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## **Over, Under and Around: Spanish Heritage Speakers' Production (and Avoidance) of Subjunctive Mood**

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### **ABSTRACT**

The present study explores the subjunctive mood production of 29 heritage speakers (HSs) of Spanish (17 advanced proficiency and 12 intermediate proficiency) and 14 Spanish-dominant controls (SDCs). All participants completed a Contextualized Elicited Production Task (CEPT), which tested their oral production of both lexically-selected (intensional) and contextually-selected (polarity) mood morphology in Spanish. Between-group analyses of the CEPT reveal that the HSs diverge significantly from the SDCs in subjunctive production, specifically by underproducing, overproducing, and avoiding subjunctive mood morphology. Despite these differences, however, the HSs still exhibited sensitivity to mood, producing significantly more subjunctive mood in expected subjunctive contexts than in expected indicative contexts. Based on HSs' knowledge of the subjunctive, which both resembles and also diverges from that of the SDCs, it is argued that categorizing HSs as having either acquired or not acquired mood in Spanish is descriptively and conceptually problematic.

*Keywords:* Heritage speakers, subjunctive mood, morphosyntax, Spanish

### **INTRODUCTION**

Heritage speakers are “individuals from language minority groups who grow up exposed to a minority language in the home and the majority societal language” (Montrul, 2016a: p. 16). Given this definition, it is likely that the experience of acquiring and maintaining heritage languages (henceforth, HLs) is as old as language contact itself. As long as families speaking one language have immigrated to, or been colonized by, regions with a different societal language, there have been heritage speakers (henceforth, HSs) facing, during early childhood, the dual challenge of (a) adapting quickly to the language of their new society and yet (b) maintaining enough competence in their HL to preserve important family and community bonds.

Despite the prevalence of HSs, across regions of the world as well as throughout history, research on HSs' acquisition and maintenance of their HL is relatively very young, dating back to seminal work by Fishman (1964), Dorian (1981), and, ultimately, Valdés (1995), who is often credited with popularizing the term “heritage language” in academic discourse. Though the nascent field of HL acquisition research is becoming increasingly multi-dimensional, encompassing research questions in the areas of sociology, psychology, and cultural studies, a large proportion of recent HL research has focused on comparing HSs' grammatical knowledge of the HL to the grammatical knowledge demonstrated by either, and in some cases, both, (a) monolingual and (b) bilingual “baseline” or “control” groups. In studies of the first type, HSs of a given HL are compared to monolingual speakers of that language, as in van Osch and Sleeman (2016), where HSs of Spanish in the Netherlands were compared to monolingual Spanish speakers in Spain. In studies of the second type, HSs of a given HL are compared to bilingual first-generation immigrants who differ from the HSs in terms of both age of acquisition of the societally-dominant language and language

dominance. Unlike the HSs, these bilingual controls acquire the societal language after puberty and, as a result, typically remain dominant in their L1. One example of a study using such bilingual controls is Pascual y Cabo and Gómez-Soler (2015), where HSs of Spanish were compared to first-generation immigrants who had learned English as adults in the United States. This paper will use the broad term *HL-dominant controls* (Giancaspro, 2017, in press) as a general category that subsumes both the monolingual and bilingual comparison groups used in HL acquisition research and, therefore, facilitates a generalized (non-language-specific) discussion of HS versus non-HS comparisons.

Linguistic comparisons of HSs and HL-dominant controls have been made in various domains of the grammar, including phonetics/phonology (e.g., Kim, 2016), syntax (e.g., Pascual y Cabo & Gómez-Soler, 2015), and morphology (e.g., Montrul, 2009). In the realm of morphosyntax, comparisons between HSs and HL-dominant controls typically, although not necessarily, reveal a broad but consistent pattern: HSs tend to behave differently from HL-dominant controls in the production and/or comprehension of morphosyntactic properties of the HL.<sup>1</sup> In the case of subjunctive mood morphology, which will be the focus of the present paper, HSs tend to differ from HL-dominant controls by either (a) producing indicative mood forms (e.g., *habla* ‘speak’) where subjunctive mood forms (e.g., *hable* ‘speak’) are expected, (b) producing subjunctive mood forms where indicative mood forms are expected or (c) employing alternative linguistic structures in places where HL-dominant controls employ subjunctive mood forms. Following Scontras, Fuchs and Polinsky (2015), this paper refers to all of these differences as “divergence.”

The term “divergence” includes multiple ways in which HSs can differ from HL-dominant controls. One way that HSs can diverge is by employing a certain linguistic form more or less often than HL-dominant controls. A recent example of this pattern comes from Bayram, Rothman, Iverson, Kupisch, Miller, Puig-Mayenco and Westergaard (2017), who found that Turkish HSs, despite exhibiting target-like production of both passive and active voice, were less likely than Turkish-dominant controls to use the passive voice when describing short, animated videos. Importantly, HSs exhibiting this type of divergence differ from controls not by producing “non-target” (e.g., ungrammatical) HL forms but by showing a stronger preference for one “target” grammatical option (e.g., active voice) over another (e.g., passive voice).

A second way in which HSs can diverge is by producing novel, “non-target” forms of a HL property which are not attested in the speech of HL-dominant controls. One common example of this second type of divergence occurs with gender agreement in Spanish determiner phrases (DPs). While Spanish-dominant speakers only produce gender-matched DPs such as *la*<sub>FEM</sub> *niña*<sub>FEM</sub> (‘the girl’), HSs sometimes produce “gender-mismatched” forms, such as *\*el*<sub>MASC</sub> *niña*<sub>FEM</sub> (Montrul & Potowski, 2007), where the grammatical gender of the determiner does not agree with the grammatical gender of the noun. The absence of these “mismatched” DPs in the speech of Spanish-dominant speakers suggests that HSs, at least with some grammatical properties, innovate beyond the input that they receive to produce novel (“non-target”) HL linguistic forms.

Curiously, though heritage speakers do diverge from HL-dominant controls by producing “non-target” variants of HL forms, it is rare for HSs to produce *only* novel, “non-target” variants of a given HL form. Instead, as noted by Flores (2015), HSs “tend to produce certain structures in both

target-like and target-deviant manners” (p. 253), e.g., by using a “target-like” variant most of the time (e.g., 80%), thereby exhibiting a similar tendency as the controls, and yet also sometimes producing a non-target variant, thereby demonstrating apparent grammatical divergence. This pattern, which has been found in a variety of HLs, raises questions about variability and divergence in HL grammars. What does a HS know about a HL property when she both (a) closely mirrors and yet also (b) diverges from HL-dominant controls in the production of that property?

The present paper sheds light on this critical question by exploring HSs’ variable production of two types of subjunctive mood morphology in Spanish. The goal of the detailed analysis presented herein is to challenge the practice of characterizing HSs dichotomously, that is to say, as having either *acquired* or *not acquired*, HL properties such as mood. Instead, it will be argued that (a) HSs’ sensitivity to mood is gradient and (b) exploring this gradience (rather than simply identifying differences between HSs and controls) should be prioritized in HL research.

The structure of this paper is as follows. The first section describes the syntax and morphology of subjunctive mood in Spanish, as well as previous studies of HSs’ subjunctive knowledge. The second section outlines the research questions (RQs) and hypotheses of the study. The third and fourth sections present the methodology and results, while the fifth and sixth sections discuss implications of the main findings for future research on divergence in HL acquisition.

## MOOD IN SPANISH

### Subjunctive Mood: Morphology and Syntax

Subjunctive mood morphology refers to a set of verbal inflections used to mark modality in Spanish (Bosque, 2012) and many other languages. In Spanish, the subjunctive mood is far less common than the default indicative mood (Bosque, 2012; Quer, 2001) and is typically considered “marked” morphology. In the present tense, the subjunctive mood in Spanish is marked on a verb via a shift in that verb’s thematic vowel. The thematic vowel of *ladra* (‘bark’), for example, is *-a*, meaning that its subjunctive mood equivalent is *ladre*. Similarly, the thematic vowel of *entiende* (‘understand’) is *-e*, meaning that its subjunctive equivalent is *entienda*. While most verbs follow this pattern, some Spanish verbs, like *tener* (‘have’), are “doubly” marked for subjunctive mood, meaning that they undergo a vowel shift (*-e* to *-a*) as well as a change in their verbal root (*tien-* to *teng-*), leading to subjunctive forms such as *tenga* (cf. indicative: *tiene*).

