Explicit Knowledge of the Spanish Subjunctive and Accurate Use in Discrete-Point, Oral Production, and Written Production Measures

Xavier Gutiérrez
University of Alberta

Abstract

The usefulness of explicit knowledge of the second language is a matter of controversy in the field of second language acquisition. In this regard, it has been argued that explicit representations might be useful for some structures but not for others (R. Ellis, 2006; Roehr & Gánem-Gutiérrez, 2009). The goal of this study was to examine whether explicit knowledge about the Spanish subjunctive is related to using this structure accurately in discrete-point measures, as well as in measures of oral and written production. The participants were 46 learners of Spanish as a second language, who were in their fifth semester and had received explicit instruction about the subjunctive during three terms. The results show that the participants had developed somewhat low levels of explicit knowledge of the subjunctive, and that explicit knowledge of this structure was significantly correlated to its correct use in discrete-point grammar exercises and in writing, but not in speaking.

Résumé

L'utilité des connaissances explicites de la langue seconde est un sujet à controverse dans le domaine de l'acquisition de la langue seconde. À cet égard, on a soutenu que des représentations explicites pourraient être utiles pour certaines structures, mais pas pour d'autres (R. Ellis, 2006 ; Roehr et Gánem-Gutiérrez, 2009). Le but de cette étude a été d'examiner si les connaissances explicites du subjonctif en espagnol étaient liées à l'utilisation correcte de cette structure dans les mesures à des instants discrets et dans les mesures de production orale et écrite. Les participants étaient 46 apprenants d'espagnol langue seconde, à leur cinquième semestre, qui avaient reçu de l'enseignement explicite sur le subjonctif pendant trois semestres. Les résultats ont démontré que les participants ont développé des niveaux assez bas de connaissances explicites du subjonctif. De même, les résultats ont indiqué qu'il y avait une corrélation significative entre les connaissances explicites de cette structure et son utilisation correcte dans les exercices de grammaire à mesure à instants discrets et dans la production écrite, mais pas dans la production orale.

Explicit Knowledge of the Spanish Subjunctive and Accurate Use in Discrete-Point, Oral Production, and Written Production Measures

Introduction

Research about knowledge representations of language is a central area of inquiry in the field of second language acquisition (SLA; Hulstjin, 2005). Many in the field have agreed that implicit, intuitive knowledge is at the basis of spontaneous language use: "Most knowledge is tacit knowledge; most learning is implicit; the vast majority of our cognitive processing is unconscious" (N. Ellis, 2005, p. 306). However, questions still remain regarding what the role, if any, of explicit, conscious knowledge of language is in relation to second language (L2) learning and use. R. Ellis (2004) defined explicit knowledge of language as the conscious, declarative knowledge of L2 features, such as phonology, lexis, syntax, morphology, and pragmatics, which is learnable and potentially verbalizable. Explicit knowledge of language might help learners notice some language features which, in turn, might facilitate the establishment of form-meaning mappings (N. Ellis, 2011). It may also be useful for solving linguistic problems in situations where implicit knowledge is insufficient (N. Ellis, 2005), and, through practice, it may become proceduralized so that it can be involved in L2 use (DeKeyser, 2003). Explicit knowledge can also be beneficial for structures that are difficult to learn implicitly (R. Ellis, 2006). In this sense, it is possible that explicit knowledge may be useful for some grammatical structures but not for others (R. Ellis, 2006; Roehr & Gánem-Gutiérrez, 2009).[1] Therefore, it may be worthwhile to examine whether there is a relationship between explicit knowledge of a particular grammar structure and actual use of such a structure in spontaneous and controlled production (Alderson, Clapham, & Steel, 1997). The present study addresses this question in relation to the Spanish subjunctive. This structure was chosen because, given its characteristics, it is difficult to acquire as implicit knowledge. Therefore, the study focused on whether fifth-semester learners of Spanish at a Canadian university had developed explicit knowledge of the subjunctive, and whether this type of knowledge was related to performance on discrete-point measures, and to its use in speaking and writing.

Literature Review

Features of the Spanish Subjunctive

In Spanish, the subjunctive mood is expressed morphologically by inflecting the verb. There are several forms of the subjunctive in present and past tenses, which appear mainly in embedded clauses although there are a few exceptions in independent clauses. From a pedagogical perspective, the Spanish subjunctive receives ample attention in instructional materials, suggesting that it is a very important structure to achieve communicative goals, and resulting in large amounts of class time devoted to it (Collentine, 2010, 2014). The subjunctive is often explained to learners of Spanish as expressing that which is not true, hypothetical, or subjective. However, these concepts can also be expressed by the indicative mood in Spanish. Such explanations are too simplistic because, as Montrul and Perpiñán (2011) pointed out, "the syntactic, semantic and pragmatic rules that govern the selection of subjunctive in Spanish . . . are quite complex and far from straightforward" (p. 94). In pedagogical materials, the Spanish subjunctive is often

presented as appearing in noun clauses that express notions such as emotion, as in example 1 below, volition (example 2), influence (example 3), or doubt (example 4), in adjectival clauses with an unknown on nonexistent antecedent (example 5), and in adverbial clauses with conjunctions that express, for example, purpose (example 6), future time (example 7), or condition (example 8). The examples below illustrate how these concepts are expressed in Spanish and in English. The subjunctive verb form is underlined in each example:

(1) *Me alegra que te sientas mejor.*
    [I'm happy that you're feeling better.]

(2) *Quiero que vayas a visitar a tu abuela.*
    [I want you to go visit your grandma.]

(3) *Juan nos recomienda que veamos la nueva película de Tarantino.*
    [Juan recommends that we see the new Tarantino movie.]

(4) *Dudo que Ana venga a clase hoy.*
    [I doubt that Ana will come to class today.]

(5) *Queremos comprar una casa que tenga tres habitaciones.*
    [We want to buy a house that has three bedrooms.]

(6) *Mis padres me dieron dinero para que pague el alquiler.*
    [My parents gave me money so that I pay the rent.]

(7) *Te llamo tan pronto como llegue a casa.*
    [I'll call you as soon as I get home.]

(8) *No vas a salir con tus amigos a menos que termines tu tarea.*
    [You're not going to go out with your friends unless you finish your homework.]

These presentations, particularly in the case of noun and adverbial clauses, are often accompanied by long lists of verbs, expressions, and conjunctions that require the subjunctive and others that may or may not need it.

Despite its significant coverage in instructional materials, from a communicative standpoint the subjunctive has very little value, as it is mainly redundant because it reflects the modality often expressed semantically and/or pragmatically by elements in the main clause (Collentine, 2010; DeKeyser & Prieto-Botana, 2014; Farley, 2004b). From a processability theory perspective (Pienemann & Lenzing, 2015), the subjunctive is a difficult structure to acquire because it requires transfer of grammatical information between the main and subordinate clauses (Johnston, 1995). From an input processing point of view (VanPatten, 2015), the regular forms of the subjunctive are low in saliency and, therefore, are difficult to notice by L2 learners (Buckwalter, 2001; Fernández, 2008; Lee & Rodríguez, 1997). This is likely because the indicative and subjunctive forms of regular verbs are frequently only distinguished by a thematic vowel. Nevertheless, many forms of the subjunctive, particularly high-frequency ones (Collentine, 2014; DeKeyser & Prieto-

Botana, 2014), are irregular, which makes them more easily noticeable (Collentine, 1997; Gudmestad, 2006). In any case, subjunctive forms appear mostly as the main verb in a subordinate clause and often in the middle of the sentence, which is the least salient position from a syntactic point of view (VanPatten, 2015). Based on VanPatten's (2015) lexical preference principle, some studies have noted that L2 learners often rely on lexical information rather than verb morphology for processing modality in a sentence (Cameron, 2011; Sánchez-Naranjo, 2009). Thus, from a psycholinguistic perspective of learning that views knowledge of linguistic structures as emerging intuitively from learners' experience with language (Collins, Trofimovich, White, Cardoso, & Horst, 2009), the characteristics of the Spanish subjunctive make it a difficult structure to learn. Indeed, the Spanish subjunctive would arguably not meet any of the criteria identified in the literature (e.g., DeKeyser, 2005; R. Ellis, 2006; Roehr & Gánem-Gutiérrez, 2009) as features that would make a particular structure easy to learn as implicit knowledge. It is worth noting, however, that it would not meet criteria for easiness as explicit knowledge either. Collins et al. (2009) identified this as the pedagogical perspective, which "focuses on the nature of the rule needed to describe the target feature to L2 learners" (p. 339). In this regard, the Spanish subjunctive is not conceptually clear (i.e., it is neither formally nor functionally simple, and there is not a transparent, general rule), and its rules require a fair amount of technical metalanguage. Yet, the few studies that have looked at the effect of explicit instruction and/or knowledge on the Spanish subjunctive reported benefits of the former in the acquisition of the latter, as will be seen in the following section.

