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The Development of Discourse Markers in Narrations Written by Spanish Heritage Language Learners: A Case for Explicit and Implicit Instruction

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THE DEVELOPMENT OF DISCOURSE MARKERS IN NARRATIONS WRITTEN BY SPANISH HERITAGE LANGUAGE LEARNERS: A CASE FOR EXPLICIT AND IMPLICIT INSTRUCTION

by

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DEDICATION

I dedicate this Dissertation to my parents, Linda and Juan Salazar, and my brother, Javier Cisneros.

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ABSTRACT

Studies in English as a Foreign Language (EFL) indicate that the use of discourse markers (DMs) in the academic writing of second language learners improves the overall quality of these texts by contributing to their cohesion and comprehensibility (Saif Modhish 2012; Jalilifar 2008; Intaraprawat & Steffensen 1995). However, despite the importance of the use of DMs in second language writing, the acquisition and production of DMs in the field of Spanish as a Heritage Language (SHL) has been given little attention. Few studies on the teaching of DMs to Spanish Second Language (SSL) learners have focused on oral discourse and suggest that both explicit and implicit instruction promote the learning and use of DMs among SSL learners (Hernández & Rodríguez-González 2013; de la Fuente 2009). However, pedagogies that promote the use of DMs in SHL writing have not yet been identified in the literature, and pedagogies for the use of DMs in SSL writing are few (Saíz 2003). For this reason, my Dissertation attempts to answer the following research questions: 1) What is the frequency of use of discourse markers used by SHL learners in narrations? and 2) Does the following pedagogical intervention (i.e., Explicit Instruction + Input Flood +

Textual Enhancement) increase the production of discourse markers in the narrations of SHL learners compared to traditional instruction? For this study, 39 SHL students enrolled in advanced Spanish writing courses served as participants: 19 served as participants in the Experimental group and 20 in the Control group (i.e., who received traditional instruction). All participants were asked to write two narrations of two different short, silent films: a pre-test narration and a post-test narration. Before writing the second narration, participants in the Experimental group watched a video on the functions and uses of DMs (i.e., explicit instruction) while reviewing a sample narration that incorporated implicit instruction strategies (i.e., Input Flood and Textual Enhancement). Participants in the Control group reviewed a list of DMs and completed a fill-in-the-blank activity using DMs from the list provided. A total of 600 discourse markers from the pre- and post-test narrations were extracted and results indicate that participants resorted to using the same set of DMs: pero ("but") (16.3%), cuando ("when") (16.3%), luego ("then") (8.6%), entonces ("then") (7.5%), and porque ("because") (7.3%); these five DMs accounted for about 48% of the DMs used in the narrations written by participants. Results also indicated that participants showed a preference for singleword DMs that sequence events (e.g., cuando ("when") and luego ("then")). Results also showed that about one-third (i.e., six) of the participants in the Experimental group incorporated new, complex (i.e., two- to three-word) DMs, such as ya que ("given that") and tan pronto como ("as soon as"), in their post-intervention narrations; these DMs were explicitly mentioned and used in the video that served as the pedagogical intervention. This increase in the use of DMs suggests that a combination of Explicit and Implicit Instruction promotes the acquisition and use of DMs in SHL writing. Additionally, an independent samples *t*-test comparing the number of DMs utilized in the post-test

narrations of both the Experimental and Control groups produced a significant t value ($t(37) = 2.53$, $p < .02$). An examination of the means revealed that the Control group had a lower mean than the Experimental group ($M = 5.95$ and $M = 9.05$, respectively).

Lastly, this dissertation also addressed the effects of the age at which SHL learners began to produce Spanish on the syntactic complexity, morpho-syntactic accuracy, and fluency of SHL narrations. That is, do the narrations of SHL learners with different experiences with Spanish (i.e., early SHL speakers vs. late SHL speakers), enrolled in a third-year Spanish writing course, differ in syntactic complexity, morphosyntactic accuracy, and fluency measures? If so, what are the differences and/or similarities in the syntactic complexity (i.e., mean length of T-Unit and mean number of clauses per T-Unit), morphosyntactic accuracy (i.e., error-free T-Units per T-Unit and error type), and fluency (i.e., number of words, number of T-units, and number of subordinate clauses per text) of narrations produced by these two types of SHL learners? The analysis of the data collected for this Dissertation indicated that Early and Late SHL learners did not differ regarding the syntactic complexity (i.e., Mean Length of T-unit and Total Number of Clauses per T-unit) and fluency (i.e., Total Number of Words, T-units, and (Type of) Subordinate Clauses) of their narrations. However, Early and Late SHL participants differed regarding the morphosyntactic accuracy (i.e., Error-Free T-units) of both narrations. Nevertheless, both groups were similar in the types of errors most produced in their narrations given that more than 46% of the errors produced by Early and Late SHL participants were preposition and vocabulary errors.

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Introduction

Motivations of the Present Study

I identify as a heritage speaker and learner of Spanish. As a child, I was surrounded by Spanish not only at home but also at church. Although my relationship with the church remains complicated to this day, it was at church where I developed my Spanish literacy skills. That is, I learned to both read and write in Spanish in church. Regarding my English writing skills, in high school and as an undergrad, I was told by multiple instructors that I was a strong writer in English. Though, to this day, I do not know exactly what those teachers and professors noted in my writing to make this claim. When I began to pursue my graduate studies in Spanish, I was told by a few Spanish professors that I was a strong writer in Spanish, which truly shocked me. As a Spanish heritage language learner, I never imagined I could express myself as well in Spanish as I could in English, especially in an academic setting nor did I ever reflect on what processes, skills, and types of writing instruction made me a strong writer in both languages.

Given that writing in the heritage language can make Heritage Language learners feel anxious (Torres et al. 2020) and since it is usually identified as SHL learners' weakest or least developed language skill (Bowles & Bello- Uriarte 2019), this Dissertation attempts to provide insight into how individuals like myself, that is, Spanish Heritage Language (SHL) learners, develop our Spanish writing skills. In doing so, this Dissertation contributes to the research literature in Spanish Heritage Language Writing that addresses and tests appropriate pedagogical approaches to teaching writing to heritage language learners. Also, I hope to encourage other researchers to continue this

line of research that will allow SHL learners to improve their writing and become confident in their heritage language skills and abilities.

Overview of the Present Dissertation

This Dissertation is divided into the following chapters:

1. Chapter 1 defines certain terms used in this Dissertation, i.e., *discourse marker* and *Spanish heritage language (SHL) learner*. I also review studies in English as a Second/Foreign Language that highlight the importance of discourse markers in writing. Lastly, I summarize studies in SHL writing regarding pedagogy and complexity, accuracy, and fluency measures.
2. Chapter 2 summarizes research in the use of Explicit and Implicit Instruction in Second Language Acquisition.
3. In Chapter 3, I present the three research questions and predictions that are addressed and answered in this Dissertation. I also describe the methodology implemented in this study: the participant recruitment process and demographics, the tasks completed by participants, and the coding process for the narrations.
4. In Chapter 4, I provide and describe the results of each research question.
5. Chapter 5 discusses the results and relates them to previous research in SHL writing, the use of discourse markers, and syntactic complexity, morphosyntactic accuracy, and fluency measures in SHL writing.
6. Lastly, Chapter 6 provides a summary of the Dissertation in terms of its contributions to the fields of Heritage Language Teaching and Spanish

Heritage Language Writing research. I also identify this study's limitations and propose future research questions.

Chapter 1

Literature Review on Discourse Markers and Spanish Heritage Language Writing

1.0. Overview of Chapter

The main purpose of this Dissertation is to describe and detail the use of discourse markers (DMs) in narrations written by Spanish Heritage Language (SHL) learners. My Dissertation will attempt to address the lack of research regarding the acquisition and production of DMs for the SHL learner (Sánchez-Naranjo 2018; Saíz 2003). The scarcity of studies on the use of DMs in SHL writing indicates the potential for research that investigates the implementation of best pedagogical approaches to teaching discourse markers in heritage language writing courses and contributing to the field of Instructed Heritage Language Acquisition (Bowles 2018; Montrul & Bowles 2017).

Writing in the heritage language is important to SHL learners enrolled in university-level Spanish courses because they are expected to write academic essays as part of the course curriculum. Given that the use of DMs in essays written by L2 learners has been shown to help L2 writers construct cohesive essays (Saif Modhish 2012; Jalilifar 2008), it can be inferred that the effective use of DMs in texts written by SHL learners is just as beneficial. Additionally, it is important to study the use of DMs in the academic writing of SHL learners since studies have "recogniz[ed] that writing tends to be HLLs' weakest skill" (Gatti and O'Neill 2018, 723; Spicer-Escalante 2007). Therefore, researching about best practices in terms of pedagogical approaches to teaching DMs to SHL learners can help these learners improve their Spanish writing skills.

In this chapter, I first define the terms *heritage language learner* and *discourse marker* as used in this Dissertation. I then summarize the studies on how DMs are used as a linguistic strategy by English Foreign[1] Language (EFL) learners and Spanish Second Language (SSL) learners to produce cohesive, coherent, and high-quality written texts. In the final section of this chapter, I provide a literature review of SHL writing studies that recommend certain pedagogical approaches to SHL writing instruction and SHL writing studies that analyze the syntactic complexity, morpho-syntactic accuracy, and fluency of texts written by SHL learners.

1.1. Defining Heritage Language Learner

Defining the term *heritage language learner* can be a complicated task since either a "narrow" or "broad" definition of this term can be used (Potowski 2013, 405). For example, Valdés' 2000 definition of *heritage learner* is considered "narrow" because, according to this definition, a *heritage learner* is an individual who is "to some degree, bilingual in English and the heritage language" (1). Consequently, language learners who only have a cultural connection to a language, but do not speak nor understand it, are not included in this definition of *heritage learner*.