The broad class of verbal inflections that we refer to as subjunctive mood morphology can be triggered by a variety of linguistic elements. That is to say, a single subjunctive mood form, such as *tenga*, can appear in different sentences as the result of entirely different syntactic processes (Quer, 2006). Following Quer (2001) and Kempchinsky (2009), this paper uses the terms intensional and polarity mood selection to refer to two broad classes of syntactic processes which trigger subjunctive or indicative mood morphology in substantially different ways.

Intensional mood selection is when a verb’s mood morphology is selected by a preceding lexical item. In (1), the complementizer *para que* (‘so that’) selects for the subjunctive mood form *entienda*. While the indicative form, *entiende*, is ungrammatical, there is no difference in meaning or interpretation between the subjunctive and indicative mood forms.

- (1) Karina<sub>i</sub> habla lentamente *para que* Bruno la<sub>i</sub> entienda/\*entiende  
 Karina speak-IND slowly for that Bruno CL-3ps understand-[3p-sg-SUBJ/\*IND]  
 ‘Karina speaks slowly so that Bruno understands her’

Not all complementizers, however, select for subjunctive mood, as shown in (2), where the complementizer *porque* (‘because’) selects for default indicative mood morphology. As in (1), the use of non-target mood morphology, though ungrammatical, has no consequences for meaning.

- (2) Bruno puede venir a la oficina *porque* no \*ladre/ladra mucho.  
 Bruno can-IND come to the office because NEG bark-[3ps-sg-\*SUBJ/IND]  
 ‘Bruno can come to the office because he does not bark much.’

Polarity mood selection, on the other hand, is when a verb’s mood morphology is selected by characteristics of the preceding context. Unlike in the case of intensional mood selection, where shifting from indicative to subjunctive mood results in differences of grammaticality, but *not* differences of meaning, shifts from indicative to subjunctive mood in polarity mood selection result in differences of meaning but *not* grammaticality.

There are many types of polarity mood selection in Spanish, e.g., indirect commands (Perez-Cortes, 2016) and negated epistemics (e.g., Kempchinsky, 2009). The present study, however, focuses on polarity mood selection in adjectival relative clauses (henceforth, ARCs).

The ARC in (3), which modifies the DP *una casa* (‘a house’), can include either a subjunctive mood form, such as *tenga*, or an indicative mood form, such as *tiene*, depending on the context and/or the speaker’s intended meaning.

- (3) Busco una casa [que tenga/tiene una puerta principal amarilla.]  
 I look for-IND a house [that have-3ps-SUBJ/IND a door main yellow]  
 ‘I am looking for a house that has a yellow front door’

According to Borgonovo, Bruhn de Garavito, and Prévost (2015), the use of indicative mood in the ARC leads to a “specific” or “referential” reading of the DP, meaning that the searcher presupposes the existence of the house with the yellow front door (e.g., because he has seen it in a catalog or visited it before). The use of subjunctive mood in the ARC, by contrast, results in a “non-referential” or “attributive” interpretation of the DP, meaning that the searcher is now looking for a(ny) house with a yellow front door and has no specific referent in mind.

Presented in isolation, both the indicative and subjunctive mood variants of (3) are grammatical, depending on a speaker’s intended meaning. By manipulating the presence/absence of presupposition in the preceding context, however, it is possible to create circumstances in which subjunctive or indicative mood forms can become ungrammatical or infelicitous.

Imagine that the searcher in (3) is driving through a neighborhood searching for the house with the yellow front door where he dropped off his daughter earlier for a birthday party. Because he presupposes the existence of the house (having seen it earlier), it would be ungrammatical for him

to produce the subjunctive version of (3) while seeking directions from a local passerby. This type of context, which I will refer to as “presuppositional,” requires indicative mood morphology.<sup>2</sup>

If the searcher in (3) is a photographer, driving through an unknown neighborhood and looking to take a picture of *any* house with a yellow front door, then the context is now clearly non-presuppositional. Consequently, it would be ungrammatical for the searcher to produce the indicative version of (3) while asking for directions. As these examples show, the grammaticality of mood morphology in ARCs depends upon the presence/absence of presupposition in context.

What must a Spanish speaker know in order to exhibit “target-like” behavior with both intensional mood selection and polarity mood selection of the types presented thus far? Whichever theoretical position one takes about the mental representation of intensional and polarity subjunctive mood, “there is general support for the idea that subjunctive morphology is only permitted in certain complements, and that these are determined by some semantic feature(s) carried by the governing element, with which the relevant features of the complement must agree” (Poplack, Lealess, & Dion 2013, p. 158). In a simple sense, therefore, acquiring both the intensional and polarity subjunctive mood is about learning to identify which semantic and/or syntactic elements trigger the presence of subjunctive mood morphology in the complement clause. In the case of the intensional subjunctive, Spanish speakers must learn that some lexical items (e.g., *para que*) trigger the subjunctive mood while other lexical items (e.g., *porque*) do not. In the case of polarity subjunctive in ARCs, on the other hand, Spanish-speakers must learn that non-presuppositional contexts trigger the subjunctive mood while presuppositional contexts do not.

Whatever specific features are responsible for triggering the subjunctive,<sup>3</sup> it is clear that knowing it requires more than knowledge of these features alone. In addition, speakers must learn what Lardiere (2005) has referred to as “morphological competence,” that is to say, how feature(s) are instantiated on specific lexical items (e.g., knowing that the subjunctive form of *salir* (‘leave’) is *salga* and not *\*sale*, *\*sala*, or *\*salgue*). Conceivably then, a Spanish speaker could know which elements trigger subjunctive mood (e.g., *para que*) and yet still fail to produce target subjunctive mood morphology after these elements due to a lack of morphological, rather than semantic/syntactic, competence.

### ACQUISITION OF SUBJUNCTIVE MOOD IN SPANISH

Previous studies have examined the acquisition of the subjunctive mood in the Spanish of monolingual children (e.g., Blake, 1983; Pérez-Leroux, 1993, 1998), bilingual children (e.g., Rodríguez, Bustamante, Wood & Sunderman, 2017; Silva-Corvalán, 2014), adult second language learners (e.g., Borgonovo et al., 2015), and adult HSs (e.g., Montrul, 2007, 2009; Montrul & Perpiñán, 2011; Perez-Cortes, 2016, *inter alia*). This section will focus on three studies of HSs’ oral production of subjunctive mood, highlighting specifically both (a) the extent to which HSs’ subjunctive mood knowledge resembled or diverged from that of Spanish-dominant controls and (b) how the authors of these studies conceptualized such similarities and differences.

Montrul (2009) tested HSs’ knowledge of subjunctive mood in Spanish. In an oral production task, participants responded to questions using phrases often associated with subjunctive mood usage, such as *busco* (‘I am looking for’) and *dudo que* (‘I doubt that’). Results of the task reveal a few

key trends. First, HSs diverged from HL-dominant controls by both underproducing the subjunctive (e.g., producing the indicative in expected subjunctive contexts) and overproducing the subjunctive (e.g., producing the subjunctive in expected indicative contexts). Because HSs' subjunctive productions were not subdivided by mood selection type (e.g., intensional and polarity mood selection), it is not possible to determine whether they diverged more from controls in intensional or polarity selection contexts. Even without such an analysis, however, it is easy to spot another key trend in the data: both the intermediate-proficiency and the advanced-proficiency HSs produced high proportions of the subjunctive mood in expected subjunctive contexts (78.1% and 92.0%, respectively), thereby showing well-above-chance subjunctive mood production.

In addition to this task, HSs also completed two receptive tasks. Most relevant here is the Sentence Conjunction Task, which tested HSs' sensitivity to subjunctive/indicative differences in three variable contexts, including ARCs. With ARCs, the AdvHSs (but not the IntHSs) made the same distinctions as the SDCs, specifically by rating the subjunctive higher than the indicative mood in non-presuppositional contexts. Based on these findings, Montrul (2009) concludes that "many of the heritage speakers tested exhibit...incomplete acquisition of mood" (p. 265), a conclusion that is seemingly drawn by assigning more weight to between-group comparisons (e.g., showing that HSs diverge from HL-dominant controls) than within-group comparisons (e.g., showing that the HSs, though different from the controls, behave in a systematically similar manner.)