Explicit Knowledge and the Spanish Subjunctive

To my knowledge, no previous study has examined the relationship between explicit knowledge of the Spanish subjunctive and accurate use of this structure. Correa (2011) examined whether general metalinguistic knowledge of English and Spanish was related to grammatical accuracy in the subjunctive. In her study, metalinguistic knowledge was measured with a terminology test and a grammaticality judgment test. These tests, however, did not contain any items about the subjunctive. Grammatical accuracy was measured through five tasks: fill-in-the blanks, sentence completion, open questions, and two forced-choice exercises. The results showed that all measures of metalinguistic knowledge were significantly correlated with subjunctive accuracy in general for the whole sample and for each level of proficiency separately, although with considerable variation.

There are also a handful of studies that have compared pedagogical techniques that provided some form of explicit instruction about the subjunctive to other teaching approaches that did not provide any explicit information. Although these studies did not directly address explicit knowledge of the subjunctive, it is possible that the attention to form-meaning connections in the explicit instruction treatments may have resulted in learners developing some explicit representations about the subjunctive. From a processing instruction (PI) perspective,[2] Farley (2004a) compared a group of Spanish L2 learners that received structured input (SI) and explicit information (EI) to a group that received SI only. The results of sentence-level interpretation and production tasks, both of which focused on form, showed that, while both groups improved significantly between the pretest and the immediate and delayed posttests, the SI + EI group obtained significantly higher gains. Farley (2004b) concluded that explicit information seems to be beneficial in "helping learners notice and subsequently process the Spanish subjunctive after expressions of

doubt" (p. 238), although structured input alone is also beneficial. Thus, explicit instruction seems to help by accelerating acquisition.

Also from a PI perspective, Fernández (2008) used a computerized test to measure the moment-to-moment behaviour of Spanish L2 learners divided into two groups (SI + EI and SI only) engaged in processing the Spanish subjunctive in expressions of doubt. In the test, the learners were presented aurally with a subordinate clause containing a verb in the subjunctive or the indicative, and had to choose which of the two main clauses presented on the screen matched the subordinate clause for modality. The results showed that the SI + EI group started to process the input containing subjunctive sooner than the SI group, although the latter eventually caught up. They also showed that the participants in the SI + EI group responded faster and more accurately than those in the SI group. Fernández concluded that EI was beneficial for processing the subjunctive and, although SI was also helpful, EI was more efficient.

Gallego (2010) set out to examine whether four different instructional treatments (namely, focus-on-meaning, focus-on-forms, focus-on-form, and focus-on-form + explicit instruction) had different effects on the acquisition of the subjunctive. Acquisition was measured with a test battery consisting of: (a) an oral interview aimed at eliciting constructions with the subjunctive; (b) a grammar section containing multiple choice, fill-in-the-blanks, forced choice and sentence-completion exercises; and (c) a writing section in which the learners were encouraged to use structures that require the subjunctive. Gallego's findings showed that the two groups that received explicit instruction outperformed the other two groups in all portions of the immediate and delayed posttests, but the differences were statistically significant in some of the test sections only. The author concluded that explicit instruction had a beneficial effect in the acquisition of the subjunctive.

As DeKeyser and Prieto-Botana (2014) indicated,

> the results of . . . these studies suggest that IL [interlanguage] development in instructed learners is expedited by approaches that (1) channel learner attention to the form and (2) include explicit information to help the formation of form-meaning connections. (pp. 454-455)

It is worth noting that the majority of the studies discussed above measured acquisition mainly through exercises that primarily focus on form (e.g., identifying the appropriate main clause for a subordinate clause containing a verb in the subjunctive, fill-in-the-blanks, forced-choice, sentence-completion exercises), with the exception of Gallego (2010), which included an oral interview and a written composition as part of the test battery. Thus, it is rather unsurprising that explicit knowledge and instruction have an effect on, or are correlated with, performance in tasks that mainly focus on form and for which explicit knowledge is arguably useful. Indeed, such tasks are often described as metalinguistic tasks (Montrul & Perpiñán, 2011). It is also important to note that, while some of the studies discussed provided explicit information about the subjunctive, none of them actually measured whether learners developed explicit knowledge of this structure.

In addition to controlled production tasks that mainly focus on form, the present study also explores the use of the subjunctive in tasks with a predominant focus on meaning, and, unlike previous studies, it incorporates measures of explicit knowledge of the subjunctive. The main goal of the study is to examine whether there is a relationship between explicit knowledge of the Spanish subjunctive and accurate use of this structure in

discrete-point measures, and in speaking and writing. The following research questions guided the study:

1. What is the participants' level of explicit knowledge of the Spanish subjunctive?
2. How well do they perform on discrete-point written measures of the subjunctive?
3. What is the participants' degree of accuracy in producing the subjunctive in oral and written tasks?
4. Does explicit knowledge of the subjunctive correlate with (a) performance on discrete-point measures and (b) accuracy in production of this structure in oral and written tasks?

Methodology

Participants and Context

Data for this study were collected from 46 participants (38 female and eight male, all of them L2 learners of Spanish) enrolled in three sections of a fifth-semester Spanish language course (roughly equivalent to the B2 level of the Common European Framework of Reference) at a Canadian university, and who signed a consent form. The participants were initially told that the study's goal was to examine explicit knowledge of language without specifying that the focal structure was the subjunctive so as to avoid the students preparing for the tests and other measures.[3]

In the two semesters prior to the course in which they were enrolled, the participants had received ample instruction on the different tenses and uses of the Spanish subjunctive (e.g., present, present perfect, imperfect, and pluperfect subjunctive; subjunctive in noun, adjective, adverbial, and *si* clauses). Seven out of the eight chapters in the textbook used in those courses contained one or more sections about the subjunctive. In the two terms combined, about 30% of the class sessions were entirely or partially devoted to the subjunctive. Moreover, in the course in which the study took place, the subjunctive was the grammar focus of two out of the four lessons the participants had completed at the time of the study. Typically, the instructors would present a specific use of the subjunctive (e.g., in noun clauses to express feelings and emotions) through the use of explicit information, mainly taken from the textbook (e.g., verbs that express a feeling or emotion require the subjunctive when there is a change of subject in the subordinate noun clause), and through the provision of examples that were analyzed in relation to the aforementioned explicit information. This presentation would normally be followed by controlled practice through sentence-completion or fill-in-the-blanks exercises, and by free production activities that elicited the use of the target structure. Thus, while explicit instruction does not necessarily result in explicit knowledge, it is likely that these learners developed explicit representations of the subjunctive. The extent of this knowledge was measured through the tests described below.

Instruments and Scoring Procedures

Tests of explicit knowledge. The participants' explicit knowledge about the subjunctive was measured through an untimed grammaticality judgment test (GJT) and a metalinguistic knowledge test (MKT). These tests were used because they have been

identified in the literature as valid measures of explicit knowledge (Bowles, 2011; Elder, 2009; R. Ellis, 2005; R. Ellis & Loewen, 2007; Gutiérrez, 2013a; Loewen, 2009). Grammaticality judgment tests have been frequently used as measures of both implicit and explicit knowledge in SLA, with certain features of the test seemingly predisposing test-takers to resort to one or the other type of representations. Thus, GJTs that do not impose any time constraints on the participants predispose them to draw on explicit knowledge (Bowles, 2011; R. Ellis, 2005). In addition, other studies (Godfroid et al., 2015; Gutiérrez, 2013a; Loewen, 2009; Zhang, 2014) pointed out the fact that the type of sentence being judged (i.e., grammatical or ungrammatical) also has a significant effect on whether learners resort to implicit or explicit knowledge, particularly in untimed GJTs: Learners may draw on their implicit knowledge when judging grammatical sentences and on their explicit knowledge when judging ungrammatical ones. As R. Ellis (2004) noted, when judging grammaticality, learners may engage in semantic processing to understand the meaning of the sentence, in noticing to decide whether there is something ungrammatical in the sentence, and in reflecting to identify what is incorrect and possibly to determine why it is incorrect. The first two of these processing operations, semantic processing and noticing, can be carried out using implicit knowledge, whereas reflecting likely requires access to explicit knowledge. Semantic processing and noticing are necessarily involved in deciding if a sentence is grammatical or not. According to Loewen (2009), if the sentence is grammatical, learners may make a judgement at this point. However, if the sentence is ungrammatical, they may engage in reflecting in order to determine what is ungrammatical in the sentence. Therefore, as the studies referred to above suggested, learners are more likely to draw on their explicit knowledge than on their implicit representations to make a judgement when there are no time constraints and when the sentence is ungrammatical.