In this study, I adopt a "broad" definition to define *Spanish heritage language learner* (abbreviated as SHL learner) as an individual who has a linguistic and/or cultural connection to Spanish. For example, in the United States, an SHL learner is an individual who was raised in a household where Spanish, and/or sometimes English, was spoken;

[1] Regarding the use of the terms "foreign language learner" and "second language learner", when summarizing the results of a study, I utilize the term used by the researcher(s) to refer to their participants. Unless otherwise stated and used by other researchers, I will use the term "second," rather than "foreign," in my Dissertation.

however, this exposure to Spanish does not mean these individuals spoke the heritage language (i.e., Spanish) as children or teenagers (Potowski 2013, 405). Although SHL learners share some characteristics, according to Torres 2020, "HL learners' linguistic knowledge is also highly variable due to internal and external factors such as amount of input in the HL that can determine their linguistic outcomes" (3). That is, not only does an HL learner's experience with the HL distinguish them from L2 learners, HL learners form a heterogenous group (Torres 2020, 3). This feature of SHL learners is relevant to this study because the participants were divided into two groups of SHL learners based on the age they began to speak Spanish and their exposure to both Spanish and English throughout their lifetime.

1.2. Discourse Markers: Definition and Classification

Many studies have emphasized the lack of a unitary definition for the term *discourse marker* (Sánchez-Naranjo 2018; Travis 2005; Fraser 1999). Table 1 provides various definitions that have been proposed and used to define and identify the forms and functions of DMs. Despite the many definitions for this term, for the purposes of this study, I define the term *discourse marker* as words or phrases that indicate a relationship between segments of speech (de la Fuente 2009, 211) and as words or phrases that are used to sequence and structure discourse (Hernández & Rodríguez-González 2013, 6). I adopt this definition of *discourse marker* in this study given that these two studies (i.e., de la Fuente 2009 and Hernández & Rodríguez-González 2013) serve as a point of comparison for this Dissertation.

Table 1. List of Discourse Marker Definitions

Reference	Definition of Discourse Marker
Schiffrin 1987, 31	"I operationally define markers as sequentially dependent elements which bracket units of talk."
Travis 2005, 27	"…the key role of such items, to mark, or act on, indeterminate chunks of discourse and indicate how they should be understood in relation to the context in which they occur."
Fraser 1999, 950	"To summarize, I have defined DMs as a pragmatic class, lexical expressions drawn from the syntactic classes of conjunctions, adverbials, and prepositional phrases."
de la Fuente 2009, 211 (citing Fraser 1999)	"Constructing L2 discourse involves the use of cohesive resources or discourse markers, both lexical (e.g., deictic markers such as *all of this*, *that*, etc.) and grammatical (e.g., conjunctions). Discourse markers are words or phrases that signal a relationship between the segment they introduce and the prior segment, with their contribution to the meaning of the message being procedural rather than conceptual (Fraser 1999)."
Hernández and Rodríguez-González 2013, 6	"Discourse markers function at a referential, interpersonal, structural, and cognitive level as signposts that orient speakers and listeners during a communicative exchange (Aijmer, 2002; Fung & Carter, 2007; Jones, 2009)."
Sánchez-Naranjo 2018, 158	"De hecho, enriquecen la interpretación que quiere lograr el autor del texto y, en combinación con la característica de la conectividad, los MDs hacen progresar el texto asegurando que el lector o escucha puedan obtener una imagen coherente y puedan construir el significado de lo que está siendo comunicado." [As a matter of fact, discourse markers enrich the interpretation the author of a text wants to achieve and, in combination with their function as connectors, discourse markers allow a text to flow to ensure the reader or listener can attain a coherent image and can construct the meaning of what is being communicated.]

Discourse markers have traditionally been divided into different categories based on their function; however, these categories are not consistent throughout many studies on the use of DMs in L2 writing. For example, Jalilifar (2008) categorized DMs into the following categories: contrastive, elaborative, inferential, and topic relating DMs. Others, such as Saif Modhish (2012) and Vande Casteele and Collewaert (2013), include the preceding DM categories and include causative, consequential, and reformulative DMs. Alternatively, Sánchez-Naranjo (2018) only provides two main DM categories: connective DMs (which she subcategorizes into information structuring, connective, and reformulative DMs) and socio-pragmatic DMs. However, in this study, I use the DM categories provided by Hernández (2011), which include: 1) to express a sequence of events, 2) to express a result, 3) to express a contrast, 4) to add information, 5) to express a condition, and 6) to express a conclusion. I adopt the DM categories used by Hernández (2011) because the SHL participants of this study utilized these DMs in their narrations and they completed a similar DM familiarity activity described in Hernández and Rodríguez-González (2013), a continuation of the 2011 study. Also, adopting the DM categories and definitions from these studies facilitated the comparison of the use of DMs between SHL learners and SSL learners.

According to these studies, DMs can function to signal a relationship between sentences (i.e., elaborative), indicate that a sentence is a conclusion derived from the preceding sentence (i.e., inferential), and to provide a counter argument to a preceding utterance (i.e., contrastive) (Jalilifar 2008; Vande Casteele & Collewaert 2013). Table 2 summarizes the DM categories stated in the studies mentioned above and provides examples of DMs for each category (if provided by the author(s)).

Table 2. Discourse Marker Categories

Reference	Categories of Discourse Markers
Intaraprawat & Steffensen 1995	Metadiscourse Forms • Connectives (e.g., *however, in the first place, and, as mentioned above, in regard to*) • Code glosses (e.g., *in other words*) • Illocutionary markers (e.g., *we claim that, I hypothesize that, to conclude*) • Validity markers (e.g., Emphatics *undoubtedly, it is obvious that, certainly*; Hedges *may, probably, it is likely/unlikely that*) • Attitude markers (e.g., *surprisingly, it is disturbing that*)
Lahuerta Martínez 2004	• Elaborative DMs (e.g., *also, for example*, and *in addition*) • Contrastive DMs (e.g., *but, however, although*) • Causative DMs (e.g., *because*, *since*) • Inferential DMs (e.g., *so, as a consequence, as a result*) Topic relating DMs (e.g., *with regards to, in relation to*)
Jalilifar 2008	• Elaborative DMs (e.g., *and*, *moreover*, *to sum up*) • Inferential DMs • Contrastive DMs • Causative DMs • Topic relating DMs
Hernández 2011	• To express a sequence of events (e.g., *primero* (“first”) and *finalmente* (“in the end”, “finally”)) • To express a result (e.g., *por eso* (“for that reason”) and *por lo tanto* (“therefore”)) • To express a contrast (e.g., *al contrario* (“on the contrary”) and *sin embargo* (“however”)) • To add information (e.g., *además* (“besides”) and *también* (“also”)) • To express a condition (e.g., *porque* (“because”) and *ya que* (“so”))

	• To express a conclusion (e.g., *así que* (“so”) and *en conclusión* (“in conclusión”))
Saif Modhish 2012	• Elaborative DMs (e.g., *and* and *also*) • Inferential DMs (e.g., *so*) • Contrastive DMs • Causative DMs • Topic relating DMs
Vande Casteele & Collewaert 2013	• Connective DMs, such as Contrastive DMs (e.g., *pero* (but), *no obstante* (“nevertheless”), *en cambio* (“however”), *al contrario* (“on the contrary”), *sin embargo* (“however”)) • Consequential DMs (e.g., *entonces* (“therefore”) and *así que* (“so”)) • Ordering (Opening, Closing, and Continuative) DMs (e.g., *entonces* (“then”)) • Reformulative DMs (e.g., *al fin y al cabo* (“in the end”), *a fin de cuentas* (“at the end of the day”), *total* (“in the end”), and *en fin* (“in short”)) • Metadiscoursive DMs (e.g., *pues* (“well”))

Sánchez-Naranjo 2018	According to Sánchez-Naranjo (2018), there are two main groups of DMs:
	• Connective DMs
	  ○ Information Structuring (e.g., *en primer lugar* (“in the first place”), *pues* (“well”))
	  ○ Connective (e.g., *además* (“besides”), *por tanto* (“therefore”), *por el contrario* (“on the contrary”), *porque* (“because”), *para que* (“so that”))
	  ○ Reformulative (e.g., *mejor dicho* (“better said”), *es decir* (“that is”), *al fin y al cabo* (“in the end”))
	• Socio-pragmatic DMs (e.g., *desde luego* (“of course”), *en efecto* (“indeed”, “in effect”), *por lo visto* (“apparently”))

The use of DMs among SSL students is indicative of advanced proficiency in the target language and mastery of these cohesive devices are reflective of "the ability to produce speech/text at the discourse level" (de la Fuente 2009, 211; Hernández 2013). However, the acquisition of DMs by SSL students is challenging due to many characteristics attributed to DMs. These characteristics include: 1) they are often not explicitly taught to second language learners or mentioned in SSL textbooks, 2) they lack perceptual salience, that is, they have low communicative value and can occur in utterance final position, which means they are less likely to be perceived and processed by second language learners, and, 3) discourse markers are multifunctional, that is, DMs do not have one specific meaning or function (Hernández 2011, 164). In the next section, I elaborate and summarize the findings of studies in the fields EFL and SSL that demonstrate how students of these languages use DMs to produce high quality written texts.

1.3. Second Language Studies on Discourse Markers (ESL/EFL and SSL)

Although there are studies that analyze the use of DMs in second language writing (Sánchez-Naranjo 2018; Vande Casteele & Collewaert 2013; Saif Modhish 2012; Jalilifar 2008; Lahuerta Martínez 2004; Intaraprawat & Steffensen 1995), it is still an understudied area of research (Saif Modhish 2012). The studies described below, primarily from the field of English as a Foreign Language, analyze the use of DMs among Iranian EFL learners, Yemeni EFL learners, and U.S. and Flemish Spanish as a Foreign/Second Language learners, and indicate how DMs advance the quality and cohesion of second language writing.