Van Osch and Sleeman (2016) tested HSs' production of mood in an oral elicited production task that targeted both intensional subjunctive (with *querer que*, 'want that') and polarity subjunctive (in ARCs). With *querer que*, HSs produced the subjunctive approximately 80% of the time. In non-presuppositional ARCs, the HSs produced the subjunctive approximately 50% of the time, thereby demonstrating considerable underproduction of the subjunctive mood. Interestingly, the same HSs exhibited strong overproduction of the subjunctive mood, specifically by producing it over 30% of the time in presuppositional ARCs. The authors attribute HSs' mood divergence with ARCs to the fact that mood selection in ARCs lies at the interface of syntax and semantics and, therefore, is vulnerable to variability in HSs. They do not, however, offer an explanation for why this vulnerability sometimes surfaces as overproduction of the subjunctive mood.

Viner (2016, 2018) used a corpus of spontaneous interview data to analyze differences in the mood production of HSs and first-generation, HL-dominant controls. In one study, Viner (2016, 2017) reports that HSs use subjunctive 90% of the time (72/80) with *para que*, diverging from controls (who used subjunctive 100% of the time (134/134) in this context) yet nonetheless demonstrating a strong and systematically target-like mood distinction. In a second study, Viner (2017, 2018) shows that HSs, who produce the subjunctive mood in only 64% (55/86) of non-presuppositional ARCs, again diverge from HL-dominant controls, who produce subjunctive in 84% (134/160) of such ARCs. As in the case of *para que*, however, the HSs' divergence is not random, given that the HSs, like the SDCs, produce more subjunctive than indicative in non-presuppositional ARCs. To account for the differences between the HSs and HL-dominant controls, Viner (2018) posits that "the linguistic constraints conditioning the variation between the two moods appear weaker" (p. 91) in the HSs. It's unclear, however, where in the grammar such weakened sensitivity might be found.

Each of these studies provides significant insight into HSs' production of the subjunctive mood in Spanish. It is apparent, nonetheless, that much could be gained from a new study that both (a) builds on strengths of these previous investigations and yet also (b) explores additional dimensions of HS divergence, specifically, via a deeper analysis of the ways in which HSs diverge from HL-dominant speakers in the production of the subjunctive mood in Spanish.

### **RESEARCH QUESTIONS AND HYPOTHESES**

With that goal in mind, the research questions of the present study are as follows:

RQ 1: Do HSs diverge from Spanish-dominant controls (SDCs) in their production of intensional and polarity subjunctive mood in Spanish?

Hypothesis 1: Based on the studies summarized in Section 2, it is hypothesized that HSs will diverge from SDCs in the production of both the intensional and polarity subjunctive mood in Spanish. Furthermore, it is hypothesized that intermediate-proficiency HSs will diverge more from the SDCs than advanced-proficiency HSs, again in accordance with recent studies (Montrul, 2009).

RQ 2: If so, in what ways do they diverge?

Hypothesis 2: It is hypothesized, based on Montrul (2009) and van Osch and Sleeman (2016), that HSs will both underproduce and overproduce the subjunctive mood in Spanish.

RQ 3: Do HSs, despite exhibiting divergence, maintain target-like mood sensitivity in Spanish?

Hypothesis 3: It is hypothesized that HSs, despite diverging from the SDCs, will nonetheless exhibit similar within-group patterns, e.g., by producing the subjunctive mood more in expected subjunctive contexts than in expected indicative contexts.

### **THE PRESENT STUDY**

#### **Participants**

The 43 participants in the study, all native-Spanish speaking bilingual adults (Rothman & Treffers-Daller, 2014) between the ages of 18-49, were divided into two groups on the basis of their age (and context) of acquisition of English: HSs ( $n = 29$ ) and Spanish-dominant controls (SDCs;  $n = 14$ ).

All HSs were born and raised in the U.S. and began learning Spanish, naturalistically, from birth, as well as English, which they acquired during early childhood (e.g., by kindergarten). In addition, all HSs belonged to the second generation (Portes & Rumbaut, 2014), meaning that at least one of their two parents immigrated from a Spanish-speaking country after puberty. At the time of testing, 18 of the 29 HSs (62.07%) in the study were currently enrolled in advanced, university-level Spanish courses, whose topics included language, literature, and linguistics. Because participants were recruited from a diverse public university in the northeast, there was substantial diversity in their families' places of origin, which included Chile, Colombia, Cuba, the Dominican Republic,



Ecuador, El Salvador, Guatemala, Honduras, Mexico, Peru, Puerto Rico and Spain. Previous studies have not found differences in the use of intensional and polarity subjunctive mood across the Spanish varieties spoken in these regions (Viner, 2016, 2017, 2018).

Following Montrul (2009), the 29 HSs were further subdivided into advanced and intermediate proficiency groups on the basis of the DELE Spanish proficiency test, a fifty-question examination commonly used in Spanish acquisition research (e.g., Montrul & Slabakova, 2003). Participants scoring 40 or higher on the DELE were labeled “advanced” (AdvHSs:  $n=17$ ), as in previous studies, while those scoring between 28-39 were labeled “intermediate” (IntHSs:  $n=12$ ).

It is important, as argued by Pascual y Cabo and Rothman (2012) and exemplified in recent research (e.g., Montrul & Sánchez-Walker, 2013), to compare HSs to first-generation immigrants who are both (a) bilingual and (b) living where the dominant societal language is *not* the language of the home. Therefore, the control group in the present study consisted of 14 Spanish-dominant controls (SDCs), all bilinguals living in the U.S., whose primary difference from the HSs was their later age and context of acquisition of English.

All SDCs in the present study were born in Spanish-speaking countries and immigrated to the U.S. at age 12 or later (Range = 12-35 years;  $M = 22.86$  years;  $SD = 7.01$  years). The 14 SDCs immigrated from eight Spanish-speaking countries, seven of which the HSs’ families had also immigrated from, making the dialectal composition of the SDC group comparable to that of the HSs.<sup>4</sup>

All participants rated their proficiency in Spanish and English using a scale from 1 (“beginner”) to 10 (“native-like proficiency”). As expected, the AdvHSs rated their English proficiency ( $M = 9.59$ ,  $SD = 0.95$ ) significantly higher than their Spanish proficiency ( $M = 7.88$ ,  $SD = 1.87$ ),  $t(16) = 3.327$ ,  $p < .01$ ,  $d = 0.81$ . The IntHSs also rated their English ( $M = 9.42$ ,  $SD = 0.90$ ) significantly higher than their Spanish ( $M = 6.67$ ,  $SD = 1.44$ ),  $t(11) = 5.248$ ,  $p < .001$ ,  $d = 1.52$ , though the strength of this difference was greater, as indicated by the larger effect size.

Although all SDCs self-reported high levels of English proficiency ( $M = 7.86$ ,  $SD = 0.95$ ), likely because they have worked and resided in the U.S. for at least 4 years (Range = 4-14 years;  $M = 8.00$  years,  $SD = 2.80$  years), they still rated their English proficiency significantly lower than their Spanish proficiency ( $M = 9.86$ ,  $SD = 0.36$ ),  $t(13) = -7.211$ ,  $p < .001$ ,  $d = 1.93$ , unlike the HS groups. A summary of the three participant groups is provided in Table 1.

**Table 1.***Participants' DELE Scores, English Self-Ratings, and Spanish Self-Ratings by Group*

Group	<i>n</i>	DELE Proficiency		Eng. Self-Rating		Span. Self-Rating	
		M	SD	M	SD	M	SD
IntHSs	12	33.75	3.36	9.42	0.90	6.67	1.44
AdvHSs	17	43.00	2.96	9.59	0.80	7.88	1.87
SDCs	14	46.50	2.96	7.86	0.95	9.86	0.36

*Note.* Maximum DELE score is 50. Eng. and Spanish Self-Ratings are on 1-10 scale.