The GJT consisted of 50 sentences, 30 of which focused on the subjunctive (see Appendix A) and the remaining 20 were distractors so that participants would not realize that the focus of the study was this particular structure. Half of the sentences containing uses of the subjunctive were grammatical and the other half were ungrammatical. Participants were asked to: (a) judge the sentences as either grammatical or ungrammatical and (b) correct the errors in the ungrammatical sentences. The GJT was administered to six native speakers to identify problematic sentences. The first version of the test contained two ungrammatical sentences in which the use of the subjunctive was not obligatory (i.e., some of the native speakers judged the use of the indicative form to be grammatical). These sentences and their two grammatical counterparts (in which the use of the subjunctive was grammatical but not obligatory) were replaced with four new test items in which the use of the subjunctive was compulsory.

In the coding stage, it was observed that sometimes participants would correctly identify a sentence as ungrammatical, but would fail to identify and correct the actual error in the sentence, which indicated that they did not know why the sentence was ungrammatical. Therefore, correcting the right or the wrong element in the sentence shows whether learners are actually demonstrating explicit knowledge of the Spanish subjunctive. Thus, based on these arguments and on the findings discussed above regarding ungrammatical sentences in GJTs, only the error correction part of the test was used as a measure of explicit knowledge. In addition, in a few instances participants would identify the actual error in the sentence but would provide an erroneous correction.[4] Therefore, the error correction part of the test was scored as follows: Participants received 0 points for either not providing a correction or correcting the wrong element in the sentence, 1 point

for correcting the right element but providing the wrong correction, and 2 points for providing the right correction to the right element.

Metalinguistic knowledge tests are also often used in studies about knowledge representations (e.g., Alderson et al., 1997; Elder & Manwaring, 2004; R. Ellis, 2005; Gutiérrez, 2013b), often in conjunction with GJTs. The main focus of MKTs is the learners' verbalizations of rules. The MKT in the present study consisted of 12 sentences containing an underlined error, six of which targeted the use of the subjunctive (see Appendix B). The participants were asked to correct the error and to write the grammar rule that the error was violating. Rule verbalizations were scored as follows: 0 points for incorrect responses (blank answers, providing a correction for the error without verbalizing a rule, or verbalizing an incorrect rule); 1 point for incomplete or partially correct rules; and 2 points for correct rule verbalizations (with or without technical terms).

Discrete-point measures. The main reason to include grammar exercises about the subjunctive in the present study was to have a point of comparison to previous studies that used similar tests to measure acquisition of this structure. Thus, accurate use of the subjunctive was measured through a forced-choice exercise and a fill-in-the-blanks exercise (Correa, 2011). The first exercise (see Appendix C) consisted of 10 sentences in which the participants had to circle one of two forms of the same verb that were provided (one in the indicative and one in the subjunctive). Each correct answer was awarded 1 point. In the second exercise (see Appendix D), participants had to fill in the blanks with the present indicative or present subjunctive form of the infinitive verb provided in parentheses. Following Correa (2011), correct answers in terms of mood and verb conjugation received 2 points, use of the correct mood with incorrect conjugation was awarded 1 point, and incorrect answers in terms of mood selection were awarded 0 points.

Measures of oral and written production. Accurate use of the subjunctive in oral and written production was measured through an oral interview and two written compositions. The oral interview was a 10-minute conversation between the course instructor and pairs of participants. During this conversation, the participants were asked questions that potentially led them to use the Spanish subjunctive in their answers (see Appendix E for sample questions). These conversations were audio-recorded and transcribed for analysis. Likewise, for the two compositions the participants had to write a short text (about 100 words in length) in response to two topics that potentially required the use of the subjunctive (see Appendices F and G).

It must be noted that some of the meanings that can be expressed using the subjunctive in Spanish can also be expressed by means of other grammatical structures. For example, to express a suggestion such as "*Te recomiendo que vayas al médico*" [I recommend you to go to the doctor], in which the subjunctive is used in the second verb (*vayas*). However, one could also say, for example, "*Deberías ir al médico*" [You should go to the doctor] or "*¿Por qué no vas al médico?*" [Why don't you go to the doctor?], and the subjunctive is not used in either of these cases. Thus, participants could resort to using alternative structures such as those to respond to the questions in the oral interview and the two compositions, as was sometimes the case. To reflect this possibility, in the oral interview and the written compositions, potential contexts of use of the subjunctive were identified (i.e., instances in which participants could have used the subjunctive to express their intended meaning). These three measures were therefore coded for correct use of the

subjunctive (example 9), incorrect use of the subjunctive (example 10), and use of an alternative structure (example 11), and a percentage was calculated for each of these categories in relation to those potential contexts of use.

(9)   *. . . es más importante que* <u>*aprendamos*</u> *. . . uh . . . uh . . . los* [sic] *habilidades sociales de hablar con otras personas*
        [. . . it's more important that we <u>learn</u> . . . uh . . . uh . . . the social skills to talk to other people]

(10)   *. . . para que nosotros *tenemos casi las mismas preferencias.*
        [. . . so that we <u>have</u> almost the same preferences.]

(11)   *Por ejemplo, la estudiante* <u>*podría ir*</u> *del* [sic] *grandísimo cine en el sur de xxx*
        [For example, the student <u>could go</u> to the huge movie theater in the south of xxx]

Data Analysis

For analysis purposes all the scores obtained through the measures described above are reported in percentages. In addition to the scores for each of the measures, composite scores of explicit knowledge, and accuracy in discrete-point measures and in compositions were calculated and expressed in percentages. A visual (histograms) and numerical (skewness and kurtosis z scores) examination of the data revealed that the test scores were not normally distributed. Therefore, non-parametric statistics tests were selected to analyze the data. To address the participants' performance on each of the tests, descriptive statistics were calculated for each of the measures. In addition, Wilcoxon Signed Ranks tests were computed to examine differences between the grammar exercises, and between the scores yielded by the oral and written production measures. To investigate the relationship between explicit knowledge of the subjunctive and accurate use in the other measures, Spearman's rho correlations were computed.[5] Finally, to explore trends in the participants' performance on each measure in relation to their level of explicit knowledge Kruskal-Wallis and Jonckheere-Terpstra tests were computed. Effect sizes were computed for all the non-parametric tests used. With respect to Spearman's rho, the correlation coefficient obtained is already an effect size measure (Field, 2009). Regarding the Wilcoxon Signed Ranks tests and the Jonckheere-Terpstra tests, effect sizes were calculated by dividing the z score obtained in the test by the square root of the number of observations (Field, 2009). The resulting effect size measures were interpreted as follows: $r = .10$ small effect, $r = .30$ medium effect, and $r = .50$ large effect (Field, 2009). The following section reports the results of the statistical procedures described above.

Results

Cronbach's alpha coefficient was .85 for the error correction part of the GJT and .80 for the MKT, indicating that both measures of explicit knowledge were reliable. Approximately 20% of the MKTs, the oral interview, and the written compositions were scored by a second rater. Inter-rater agreement was 90% for the MKT, 87.5% for the oral

interview, 95% for the first composition, and 94% for the second one. All instances of disagreement were discussed and consensus was reached.

        To explore the level of the participants' explicit knowledge of the subjunctive (research question 1), descriptive statistics were calculated for the results of the GJT, the MKT, and the composite score of explicit knowledge. These figures are reported in Table 1. As the data show, the participants obtained somewhat low means in both the GJT and the MKT (52.61% and 43.48%, respectively), which indicates that the participants had difficulty in identifying and correcting ungrammatical sentences in the GJT and in verbalizing rules in the MKT. The high standard deviations for both tests indicate that the scores varied considerably.

Table 1
Descriptive Statistics for the Explicit Knowledge Measures ($N = 46$)

Test	M (%)	SD	Mdn	CI	
				Lower	Upper
GJT	52.61	26.83	56.67	44.86	60.36
MKT	43.48	27.55	41.67	35.52	51.44
EK	48.04	24.91	46.25	40.84	55.24

Note. GJT = Grammaticality Judgment Test; MKT = Metalinguistic Knowledge Test; EK = Explicit Knowledge.

        Table 2 shows the descriptive statistics for the forced choice and fill-in-the-blanks exercises, as well as for the composite score on these discrete-point measures (research question 2). The participants in this study obtained high percentages in both exercises, as well as in the composite score. A Wilcoxon Signed Ranks test showed that the participants performed significantly better in the forced-choice exercise ($Mdn = 90.00$) than in the fill-in-the-blanks exercise ($Mdn = 72.50$), $z = -4.84$, $p < .001$, $r = -.51$. This large effect size indicates that the difference between the two exercises was important.