Intaraprawat & Steffensen (1995) analyzed the use of metadiscourse features in persuasive (i.e., argumentative) essays of twelve English as a Second Language learners at a Midwestern university in the U.S. The goal of their study was to prove that a higher use, in number and variety, of metadiscourse forms improves the quality of essays written by ESL learners (256). The essays, which were written as part of a placement exam, were scored from 1 to 5 by five raters; they were evaluated based on criteria such as, clear thesis statement, paragraphing, overall organization, and grammar (257-258). For this study, the six poorest essays, with an average score of 1 to 1.2, and the six best essays, with an average score of 5, were analyzed for the use of metadiscourse features, such as, connectives, illocutionary markers, emphatics, and hedges.

Although the authors do not limit their study to the use of metadiscourse forms, one of the metadiscourse features analyzed was connective discourse markers, such as, *however* and *and* (258). The authors found that a greater use and wider range of use of metadiscourse markers, including connective DMs, improved the quality of the essays, that is, essays with a higher score showed more use of metadiscourse markers (270). Regarding the use of connectives, the authors mention that these devices link and structure ideas to produce a cohesive text (266). This finding indicates and supports the assertion that these linguistic devices, or DMs, are used by SL writers to elevate the quality of their writing. Although, the authors highlight the importance of the use of metadiscourse markers for second language learners, they do not mention how learners learn to use these linguistic structures through a particular type of instruction, which is a central focus of this Dissertation.

Lahuerta Martínez (2004) examined the use of discourse markers in 78 expository essays written by native Spanish speakers who were first-year English students at the University of Oviedo. Their essays were assessed for content, organization, vocabulary, language use, and mechanics to determine the relationship between the frequency of use and type of DMs and the quality of the essays written by the ESL participants (66). She found that elaborative DMs (e.g., *also, for example*, and *in addition*) were most frequently used in participants' essays, followed by contrastive DMs (e.g., *but, however, although*), causative DMs (e.g., *because, since*), inferential DMs (e.g., *so, as a consequence, as a result*), and topic relating DMs (e.g., *with regards to, in relation to*).

She also found a statistically significant relationship between the number of DMs used in an essay and the score it received. That is, the more DMs used in an essay (specifically elaborative, contrastive, and topic relating DMs), the higher score it received, which was indicative of a higher quality essay (73-75). Lastly, Lahuerta Martínez (2004) observed that high quality essays used a variety of DMs while the writers of the poorer quality essays repeatedly used the same DMs in their texts (77). In summary, the results of Lahuerta Martínez (2004) indicate that a greater and varied use of DMs is associated with a high-quality essay. These results suggests that DMs improve and advance the quality of essays written by L2 learners. However, one limitation of this study is that it does not consider how DMs were taught to these English learners. Lahuerta Martínez (2004) only suggests the need for focused instruction for ESL learners to learn the correct use of English DMs (78) but details on the nature of such instruction were not provided.

Jalilifar (2008) studied the correlation between the quality of descriptive essays of Iranian EFL learners and the use of DMs by comparing the quality of the essays to the frequency of the appropriate use of DMs in essays written by three groups of EFL Iranian university students: third- and fourth-year undergraduate students and graduate students. For this study, a total of 90 students, 30 students in each group, wrote a descriptive essay every week for eight consecutive weeks. At the end of this eight-week period, 598 essays were analyzed for number and type of discourse maker, and whether the discourse markers were used in an appropriate context (116).

Jalilifar (2008) observed that as participants' experience with writing in English increased, the appropriate use of discourse markers increased; that is, the graduate student group used more DMs (i.e., in quantity and quality) than the third- and fourth-year participants. However, he found that the three groups used elaborative DMs (e.g., *and*, *moreover*, *to sum up*) the most, followed by inferential DMs, contrastive DMs, causative DMs, and topic relating DMs, which he attributed to the nature of descriptive essays.

He also found that the graduate student group used a variety of DMs as evidenced by their lower percentage of elaborative DMs and higher percentage of other types of DMs. Additionally, Jalilifar (2008) found a correlation between the appropriate use of DMs and the quality of the written essays, that is, the use of discourse markers in an appropriate context produced higher quality essays (117). Jalilifar (2008) also remarks how a lack of use of DMs and the repetitive use of the same DM can make an essay incohesive as well as dull and difficult to comprehend (118-119).

Jalilifar (2008) provides evidence that the appropriate use of DMs in the academic writing of L2 learners is important because it improves the quality and comprehensibility

of essays. It also highlights how the appropriate use of DMs increases with more writing experience in the target language. This finding has implications for the present study as participants were divided into two groups of SHL learners, early speakers vs. late speakers of the HL. Patterning the findings of Jalilifar (2008), it is expected that SHL learners who have earlier experiences with speaking in Spanish will show a greater use of DMs in their narrations. Nevertheless, like Lahuerta Martinez (2004), one limitation of Jalilifar (2008) is that it does not consider how DMs were taught to these English learners and if the type of instruction that these EFL learners received regarding DMs affected the use of DMs in their essays. Another limitation of this study is the lack of detail regarding learners' previous knowledge or familiarity of DMs (see Hernández and Rodríguez-González 2013). It is important to document learners' previous knowledge of DMs because it allows instructors to identify whether students need, and, ultimately, benefit from being taught how to use DMs to advance their writing.

Saif Modhish (2012) analyzed 50 expository essays, written by third-year Yemeni EFL students majoring in English at Taiz University, to determine the correlation between the use of DMs and the quality of academic writing (58). To rate the quality of these texts, two EFL writing instructors evaluated these expository essays for grammar, content, style, punctuation and spelling. Like Lahuerta Martinez (2004) and Jalilifar (2008), Saif Modhish (2012) found that participants also used elaborative DMs (e.g., *also* and *for example*) more than other types of DMs (e.g., inferential (e.g., *since* and *because*) and contrastive DMs (e.g., *but* and *however*)) in their essays (58). However, unlike the previously mentioned studies, Saif Modhish (2012) did not find a strong positive

correlation between the use of discourse markers (with the exception of topic relating markers) and the quality of the essays.

Saif Modhish (2012) also found that these third-year EFL students limit their use of discourse markers to a familiar set of elaborative, inferential, and contrastive DMs (e.g., *also*, *so*, *but*, respectively), that is, they avoided producing unfamiliar DMs and showed repeated use of the same elaborative and inferential DMs (e.g., *and* and *so*). In addition to limiting their use of DMs to a familiar set or repeating the same DM in their essays, Saif Modhish (2012) also noted that some students did not produce any DMs in their essays. He provides various reasons for this result and for the poor quality of students' essays. He notes that some participants focused on producing grammatically correct utterances rather than focusing on the use of DMs. However, one other possible explanation for the lack of use of DMs could be that these students did not know how to use them to transition or connect ideas.

Nonetheless, Saif Modhish also mentions the possibility that some participants did not have the linguistic competence to produce grammatically correct sentences. He attributes this lack of proficiency in writing in English to "an acquisition-poor environment where real and authentic language input is rather scarce" (59). That is, learners did not have sufficient target language input to produce morpho-syntactically accurate sentences nor learn or acquire the uses of English DMs. For these reasons, he concludes that some participants of the study produced poor quality essays.

Saif Modhish (2012) demonstrates how language proficiency and tlanguage experiences and input affect a learner's ability to use DMs in their essays. This finding can be applied to the participants recruited for the present study, that is, to both groups of

SHL learners, in that it can be assumed that early and, therefore, more extended use of the HL would allow SHL learners to produce more DMs in their speech and writing in the HL. Nevertheless, one limitation of Saif Modhish (2012) is that only essays written by third-year English language learners were analyzed; Saif Modhish did not analyze essays written by more proficient learners, which would lend more support to the interpretation of their results.

Vande Casteele and Collewaert (2013) is one of the few studies that evaluates the use of DMs in narrative essays written by Spanish Foreign language learners; however, the study does not evaluate the quality of these essays in relation to their use. Rather, this study compares the use of DMs in the narrative texts written by Flemish university students, who were Spanish Foreign Language learners, to that of a control group consisting of native speakers of Spanish. The participants of this study wrote a 600-word essay in which they narrated and described, in Spanish, a day they would never forget.

The results of this study indicate that the SFL learners produced more discourse markers (17.25 per 1,000 words) than the native Spanish speakers (12.5 per 1,000 words) (553). However, with respect to type of DM, the SFL learners showed some similarities and differences in comparison to the native speakers. For example, both groups used contrastive DMs the most in their essays, but the SFL learners showed a more varied use of DMs. The SFL group produced *pero* ("but"), *sin embargo* ("however"), *no obstante* ("nevertheless"), *en cambio* ("however") and *al contrario* ("on the contrary") (553), while native Spanish speakers only used *pero* ("but") and *sin embargo* ("however") (553). The authors attribute these differences to the fact that students were aware that their essays were being evaluated by their instructor and, for this reason, utilized a variety

of DMs. The native speakers, however, did not have this constraint. Other differences between the two groups included: with respect to consequential DMs, SFL learners favored the use of *entonces* ("then") while native speakers preferred *así que* ("so"), and, regarding reformulative DMs, SFL learners favored *al fin y al cabo* ("in the end") and *a fin de cuentas* ("at the end of the day"), while the native speaker group preferred the use of *total* ("in the end") and *en fin* ("in short") (554).