### Methodology

In addition to the DELE, which was done at the end of the experiment, all participants completed the Contextualized Elicited Production Task (CEPT), which tested their oral production of both intensional and polarity indicative and subjunctive mood morphology in Spanish.

Participants completing the CEPT were asked to imagine themselves in a department store, where they would be searching for products (e.g., a camera) with particular characteristics (e.g., that takes pictures underwater). For each experimental item, participants read a 2-3 sentence description (written in Spanish, but presented in English here) of a particular type of product that they are searching for. Below each of these descriptions was a short sentence fragment, always consisting of *busco* ('I am searching for'), a DP (e.g., *un bolígrafo*, 'a pen'), and then either *que* ('that'), *porque* ('because') or *para que* ('so that'), depending on the condition. After reading each description, participants were asked to read the sentence fragment out loud and complete it (orally) using (a) a form of the verb given in parentheses and (b) any other necessary information.

There were four experimental conditions, each of which included six items and targeted either the indicative or subjunctive mood. In the PolarityIndicative and PolaritySubjunctive conditions, participants are expected to produce the indicative or subjunctive based on the presence/absence of presupposition in the product description. In (4), from the PolaritySubjunctive condition, the participant cannot find a water-resistant camera, meaning that he does *not* presuppose the existence of the camera and, therefore, is expected to produce subjunctive.

## (4) PolaritySubjunctive Example

Context: *You are in the electronics section. You need to buy a camera to take pictures underwater. You find one fire-resistant camera and another camera with a normal lens.*

You tell the store clerk:

*Busco una cámara que \_\_\_\_\_ (FUNCIONAR)*  
(‘I am looking for a camera that \_\_\_\_\_ (WORK)’)

Expected Response: *que funcione<sub>SUBJ</sub> bajo el mar.*  
‘that works<sub>SUBJ</sub> under the sea’

In (5), from the PolarityIndicative condition, the participant *does* have a particular product in mind: the Coleman flashlight that uses solar energy. Because the participant presupposes the existence of the flashlight, he is expected to produce indicative in the ARC. Unlike the indefinite DPs in the fragments of the PolaritySubjunctive condition (e.g., *una cámara*), the DPs in this condition were definite (e.g., *la linterna*) to give participants more evidence of presupposition.

## (5) PolarityIndicative Example

Context: *You are in the home goods section. You need to buy a flashlight for emergencies. You already know that you want the new Coleman lantern with the ability to use solar energy.*

You tell the store clerk:

*Busco la linterna que \_\_\_\_\_ (USAR)*  
(‘I am looking for the flashlight that \_\_\_\_\_ (USE)’)

Expected Response: *que usa<sub>INDIC</sub> energía solar*  
‘that uses<sub>INDIC</sub> solar energy’

The sentence fragments in the IntensionalIndicative and IntensionalSubjunctive conditions ((6) and (7)) are also preceded by 2-3 sentence product descriptions. Where the Intensional conditions differ from the Polarity conditions, therefore, is in the relevance of this contextual information for the mood morphology that participants are expected to produce. In (6) and (7), it is the complementizers *para que* and *porque* that select for the subjunctive and indicative moods rather than the presence/absence of presupposition in the context.

## (6) IntensionalSubjunctive Example

Context: *You are in the music section. Your younger brother rarely plays music, but he needs a guitar for his music class. You always like to buy him musical gifts.*

You tell the store clerk:

*Busco una guitarra para que mi hermano \_\_\_\_\_ (PRACTICAR)*

(‘I am looking for a guitar so that my brother \_\_\_\_\_ (PRACTICE)’)

Expected Response: *para que mi hermano practique<sub>SUBJ</sub> la guitarra*  
‘so that my brother practices the guitar’

### (7) IntensionalIndicative Example

Context: *You are in the home goods section. Your uncle is not very organized and often has trouble finding his keys. He needs a small keychain. You like to buy him things like that.*

You tell the store clerk:

*Busco un llavero porque mi tío siempre \_\_\_\_\_ (PERDER)*  
(‘I am looking for a keychain because my uncle always \_\_\_\_\_ (LOSE)’) )

Expected Response: *porque mi tío siempre pierde<sub>INDIC</sub> sus llaves*  
‘because my uncle always loses his keys’

In addition to the 24 items in the four experimental conditions, the CEPT also included 12 distracters. Six of the distracters, which will not be further discussed in this paper, were intended to elicit the production of non-finite verb forms after the complementizer *para*. The other six distracters, whose format will be detailed below, elicited the production of adjunct phrases headed by *por* (‘for’; e.g., *por 50 dólares*, ‘for fifty dollars’) and often followed by further modification.

### Data Analysis and Coding

Of the 43 participants’ 1032 responses to experimental items, 32 (3.1%) were excluded from further analyses, most frequently when participants (a) altered the sentence fragment (e.g., changing *un* to *el*) or (b) added additional lexical items (e.g., *pueda*, ‘can’) before the verb in parentheses. The remaining 1000 responses, presented below in Table 2, were analyzed using a logistic mixed effects model (GENLINMIXED in SPSS 25). The dependent variable was SubjunctiveProduction, coded as either 1 (‘subjunctive’) or 0 (‘indicative’), while the fixed factors were Group (SDC, AdvHSs, IntHSs), MoodSelectionType (Polarity, Intensional) and ExpectedMood (Subjunctive, Indicative), as well as all interactions between these variables. The model also included random intercepts for both subject and item.

As shown in Table 2, the SDCs produced 100% subjunctive mood in both ExpectedSubjunctive conditions (with *para que*, 81/81; with non-presuppositional ARCs, 82/82) and 0% subjunctive mood in the IntensionalIndicative condition (with *porque*, 0/81). Because logistic mixed effects models cannot run without variability (e.g., more than one type of response given in each cell), one SDC response in each of these three conditions was selected at random and then changed either from subjunctive to indicative or indicative to subjunctive, respectively. As a result of these minor modifications, the SDCs’ proportion of subjunctive production in the two ExpectedSubjunctive conditions does not reach 100% in the model results of Table 3.

**Table 2.***Descriptive Data: Mood Production by Group, MoodSelectType, ExpectedMood*

Group	Condition		Mood Production		
	ExpectedMood	MoodSelectType	# subjunctive	# indicative	% of subjunctive
IntHS	Indicative	Polarity	3	68	4.22
		Intensional	8	62	11.42
	Subjunctive	Polarity	14	57	19.71
		Intensional	38	33	53.52
AdvHS	Indicative	Polarity	36	63	36.36
		Intensional	1	95	1.04
	Subjunctive	Polarity	65	37	63.72
		Intensional	84	16	84.00
SDC	Indicative	Polarity	7	71	8.97
		Intensional	0	81	0
	Subjunctive	Polarity	82	0	100
		Intensional	81	0	100

Logistic mixed effects models generate a few primary outputs worth briefly outlining here. The first (and most important) output is predicted likelihood, in this case, the predicted likelihood of producing subjunctive mood morphology. Predicted likelihood, which can be calculated for specific groups in specific conditions, can be expressed as either probability (e.g., # of subjunctive productions divided by total productions; written as a percentage no greater than 100) or odds (# of subjunctive productions divided by # of indicative productions; written as a positive number). The second output of interest generated by logistic mixed effects models is the *p*-value, which indicates whether there are statistically significant differences between the predicted probabilities of (a) two groups in the same condition (between-group comparison) or (b) one group across multiple conditions (within-group comparison). Complementing these two outputs is a third output, known as an odds-ratio (OR), which is used to measure the effect size of between-group and within-group comparisons. ORs<sup>5</sup> are calculated by taking the ratio of two separate odds, e.g., the odds of subjunctive production for the SDCs and the odds of subjunctive production for the IntHSs (between-group comparison) or the odds of subjunctive production for the IntHSs with *para que* and the odds of subjunctive production for the IntHSs with *porque* (within-group comparison). ORs that are close to 1.0 indicate small effect sizes while larger ORs indicate larger effect sizes.