Table 2
Descriptive Statistics for the Grammar Exercises ($N = 46$)

Exercise	M (%)	SD	Mdn	CI	
				Lower	Upper
Forced Choice	85.22	16.29	90.00	80.51	89.93
Fill-in-the-Blanks	71.41	16.72	72.50	66.58	76.24
Composite	78.32	14.79	81.25	74.05	82.59

        Regarding the participants' degree of accuracy in the subjunctive in speaking and writing (research question 3), Tables 3, 4, 5, and 6 show that the oral interview and the two compositions obtained higher percentages of correct use of the subjunctive than incorrect use or use of alternative structures. In addition, the figures for the standard deviations indicate a high level of variance for all the measures.

Table 3
Descriptive Statistics for the Oral Interview (*N* = 46)

Use of the Subjunctive	*M* (%)	*SD*	*Mdn*	CI	
				Lower	Upper
Correct Use	51.88	30.35	57.74	43.11	60.65
Incorrect Use	31.50	24.57	27.92	24.4	38.6
Alternative Structure	16.27	25.36	8.39	8.94	23.6

Table 4
Descriptive Statistics for Composition 1 (*N* = 46)

Use of the Subjunctive	*M* (%)	*SD*	*Mdn*	CI	
				Lower	Upper
Correct Use	55.13	28.43	62.59	46.91	63.35
Incorrect Use	13.42	16.89	9.09	8.54	18.3
Alternative Structure	31.45	27.90	20.72	23.39	39.51

Table 5
Descriptive Statistics for Composition 2 (*N* = 46)

Use of the Subjunctive	*M* (%)	*SD*	*Mdn*	CI	
				Lower	Upper
Correct Use	68.48	26.93	75.00	60.7	76.26
Incorrect Use	21.42	20.08	15.38	15.62	27.22
Alternative Structure	10.10	16.14	0.00	5.44	14.76

Table 6
Descriptive Statistics for Compositions 1 and 2 Combined (*N* = 46)

Use of the Subjunctive	*M* (%)	*SD*	*Mdn*	CI	
				Lower	Upper
Correct Use	61.80	23.62	68.05	54.97	68.63
Incorrect Use	17.42	14.71	12.50	13.17	21.67
Alternative Structure	20.78	17.30	16.67	15.78	25.78

A Wilcoxon Signed Ranks test showed that, in the oral interview, the participants produced significantly more instances of correct use (*Mdn* = 57.74) than incorrect use (*Mdn* = 27.92), $z = -2.56$, $p = .01$, $r = -.27$; or use of alternative structures (*Mdn* = 8.39), $z = -3.67$, $p < .001$, $r = -.38$. In both cases, the close to medium and medium effect sizes indicate that

the difference between the scores is somewhat considerable. In the first composition, correct use of the subjunctive (*Mdn* = 62.59) was significantly higher than incorrect use (*Mdn* = 9.09), *z* = -5.06, *p* < .001, *r* = -.53; and also than use of alternative structures (*Mdn* = 20.72), *z* = -2.77, *p* = .006, *r* = -.29. Likewise, in the second composition the participants also produced significantly more correct uses of the subjunctive (*Mdn* = 75.00) than incorrect uses (*Mdn* = 15.38), *z* = -4.86, *p* < .001, *r* = .51; and more than alternative structures (*Mdn* = .00), *z* = -5.42, *p* < .001, *r* = -.57. The effect size figures point to considerable differences between the measures, except in the case of the difference between correct uses and alternative structures in the first composition, in which the effect size was close to medium. Thus, these three measures show a similar pattern in that in all of them the participants produced significantly more instances of correct use than incorrect use or use of alternative structures.

The comparison between the oral and written contexts shows that both composition 1 (*Mdn* = 62.59) and composition 2 (*Mdn* = 75.00) had more instances of correct use of the subjunctive than the oral interview (*Mdn* = 57.74). However, the difference was only significant with a medium effect size between composition 2 and the oral interview, *z* = -2.93, *p* = .003, *r* = -.31; but not between composition 1 and the oral interview, *z* = -.72, *p* = .474, *r* = -.07, which shows a negligible difference. Composition 2 also had significantly more instances of correct use of the subjunctive (*Mdn* = 75.00) than composition 1 (*Mdn* = 62.59), *z* = 2.84, *p* = .005, *r* = .30. The medium effect size indicates that the difference between the scores is somewhat important.

Spearman's correlation coefficient was calculated in order to examine the relationship between the measures of explicit knowledge and the measures of accurate production of the subjunctive (research question 4). As the data in Table 7 show, performance on the GJT and the MKT was significantly correlated to performance in the discrete-point exercises. The correlation coefficients were moderate with the forced choice exercise and strong with the fill-in-the-blanks exercise. Likewise, the global scores for explicit knowledge and for these exercises were strongly correlated. With respect to the written compositions, explicit knowledge was moderately correlated to correct use of the subjunctive in both of them. The data also show negative correlations between the two measures of explicit knowledge and incorrect use of the subjunctive or use of alternative structures, although the correlations were only moderately significant for incorrect use in composition 2. The global score for explicit knowledge shows a moderate positive correlation with the composite score for correct use of the subjunctive in the compositions, and a moderate negative correlation with the composite score for incorrect use. Regarding the oral interview, the correlations between all the explicit knowledge scores (i.e., the GJT and MKT separately, as well as the composite score) and correct, incorrect and alternative uses of the subjunctive were weak or almost non-existent. However, there was a somewhat higher positive correlation coefficient between explicit knowledge and correct use. With regard to the measures of accuracy, the forced choice exercise does not correlate significantly with any of the measures of use of the subjunctive. However, the fill-in-the-blanks exercise shows moderate positive correlations with correct use of the subjunctive in both compositions, and moderate negative correlations with incorrect use of the subjunctive in composition 2. Overall, the global score of the discrete-point measures shows a moderate positive correlation with the composite score for correct use of the subjunctive in the compositions, and a moderate negative correlation with the composite score for incorrect use.

Table 7
Correlations Matrix (*N* = 46)

Test	GJT	MKT	EK	FC	FB	DP	OCo	OI	OA	C1Co	C1I	C1A	C2Co	C2I	C2A	CGCo	CGI	CGA
GJT	___	.68**	.91**	.42**	.62**	.60**	.20	.01	-.06	.42**	-.24	-.22	.41**	-.45**	-.14	.47**	-.43**	-.26
MKT		___	.92**	.38**	.52**	.53**	.23	-.15	-.09	.50**	-.24	-.27	.48**	-.47**	-.25	.58**	-.49**	-.35*
EK			___	.42**	.62**	.60**	.25	-.09	-.08	.49**	-.30	-.22	.47**	-.48**	-.21	.56**	-.50**	-.29
FC				___	.58**	.82**	.15	.12	-.19	.28	-.06	-.09	.15	-.19	.06	.24	-.17	-.10
FB					___	.93**	.05	-.05	.07	.49**	-.18	-.28	.33	-.44**	.04	.47**	-.44**	-.25
DP						___	.11	.01	-.06	.45**	-.13	-.25	.27	-.36*	.04	.41**	-.35*	-.23
OCo							___	-.57**	-.58**	.28	.06	-.29	.11	-.04	-.11	.23	.03	-.31
OI								___	-.15	-.29	-.02	.39*	.08	.02	.01	-.14	.02	.30
OA									___	-.01	-.18	.01	-.22	.03	.25	-.12	-.09	.15
C1Co										___	-.26	-.77**	.44**	-.47**	-.20	.88**	-.49**	-.76**
C1I											___	-.30	-.16	.21	.10	-.23	.64**	-.20
C1A												___	-.34	.31	.18	-.67**	.09	.89**
C2Co													___	-.75**	-.71**	.80**	-.62**	-.59**
C2I														___	.21	-.70**	.85**	.37*
C2A															___	-.50**	.16	.55**
CGCo																___	-.64**	-.80**
CGI																	___	.16
CGA																		___

Note. GJT = Grammaticality Judgement Test; MKT = Metalinguistic Knowledge Test; EK = Explicit Knowledge; FC = Forced Choice; FB = Fill-in-the-blanks; DP = Discrete-point; O = Oral; Co = Correct; I = Incorrect; A = Alternative; C = Composition; CG = Composition Global.
p < .05. **p* < .01.

To support the results obtained in the correlations test, the differences among participants based on their level of explicit knowledge were examined. The participants were divided into five groups according to their explicit knowledge global score: 0-19%, 20-39%, 40-59%, 60-79%, and 80-100%. Kruskal-Wallis tests were computed to find out whether there were any significant differences among these five groups regarding their performance on the accuracy and language use measures. Furthermore, Jonckheere-Terpstra tests were carried out to explore significant trends in these differences. Table 8 shows the results of these tests. For ease of interpretation, only results for the composite scores on the discrete-point measures and for the compositions are reported.