To summarize, the results of Vande Casteele and Collewaert (2013) reveal, not surprisingly, that SSL learners and native speakers use different DMs (in type and variety) in narrative essays, albeit with some similarities. Consequently, one limitation of this study is this comparison of SFL learners to native Spanish speakers instead of to SFL learners of higher or lower proficiency. This study would have provided more insight into the acquisition and production of DMs for this second language learner population had the essays written by students of higher and lower proficiency been analyzed. For this reason, in this Dissertation, I focus solely on one language learner group, on SHL learners, to determine how SHL learners with different HL experiences acquire and utilize DMs.

One final study that analyzes the production of DMs in essays written by SSL learners is Sánchez-Naranjo (2018). This study analyzes the use, in type and frequency, of DMs in texts written by 40 SSL learners enrolled in writing workshops in a southern U.S. public university. The data in her study consisted of a collection of 120 essays, written by intermediate-level learners of Spanish. Each participant wrote a total of three essays: a narrative essay, an expository essay, and an argumentative essay. Sánchez-Naranjo classified DMs into two main groups: connective DMs and socio-pragmatic

DMs, and found that connective DMs [e.g., *y* (“and”) and *además* (“besides”)] were more common than socio-pragmatic DMs [e.g., *por lo visto* (“apparently”) and *bien* (“okay”)] and that SSL learners used more DMs in narrative essays than in expository and argumentative essays (165-166).

Although the focus of Sánchez-Naranjo (2018) was not pedagogical, but rather, to determine what type of DM is most frequent in the academic writing of SSL learners, this understanding of the use of DMs among SSL learners can inform and impact SSL pedagogy since it can reveal the types of DMs should be taught to use in their writing. Similarly, this Dissertation analyzes the frequency of use and type of DMs used in narrations written by SHL learners. For this reason, Sánchez-Naranjo (2018) provides a basis for the types of DMs that should be used in the narrations written by the participants of the present study. However, unlike the studies mentioned above, Sánchez-Naranjo (2018) does not relate whether students appropriately used DMs in their essays or which type of DMs students used (in)correctly. This detail would contribute substantially to the knowledge of the acquisition of DMs in the field of SSL and could be used to create pedagogical materials that would benefit SSL students learning to write coherent and cohesive essays.

Table 3. Brief Overview of Studies on the Use of Discourse Markers in Writing

Reference	Participants	Methodology	Results
Intaraprawat & Steffensen 1995	12 ESL students in U.S.	Each participant wrote a **persuasive** essay that was rated by 5 different raters.	**Greater use** and wider range of use of DMs **improved the quality** of essays.
Lahuerta Martínez 2004	78 first-years ESL university students in Spain	Each student wrote an **expository** essay that was rated by 2 different raters.	Essays with a **higher and varied use of DMs** received a **higher score** from raters.
Jalilifar 2008	90 EFL Iranian university students • 30 third-year undergraduate students • 30 fourth-year undergraduate students • 30 graduate students	598 **descriptive** essays written by students over the course of eight weeks	Greater use of **DMs** in an **appropriate context** led to a **greater quality** essay.
Saif Modhish 2012	50 third-year Yemeni EFL university students	50 **expository** essays evaluated by two EFL writing instructors	Students avoided producing unfamiliar discourse markers and showed repeated use of the same discourse markers. There was a positive correlation between the use of topic relating markers and essay quality.

Vande Casteele & Collewaert 2013	SSL Flemish university students & Native Spanish speakers	Participants wrote a 600- word **narrative** essay	**Overuse** and **inappropriate** use of DMs produced **incoherent** and **incohesive** essays.
Sánchez-Naranjo 2018	40 intermediate-level SSL learners in the U.S.	120 essays • 40 **narrative** essays • 40 **expository** essays • 40 **argumentative** essays	Connective DMs (*además* ("besides")), *es decir* ("that is")) were more common than socio-pragmatic DMs (*claro* ("of course"), *bien* ("okay")) and more DMs in the narrative essays than in argumentative and expository essays

Although this section summarizes studies on the use of DMs in texts written by ESL and SSL learners, Table 3 highlights important details about each of the studies mentioned above. Overall, these studies indicate that a greater (i.e., number and variety) and the appropriate use of DMs improves the overall quality of essays written by second language learners (Saif Modhish 2012; Jalilifar 2008; Lahuerta Martinez 2004). Additionally, these studies analyzed the use of DMs in different essay genres: narrative essays (Sánchez-Naranjo 2018; Vande Casteele & Collewaert 2013), expository essays (Sánchez-Naranjo 2018; Saif Modhish 2012; Lahuerta Martinez 2004), argumentative essays (Sánchez-Naranjo 2018; Intaraprawat & Steffensen 1995) and descriptive essays (Jalilifar 2008). By evaluating the use of DMs in different essay genres, these studies have revealed one commonality: elaborative, or connective, DMs are the most prevalent

DM used in essays written by second language learners, regardless of the target language (i.e., English or Spanish).

Despite these generalizations regarding the use of DMs in second language (SL) writing, these studies do not detail pedagogical approaches that help SL learners acquire the appropriate uses of DMs. Some of the studies summarized above recommend the use of focused and explicit instruction for the teaching of DMs (Saif Modhish 2012, 60; Lahuerta Martinez 2004, 78); however, they do not provide suggestions or materials to aid SL instructors in teaching discourse markers to SL learners. For this reason, this Dissertation attempts to create a pedagogical intervention that can be used by Spanish Heritage Language instructors, and possibly SSL instructors, to help SHL students acquire and produce DMs in their written texts.

Lastly, as mentioned by Saif Modhish (2012), this area of research, that is, the use of DMs in EFL writing, is understudied and "overlooked" (56). This gap is even more evident in the field of SSL as only three studies (Sánchez-Naranjo 2018; Vande Casteele & Collewaert 2013; Saíz 2003 (summarized in Chapter 2)) were found regarding the use of DMs in SSL learners' writing. However, this Dissertation focuses on another type of language learner: Spanish Heritage Language learners. For this reason, in the next section I review research on SHL writing to establish what is known about texts written by SHL learners and to emphasize the need for SHL writing studies that focus on the use of DMs in essays written by this language learner population.

1.4. Studies on SHL Writing

Of the four language skills (i.e., reading, writing, speaking, and listening), writing has typically been identified as the weakest, or least developed, for SHL learners (Spicer-Escalante 2005). Research on texts written by SHL learners has focused on the syntactic complexity, morpho-syntactic accuracy, and fluency (abbreviated as CAF) of these texts (e.g., Belpoliti & Bermejo 2020), the discourse and clause-combining strategies employed by SHL learners (e.g., Colombi 2005), and pedagogical approaches that benefit this group of learners (e.g., Beaudrie, Ducar & Potowski 2014). Although various studies in SHL writing have also addressed other aspects such as the experiences and perceptions of SHL learners regarding writing in Spanish (Torres et al. 2020) and compare SHL learners' writing to their Spanish oral proficiency (Gatti & Graves 2020), for the purposes of this study, I limit the following literature review of studies on SHL writing to those studies that address pedagogical approaches to SHL writing instruction and those that focus on the syntactic complexity, accuracy, and fluency of texts written by SHL learners.

1.4.1. Pedagogical Approaches to SHL Writing

Regarding pedagogical approaches to SHL writing instruction, some studies advocate for the use of explicit instruction to teach SHL learners the rhetorical and linguistic conventions of writing genres (Beaudrie et al 2014; Colombi 2003; Schleppegrell & Colombi 1997). For example, Schleppegrell and Colombi (1997) recommend explicit instruction regarding how text and clause structure work together to produce certain types of genres, in different contexts and situations. They also suggest

that students should be explicitly taught "ways of condensing information that are typical of many academic tasks" (494). Similarly, Colombi (2003) suggests the use of Systemic Functional Linguistics (SFL) in the SHL classroom, to allow students to analyze their texts to incorporate the discursive, semantic, and lexico-grammatical components that are characteristic of different genres of writing. However, while these studies recommend these approaches to SHL writing instruction, they do not provide examples as to how they should be implemented.

One of the most detailed documents regarding recommendations to SHL writing instruction is Beaudrie et al. (2014). Pertinent to this Dissertation is their recommendation that SHL learners be explicitly taught transitional words and expressions and how to use them appropriately. According to them, this can be done by having students analyze their use in readings and then having students use these words and expressions in their writing, to develop their academic essays and "make their writing more sophisticated" (145). This approach is similar to the one taken in this study since students were explicitly (and implicitly) taught on the uses of discourse markers.

A few studies in SHL writing provide examples of pedagogical approaches or activities that can be applied in the classroom to develop SHL learners' writing skills (Torres 2020, 2016; Martinez 2005; Potowski 2005; Schwartz 2003). For example, Schwartz (2003) recommends having students reflect on the writing strategies that work and do not work for them when writing in the heritage language (251). She also recommends the use of paraphrasing activities that will help students reprocess information and develop their abilities to phrase their thoughts in Spanish (252).

Nevertheless, Schwartz (2003) does not provide empirical evidence to support these recommendations.

Other studies, such as Potowski (2005), maintain that SHL learners, especially those who are beginning to learn to write in the HL, benefit from writing in multiple stages because it helps them formulate and express their thoughts effectively (46). That is, instead of assigning SHL learners an essay by simply providing a prompt, they should complete pre-writing activities where they discuss and brainstorm, in groups or individually, topics related to the essay prompt they will be assigned after completing these activities. Additionally, she recommends limiting student feedback and corrections to only important linguistic structures and does not recommend correcting all errors in SHL students' essays. Potowski (2005) also states that SHL learners' writing develops if they are given the opportunity to write informally and are allowed to code-switch to English in their writing assignments so they can translate these instances of English to Spanish later in the writing process (47-48).