## RESULTS

### Experimental Items

The logistic mixed effects model revealed statistically significant effects of the fixed factors Group ( $F(2, 65) = 7.085, p < .01$ ), ExpectedMood ( $F(1, 36) = 100.643, p < .001$ ), Group\*MoodSelectionType ( $F(2, 988) = 11.730, p < .001$ ), Group\*ExpectedMood ( $F(2, 988) = 19.400, p < .001$ ), MoodSelectionType\*ExpectedMood ( $F(1, 35) = 8.022, p < .01$ ), and Group\*MoodSelectionType\*ExpectedMood ( $F(2, 988) = 7.299, p < .001$ ), but not MoodSelectionType ( $F(1, 35) = 0.184, p = .671$ ). The random factors of Subject ( $z = 3.081, p < .01$ ) and Item ( $z = 2.014, p < .05$ ) were also found to be statistically significant.

Out of all of these statistically significant effects, however, only the three-way interaction between Group, MoodSelectionType and ExpectedMood sheds light on the research questions in the present study. The results of this interaction are presented in Table 3, which illustrates the predicted likelihood that participants in each group and condition produce subjunctive mood forms. Predicted likelihoods are presented in Table 3 as probabilities (with 95% Confidence Intervals), odds, and log-odds (with standard errors).

**Table 3.**

*Predicted Likelihood of Subjunctive Production by Group, MoodSelectType, ExpectedMood*

Group	Condition		Predicted Likelihood					
	ExpectedMood	MoodSelectType	Odds		Probability (%)			
			log-odds	SE	odds	Probability	CI-Lower	CI-Upper
IntHS	Indicative	Polarity	-3.64	0.76	0.03	2.56	0.59	10.56
		Intensional	-2.27	0.59	0.10	9.35	3.06	25.20
	Subjunctive	Polarity	-1.73	0.56	0.18	15.10	5.51	35.11
		Intensional	0.22	0.52	1.25	55.50	30.47	78.02
AdvHS	Indicative	Polarity	-0.73	0.48	0.48	32.52	15.51	55.87
		Intensional	-5.14	1.11	0.01	0.58	0.07	4.87
	Subjunctive	Polarity	0.70	0.48	2.01	66.91	43.49	84.16
		Intensional	2.09	0.52	8.08	88.94	73.90	95.81
SDC	Indicative	Polarity	-2.51	0.60	0.08	7.55	2.42	21.18
		Intensional	-3.84	0.85	0.02	2.11	0.41	10.26
	Subjunctive	Polarity	3.93	0.85	50.90	98.08	90.64	99.63
		Intensional	3.83	0.84	46.06	97.87	89.76	99.59

By examining the between-group perspective of the three-way interaction between Group, MoodSelectType and ExpectedMood, it is possible to explore whether the HSs diverge from the SDCs when ExpectedMood is subjunctive (RQ #1).

In the IntensionalSubjunctive condition, the SDCs' odds of subjunctive production were significantly higher than the odds for both the IntHSs ( $p < .001$ , OR = 36.85) and the AdvHSs ( $p < .05$ , OR = 5.70), both of whom produced qualitatively divergent indicative forms. Although both HS groups diverged from the SDCs, the AdvHSs diverged *less*, exhibiting significantly higher odds of producing subjunctive with *para que* than the IntHSs ( $p < .01$ , OR = 6.46). Note that the effect sizes (ORs) presented in this paragraph (as well as throughout the remainder of this article) can be calculated by simply dividing the two odds that make up a given comparison. The first OR (36.85), for example, is calculated by dividing the SDCs' odds of subjunctive production (46.06) by the IntHSs' odds of subjunctive production (1.25)

In the PolaritySubjunctive condition, the SDCs' odds of subjunctive production were significantly higher than the odds for both the IntHSs ( $p < .001$ , OR = 282.78) and the AdvHSs ( $p < .001$ , OR = 25.32). As in the previous condition, the AdvHSs performed more similarly to the SDCs than the IntHSs did, as evidenced by their significantly higher odds of subjunctive production ( $p < .001$ , OR = 11.17)

Together, the data from these conditions shed light on both RQ #1, by showing that the HSs do, in fact, diverge from the SDCs, as well as RQ #2, by identifying one of the ways in which HSs diverge, namely, underproduction of subjunctive mood. To fully answer RQ #1 and RQ #2, however, it is necessary to present the two conditions where indicative mood is expected.

In the IntensionalIndicative condition, where the complementizer *porque* selects for indicative, a curious finding emerges. The IntHSs, whose overall odds of producing subjunctive are much lower than the odds for the SDCs ( $p < .001$ ) and AdvHSs ( $p < .06$ ), are marginally more likely to produce subjunctive than the SDCs ( $p = .094$ , OR = 5.00) and significantly more likely to do so than the AdvHSs ( $p < .05$ , OR = 10.00). On the basis of this second comparison, it appears that the trend of overproducing subjunctive with *porque* is limited to the IntHSs only.

In the PolarityIndicative condition, however, where the presence of presupposition triggers the indicative mood in the ARC, it is the AdvHSs who frequently overproduce the subjunctive mood. Between-group comparisons indicate that the AdvHSs' odds of subjunctive production in this condition are significantly higher than the odds for both the SDCs ( $p < .001$ , OR = 6.00) and the IntHSs ( $p < .001$ , OR = 16.00). The difference between the HS groups reveals that overproduction of the subjunctive mood in this condition is limited to the AdvHSs only.

The between-group comparisons presented thus far have shown that (a) HSs diverge from the SDCs in the production of the subjunctive mood (RQ #1) and (b) this divergence takes the form of both underproduction and overproduction of the subjunctive mood (RQ #2). As informative as these between-group comparisons may be, however, they cannot shed light on the nature of the HS grammars themselves. To determine whether HSs show sensitivity to mood selection (RQ #3), therefore, it is necessary to investigate the within-group perspective of the present interaction. Are HSs more likely to produce the subjunctive in expected subjunctive mood contexts?

In the Intensional conditions, where the expected mood is lexically-determined, both the AdvHSs ( $p < .001$ , OR = 808.00) and the IntHSs ( $p < .001$ , OR = 12.50) are significantly more likely to produce subjunctive with *para que*, which obligatorily selects for subjunctive, than with *porque*, which obligatorily selects for indicative. The large effect sizes in each within-group comparison—even the IntHSs' odds of producing the subjunctive mood are over 12 times greater with *para que* than with *porque*—suggest that the HSs' intensional mood sensitivity is strong, in spite of their quantitative divergence from the SDCs.

In the Polarity conditions, where the expected mood is contextually determined, the AdvHSs ( $p < .05$ , OR = 4.19) and the IntHSs ( $p < .05$ , OR = 6.00) are significantly more likely to produce the subjunctive in non-presuppositional ARCs, which require the subjunctive, than in presuppositional ARCs, which do not. Though HSs are less sensitive to mood here than in the Intensional conditions, they still make the same directional mood distinction as the SDCs, strengthening the evidence HSs' divergence with the subjunctive does not imply mood insensitivity.

The data presented thus far, which has been used to answer RQs #1, #2, and #3, comes entirely from the four experimental conditions. As mentioned above, however, one type of distracter item

also elicited responses that enrich our understanding of RQ #2 by demonstrating a third way in which HSs diverge from SDCs with the subjunctive mood. Before exploring this data, though, it is necessary to first introduce the format of the distracters to show why they are particularly advantageous for assessing HSs' avoidance of subjunctive mood structure.

### Distracters

The distracters, such as (8), were originally intended to test participants' attention to the experimental contexts, e.g., whether they could identify the price ceiling for a given product. However, because the distracters' product descriptions included other contextually relevant details (e.g., that the scarf in (8) should be 'smooth and beautiful'), participants in all three groups provided additional modifying information after specifying the price ceiling. What makes these modifications revealing is that their structure (e.g., the linguistic form(s) with which participants chose to communicate the modifications) was not dictated to participants by the sentence fragment, which, by that point, they had already finished reading. As such, participants were able to communicate modifying information not just with ARCs but also any other structures that they chose to produce. This element of choice provides an opportunity to explore whether HSs diverge from the SDCs in a third way, namely by avoiding structures that require the subjunctive mood.

