjectives, most of the non-L1 English speakers like Arabic and Hindi have noun-adjective agreement in their first grammar; therefore, this made it easier for them to grasp the concept faster.

For experiment # 3, “*Gender Classification through Picture Recognition*”, Experiment #4, “*Classification and Agreement of the Grammatical Gender,*” and Experiment # 5, “*Gender agreement with animate nouns*”, especially for the last one, the role of teaching methodology could have interfered in a positive way with the results of this experiment. As is already known, the non-L1 English speakers from the control groups did relatively better in this experiment than the L1 English speakers, and vice versa for the experimental group. The reason why the L1 English speakers of the control group did better in this experiment than the experimental group could be linked to the types of methodologies implemented in the classroom.

As a reminder, the methodology used by the control group had a more communicative approach while the teaching methodology from the experimental group had a more grammar-explicit approach. Having said this, there is a possibility that the L1 English speakers in the experimental group did not have consciousness raising every time the grammatical gender was explained like the control group did. Perhaps it could have been the more communicative approach that marked the difference. In the case of the non- L1 English speakers from the control group, it could have been that they needed that consciousness raising.

### **6.3 Limitations**

Now that we have found some possible explanations of why even after being exposed to the rules of the grammatical gender, students still made mistakes when classifying and making gender agreement in sentence or discourse, it is important to recognize some factors that could have affected the results either in a positive or negative way. First, even though this study had thirty- six subjects, eighteen students from *the control group* and eighteen students from *the experimental group*, when students were divided into L1 English speakers and non-L1 English speakers, the numbers of students no longer were equal. This somehow could have affected the results. The second factor includes the time intervals; the experiments were collected every two days or sometimes every week. This by itself could have affected the students' results in a positive or negative way. For example, when the test was collected every two days, students might have very little time to internalize any gained knowledge. However, when experiments were collected every week, there was the possibility that students had temporarily understood the explanation but then, due to lack of individual practice, they might have forgotten the explained concept, which lead to poor performance on the experiments. Third, the task design may have interfered; some of the pictures used in this study had strong gender inferences and very little distractors.

### **6.4 Final Conclusions**

Returning to the research questions that were introduced at the beginning of the study, which asked, (1) Can cultural perception be one possible reason students at a nascent level in the learning process of the grammatical gender classification have difficulty showing understanding? (2) Is it within a nominal phrase or in an adjective phrase where students find the most difficulty

when classifying the grammatical gender? (3) Can classroom methodology intervene in a positive way with the learning of the grammatical gender?

Question number 1: Based on the results from this study, the answer for question #1 is yes. Cultural language perception could be problematic for students whose L1 is not Spanish. However, this perception will disappear once the student starts internalize the rules by which the grammatical gender is classified.

Question number 2: According to the results of this study, the answer to this question is that students had difficulty when making an agreement in a nominal phrase rather than in an adjective phrase (*noun + adj*). It is important to remember that the majority of the subjects for this study do not have gender agreement between the noun and the adjective in their first language. Therefore, when making gender agreement between the noun and the adjective in Spanish, L1 English speakers had difficulty. However, if students had to agree gender only in a noun phrase, there is a possibility to encounter L1 English learners that might not find the gender classification difficult. As far as the non-L1 English speakers, the results indicated that for those students who were not capable of making a full gender agreement just as the L1 English speakers, the non-L1 English speakers had the most difficulty when classifying the gender of the nouns rather than making an agreement with the adjective.

Question number 3: the answer to question # 3 is yes, teaching methodologies could intervene in a positive way when learning the grammatical gender. For instance, if we compare both L1 English speakers from the control group and the experimental group; the results from Experiment One to Experiment Five displayed that the L1 English speakers from the control group performed better than the experimental group. As far as the non-L1 English speakers, the



non-L1 English speakers from the experimental group performed better than the control group. The reason for these results could be linked to the different teaching methodology used by both teachers. The experimental group used a more grammar approach with the purpose of making students aware of the differences in the target language grammar from their L1 grammars, while the control group used a more communicative approach. The results showed that L1-English speakers responded better to the control's group methodology.

On the other hand, a possible reason why the non-L1 English speakers did better in the experimental group could be because the group already had some type of grammatical gender, therefore a grammar approach only served as a reminder. According to the results of this paper, the methods selected in the classroom could improve the students' awareness of rules. Nevertheless, it is hard to determine whether certain teaching methods can lead to error-free gender learning since there are also other internal and external factors at play which will not be discussed in this investigation.

At the end, and judging by the percentages of students who were able to classify the gender correctly, it is hard to suggest that students in a beginning level understood the classification of the grammatical gender. Nevertheless, the results show us that there could be a starting point for those students who were not able to make full gender agreement (article + noun + adjective), this starting point was the gender agreement in an adjective phrase.

## **6.5 Future Research**

Future studies in this particular area can improve both the instrument design and the results of this investigation. The results could be improved by selecting an equal time interval that would better reflect students' progress. One could improve the instrument design by selecting a variety of adjectives with different word makers and more distracters to prevent future bias. Future research could also look into and compare in detail why students have difficulty in the nominal phrase rather than in the adjective phrase and compare L1 English speakers of other languages that do not have grammatical gender.