Martinez (2005) briefly traces the changes in SHL writing instruction: from a focus on traditional grammar instruction like verb conjugations and spelling (i.e., a process approach) to a post-process approach, that is, writing instruction that focuses on developing students' knowledge and awareness of the discursive, lexical, and grammatical conventions of writing genres. Nevertheless, Martinez (2005) suggests that SHL writing instruction should not focus only on professional and academic genres but should utilize a flexible definition of "genre." That is, SHL writing courses should be a space where students "explore the rich flexibility" of genres "present in the use of discourse in multiple settings" (88). For this reason, he advocates the use of "genre

chain" activities, or "thematically linked writing assignment[s] driven by a multiplicity of communicative purposes" (88). That is, the use of activities that allow SHL students to transfer discursive and textual features across their Spanish and English texts.

In Martinez (2005), students completed a total of five writing assignments on language and literacy in their daily lives. These writing assignments differed in language and genre type; students wrote an essay about their daily use of the HL (in Spanish), a literacy autobiography (in English), an interview on experiences of language repression (in Spanish), an essay on the effects of language repression (in English), and a letter to their younger selves on the importance of maintaining the HL (in Spanish) (84). Martinez (2005) found that implementing this genre chain activity allowed SHL students to transfer discursive practices that transcended language and genre differences; these practices included the use of repetition, synonymy, and superordination.

Torres (2016) suggests that SHL learners develop their writing conventions and strategies in a flipped classroom model, that is, "taking out the lecture component of the course, and instead, encourag[ing] student actions during classroom time" (311). For this model, SHL students watched videos, for homework, that were designed to teach or review a writing convention and then students completed in-class activities and discussions which were designed to solidify students' understanding of a writing convention to allow them to apply it to their essays (317). However, this study did not empirically test the effects of the flipped classroom model on SHL learners' writing, rather this study reported on students' comments to the videos. As Torres mentions, he did not determine if the in-class practices helped students solidify the writing convention or if the video alone helped students become aware of it (320). For this reason, he

suggests that future studies should analyze the effectiveness of the flipped classroom model.

Lastly, Torres (2020) investigated how mode of communication (i.e., face-to-face (F2F) vs. synchronous computer-mediated communication (SCMC)) and dyad, or pair, types (i.e., HL-HL and HL-L2) affected the syntactic complexity and accuracy of collaborative written tasks in Spanish. The results of this study indicated that HL-HL pairs wrote more syntactically complex and morpho-syntactically accurate written texts (i.e., business letters) than HL-L2 pairs, and that SCMC interaction led to the use of more coordination, especially among HL-HL pairs. The latter result provides insight into the effects of modality on texts written collaboratively by these two types of Spanish language learners, that is, more coordination, "a sign of lesser syntactic complexification" (20), was used in the SCMC interaction because SHL learners found it more difficult to communicate their ideas via chat rather than face-to-face (19). Lastly, one limitation of the study, as Torres (2020) mentions, is that learners' individual texts were not analyzed to determine how task-based instruction and peer interaction benefit the syntactic complexity and accuracy of SSL and SHL written texts. For this reason, the present study addresses how explicit and implicit instruction affects SHL learners' writing.

Although the studies summarized above recommend certain approaches to SHL writing instruction, many of these studies do not provide activities nor materials to accompany their recommendations (Potowski 2005; Schwartz 2003; Colombi 2003; Schleppegrell & Colombi 1997). Martinez (2005) does provide a topic and other instructions for a particular "genre chain" writing activity; however, his study does not measure nor mention the effectiveness of this type of writing activity on the development

of syntactic complexity, accuracy, fluency, or other measures of SHL learners' written texts. Torres (2016) mentions that students received instruction on writing conventions via a video, in a flipped classroom model, but he did not analyze the effectiveness of these videos on students' writing tasks; he only reported students' comments and reactions to the effectiveness and value of these videos. Lastly, while Torres (2020) provided examples of the activities incorporated in his research, he did not indicate the type of writing instruction SHL learners received. The lack of details in terms of instruction in these studies reveal gaps in the current SHL writing research which the present study attempts to address, that is, the present study takes into account the type of instruction SHL learners received, providing example activities, and measuring complexity, accuracy and fluency (CAF) measures of SHL learners.

1.4.2. SHL Writing: Complexity, Accuracy, and Fluency (CAF)

In addition to studies that focus on pedagogical approaches to SHL writing, other studies in the field of Spanish as a Heritage Language have focused on measuring the syntactic complexity, morpho-syntactic accuracy, and fluency (often abbreviated as CAF) of essays written by SHL learners. The few studies that have focused on CAF indices of SHL written texts have compared these measures to those of SSL learners and native speakers of Spanish (Camus & Adrada-Rafael 2015; Sánchez Abchi & De Mier 2017; Spicer-Escalante 2007). For example, Spicer-Escalante (2007), using the same corpus as Spicer-Escalante (2005) (see section above), shows that the average T-unit[2] length

[2] A *t-unit* is defined as "an independent clause and any dependent clauses attached to it" (Torres 2020, 11). It is used to measure syntactic complexity or "the range and the sophistication of grammatical resources exhibited in language production" (Ortega 2015, 82).

produced by SHL learners is similar to that of SSL learners; however, this measure is significantly shorter than those produced by native speakers of Spanish.

This study also found that SHL learners produce, on average, a similar number of T-units in their essays as native speakers of Spanish; however, their texts are significantly shorter than those produced by this group. Spicer-Escalante (2007) also reveals a recurrent theme, or finding, in SHL writing: beginner and advanced-level SHL learners produce written texts that oftentimes share linguistic characteristics (e.g., average T-unit length and use of subordination) with those of SSL learners and native speakers of Spanish. However, this comparison of SSL and SHL learners' linguistic abilities with those of native speakers is problematic because it assumes that a native speaker's linguistic system is a standard to which SSL and SHL learners should aspire. Furthermore, Potowski (2013) states "bilinguals are not two monolinguals rolled into one" (409); this affirmation suggests that SSL, SHL, and native speaker linguistic systems are inherently different which makes comparisons of these groups linguistic systems futile.

Nevertheless, more recent studies on this topic, that is, the comparison of SHL written texts to those produced by SSL learners and native speakers of Spanish, emphasize these differences and similarities (Sánchez Abchi & De Mier 2017; Camus & Adrada-Rafael 2015). For example, Camus and Adrada-Rafael (2015) show that SHL learners outperform SSL learners in writing regarding syntactic complexity, such as mean length of T-units and subordination (Camus & Adrada-Rafael 2015). Sánchez Abchi & De Mier (2017), using written narratives of younger SHL learners (approximately 9 to 14 years of age), do not show differences in syntactic complexity, only in accuracy (as

measured in error-free T-units), when compared to monolingual Spanish speakers of the same age. Table 4 shows the findings of these two studies regarding complexity, accuracy, and fluency measures of SHL learners.

Table 4. Results of Camus & Adrada-Rafael 2015 and Sánchez Abchi & De Mier 2017

	Camus & Adrada-Rafael 2015	**Sánchez Abchi & De Mier 2017**
Mean Length of T-unit	17.31	6.93
Subordination Measures	Number of subordinate clauses/T-unit: 2.03	Number of clauses/T-unit: 0.2
Error-free T-Units (%)	68.04%	22.23%
Average Number of Words	427	87.3

One of the most comprehensive studies to date on SHL writing is Belpoliti and Bermejo (2020); however, this study differs from those previously mentioned in this section because they focus on beginner-level SHL learners, rather than advanced-level SHL learners. Their study focuses on the use of orthography, lexicon, and verbs, and on the development of complexity, accuracy, fluency, and discourse competence in the writing of beginner-level SHL learners. Regarding CAF measures, Belpoliti and Bermejo (2020) state that beginner-level SHL learners "have acquired basic and some complex structures of Spanish grammar that enable them to write long sentences and embed different types of clauses (albeit not always accurately or meaningfully)" and have "displayed features of advanced fluency and complexity, similar to the written production of Spanish monolingual learners at the high-school/pre-college level" (96).

This recent study on CAF measures of SHL learners' writing, once again, highlights how beginner-level SHL learners can construct syntactically complex sentences like high-school aged monolingual speakers of Spanish, but differ in accuracy from this native speaker population. Although many of the studies summarized in this section (e.g., Belpoliti & Bermejo 2020; Sánchez Abchi & De Mier 2017; Camus & Adrada-Rafael 2015) incorporate control groups consisting of native speakers of Spanish and /or SSL learners, the current study does not include these language learner groups since one of the main objectives of this Dissertation is to determine how an SHL learner's experience with the HL affects the complexity, accuracy, and fluency of their writing.

1.5 Conclusion

As shown above, the field of SHL writing is fairly abundant; however, there is a lack of studies on SHL learners' production of DMs in written discourse. Carreira and Kagan (2018) note that heritage language learners' struggle to produce paragraph-length discourse using connectors (i.e., discourse markers), which causes their discourse to be less cohesive (155). For this reason, it is important to include SHL learners in this area of research as many advanced Spanish courses require SHL learners to write essays using a formal and academic register. Finding appropriate pedagogical approaches to teaching the use of DMs in written and spoken discourse in either mixed SSL-SHL or exclusive SHL courses will benefit students and, ultimately, allow SHL learners to produce cohesive, coherent, and high-quality written texts. Consequently, Chapter 2 describes two types of instruction that have been used to teach grammar to SSL and SHL learners, Explicit and Implicit Instruction; it also details SSL studies that have incorporated

Explicit and Implicit Instruction to teach DMs to SSL learners, which serve as the basis for the methodology utilized in this Dissertation.