#### (8) Example of Distracter Item

Context: *You are in the clothing section. You need to buy a new scarf before winter. You only have \$25 with you. You want a smooth and beautiful scarf.*

You tell the store clerk:

*Busco una bufanda por \_\_\_\_\_ (MENOS)*  
(‘I am looking for a scarf for \_\_\_\_\_ (LESS))

Expected Response: *por menos de veinticinco dólares*  
‘for less than 25 dollars’

After excluding 12 (4.7%) responses where participants altered the sentence fragment, there were a total of 246 remaining distracter responses, which were used to answer the following three questions. First, do participants in each group exhibit the same likelihood of choosing to modify a distracter response? Second, when participants in each group *do* choose to modify a distracter response, are they equally likely to use ARCs? Third, what is the overall distribution of modification strategies used by each of the groups? Due to the very small sample of participant responses, this section will answer these questions using descriptive data only. As such, it is important to highlight the very preliminary nature of the findings that follow.

To answer the first question, all participant responses were categorized as either “modifications,” when participants modified the sentence fragments beyond the price ceiling, or “non-modifications,” when they did not. Combined, participants modified 189/246 (76.8%) possible responses. The finding that participants, as a whole, modified most, though not all, of their responses speaks to the fact that they deemed such modifications to be (a) communicatively relevant (otherwise, they would not produce them), yet also (b) non-obligatory. The three groups’



modification rates (SDCs: 61/81: 75.3%, AdvHSs: 72/97: 74.2%, and IntHSs: 56/68: 82.4%) indicate that all three groups found modifications to be similarly necessary.

To answer the second question, all participant modifications were categorized as either “ARC” (adjectival relative clauses) or “non-ARC” (any other response). Results from this analysis indicated that the SDCs (51/61: 83.6%) were descriptively more likely to use ARC modifications than the AdvHSs (50/72: 69.4%) and the IntHSs (32/56: 57.1%). These preliminary results suggest that ARCs, while produced by all groups, are most strongly preferred by the SDCs.

To answer the final question, all participant responses were divided into four categories, as shown below in (9)-(12). It is important to note that all examples (9)-(12) are modifications produced by participants *after* specifying the price ceiling (e.g., ‘for less than 25 dollars.’)

(9) Category 1 Example

que            sea            suave y bonita  
that            is-3ps-SUBJ soft and beautiful  
‘that is soft and beautiful’

(10) Category 2 Example

que            es                suave y bonita  
that            is-3ps-IND    soft and beautiful  
‘that is soft and beautiful’

(11) Category 3 Example

prefiero    que            sea            suave y bonita  
prefer-1ps that is-3ps-SUBJ soft and beautiful  
‘I prefer that it be soft and beautiful’

(12) Category 4 Example

tiene        que            ser            una bufanda suave y bonita  
have-3ps that be-INF a scarf soft and beautiful  
‘It has to be a soft and beautiful scarf’

Category 1 consisted of ARCs with a subjunctive verb. Category 2, which was only produced by the HSs, consisted of ARCs with an indicative verb. Category 3, which will be referred to as alternative subjunctive forms, consisted of any subjunctive form that was not an ARC, mostly nominal RCs with *quiero* (‘I want’) or *prefiero* (‘I prefer’). Category 4, which will be referred to as avoidance/alternative structures, consisted of any other modification strategy that did not involve ARCs or alternative subjunctive mood forms. The goal of looking at participants’ use of

each of these four modification strategies (Table 4) is to see whether the HS groups are more likely than the SDCs to opt for structures that allow them to avoid subjunctive mood.

**Table 4.**

*Participants' Distracter Modifications by Category.*

Group	<u>Category of Participant Response</u>							
	Category 1 ARC Subj.		Category 2 ARC Indic.		Category 3 Altern. Subj.		Category 4 Avoidance	
	#	%	#	%	#	%	#	%
SDCs	51	83.61	0	0.0	7	11.48	3	4.92
AdvHSs	48	66.67	2	2.78	6	8.33	16	22.22
IntHSs	23	41.07	9	16.07	3	5.36	21	37.50
TOTAL	122	64.55	11	5.82	16	8.47	40	21.16

As shown in Table 4, the SDCs almost always produced Category 1 modifications. Of their ten, non-Category 1 responses, 7 were Category 3 alternative subjunctive forms and only 3 (30%) were Category 4 avoidances. The important takeaway here is the SDCs' strong preference for Category 1 modifications, which they produce over 17 times more than Category 4 modifications.

The AdvHSs mostly produced Category 1 modifications as well, although they did so less frequently than the SDCs. Of their 24 non-Category 1 responses, however, the majority 18 (66.67%) were Category 4 avoidances. Unlike the SDCs, who strongly preferred Category 1 over Category 4 responses, the AdvHSs' relative preference for Category 1 responses was far less robust.

Only the IntHSs produced Category 1 modifications less than half of the time. Out of their 33 non-Category 1 responses, 21 (63.36%) were Category 4 avoidances. Unlike the other groups, who produced Category 1 responses at least three times more than Category 4 responses, the IntHSs produced nearly as many Category 4 responses ( $n = 21$ ) as Category 1 responses ( $n = 23$ ).

The descriptive analysis of participants' modifications points to a strong but preliminary trend: when given the freedom to modify sentence fragments as they choose, HSs are less likely than SDCs to produce ARCs and more likely to use alternative, non-subjunctive modification strategies. This trend is consistent with the possibility that HSs are avoiding, either consciously or unconsciously, complex subjunctive mood structure.

## DISCUSSION

The results of the CEPT indicate that the HSs in this study diverged from the SDCs in the production of subjunctive mood morphology in Spanish, as hypothesized in RQ #1, and as reported in previous studies. While the HSs' divergence from the SDCs is certainly informative, it is argued

here that it should be the beginning, rather than the end, of our attempt to understand HSs' subjunctive mood knowledge. Much more informative, if the primary goal is to understand HS grammars on their own terms, are RQs #2 and #3 which, collectively, address both (a) the different ways in which HSs diverge in their production of mood morphology (RQ #2) and (b) the extent to which HSs maintain sensitivity to mood morphology in spite of these differences (RQ #3).

In what ways do HSs diverge from the SDCs in their production of subjunctive mood morphology in Spanish? The results of the present study indicate that HSs' divergence with the subjunctive mood takes at least three forms, each of which sheds light on the nature of HSs' subjunctive mood knowledge, as well as the nature of HS grammars more generally. The first and most prominent way in which HSs diverge from the SDCs is in the underproduction of the subjunctive mood in expected subjunctive contexts. This underproduction, which was more apparent with HSs at the intermediate proficiency level, has been widely reported in previous studies of HSs' subjunctive mood production. Nonetheless, it is worthwhile to briefly consider possible explanations for, and implications of, such a finding.

One possibility is that HSs' underproduction of subjunctive mood is a reflection of changes taking place in the subjunctive mood system of first-generation immigrants, who provide HSs with their primary input in the HL. Viner (2016, 2018), in studies comparing the subjunctive mood production of Spanish-dominant speakers and second-generation HSs in NYC, provides evidence that is at least partially consistent with such a hypothesis. In non-presuppositional ARCs, the Spanish-dominant speakers in Viner (2018) produce the subjunctive mood only 84% of the time, suggesting that HSs' underproduction of the subjunctive in these contexts may be attributable to incipient changes in the mood production of Spanish-dominant speakers. It is worth noting, however, that the SDCs in the present study showed no evidence of such changes, producing the subjunctive mood categorically<sup>6</sup> in non-presuppositional ARCs. In the case of intensional subjunctive mood with *para que*, which is produced categorically by both the Spanish-dominant speakers in Viner (2016) as well as the SDCs in this study<sup>7</sup> there is no reason to believe that HSs' underproduction of subjunctive results from exposure to these forms in the HL input.

A second possibility is that HSs' underproduction of subjunctive mood is the result of their generalized preference for default morphology. Many previous studies have found that HSs exhibit a robust tendency to (over)use default morphological forms, such as masculine gender (Montrul & Potowski, 2007) and perfective aspect in Spanish (e.g., Montrul, 2002, 2009). Nonetheless, the notion of default morphology remains "poorly defined" (Scontras et al., 2015), making such an analysis more of a useful description than an underlying explanation.