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## Appendix A

**El Género Gramatical.** Encierre si usted cree que los siguientes dibujos podrían clasificarse en femenino (F) o masculino (M) y escriba una breve explicación de su respuesta.


- 1)  **the house M / F**

Why? \_\_\_\_\_


- 2)  **the car M / F**
- Why? \_\_\_\_\_

- 3)  **the hand M / F**

Why? \_\_\_\_\_

- 4)  **the pencil M / F**

Why? \_\_\_\_\_

- 5)  **the map M / F**

Why? \_\_\_\_\_

**Continuation of Appendix A**



6) **the lips M / F**

**Why?** \_\_\_\_\_



7) **the coat M / F**

**Why?** \_\_\_\_\_



8) **the tie M / F**

**Why?** \_\_\_\_\_



9) **the dress M / F**

**Why?** \_\_\_\_\_



10) **the dress shirt M / F**

**Why?** \_\_\_\_\_

## Appendix B

### Asociaciones. Las descripciones de las personas famosas.

¿Quién es \_\_\_\_\_?

- a. Rubio/rubia ~ moreno/morena      d. joven ~ viejo/vieja  
b. Alto/alta ~ bajo/baja      e. delgado/delgada (flaco/flaca) ~ gordo/gorda  
c. Guapo/guapa, bonito/bonita ~ feo/fea      f. rico/rica ~ pobre



1. **Salma Hayek** es \_\_\_\_\_



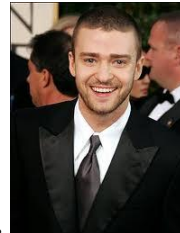
2. **Oprah Winfrey** es \_\_\_\_\_



3. **Matt Damon** \_\_\_\_\_ 4.



5. **Angelina Jolie** es \_\_\_\_\_



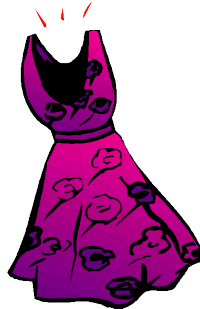
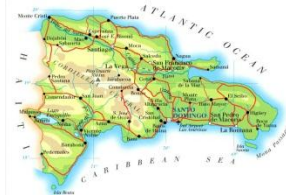
6. **Justin Timberlake** es \_\_\_\_\_



**Notorious B.I.G.** es \_\_\_\_\_

## Appendix C

Escriba el artículo y el sustantivo correspondiente a cada dibujo



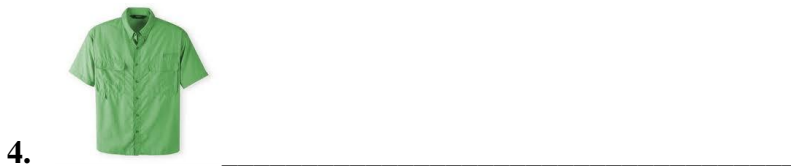
## Appendix D

**La ropa. Seleccione una palabra y un color del siguiente cuadro para poder describir los siguientes dibujos. Use la forma del verbo ser (ES o SON), y los artículos indefinidos UN/ UNOS, UNA / UNAS.**

vestido, sombrero, zapatos, camisa,  
Suéter, corbata, chaqueta, bota, abrigo, blusa.


Rojo /roja, anaranjado/anaranjada, gris, verde, azul,  
morado/morada, negra/negro, marrón, rosada/rosado.


**Modelo: es un saco rojo.**






**Continuation of Appendix D**

6.  \_\_\_\_\_

7.  \_\_\_\_\_

8.  \_\_\_\_\_

9.  \_\_\_\_\_

10.  \_\_\_\_\_

## Appendix E



Escriba una composición describiendo cómo es físicamente y cómo es la



personalidad de su mejor amiga o mejor amigo.

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**Appendix F**

Name \_\_\_\_\_

**Status at Stony Brook University**

Freshman \_\_\_\_\_ Sophomore \_\_\_\_\_ Junior \_\_\_\_\_ Senior \_\_\_\_\_  
Graduate \_\_\_\_\_ Auditing \_\_\_\_\_

What is your first language (mother tongue): \_\_\_\_\_

How long have you been studying Spanish and where? \_\_\_\_\_

**Please check the years you have taken Spanish**

High school: 7<sup>th</sup> Grade \_\_\_\_\_ 10<sup>th</sup> Grade \_\_\_\_\_ AP Spanish \_\_\_\_\_  
8<sup>th</sup> Grade \_\_\_\_\_ 11<sup>th</sup> Grade \_\_\_\_\_  
9<sup>th</sup> Grade \_\_\_\_\_ 12<sup>th</sup> \_\_\_\_\_

Regents? \_\_\_\_\_ yes Score \_\_\_\_\_ No \_\_\_\_\_

College: SPN 111 \_\_\_\_\_ Where? \_\_\_\_\_

SPN 112 \_\_\_\_\_ Where? \_\_\_\_\_

SPN 211 \_\_\_\_\_ Where? \_\_\_\_\_

**Have you had any other contact with the language? Please describe your experience.**

**Does anyone in your family speak Spanish? Do any of your friends? Please comment.**

**Why are you taking Spanish?**

**Are you going to continue taking Spanish at this University?**