Table 8
Kruskal-Wallis and Jonckheere-Terpstra Tests

| | Kruskal-Wallis | | Jonckheere-Terpstra | | |
Test	H	df	J	z	r
Oral Correct	4.38	4	518.50	1.92	.28
Oral Incorrect	5.28	4	368	-1.01	-.15
Oral Alternative	2.76	4	391.50	-.58	-.09
Comp. Correct	16.20**	4	625**	3.98	.59
Comp. Incorrect	12.59*	4	234.50**	-3.60	-.53
Comp. Alternative	6.11	4	299*	-2.35	-.35
Discrete-Point	18.05**	4	637**	4.28	.63

*$p < .05$. **$p < .01$.

As Table 8 shows, significant differences were found among the groups for correct and incorrect use of the subjunctive in the compositions, and for performance on the discrete-point measures. The Jonckheere-Terpstra tests showed a significant positive trend for correct use of the subjunctive in the compositions and for performance on the discrete-point measures, and a significant negative trend for incorrect use of the subjunctive. The large effect sizes indicate that these trends in the data are important. The Jonckheere-Terpstra test also yielded a significant negative trend with a medium effect size for use of alternative structures in the compositions.

Discussion

The data reported in the previous section present information about the participants' explicit knowledge of the subjunctive, their accurate use of this structure in discrete-point measures and in oral and written production, and the relationship between these different measures. With regard to the learners' explicit knowledge of the subjunctive (research question 1), Table 1 shows that the participants obtained somewhat low percentages in both the GJT and the MKT (52.61% and 43.48%, respectively), and in the global explicit knowledge score (48.04%). Indeed, only 21 participants scored higher than 60% in the GJT and only 14 did so in the MKT. Regarding the GJT, when only identification of the ungrammatical element is taken into account (i.e., not considering whether participants provided the right correction), about 55% of the sentences were judged correctly. With respect to the MKT, out of a total of 276 rule verbalizations, 70 (25.36%) were correct and 100 (36.23%) were partially correct. Thus, even though the scores on the GJT and the MKT are somewhat low, the participants' level of explicit knowledge of the Spanish subjunctive

can be considered reasonable for intermediate-level learners. Although these learners had received a considerable amount of explicit instruction about the subjunctive, given the challenges that this structure poses to L2 learners of Spanish, and the fact that not everything that is taught gets learned, these results are to be expected. Indeed, similar levels of explicit knowledge of the L2 are a common finding in SLA studies (e.g., Alderson et al., 1997; Elder & Manwaring, 2004; R. Ellis, 2005; Gutiérrez, 2013a; Roehr, 2008; Sorace, 1985). One plausible explanation for the participants' performance on the explicit knowledge measures may be the lack of familiarity with the tests: While learners are typically asked to complete grammar exercises such as the forced choice or fill-in-the-blanks exercises used in this study, or to use grammar structures in oral and written production, they are rarely asked to identify and correct ungrammatical sentences or to explain grammar rules. With respect to the latter, Sorace (1985) pointed out that "verbalizations appear at the last stage of the developmental sequence" (p. 249) of metalinguistic abilities that she outlined in her study and, consequently, they represent an advanced, specialized form of explicit knowledge.

With regard to accurate use of the subjunctive in discrete-point measures (research question 2), the participants performed very well in both the forced-choice test (85.22%) and the fill-in-the-blanks test (71.41%), and the difference between both tests was significant. It is possible that the high percentage in the forced-choice test is due to the fact that the participants had to select one of two options and, hence, they had a 50% chance of answering correctly even if they did not actually know the correct answer.[6] Therefore, the fill-in-the-blanks test might be a more reliable measure of the participants' ability to choose the correct mood of the verb and conjugate it appropriately in a controlled exercise. In any case, the high scores in these discrete-point measures are not surprising given the pedagogical context in which the participants were exposed to the subjunctive. As noted above, the participants were used to practicing this structure in controlled exercises such as the forced choice and fill-in-the-blanks exercises. Thus, their familiarity with these types of tasks likely contributed to their performance. The results of these tests are similar to those of previous studies that used comparable measures about the Spanish subjunctive with learners who had received explicit instruction about this structure (e.g., Alonso-Aparicio, 2007; Farley, 2004b; Gallego, 2010; Montrul, 2011; Terrell, Baycroft, & Perrone, 1987). While practice through controlled exercises might be useful in order for explicit, declarative knowledge of the target structure to turn into proceduralized knowledge, such practice is not conducive to the level of automaticity that would be necessary to use that structure in communicative situations (DeKeyser, 2009). The development of such automaticity may be facilitated by using a specific grammar structure in communicatively meaningful, purposeful interaction. As previously noted, opportunities for this type of practice were also provided in the courses that the participants had taken, which may have played a role in their performance on the oral and written production measures.

Regarding use of the subjunctive in speaking and writing (research question 3), the data show that the participants produced significantly more correct uses of this structure than incorrect uses or alternative structures in the oral interview and in both compositions, and that correct uses accounted for the majority of the contexts in all measures. Given that one important goal of the pedagogical context in which the research took place is the development of the ability to use Spanish in communicative situations, this is an encouraging finding. These results show that students in 5th semester Spanish are able to use the subjunctive correctly more than 50% of the time in speaking and writing despite the

difficulties of acquiring this structure, particularly as implicit knowledge, as outlined above. Importantly, these measures can be considered spontaneous and meaning-focused in comparison to the controlled production measures (e.g., fill-in-the-blanks, sentence completion) used in the studies discussed above that examined explicit instruction in relation to the subjunctive. It is also worth noting that the participants were able to convey their meaning accurately by using the subjunctive or other structures in all the production measures. Indeed, incorrect use of the subjunctive amounted to about one third or fewer of the total instances. Another noteworthy finding is that the participants used the subjunctive correctly in the two compositions more than in the oral interview. A possible explanation for these differences is that the written tasks allowed the participants more time to pay attention to the form of their intended message compared to the oral interview.

Previous studies (Cheng & Mojica-Diaz, 2006; Gallego, 2010; Montrul, 2011; Stokes, 1988) with participants at a proficiency level comparable to that of the participants in the present study have examined the use of the subjunctive in spontaneous oral production tasks and reported averages ranging from 50.6% to 61.2%. Thus, the participants' use of the subjunctive in the present study is at a level similar to that of learners at the same level of proficiency. With respect to the use of the subjunctive in spontaneous written production tasks, interestingly, only Gallego (2010) used measures similar to those in the present study. In her study, the participants used the subjunctive correctly from 46.4% to 58.4% of the instances in the posttest and delayed posttest after receiving explicit instruction about this structure.[7] The results of the present study are in some instances similar and in some others higher than the percentages obtained in Gallego's study.

The relationship between explicit knowledge of the Spanish subjunctive and accurate use of this structure (research question 4) is shown in Table 7. With respect to the discrete-point measures, the results show moderate and strong correlations between these measures and explicit knowledge. These significant correlations indicate that this type of knowledge is available to learners in tasks in which the main focus is linguistic form. It could be argued that the discrete-point measures actually tap into the same type of knowledge representations as the GJT and the MKT (Roehr, 2008). In fact, tasks such as the forced choice or the fill-in-the-blanks exercise are often referred to as "metalinguistic tasks" (e.g., Montrul & Perpiñán, 2011). The strong positive trend observed in the discrete-point scores in relation to the participants' level of explicit knowledge (Table 8) further supports these results: As the level of explicit knowledge increased, so did accurate use of this structure in those measures.

With respect to accurate use of the subjunctive in speaking, on the one hand, as the results indicate, there are no significant correlations between the two measures of explicit knowledge and correct use of the subjunctive in the oral interview. Furthermore, explicit knowledge is not correlated significantly with incorrect use or alternative use in the oral interview, either. It is worth noting, however, the non-significant but positive tendency between the explicit knowledge measures and correct use of the subjunctive in speaking, whereas the tendency is almost neutral or negative between those measures and incorrect and alternative uses, as reflected in the correlation coefficients. In this regard, the close to significant value ($p = .055$) and close to medium effect size ($r = .28$) of the Jonckheere-Terpstra test for correct use of the subjunctive in the oral interview indicate that the relationship between this measure and explicit knowledge should not be completely disregarded. A plausible explanation for the non-significant correlation between explicit

knowledge and correct use of the subjunctive in the oral interview may be that the speeded nature of this measure, together with the fact that the main focus was on conveying meaning, likely left few attentional resources and little time for the learners to access their explicit knowledge of the subjunctive. It is also possible that the participants had developed a certain degree of automaticity in this structure and, hence, they drew on this type of representation in the oral production measure.