The third, and perhaps most promising possibility is that HSs' underproduction of subjunctive mood is at least somewhat attributable to their morphological competence, that is to say, their knowledge of the subjunctive mood inflections of specific Spanish verbs. By separating HSs' syntactic knowledge (e.g., which features and/or lexical items trigger subjunctive) from their morphological knowledge (e.g., what forms does subjunctive take), this approach (known as lexical specificity) predicts that a HS could "know" subjunctive mood with a limited sub-set of lexical items. Though the present study was not designed to test this prediction, recent research suggests that it is very plausible. Giancaspro (2017, in press) provides evidence that HSs of

Spanish are more likely to underproduce subjunctive mood with infrequent, as opposed to frequent, Spanish verbs. Similarly, Dorian (1981) and Gal (1989) have shown that HSs of Gaelic and Hungarian appear to exhibit knowledge of certain verbal inflections only on (relatively) frequent verb stems.

In addition to underproducing the subjunctive mood in expected subjunctive contexts, HSs in the present study also overproduced the subjunctive mood in expected indicative contexts, a pattern that has also been found in previous research (e.g., Montrul, 2009; van Osch & Sleeman, 2016; Perez-Cortes, 2016). Though both HS groups in the present study exhibited overproduction, the distribution of their overproduction differed, suggesting at least two possible underlying factors.

Surprisingly, the IntHSs overproduced subjunctive mood with the complementizer *porque*, which obligatorily triggers indicative mood morphology in the grammar of Spanish-dominant speakers. Though this pattern could indicate an emerging tendency for the IntHSs to associate subjunctive mood features with *porque*, it is more likely to be the result of unstable morphological competence. If so, when the IntHSs produce a subjunctive mood form after *porque*, it may be because this form is actually marked as indicative in their mental lexicon. This explanation, though admittedly speculative, is consistent with the performance of the higher-proficiency AdvHSs, whose non-production of subjunctive forms after *porque* could be interpreted as the result of their more consistent knowledge of indicative mood morphology.

The AdvHSs, on the other hand, overproduced the subjunctive mood in presuppositional ARCs, a finding that has also been reported in van Osch and Sleeman (2016). What makes this overproduction different from the overproduction of the IntHSs with *porque*, however, is that it occurs over 30% of the time, indicating that it is probably not the result of unstable morphological competence. Instead, the AdvHSs' overproduction of subjunctive seems to be the result of a more variable connection between mood morphology and the presuppositional status of ARCs. It is worth noting that the AdvHSs' robust pattern of overproduction defies, or at the very least, complicates the assumption that HSs' non-target inflectional forms are necessarily "default."

The third, and final, way in which HSs diverge from the SDCs is by "avoiding" structures that trigger subjunctive mood. In the distracter items of the experiment, where participants had the freedom to modify DPs as they pleased, HSs were less likely than the SDCs to employ ARCs (with or without subjunctive) and more likely to use alternative modification strategies. Perez-Cortes (2016), in a recent study of Spanish HSs' written production of polarity subjunctive in indirect commands, reports a similar finding: low- and intermediate-proficiency HSs sometimes "avoid" subjunctive mood, instead opting for modal structures with *tener que* ('have to'). As shown in (12), HSs in the present study also used modal structures in place of subjunctive mood forms. To better understand this pattern, the paper now turns to a few preliminary explanations of HS avoidance.

The first reason why HSs may have avoided ARCs is related to the nature of the experimental task itself. A production task, if open-ended, "allows speakers...to avoid areas of difficulty" (Polinsky, 2016a, p. 4). The distracter items in the present experiment, which were originally intended to serve as a test of participants' attention to the experimental contexts, ended up eliciting modifications which occurred *after* the target sentence fragments and, therefore, could be

communicated with whatever linguistic structures a speaker preferred to use. In a strict sense, then, HSs avoided ARCs with subjunctive because the task gave them the opportunity to do so. This explanation does not, however, account for why HSs avoided ARCs more than the SDCs.

One possible explanation for this between-group difference is that the HSs consciously avoided ARCs, perhaps out of awareness that they required the subjunctive mood. Hubert (2014) reports evidence of conscious subjunctive mood avoidance by instructed L2 learners, who consistently opted to use non-subjunctive structures in a written production task. It is not possible, based on the data collected in this study, to rule out a similar role of conscious avoidance on the part of the HSs. Nonetheless, such an explanation seems unlikely for a few reasons. First, HSs who consciously avoid ARCs would presumably first need to identify them as structures requiring the subjunctive mood in non-presuppositional contexts. At the end of the study, when asked to guess the topic of the experiment, only two of the 29 HSs (6.9%) mentioned the subjunctive mood, suggesting that most HSs were probably (a) unaware of the topic of the experiment and, thus, (b) *not* consciously avoiding ARCs. Another reason to doubt that HSs employed metalinguistic knowledge to consciously avoid ARCs comes from a recent study by Correa (2011), who found that HSs' performance on a series of subjunctive mood tasks (including items with both ARCs and *para que*) was not at all correlated with their performance on a test of metalinguistic knowledge in Spanish.<sup>8</sup> For these reasons, as well as HSs well-known tendency to demonstrate little metalinguistic knowledge of the HL (e.g., Polinsky, 2016b), it seems much more plausible to attribute HSs' apparent avoidance of certain HL structures to unconscious causes.

Dorian (1982) points out that HSs of Gaelic, over the course of their lifetime, often face a reduced ability to produce “the full complement of functions or perhaps even forms” (pp. 44-45) in the HL. In other words, HSs sometimes maintain (some) receptive knowledge of a given HL form (Sherkina Lieber, 2015), such as the subjunctive mood in ARCs, and yet, perhaps due to reduced usage or activation of the HL (e.g., Putnam & Sánchez, 2013), find it increasingly difficult to access that knowledge in production of the HL. If such an analysis is on track, it may be the case that the HSs in the present study were more likely to avoid ARCs simply because these forms were more difficult (unconsciously) for them to access for production. Fully evaluating this hypothesis, however, would require on-line processing data not collected in the present study.

Addressing RQ #1 and #2 has demonstrated, thus far, the importance of evaluating not just whether HSs diverge from HL-dominant speakers but also how they diverge, which can provide important insight into HSs' grammatical knowledge. The best way, however, to understand HSs' sensitivity to a given HL property is to examine within-group rather than between-group comparisons. (For a similar argument, see Viner, 2017). RQ #3, therefore, addressed whether HSs were, like the SDCs, more likely to produce the subjunctive mood in expected subjunctive contexts than in expected indicative contexts, respectively.

In the case of intensional mood selection, both the AdvHSs and the IntHSs were significantly more likely to produce subjunctive with *para que* than with *porque*. The large effect sizes for each of these within-group comparisons (IntHSs: OR = 12.50; AdvHSs: OR = 808.00) indicate that the distinctions made by each of these groups are by no means negligible. With polarity mood selection, where the HSs diverged more from the SDCs, both HS groups were still more likely to produce

subjunctive in non-presuppositional ARCs than in presuppositional ARCs, thereby demonstrating sensitivity to mood selection in these contexts as well. Clearly, then, HSs' divergence from HL-dominant controls with a property in between-group statistical comparisons does not imply that the HSs themselves lack sensitivity to that property.

Another clear implication of the present study is that categorizing HSs in a binary fashion, that is, as having either 'acquired' or 'not acquired' the subjunctive mood, does not capture the complex patterns of HSs' subjunctive mood production. It seems apparent, instead, that HSs' subjunctive mood knowledge is gradient, meaning that HSs can differ, to varying extents, from SDCs in any or all of the multiple components that together constitute knowledge of the subjunctive mood in Spanish. Evidence for this conclusion can be evaluated by looking at a few examples of patterns exhibited by individual HSs (see also Viner, 2017) at different points along the continuum of subjunctive mood knowledge (in ARCs only).

HL researchers, as pointed out by Montrul (2013), have often paid less attention to speakers at the higher end of the HL proficiency spectrum, choosing instead to focus on HSs who diverge more noticeably from HL-dominant controls. With this point in mind, the presentation of individual data below begins with examples of HSs whose knowledge of the subjunctive mood in ARCs most closely resembles that of the SDCs.