Chapter 2

Theoretical Framework for Pedagogical Intervention: Explicit Instruction and Implicit Instruction

2.0. Overview of Chapter

In the previous chapter, I operationalized certain terms relevant to this study (e.g., *heritage language learner/speaker* and *discourse marker*), summarized research that acknowledges the importance of the appropriate use of DMs in English as a Second Language writin,g and reviewed the findings of studies in the field of Spanish Heritage Language writing. In this chapter, I define two types of instruction utilized in the field of Second Language Teaching, i.e., Explicit Instruction and Implicit Instruction, that are relevant to the present study as they have been documented and researched in scholarship of Spanish language teaching and learning. I also describe strategies and methods associated with these two types of instruction.

I begin this chapter defining Explicit Instruction (see Section 2.1) and summarizing studies in the field of Spanish Instructed Heritage Language Acquisition (IHLA) that demonstrate the effectiveness of Explicit Instruction pertaining to the acquisition of certain linguistic features (e.g., the Spanish subjunctive) (see Section 2.1.1). After, I define Implicit Instruction (see Section 2.2) and describe two types of Input Enhancement strategies relevant to this Dissertation: Input Flood (see Section 2.2.1) and Textual Enhancement (see Section 2.2.2). In those sections, I also summarize studies in Second Language Acquisition (SLA) that address the use of input flood and textual enhancement to teach a variety of linguistic structures to Second Language (L2) learners of various languages. Finally, to conclude this chapter, I summarize the studies

on pedagogical interventions that have been empirically tested in teaching DMs to Spanish Second Language (SSL) learners (see Section 2.3).

2.1. Explicit Instruction

The present study examines whether Explicit Instruction is beneficial for Spanish Heritage Language learners. According to Ellis (2015), Explicit Instruction:

> "directs attention to form; is predetermined and planned (e.g., as the main focus and goal of a teaching activity; is obtrusive (interruption of communicative meaning); presents target forms in isolation; uses metalinguistic terminology (e.g., rule explanation); involves controlled practice of the target form" (242).

Loewen (2020) defines Explicit Instruction as:

> "when the primary goal of a lesson or activity involves overtly drawing learners' attention to linguistic features, such as morphosyntactic rules and patterns. In addition, in many instances the presentation of rules is accompanied by the provision of examples of said rules, often in ways that are decontextualized and devoid of larger semantic context" (114).

Both definitions presented above are relevant to the present study since the pedagogical intervention provided participants with an explanation of the functions of discourse markers and overtly drew their attention to the discourse markers used in the narration reviewed in the video.

Studies in Second Language Teaching attest to the effectiveness of explicit instruction on the learning of certain linguistic structures. For example, explicit instruction has been shown to benefit L2 English learners' implicit and explicit knowledge of (non)generic uses of English articles (Akakura 2012) and, also, L2 Spanish

learners' pragmatic development of refusal strategies in informal and formal contexts (Félix-Brasdefer 2008). Similarly, a few of the studies summarized in Chapter 1 suggest that focused, explicit instruction of DMs benefits L2 learners of English and helps them learn the meaning and correct use of English and Spanish DMs (Saif Modhish 2012, 60; Lahuerta Martinez 2004, 78). However, no guidelines or materials are provided with these articles. Other studies have attested to the effectiveness of Explicit Instruction, when combined with Input Flood (see Sections 2.2.1 and 2.3 for more detail), in teaching DMs to SSL learners (Hernández 2008, 2011; Hernández & Rodríguez-González 2013, reviewed in section 2.3); however, these studies have focused exclusively on oral production. Although most studies addressing the benefits of Explicit Instruction have been conducted with second language learners, there are a few studies in the field of Instructed Heritage Language Acquisition (IHLA) that empirically measure the benefits of explicit instruction on the linguistic development of Spanish Heritage Language learners. These studies are summarized in subsection 2.1.1.

2.1.1. Explicit Instruction for Heritage Language Learners

In recent years, the field of Instructed Heritage Language Acquisition (IHLA) has emerged with the primary goal of determining whether heritage language learners benefit from formal, or classroom, instruction (Bowles 2018; Montrul & Bowles 2017, 489). Few studies in SHL instruction have researched the effects of explicit instruction on student learning and have empirically tested whether instructed SHL learners make more learning gains than uninstructed HL learners (Montrul & Bowles 2010; Potowski et al. 2009).

Below I summarize the contributions and findings of these pioneering studies in Spanish IHLA.

Potowski et al. (2009) compared the effects of two different types of instruction (i.e., processing instruction and traditional output-based instruction) on the use of the imperfect subjunctive in adjectival clauses among 127 SHL learners and 22 SSL learners. In their study, they define processing instruction as a "treatment [that] briefly explains the relevant structure and tells learners how it is often misprocessed" which is followed by a "series of structured input activities that push them to process the structure correctly" (545). Traditional output-based instruction is defined as "form-oriented activities that are found in most of the textbooks of heritage Spanish that include a grammar component" (552).

For their respective instructional treatments, the two groups completed the same number of activities, and received explicit instruction[3] on how the imperfect subjunctive is formed, where it is located in a sentence, and when it is used. In addition to the explicit instruction on the imperfect subjunctive, the processing instruction group received input that "was structured to direct learners away from two natural processing tendencies that can prevent them from making the critical connection between subjunctive mood and their respective meaning" (550). This type of input was provided by separating the target form (i.e., the imperfect subjunctive) from the imperfect indicative form, either physically in written form or temporally in aural form, and by placing the target form in

[3] The authors do not specify whether explicit instruction was provided in English or in Spanish. However, they provide the processing instruction activities in the Appendix of their article. These activities are written in Spanish.

boldface print in sentence-initial position in written input. The traditional instruction group did not receive this explanation nor processing instruction.

Participants also completed interpretation, production, and grammaticality judgment pre-tests and post-tests the day before and the day after their respective instructional treatment. Overall, this study found that SSL learners demonstrated more gains in all three post-tests than the SHL learners, who only showed gains in the interpretation and production tasks. That is, SHL learners could interpret the meaning of the imperfect subjunctive and produce this form with the appropriate main clause verbs at a significantly higher percentage after both treatments. Although Potowski et al. (2009) found that there was no effect for instruction type, they suggest that SHL learners "can benefit from focused grammar instruction" but more research is needed to determine what type of specialized instruction benefits heritage language learners (565).

Montrul and Bowles (2010) investigated the use of explicit instruction with negative evidence to assist 45 college-level SHL learners (re)acquire dative case marking. To test the effects of this type of instruction, students first completed a pre-test, in the form of a written production task and a written grammaticality judgment task (8). A week later, students completed an online instructional treatment that consisted of an explicit grammatical explanation of dative case marking that included both positive and negative evidence[4]. Following the treatment, participants completed a practice activity that differed in format from the pre- and post-tests. For this practice activity, participants used a post-verbal drop-down menu to determine whether a sentence required differential object marking. Upon completing each sentence, participants were provided with explicit

[4] Positive evidence is providing learners with examples of what is grammatical and acceptable, while negative evidence is providing learners with examples of what is ungrammatical (Ellis 2015: 155).

feedback that indicated whether their response was (in)correct and provided an explanation as to why their answer was (in)correct. After the treatment, students completed the post-test, which was provided in the same format as the pre-test. The results of the study indicated that the treatment did improve SHL learners' production and recognition of dative case marking. These results suggest that explicit instruction, including explicit feedback and negative evidence, can benefit SHL learners in the classroom (19).

The few studies that tested the effectiveness of explicit instruction on SHL teaching reveal positive outcomes for this type of instruction. The results of these studies favor the use of explicit instruction for SHL learners, but have only focused on few linguistic structures, i.e., dative case marking and the use of the subjunctive. Also, the participants of these studies are described as second-generation, U.S.-born individuals residing in Chicago, and those in one study are categorized as receptive and productive abilities in Spanish (Potowski et al. 2009: 550). However, the authors do not describe the participants' use of the heritage language (e.g., how often they write in Spanish) or their experiences with the heritage language (e.g., when they began to speak Spanish). For these reasons, more research needs to be conducted on the usefulness of explicit instruction for the development and use of other linguistic structures in SHL learners' oral and written production. This Dissertation undertakes this task and focuses on the development of the use discourse markers in narrations written by SHL learners with different experiences with the heritage language (i.e., Early and Late SHL learners). Table 5 provides a summary of the linguistic structures, interventions, and the results of the IHLA studies detailed above.

Table 5. Summaries of Explicit Instruction SHL Studies

Study	Linguistic Structure	Intervention	Results
Potowski et al 2009	Spanish imperfect subjunctive in adjectival clauses with indefinite referents	• Processing Instruction (PI) for L2 and HL learners • Traditional Instruction (TI) for L2 and HL learners • Assessment using Interpretation Task, Grammaticality Judgment Task, and Production Task	Both L2 and HL learners, from PI and TI groups, showed improvement in interpretation and production tasks. Only L2 learners showed improvement in grammaticality judgment task.
Montrul & Bowles 2010	Dative case marking with animate direct object and dative experiencers	• Instructional Treatment Group of 45 SHL learners. Treatment consisted of explicit grammatical explanation, explicit feedback, and negative evidence.	Explicit instruction, accompanied with negative evidence and feedback, benefits SHLLs recognition and production of *a* with animate direct objects and dative experiencers (1).

2.2. Implicit Instruction

According to Ellis (2015), Implicit Instruction is "instruction aimed at facilitating incidental acquisition—i.e. the picking-up of linguistic features when learners are not making deliberate efforts to learn them" and "does not aim at inducing metalinguistic understanding of target features" (267). That is, Implicit Instruction does not present

grammar rules to students, nor does it require an instructor to explicitly direct students' attention to a target grammatical structure (Zyzik and Marqués Pascual 2012, 2). In this Dissertation, Implicit Instruction was used in the pedagogical intervention in the form of two Input Enhancement strategies, that is, focus-on-form strategies used to make target structures salient in language learner input to implicitly draw learners' attention to a target form to attempt to promote the processing and learning of the target structure (Ellis 2015; Wong 2005, 33; Bowles 2003). These types of Input Enhancement strategies were Input Flood and Textual Enhancement. In subsection 2.2.1, I define Input Flood and review Second Language Acquisition studies that tested the effectiveness of input flood, and in subsection 2.2.2, I define Textual Enhancement and summarize the findings of certain SLA studies that tested the efficacy of this implicit instruction technique.