On the other hand, explicit knowledge of the subjunctive was significantly correlated to correct use in the writing measures. The significant correlations between the participants' performance on the GJT and the MKT and correct use of the subjunctive in the two compositions indicate that those participants who had developed explicit mental representations of the Spanish subjunctive were able to draw on them when writing in Spanish. In this type of task, although the learners' focus is also on meaning, the availability of time likely allowed them to draw on their explicit knowledge to accurately express their intended message. The differences among participants when grouped by level of explicit knowledge, as well as the trends in the data in relation to this level are a valuable indicator of the interaction between this type of representations and use of the subjunctive in writing. Thus, as the data in Table 8 show, as the level of explicit knowledge of the participants increased, so did their correct use of the subjunctive, whereas their incorrect use of this structure and their use of alternative structures significantly decreased.

As noted earlier, there are no known studies that have measured explicit knowledge of the Spanish subjunctive and its relationship to accurate use in different measures. Although Correa (2011) found a positive significant correlation between general explicit knowledge of English and Spanish, and accuracy in the subjunctive, the measures of explicit knowledge in her study did not contain any items about the Spanish subjunctive. The only study that examined the provision of explicit instruction about the subjunctive and performance in tasks similar to the ones used in the present study is Gallego (2010). In her study, those groups of learners who received explicit instruction performed better on the grammar, oral and written tests than those who did not. Studies from a PI perspective (e.g., Alonso-Aparicio, 2007; Farley, 2004b; Fernández, 2008; Kirk, 2013; McNulty, 2011) have also shown that the provision of explicit instruction is beneficial in learning the subjunctive, although the measures used in these studies are mainly of the discrete-point type. Given that these types of tasks likely tap into the same type of representations as GJTs and MKTs, as noted above, using them as the only measure of acquisition of a particular structure arguably provides a partial picture of acquisition. In this sense, as Montrul and Perpiñán (2011) suggested, it is necessary to use various types of tasks to assess learners' knowledge of the L2.

Studies that have examined the relationship between general explicit knowledge and language proficiency have yielded mixed results, largely depending on how proficiency was measured. In general, studies examining proficiency through oral (speaking and listening) and written (reading and writing) measures (e.g., Elder & Manwaring, 2004; Elder & R. Ellis, 2009; R. Ellis, 2006) have reported stronger correlations between explicit knowledge and the written measures than between explicit knowledge and the oral measures. The results of the present study are consistent with those findings. In this regard, R. Ellis (2006) noted that "oral language use draws more on automatic processing (a key feature of implicit knowledge), whereas written language allows for more controlled processing (a feature of explicit knowledge)" (p. 458). Thus, the type of explicit instruction about the subjunctive that the participants' received likely led to the development of

explicit, declarative knowledge about this structure. In addition, opportunities to practice this structure in controlled exercises and in communicatively-oriented situations may have contributed to a certain degree of proceduralization and automatization of that declarative knowledge. As DeKeyser (2009) pointed out, "the likelihood of learners achieving a fairly high degree of automaticity in their use of a structure keeps evolving in parallel with their declarative knowledge of that structure" (p. 126).

Conclusion

The study reported here examined whether explicit knowledge of the Spanish subjunctive was related to accurate use of this structure in discrete-point tests, and in speaking and writing. By examining the different correlation patterns between explicit knowledge and different uses of language, the present study was able to determine that having developed explicit knowledge representations about the subjunctive was arguably beneficial for the participants since those who did so performed significantly better in the discrete-point exercises and in the written compositions. This was not the case for the oral interview, in which there was a non-significant weak correlation between this type of knowledge and correct use of the subjunctive in that measure. Therefore, it is possible to conclude that explicit knowledge of the Spanish subjunctive is helpful in tasks whose characteristics favour resorting to this type of representations, that is, tasks that allow time to access this type of knowledge and/or that focus on form rather than meaning. However, explicit knowledge may be less helpful in tasks such as the oral interview that, because of their speeded nature, rely on automatic processing. It is likely that implicit knowledge or automatized explicit knowledge of the Spanish subjunctive would be more helpful in the latter type of task. Thus, from a pedagogical perspective, an approach that promotes the development of both explicit and implicit representations might be useful for this particular structure. In this sense, although the oral production task can be considered a measure of implicit knowledge, a limitation of the current study is that it would have benefited from using other measures of implicit knowledge such as an Elicited Imitation Task or a Timed Grammaticality Judgement Test (R. Ellis, 2005) in order to examine whether the learners had developed implicit knowledge of the subjunctive and if this type of knowledge representation was correlated with any of the other measures. This presents a potentially interesting avenue for future research. Another limitation of this study is that it did not directly examine the connection between explicit instruction and explicit knowledge. Therefore, future research could investigate whether different forms of explicit instruction lead to the development of explicit representations, and how such representations are related to language use. In addition, the present study would have benefitted from a larger sample of participants to boost the statistical power of the tests used. Finally, the strong emphasis on explicit instruction about grammar in the pedagogical context in which the study took place undoubtedly played a role in the results obtained. While such an emphasis is usual in many foreign language instructional settings, it would be interesting to carry out a similar study with learners who have not received this type of instruction (e.g., in an entirely communicative approach or in a natural setting).

All in all, the present study contributes to the body of research about the potential benefits of explicit knowledge in instructed L2 learning and, more specifically, it constitutes a step forward in determining the usefulness of explicit knowledge in relation to particular structures. Therefore, the findings support the claim that the development of

explicit knowledge representations of the Spanish subjunctive can be useful in learning a structure that is typically problematic for learners of L2 Spanish. Because of their first language experience, L2 learners tend to process lexical items first in order to interpret the meaning of a sentence (VanPatten, 2015), which leads to "blocking" grammatical cues when these are redundant (N. Ellis, 2006). For structures such as the subjunctive that are low in salience, low in frequency, and redundant from a semantic point of view, "all the extra input in the world can sum to nothing" (N. Ellis & Wulff, 2015, p. 83). Acquiring such structures from implicit processes alone may take a very long time (N. Ellis, 2005). Thus, within a usage-based perspective of SLA (N. Ellis & Wulff, 2015), explicit knowledge can play a facilitative role in the acquisition of structures like the Spanish subjunctive. However, this does not entail the abandonment of activities that focus on meaning and that foster the development of implicit knowledge when teaching this structure in Spanish language classes, since this type of representations may be useful for speaking. As DeKeyser and Prieto-Botana (2014) pointed out, "provision of explicit information may be a necessary condition for some structures . . . , but it is never a sufficient condition" (p. 453), since the use of such structures in communicative contexts is essential for the development of form-meaning mappings.

Correspondence should be addressed to Xavier Gutiérrez.
Email: xavier.gutierrez@ualberta.ca

Acknowledgments

Notes

[1]See, for example, Butler (2002) about the use of English articles, and White and Ranta (2002) about the use of possessive determiners in English.

[2]There are other studies (e.g., Alonso-Aparicio, 2007; Collentine, 1998; Kirk, 2013; McNulty, 2011) that have examined the efficacy of PI in comparison to different types of instruction in relation to the subjunctive, but in these studies all treatments provided explicit information about the subjunctive, and in all cases PI and the other types of instruction were equally effective.

[3]Following Research Ethics procedures, the participants were debriefed on the last data collection session regarding the actual goal of the study.

[4]Oftentimes, participants would attempt to provide a subjunctive form but the form provided would be conjugated in the wrong person.

[5]Given that multiple correlations were computed, Benjamini and Hochberg's (1995) method to control false discovery rate was used.

[6]As pointed out by an anonymous reviewer, however, the participants were not at ceiling; their scores were slightly above chance.

[7]Gallego (2010) did not present her data in percentages. The percentages reported here were calculated from the data reported in her study.

References

Alderson, J. C., Clapham, C., & Steel, D. (1997). Metalinguistic knowledge, language aptitude and language proficiency. *Language Teaching Research*, *1-2*, 93-121.

Alonso-Aparicio, I. (2007). La instrucción basada en el procesamiento frente al enfoque ecléctico para el aprendizaje del subjuntivo en la enseñanza de E/LE [Processing instruction versus the eclectic approach for learning the subjunctive in Spanish-as-a-foreign-language teaching]. *Porta Linguarum, 8*, 41-62

Benjamini, Y, & Hochberg, Y. (1995). Controlling the false discovery rate: A practical and powerful approach to multiple testing. *Journal of the Royal Statistical Society, Series B, 57*, 298-300.

Bowles, M. (2011). Measuring implicit and explicit linguistic knowledge: What can heritage language learners contribute? *Studies in Second Language Acquisition, 33*, 247-271.

Buckwalter, P. (2001). Repair sequences in Spanish L2 dyadic discourse: A descriptive study. *The Modern Language Journal, 85*, 380-397.