Participant #214, an AdvHS, produced the subjunctive in all six non-presuppositional ARCs and only one of the six presuppositional ARCs, thereby demonstrating no underproduction and minimal overproduction of the subjunctive mood. Participant #214 also produced exclusively subjunctive mood ARCs in all distracter items, suggesting that his subjunctive mood knowledge is both qualitatively and quantitatively comparable to that of the SDCs<sup>9</sup> Participant #210, also an AdvHS, exhibited subjunctive mood knowledge that is harder to classify, producing subjunctive in all non-presuppositional ARCs (as well as all distracter items), but also overproducing it in five of six presuppositional ARCs. In the grammar of Participant #210, therefore, the subjunctive mood may be default in both presuppositional and non-presuppositional ARCs.

A far more common outcome, at least in the present study, is for HSs to alternate inconsistently between indicative and subjunctive mood morphology. The HSs' variable yet systematic performance represents an even greater challenge for approaches that seek to describe HSs as having acquired or not acquired, the subjunctive mood. The most notable example of this pattern comes from Participant #102, an IntHS who produced the subjunctive mood 50% of the time in non-presuppositional ARCs and 0% of the time in presuppositional ARCs, thereby exhibiting a clear if also variable sensitivity to restrictions on mood morphology. Interestingly, when Participant #102 had the chance to avoid ARCs in the distracter items, she produced them every time, always with subjunctive mood, further defying simple, binary classification.

Perhaps even more intriguing are the cases of HSs whose subjunctive mood production is almost exclusively limited to frequently used Spanish verbs. Participant #205, an AdvHS, produced only one instance of subjunctive mood in the non-presuppositional ARCs of the experimental task, specifically, with the frequent verb *tener*. From this data alone, it seems that Participant #205 has a HL grammar that requires indicative mood in (almost) all ARCs. On the distracter items, however,

Participant #205 produced five ARCs with the subjunctive mood, all with the highly frequent verb *ser*, suggesting that he retains at least some polarity mood sensitivity.

Polinsky and Kagan (2007) warn that HSs' production of target-like morphology on frequent lexical items may, in fact, be nothing more than fossilized chunks and, therefore, mistakenly lead researchers to claim that a given HS "controls more morphology than he or she actually knows" (p. 379). It would be unwarranted to assume, based on the production of morphology on a frequently used chunk, that a HS has systematic knowledge of that chunk's morphological inflection. Still, it may be equally unwarranted to assume that such a HS does not have (some) knowledge of that morphological paradigm if they, like Participant #205, use it consistently in a context where HL-dominant speakers use it as well. No matter how one chooses to conceptualize such a HS's knowledge of mood, it is apparent that binary classification is not a descriptively adequate option.

The point of the individual data presented here is not to argue that all HSs have qualitatively target-like knowledge of (polarity) subjunctive mood in Spanish. Participant #119, an IntHS, produces no subjunctive mood forms in non-presuppositional ARCs, thereby highlighting that some HSs' subjunctive mood knowledge does seem to diverge entirely from that of the SDCs. Instead, these examples reinforce two important points. First, HS divergence from HL-dominant controls with a property of the HL does not imply that HSs lack sensitivity to that property. Second, HSs' knowledge of a HL property can take many forms.

The present study did not evaluate the effects of explicit subjunctive mood instruction on HSs' subjunctive mood production. Nonetheless, the study results have potential implications for the instruction of mood morphology in the HL classroom.

Carreira (2016) argues that HL instructors should "make strategic use of HL learners' strengths to address gaps in their knowledge" (p. 130). If the present study is any indication, HSs' strength in the area of subjunctive mood morphology may be the use of subjunctive forms with relatively more frequent verbs such as *ser* ('be'). (See also Giancaspro, 2017, in press). Recall that Participant #205, who produced the subjunctive in only one of six experimental items with non-presuppositional ARCs, used the subjunctive form *que sea* with 100% accuracy across five filler items, suggesting that HSs' subjunctive mood production may be constrained by lexical frequency.

When teaching subjunctive mood in the HL classroom, it may be advantageous for HL instructors to begin by focusing on highly frequent subjunctive phrases, such as *que sea*, that HSs across the proficiency spectrum may be more likely to recognize and produce. By starting with these familiar phrases—preferably presented in highly authentic contexts—and then expanding to subjunctive mood inflections of less familiar verbs, HL instructors can frame the task of mastering the subjunctive mood as expanding one's existing grammatical knowledge, rather than learning an entirely novel grammatical concept.

The present study, though informative, suffers from a few limitations. First, the study lacks comprehension tasks, making it more difficult to gain a thorough and multi-modal understanding of what HSs know about the subjunctive mood in Spanish. By testing HSs' productive and

receptive knowledge, it would be possible to identify and explore many more intermediary points along the spectrum of HSs' subjunctive mood knowledge. (It is easy to imagine, for example, a HS who produces the subjunctive with only a small subset of verbs but understands it with a far larger subset. Examining a variety of subjunctive mood structures could further clarify this spectrum.) Second, the analysis of subjunctive mood avoidance, though suggestive of important between-group differences, consisted of few participant responses, thereby reducing its statistical power. In the future, it would be useful to design an experimental task that provides HSs with more opportunities to avoid ARCs, thereby allowing for a deeper analysis of avoidance patterns and their implications for our understanding of HS grammatical knowledge. Finally, the present study addresses HSs' use of only two types of Spanish subjunctive—both categorical in nature. It is critical that future studies also examine other types and subtypes of subjunctive mood in Spanish.

### CONCLUSION

The present article has shown that HSs diverge from Spanish-dominant controls in their production of subjunctive mood morphology in Spanish, and, additionally, that this divergence can take the shape of underproduction, overproduction, or avoidance. Though the HSs differ from the SDCs in each of these ways, within-group analyses of the HSs' responses, coupled with patterns from the individual data, indicate that many HSs retain sensitivity to mood distinctions in Spanish, thereby problematizing approaches that categorize HSs as having either acquired or not acquired the subjunctive mood in Spanish.

Broadly, the study makes an important conceptual point: in order to understand HSs' grammatical knowledge, it is critical to shift attention from between-group comparisons with controls to within-group comparisons, individual data, and any other analytical tools that can be used to approach HS grammars as systems worth understanding on their own terms.

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## NOTES

1. The relative scarcity of studies in which HSs do not diverge from HL-dominant speakers may be partially because “documenting and characterizing the high end of the [HL] proficiency spectrum...has not...been the focus of much research in this field” (Montrul, 2013, p. 15). For a review of studies where HSs do *not* diverge significantly from HL-dominant speakers, see Kupisch & Rothman (2016) and citations therein.
  
2. Such a speaker might also opt to indicate specificity by means of a definite determiner, as in (3b):  
 (3b) *Busco                    la casa que tieneINDIC una puerta principal amarilla*  
       I am looking for the house that has            a yellow front door
  
3. For a generative account of the specific syntactic features that underlie intensional and polarity subjunctive mood in Spanish, see Kempchinsky (2009) and sources therein.
  
4. The only country represented in the SDC group but not in the HS groups was Venezuela.
  
5. For more on the use of odds-ratios as measures of effect size, see Durlak (2009).
  
6. Recall that the SDCs produced the subjunctive 100% of the time (82/82) in this condition of the experiment.
  
7. Recall that the SDCs produced the subjunctive 100% of the time (81/81) in this condition of the experiment.
  
8. In the case of the present study, students enrolled in Spanish classes did not produce more subjunctive than students who were not enrolled in Spanish courses. The 5 IntHSs enrolled in Spanish courses at the time of the experiment actually produced less subjunctive mood than the 7 IntHSs who were not enrolled in Spanish courses (non-presuppositional ARCs: 7.7% vs. 23.8%; *para que*: 33.3% vs. 58.5%). Similarly, the 13 AdvHSs who were enrolled in Spanish courses at the time of the experiment also produced slightly less subjunctive mood than the 4 AdvHSs who were not enrolled in Spanish courses (non-presuppositional ARCs: 57.7% vs. 83.3%; *para que*: 69.7% vs. 87.5%).
  
9. For more evidence of individual HSs producing subjunctive categorically in certain contexts, see Viner (2017).