2.2.1. Input Flood in Second Language Learning

Input Flood, in the context of language teaching, is an implicit instruction strategy that "provides students with a copious amount of meaningful target language input" (Hernández 2018, 1). This strategy provides plenty of input for second language acquisition to occur because it makes a target linguistic form more salient in the input supplied to learners. For example, input flood was implemented in the present study by including 13 DMs in a 259-word narration provided and reviewed with students in the pedagogical intervention. By making the target form more salient, students' attention is drawn to the target form and can help students learn its meaning and function (Hernández 2018; Nemati & Motallebzadeh 2018; Balcom & Bouffard 2015). There is no correct or appropriate number of exemplars of the target structure that should be used in input flood

activities; however, it is recommended to use as many examples as possible in the input provided to students (Wong 2005, 39).

It has also been observed that input flood can be beneficial for learners because it is less disruptive during meaning-based activities. Nevertheless, input flood is not without its disadvantages as it may not be explicit enough to encourage reflection on the differences between learners' use of the target form and the examples of the form in the input they receive (Williams and Evans 1998, 141). Furthermore, although input flood is easy to implement since it only requires including many examples of the target structure in a lesson or an activity, it may not always promote noticing of the linguistic forms, especially if they are not salient and have low communicative value. However, this disadvantage could be remedied by pairing input flood with explicit instruction and/or corrective feedback (Hernández 2018, 2).

What follows are summaries of studies in the field of Second Language Acquisition that utilize input flood as a strategy to teach certain grammatical structures to second language learners of various languages. For the purposes of this dissertation, I will only summarize the results of a few studies that have utilized input flood (i.e., Williams & Evans 1998; Loewen et al. 2009; Zyzik & Marqués Pascual 2012; Balcom & Bouffard 2015; Nemati and Motallebzadeh 2018; Safdari 2019).

Williams and Evans (1998) studied the effectiveness of Input Flood and Explicit Instruction among intermediate-level ESL learners who were acquiring the uses of predicate adjectives and the English passive. The instructional treatments were administered to two experimental groups: one group received positive evidence in the form of materials flooded with the target forms, while the second group received explicit

instruction in the form of rule presentation, corrective feedback, and the same flooded material provided to the first group. They also included a control group that did not receive any type of experimental treatment.

Their data consisted of pre- and post-tests in the form of grammaticality judgment tasks and sentence completion tests for participial adjectives (146) and sentence completion tests and two narratives for the English passive (147). They found that for participial adjectives, the input flood only group did improve in the post-test; however, the second experimental group, who received input flood, explicit instruction, and corrective feedback, performed better in the post-test than the input flood only and the control groups. Regarding the passive, both experimental groups performed better than the control group but did not outperform each other in the post-test. Their study suggests that input flood alone can have a positive effect on learners' ability to notice a target structure; however, the researchers conclude saying that instructional treatment, form type, and learner profile are important factors that contribute to the effectiveness of treatments. That is, a learner's readiness to acquire a form and the complexity of the target form can affect the type of instructional treatment that should be used.

Reinders and Ellis (2009) studied the effects of enriched input (i.e., input flood) and enhanced input (i.e., explicitly directing learners' attention to the target structure) on the intake and acquisition of negative adverbs among 28 "upper-intermediate proficiency level" ESL learners (289). For this study, the pedagogical treatment consisted of completing one of three different tasks (i.e., a dictation task, an individual reconstruction task, or a collaborative reconstruction task) for three consecutive weeks. For these treatments, the enriched input group was told to complete the task, while the enhanced

input group was told to complete the task and to pay attention to the position of the auxiliary verb in each sentence.

A week after completing the last treatment, participants completed an immediate post-test (i.e., an untimed and a timed grammaticality judgment task) and a week later, participants completed a delayed post-test consisting of the same judgment tasks from the previous week. Reinders and Ellis (2009) found that enriched input had a positive effect on intake of the target structure and the acquisition of implicit knowledge, while enhanced input did not influence intake nor implicit or explicit knowledge. Although they concluded that the results of their study suggest that implicit instruction is more effective than explicit instruction, they state that the noticing instructions may not have been explicit enough to help learners acquire the target structure.

Zyzik and Marqués Pascual (2012) analyzed the effects of three different types of pedagogical interventions on the recognition and production of differential object marking (DOM) on 123 second-year Spanish second language learners (9). Participants were exposed to one of three different interventions: 1) the explicit grammar intervention, 2) the input flood intervention, and 3) the enhanced input flood intervention in which participants were instructed to notice the use of DOM. One of the main differences between the three groups was that the explicit grammar group received an explanation of the target structure, and the other two groups received more exemplars of DOM (25 vs. 88 exemplars, respectively) (12).

Two weeks after receiving their respective intervention, participants completed a post-test in the form of three separate tasks: 1) a cued sentence production task, 2) a video narration task, and 3) a grammatical preference task (13). These same tasks were

also completed three weeks before the interventions to serve as the pre-tests; these assessment tasks were different from those tasks assigned and completed during the instructional treatments. For example, the explicit grammar group reviewed the rules regarding DOM and read an authentic text in which they had to identify all the examples of DOM. They also had to narrate a comic strip and describe pictures that elicited the use of DOM. On the other hand, the input flood group and the enhanced input flood group learned the meaning of certain Spanish idioms that contain a transitive verb and DOM. To learn the meaning of these Spanish idioms, students completed a matching activity, a sentence completion activity, and a substitution activity (11).

The results of the study indicated that explicit instruction had a positive effect for participants, reflected in a statistically significant difference between the groups in the post-test scores for the grammatical preference task and the cued sentence production task. However, there was no statistically significant difference between the groups for the narration task. The researchers attributed the results of the narration task to its more cognitively demanding nature. That is, participants had to produce a "discourse-length narrative" under a time constraint instead of "isolated sentences…with continued visual support" as in the cued sentence production task (25).

Balcom and Bouffard (2015) studied the effectiveness of a combination of oral input flood and other types of focus-on-form instruction (e.g., explicit instruction, error correction, input enhancement, recasts and pushed output[5]) on the production of positive and negative adjective placement among 24 beginner-level L3 learners of French. This

[5] A recast occurs when an "instructor rephrases the learner's incorrect utterance correctly" (Wong 2005, 120), while pushed output is "learner output that is produced with effort and reflects the outer limits of the learner's linguistic competence" (Ellis 2015, 324).

study had two groups: 1) a Treatment group, who received the instruction previously mentioned, and 2) a Control group, who completed the same activities as the Treatment group but did not receive any input flood or focus-on-form instruction. To assess the effectiveness of the pedagogical treatment, students completed a sentence completion task and a grammaticality judgment task for both the pre-tests and the post-tests.

Regarding the use of positive adjectives, they found that the pedagogical treatment had a positive effect on learners in the Treatment group since there were statistically significant differences between the Treatment group's scores on the pre-tests and post-tests with those of the Control group. Additionally, the Control group showed no significant within-group differences in their scores on the pre-tests and post-tests. Regarding the use of negative adjectives, both groups showed significant improvement from scores on the pre-tests to those of the post-tests, and there were no significant differences between both groups and their performances on these tasks. Balcom and Bouffard interpret these results in favor of pairing other focus-on-form strategies with Input Flood.

Nemati and Motallebzadeh (2018) analyzed the effectiveness of Input Flood on the learning of five target structures (i.e., the simple present (use of 3rd person '-s'), the present continuous, the simple present, the past continuous, and the present perfect) in the oral production of 43 pre-intermediate Iranian EFL learners (1078). They had two groups: 1) a Control group that listened to 20 passages (that did not contain input flood of the target structures) over twenty 90-minute sessions and 2) an Experimental Group that listened to twenty passages that contained Input Flood of the five target structures. Data was collected through a pre-test in the form of a structured interview, and 40 days after

completing the pre-test, participants completed the same structured interview for the post-test. They found that the Input Flood treatment did not have a significant effect on the acquisition of the target forms when compared to the control group, who did not receive Input Flood or any type of focus-on-form instruction. The authors explain that students in the Experimental group may not have benefitted from Input Flood because they may not have been prepared to acquire the target forms (1075).

Lastly, Safdari (2019) analyzed the effects of Input Flood and Input Enhancement (i.e., a combination of highlighting, boldfacing, italicizing, changing font type, and coloring as a strategy for noticing) on the use of the present simple and continuous tenses in the writing of 75 beginner-level Iranian EFL learners. This study had three groups: 1) a Control group, 2) an Input Flood group, and 3) an Input Enhancement group. She found that the Input Flood group and the Input Enhancement group performed better than the Control group in the post-test, that is, each input treatment improved students' writing performance, and there were no differences between each experimental group. Additionally, Safdari interviewed five participants from each experimental group regarding their perceptions of the use of input flood or input enhancement. Most of the interviewed students responded favorably to both Input Flood and Input Enhancement, noting that the repeated or modified input helped them learn the grammar better (290).

Overall, the studies on the use of Input Flood are conflicting. Some studies suggest Input Flood alone is enough to allow learners to acquire certain linguistic forms (Safdari 2019; Reinders and Ellis 2009; Williams & Evans 1998), other studies have demonstrated that Input Flood should be accompanied by explicit instruction, corrective feedback or noticing instructions to allow for the acquisition of target forms (Nemati and

Motallebzadeh 2018; Balcom & Bouffard 2015; Zyzik & Marqués Pascual 2012). As mentioned by Hernández (2018), certain linguistic forms require explicit instruction as well because they are not salient in discourse (i.e., not easily perceived by learners in the input provided), they are redundant, and/or they have no communicative value (4). Given that discourse markers are not salient in discourse (Hernández & Rodríguez-González 2013), I take Hernández's recommendation into consideration by pairing Input Flood with Explicit Instruction and Textual Enhancement.