Butler, Y. (2002). Second language learners' theories on the use of English articles. *Studies in Second Language Acquisition, 24*, 451-480.

Cameron, R. D. (2011). *Native and nonnative processing of modality and mood in Spanish* (Unpublished doctoral dissertation). The Florida State University, Tallahassee, FL.

Cheng, A. C. & Mojica-Diaz, C. C. (2006). The effects of formal instruction and study abroad on improving proficiency: The case of the Spanish subjunctive. *Applied Language Learning, 16*, 17-36.

Collentine, J. (1997). The effects of irregular stems on the detection of verbs in Spanish. *Spanish Applied Linguistics, 1*, 3-23.

Collentine, J. (1998). Processing Instruction and the Subjunctive. *Hispania, 81*, 576-587.

Collentine, J. (2010). The acquisition and teaching of the Spanish subjunctive. An update on current findings. *Hispania, 93*, 39-51.

Collentine, J. (2014). Subjunctive in second language Spanish. In K. L. Geeslin (Ed.), *The handbook of Spanish second language acquisition* (pp. 270-286). Malden, MA: Wiley-Blackwell.

Collins, L., Trofimovitch, P., White, J., Cardoso, W., & Horst, M. (2009). Some input on the easy/difficult grammar question: An empirical study. *The Modern Language Journal, 93*, 336-353.

Correa, M. (2011). Subjunctive accuracy and metalinguistic knowledge of L2 learners of Spanish. *Electronic Journal of Foreign Language Teaching, 8,* 39-56.

DeKeyser, R. M. (2003). Implicit and explicit learning. In C. Doughty & M. H. Long (Eds.), *The handbook of second language acquisition* (pp. 313-348). Oxford: Blackwell.

DeKeyser, R. M. (2005). What makes learning second-language grammar difficult? A
    review of issues. *Language Learning, 55*, 1-25.

DeKeyser, R. M. (2009). Cognitive-psychological processes in second language learning.
    In M. H. Long & C. J. Doughty (Eds.), *The handbook of language teaching* (pp.
    119-138). Malden, MA: Wiley-Blackwell.

DeKeyser, R. M., & Prieto-Botana, G. (2014). Acquisition of grammar by instructed
    learners. In K. L. Geeslin (Ed.), *The handbook of Spanish second language
    acquisition* (pp. 449-465). Malden, MA: Wiley-Blackwell.

Elder, C. (2009). Validating a test of metalinguistic knowledge. In R. Ellis, S. Loewen, C.
    Elder, R. Erlam, J. Philp, & H. Reinders. *Implicit and explicit knowledge in second
    language learning, testing and teaching* (pp. 113-138). Bristol: Multilingual
    Matters.

Elder, C., & Ellis, R. (2009). Implicit and explicit knowledge of an L2 and language
    proficiency. In R. Ellis, S. Loewen, C. Elder, R. Erlam, J. Philp, & H. Reinders
    (Eds.), *Implicit and explicit knowledge in second language learning, testing and
    teaching* (pp. 167-193). Bristol, United Kingdom: Multilingual Matters.

Elder, C., & Manwaring, D. (2004). The relationship between metalinguistic knowledge
    and learning outcomes among undergraduate students of Chinese. *Language
    Awareness, 13*, 145-162.

Ellis, N. (2005). At the interface: Dynamic interactions of explicit and implicit knowledge.
    Studies in Second Language Acquisition, 27, 305-352.

Ellis, N. (2006). Selective attention and transfer phenomena in SLA: Contingency, cue
    competition, salience, interference, overshadowing, blocking, and perceptual
    learning. *Applied Linguistics, 27*, 1-31.

Ellis, N. (2011). Implicit and explicit SLA and their interface. In C. Sanz, & R. P. Leow
    (Eds.), *Implicit and explicit language learning. Conditions, processes, and
    knowledge in SLA and bilingualism* (pp. 35-47). Washington, DC: Georgetown
    University Press.

Ellis, N., & Wulff, S. (2015). Usage-based approaches to SLA. In B. VanPatten & J.
    Williams (Eds.), *Theories in Second Language Acquisiton: An introduction* (2nd
    edition) (pp. 75-93). London: Routledge.

Ellis, R. (2004). The definition and measurement of L2 explicit knowledge. *Language
    Learning, 54*, 227-275.

Ellis, R. (2005). Measuring implicit and explicit knowledge of a second language. A
    psychometric study. *Studies in Second Language Acquisition, 27*, 141-172.

Ellis, R. (2006). Modelling learning difficulty and second language proficiency: the
    differential contributions of implicit and explicit knowledge. *Applied Linguistics,
    27*, 431-463.

Ellis, R., & Loewen, S. (2007). Confirming the operational definitions of explicit and
    implicit knowledge in Ellis (2005): Responding to Isemonger. *Studies in Second
    Language Acquisition, 29*, 119-126.

Farley, A. (2004a). Processing instruction and the Spanish subjunctive: Is explicit
    information needed? In B. VanPatten (Ed.), *Processing Instruction: Theory,
    research, and commentary* (pp. 227-240). Mahwah, NJ: Erlbaum.

Farley, A. (2004b). The relative effects of processing instruction and meaning-based output
    instruction. In B. VanPatten (Ed.), *Processing Instruction: Theory, research, and
    commentary* (pp. 143-168). Mahwah, NJ: Erlbaum.

Fernández, C. (2008). Reexamining the role of explicit information in processing instruction. *Studies in Second Language Acquisition, 30*, 277–305.

Field, A. (2009). *Discovering statistics using SPSS* (3rd ed.). Thousand Oaks, CA: Sage.

Gallego, M. (2010). *Focus on form through a dictogloss task: Exploring its effects on the acquisition of the Spanish present subjunctive in complement clause.* Unpublished doctoral dissertation, Purdue University.

Godfroid, A., Loewen, S., Jung, S., Park, J-H., Gass, S., & Ellis, R. (2015). Timed and untimed grammaticality judgments measure distinct types of knowledge. Evidence from eye-movement patterns. *Studies in Second Language Acquisition, 37*, 269-297.

Gudmestad, A. (2006). L2 variation and the Spanish subjunctive: Linguistic features predicting mood selection. In C. Klee & T. Face (Eds), *Selected papers of the 7th Conference on the Acquisition of Spanish and Portuguese as First and Second Languages* (pp. 170–184). Somerville, MA: Cascadilla Proceedings Project.

Gutiérrez, X. (2013a). The construct validity of grammaticality judgment tests as measures of implicit and explicit L2 knowledge. *Studies in Second Language Acquisition, 35*, 423-449.

Gutiérrez, X. (2013b). Metalinguistic knowledge, metalingual knowledge, and proficiency in L2 Spanish. *Language Awareness, 22*, 176-191.

Hulstjin, J. H. (2005). Theoretical and empirical issues in the study of implicit and explicit second-language learning. *Studies in Second Language Acquisition, 27*, 129-140.

Johnston, M. (1995). Stages of acquisition of Spanish as a second language. *Australian Studies in Language Acquisition, 4*, 1–28.

Kirk, R. (2013). The Effects of Processing Instruction with and Without Output: Acquisition of the Spanish Subjunctive in Three Conjunctional Phrases. *Hispania, 96*, 153-169.

Lee, J., & Rodríguez, R. (1997). The effects of lexemic and morphosyntactic modifications on L2 reading comprehension and input processing. In W. Glass & A. Pérez-Leroux (Eds.), *Contemporary perspectives on the acquisition of Spanish* (pp. 135-157). Somerville, MA: Cascadilla Press.

Loewen, S. (2009). Grammaticality judgment tests and the measurement of implicit and explicit L2 knowledge. In R. Ellis, S. Loewen, C. Elder, R. Erlam, J. Philp, & H. Reinders, *Implicit and explicit knowledge in second language learning, testing and teaching* (pp. 94-112). Bristol: Multilingual Matters.

McNulty, E. M. (2011). *On activity types and activity order in the processing instruction of Spanish cuando plus subjunctive/indicative.* Unpublished doctoral dissertation, Indiana University.

Montrul, S. (2011). Morphological errors in Spanish second language learners and heritage speakers. *Studies in Second Language Acquisition, 33*, 163-192.

Montrul, S., & Perpiñán, S. (2011). Assessing differences and similarities between instructed heritage language learners and L2 learners in their knowledge of Spanish tense-aspect and mood (TAM) morphology. *Heritage Language Journal, 8*, 90-133.

Pienemann, M., & Lenzing, A. (2015). Processability Theory. In B. VanPatten & J. Williams (Eds.), *Theories in Second Language Acquisiton: An introduction* (2nd edition) (pp. 159-179). London: Routledge.

Roehr, K. (2008). Metalinguistic knowledge and language ability in university-level L2 learners. *Applied Linguistics*, *29*, 173–199.

Roehr, K., & Gánem-Gutiérrez, G. A. (2009). Metalinguistic knowledge: A stepping stone towards L2 proficiency? In A. Benati (Ed.), *Issues in second language proficiency* (pp. 79-94). London: Continuum.

Sánchez-Naranjo, J. (2009). *L2 learners' difficulties in the interpretation of the spanish subjunctive: L1 influence and misanalysis of the input.* Unpublished doctoral dissertation, University of Toronto.

Sorace, A. (1985). Metalinguistic knowledge and language use in acquisition-poor environments. *Applied Linguistics, 6*, 239-254.

Stokes, J. D. (1988). Some factors in the acquisition of the present subjunctive in Spanish. *Hispania, 71*, 705-710.

Terrell, T. D., Baycroft, B., & Perrone, C. (1987). The subjunctive in Spanish interlanguage: accuracy and comprehensibility. In B. VanPatten, T. R. Dvorak, & J. F. Lee (Eds.), *Foreign language learning. A research perspective* (pp. 19-32). Cambridge, MA: Newbury House.

VanPatten, B. (2015). Input processing in adult SLA. In B. VanPatten & J. Williams (Eds.), *Theories in Second Language Acquisiton: An introduction* (2nd edition) (pp. 115-135). London: Routledge.

White, J., & Ranta, L. (2002). Examining the interface between metalinguistic task performance and oral production in a second language. *Language Awareness, 11*, 259-290.

Zhang, R. (2014). Measuring university-level L2 learners' implicit and explicit linguistic knowledge. *Studies in Second Language Acquisition*. Advance online publication. doi:10.1017/S0272263114000370

Appendix A

Grammaticality Judgement Test

Please: (1) indicate whether the sentences in the item sheet are <u>grammatical (G) or ungrammatical (UN)</u>; and (2) <u>provide the correct version</u> only of those sentences that you deem ungrammatical.

1. *El médico me recomienda que yo **voy** al gimnasio más a menudo.
2. *Espero que ellos **pueden** venir a mi fiesta de cumpleaños.
3. *Te sugiero que **descansas** unas horas.
4. *Es importante que nosotros **bebemos** mucha agua cada día.
5. Te aconsejo que **bebas** dos litros de agua cada día.
6. Sonia quiere que nosotros **lleguemos** temprano a casa esta noche.
7. María prefiere que ustedes **vengan** a las cinco.
8. Es necesario que ustedes **duerman** ocho horas diarias.
9. *Es sorprendente que tú no **sabes** lo que pasa.
10. *Me molesta que la gente no **ayuda** a los demás.
11. *Nos encanta que **vienes** a visitarnos.
12. Me alegra que tú **busques** trabajo.
13. Es terrible que él no **haga** nada para solucionar el problema.
14. Me gusta que Becky **aprenda** español.
15. *Dudo que ustedes **comen** suficiente fruta.
16. El médico duda que yo **deje** de fumar.
17. *No pienso que Juan **empieza** las clases la próxima semana.
18. *No creemos que Pablo **llega** el domingo.
19. No creo que ustedes **salgan** de trabajar antes de las 9.
20. Mi padre no piensa que el Madrid **gane** la liga.
21. *No puedes ver la televisión a menos que tú **terminas** la tarea.
22. *Hoy cenaremos antes para que los niños **tienen** tiempo de leer un cuento.
23. *Tengo que ir a comprar el pan antes de que **cierra** la panadería.
24. *A pesar de que la situación económica **mejora** en los próximos meses, es mejor no invertir en nuevos proyectos.
25. *Vamos a ir a pasear tan pronto como **acaba** el partido de fútbol.
26. En cuanto tu madre **vuelva** del trabajo, iremos a cenar al restaurante.
27. Ustedes pueden ir al cine con tal de que me **dejen** en paz.
28. Aunque **llueva** mañana, vamos a ir a la playa.
29. Tengo que reunirme contigo para que **hablemos** del próximo proyecto.
30. Cuando yo **salga** de clase esta tarde me voy a tomar un par de cervezas.

Appendix B

Metalinguistic Knowledge Test

All the following sentences are ungrammatical and the part containing the error has been underlined for you. For each sentence, correct the error and, if you know a rule that explains why the sentence is ungrammatical, write it in English in the space provided (you may use terms in Spanish if that helps you).

1. *Mis amigos me sugieren que yo <u>camino</u> 45 minutos cada día.*
2. *Es bueno que los chicos <u>pasan</u> tiempo con sus amigos.*
3. *Mi padre duda que los jóvenes hoy día <u>tienen</u> respeto por otras personas.*
4. *María me prestó veinte dólares para que <u>voy</u> al cine esta noche.*
5. *No puedes salir con tus amigos a no ser que <u>haces</u> la tarea.*
6. *Cuando yo <u>termino</u> de trabajar mañana por la tarde, voy a salir con mis amigos.*

Appendix C

Forced-Choice Exercise

Selecciona el verbo correcto para cada una de estas frases.

1. *El médico me recomienda que yo **voy/vaya** al gimnasio más a menudo.*
2. *Es sorprendente que tú no **sabes/sepas** lo que pasa.*
3. *Creo que ustedes no **comen/coman** suficiente fruta.*
4. *Ya que ellos **están/estén** cansados, vamos a salir solos.*
5. *No puedes ver la televisión a menos que tú **terminas/termines** la tarea.*
6. *Te aconsejo que **bebes/bebas** dos litros de agua cada día.*
7. *Vamos a ir a pasear tan pronto como **acaba/acabe** el partido de fútbol.*
8. *Pienso que esta película **parece/parezca** interesante.*
9. *Me alegra que tú **buscas/busques** trabajo.*
10. *Hoy cenaremos antes para que los niños **tienen/tengan** tiempo de leer un cuento.*

Appendix D

Fill-in-the-Blanks Exercise

Completa las siguientes frases con el verbo entre paréntesis en presente de indicativo o presente de subjuntivo

1. *Estoy encantada de que tú ___ (estar) aquí conmigo.*
2. *Les sugiero que ustedes ___ (descansar) una horas.*
3. *Ella cree que tú ___ (tener) 20 años.*
4. *Vamos a comprar el pan antes de que ___ (cerrar) la panadería.*
5. *Espero que ustedes ___ (venir) a la fiesta.*
6. *Estoy seguro de que el gobierno ___ (poder) resolver nuestros problemas.*
7. *Cuando nosotros ___ (ir) a Sevilla, nos alojaremos en casa de unos amigos.*
8. *Prefiero no viajar en esta época del año porque ___ (hacer) frío.*
9. *Es necesario reciclar para que nosotros ___ (conservar) nuestros recursos naturales.*
10. *Me molesta que la gente no ___ (ayudar) a los demás.*

Appendix E

Sample Questions for Oral Interview

1. Un/-a amigo/-a tuyo/-a se discutió con su pareja y se siente triste. ¿Qué le sugieres para que se sienta mejor?
[A friend of yours argued with his/her partner and is feeling sad. What do you suggest so that he/she feels better?]

2. ¿Qué le recomiendas a un estudiante internacional que quiere estudiar en esta universidad?
[What do you recommend to an international student that wants to study at this university?]

3. ¿Qué hay que hacer para tener una buena relación con tu pareja (amigos/familia/compañeros de trabajo)?
[What does one have to do to have a good relationship with his/her partner (friends/family/co-workers)?]

4. ¿Qué te molesta (enoja/irrita) de tu familia (mejor amigo/-a/pareja)?
[What bothers (annoys/irritates) you about your family (best friend/partner)?]

5. ¿Qué esperas/deseas para tu futuro?
[What do you hope/wish for your future?]

Appendix F

Composition 1

Imagina que un/a estudiante nuevo/a en "ciudad X" quiere salir este fin de semana pero no conoce la ciudad. ¿Qué le recomiendas que haga para divertirse? Escribe un párrafo de unas 100 palabras con al menos 8 sugerencias.

[Imagine that a new student in "city X" wants to go out this weekend but he/she doesn't know the city. What do you recommend him/her to do to have fun? Write a paragraph of about 100 words with at least 8 suggestions.]

Appendix G

Composition 2

*Imagina que quieres compartir tu apartamento y buscas un/a compañero/a de cuarto.
¿Cómo quieres que sea esta persona? ¿Qué características prefieres que tenga? ¿Qué
cosas quieres que haga/no haga esta persona? Escribe un párrafo de unas 100 palabras.*
[Imagine that you want to share your apartment and you are looking for a roommate. What
do you want this person to be like? What characteristics do you prefer him/her to have?
What things do you want this person to do or not to do? Write a paragraph of about 100
words.]