Table 6 provides an overview of the studies summarized above, that is, the target linguistic structure, the pedagogical intervention, and results.

Table 6. Overview of Input Flood Articles

Study	Linguistic Structures	Intervention	Results
Williams and Evans 1998	1. Participial adjectives 2. English passive	1. Control Group 2. Input Flood group 3. Explicit Instruction and Input Flood Group	For participial adjectives, the Input Flood only group improved in the posttest. The Input flood, explicit instruction, and corrective feedback group performed better in the posttest than the other groups. Regarding the passive, both experimental groups performed better than the control group but did not outperform each other in the posttest.
Reinders and Ellis 2009	1. Negative adverbs	1. Enriched Input Group 2. Enhanced Input Group	Enriched input (i.e., input flood) had a positive effect on intake and the acquisition of implicit knowledge. Enhanced input did not have any effect on intake or explicit and implicit knowledge.
Zyzik and Marqués Pascual 2012	1. Differential Object Marking	1. Explicit Grammar Group 2. Input Flood Group 3. Enhanced Input Flood Group	The Explicit Grammar Group performed better on the cued sentence production task and the

			grammatical preference task. However, there was no statistically significant difference between the groups in the narration task.
Balcom and Bouffard 2015	1. Positive and Negative Adverb Placement	1. Control Group 2. Treatment Group (input flood, explicit instruction, recasts, etc.)	The Treatment group showed significant differences both between and within groups.
Nemati and Motallebzadeh 2018	1. The simple present (use of 3rd person '-s') 2. The present continuous 3. The simple present 4. The past continuous 5. The present perfect	1. The experimental group received input flood of target structures through 20 90-minute sessions in which they listened to a passage.	There were no significant differences between the Experimental and Control groups as measured through structured interviews 40 days after the pre-test.
Safdari 2019	1. Present Simple tense 2. Present Continuous tense	1. Input Flood group 2. Input Enhancement group 3. Control group	Both experimental groups performed better than the control group; however, neither experimental group outperformed the other.

2.2.2. Textual Enhancement in Second Language Learning

Textual Enhancement, much like Input Flood, is used to make a target linguistic structure salient and to draw learners' attention to a target linguistic form. However, it differs from Input Flood in that it is primarily used in written input. Textual Enhancement

is incorporated into a text by means of **bolding**, *italicizing*, highlighting, or changing the color, font size, or font type of the target form in a meaning-bearing text provided to students (Wong 2005 4,9). Like Input Flood, this strategy is inobtrusive and easy to implement; however, one disadvantage of utilizing Textual Enhancement is that it may draw a learner's attention to a linguistic form but not necessarily to its meaning (Wong 2005, 56). There have been many studies published on the use of textual enhancement in the field of Second Language Acquisition; however, for the sake of space, I only summarize studies in Spanish SLA in which Textual Enhancement was used (i.e., Jourdenais et al. 1995; Overstreet 1998; Leow 2001; Bowles 2003; LaBrozzi 2016; Loewen and Inceoglu 2016).

Jourdenais et al. (1995) analyzed the effects of Textual Enhancement on the noticing and production of the Spanish preterit and imperfect among ten second-semester Spanish second language learners. This study did not have students complete a pre-test, instead, they utilized the scores from the preterit and imperfect section of a mid-term to assess students' knowledge of these target forms (192). The text used in this study was a version of "Little Red Writing Hood", written by three native Spanish speakers. In the enhanced version of this text, all instances of preterit and imperfect verb forms were underlined and printed in a different font from the rest of the text, and, in addition to these modifications, preterit verbs were shadowed and imperfect verbs were bolded.

After reading their respective text, students were asked to write a narration of a series of pictures they were shown by the researchers. To measure noticing and processing, think-aloud protocols were used during the writing process, that is, participants were asked to voice aloud all thoughts during this task. The results of

Jourdenais et al (1995) indicated that Textual Enhancement did increase both the noticing and production of the target structure since participants from the Enhanced group explicitly mentioned the target form more in the think-aloud protocols and used it more in obligatory contexts in the written narration compared to the Control group (208). Writing skills and proficiency level can affect how learners interact with the input (209).

Overstreet (1998) aimed to determine whether learners' familiarity with a text affected the efficacy of Textual Enhancement on learners' comprehension and production of two target structures, the Spanish preterit and imperfect. For his study, 50 third-semester Spanish second language learners received a packet that contained one of two texts: *Caperucita roja*, the familiar text, and *Una carta a Dios*, the unfamiliar text, and other activities. There were four different packets varying in text familiarity and enhancement: familiar/unenhanced text, familiar/enhanced text, unfamiliar/unenhanced text, and unfamiliar/enhanced text. The enhancements for both texts consisted of boldface and underlined imperfect verbs and shadowed and underlined preterit verbs.

A week before reading their assigned text, participants completed a circle-the-verb pre-test in which they circled the correct tense, the preterit or imperfect, in a narration. A week later, students were given the packets containing one of the four versions of the story and asked to complete a short comprehension quiz on the text. After finishing the quiz, they completed a written narration task that elicited the two target structures to measure their production of these two forms. Overstreet (1998) found that neither text familiarity nor Textual Enhancement influenced learners' production of the Spanish preterit and imperfect; he also found a negative effect of Textual Enhancement on the Enhanced group's comprehension of the text. He attributed these effects to

learners focusing more on form and not meaning and not being able to focus their attention on both target forms. Lastly, he suggests using long-term treatments, rather than short-term treatments, to see a positive effect of Textual Enhancement, and that more advanced learners would benefit more from this type of input enhancement (249).

Leow (2001) examined the benefits of Textual Enhancement for 38 first-year Spanish second language learners' comprehension and production of the formal, or *usted*, imperative verb form. In his study, he also implemented an online measure (i.e., think-aloud protocol) to gauge learners' attentional processes while interacting with the input. Leow modified the target structure verbs by underlining the whole verb but only bolding the verb ending (e.g., hag**a**) in the text provided to students. To assess the effectiveness of the enhanced text, students completed three different tasks after reading the assigned (un)enhanced text: a comprehension task, a fill-in-the-blank production task, and a multiple-choice recognition task. While completing the reading and activities, students were asked to speak their thoughts aloud. Three weeks after completing these tasks, they were asked to complete the production and recognition tasks again. The results of Leow (2001) indicate that Textual Enhancement did not promote more noticing of the target structure for the Enhanced group compared to the Unenhanced group, nor were there any differences in the comprehension tasks between both groups.

Building on Leow (2001), Bowles (2003) examined the effects of Textual Enhancement on the noticing, comprehension, and production of the formal imperative among 15 intermediate-level Spanish language learners (401). In her study, Bowles divided participants into two groups, an Experimental group, who received the same enhanced text used in Leow (2001) (i.e., in which the target structure was underlined but

only the final vowel was bolded, e.g., sub**a**), and a Control group, who received the unenhanced text (403). Participants first completed a two-part pre-test: a fill-in-the-blank production task and a multiple-choice recognition task. While reading the task, students were asked to voice their thoughts aloud (i.e., think-aloud protocols) to determine whether students noticed the targeted structure. After reading the task, participants completed immediate post-tests after reading their respective text, and three weeks later completed delayed posttests. For both versions of the post-tests, students completed a comprehension task (only for the immediate post-test), a production task, and a recognition task.

The results of Bowles (2003) indicated that there were no statistically significant differences between both groups in the think-aloud protocols and the production and comprehension tasks, which suggests no benefits to Textual Enhancement. However, Bowles cautions that these results should be interpreted cautiously due to a small sample size of participants (i.e., 8 in the Control group and 7 in the Experimental group). Although differences were not statistically significant, she notes that participants in the Experimental group performed better than the control group in post-test production tasks. She also notes that the enhanced text may have helped two participants make "the double meaning-form connection, associating the targeted forms with both subjunctive and imperative forms" (408). Nevertheless, this finding needs to be substantiated with more data from more participants.

Loewen and Inceoglu (2016) studied the use of color as a form of textual enhancement on the production, comprehension, and recognition of the preterit and imperfect past tense among 30 second-semester Spanish second language learners. In

addition to having an Experimental group (15 participants) and a Control group (15 participants), this study also included a group of 16 native Spanish speakers: eight read the enhanced text and eight read the unenhanced text (95). For this study, participants completed a pre-test (i.e., a cloze test and an oral production task), read an enhanced or unenhanced text, then completed a post-test (i.e., a cloze test and an oral production task), and completed an exit questionnaire (96). For the reading task, they used a simplified version of Overstreet's (1998) text, "Caperucita Roja"; in the enhanced text, they highlighted the imperfect verbs in red and the preterit verbs in green. One difference in this study is how the text was presented; they divided the text into three sections because they used eye-tracking to measure the length of participants' gaze on each targeted form (97). In the cloze test, participants had to write the correct form of the target structure, either the preterit or imperfect; for the oral production task, participants narrated a series of six pictures cards from "Little Red Riding Hood". The exit questionnaire served to gauge participants' noticing and awareness of the target forms.

The results of Leowen and Inceoglu (2016) revealed that there was no statistically significant difference between the Enhanced and Unenhanced L2 groups regarding the time spent attending to the targeted structures. There were also no differences between both groups in the production tasks, i.e., the cloze tests and the oral task. However, they did note that more participants from the Unenhanced group were able to identify the target structure correctly than in the Enhanced group. As a whole, these results suggest that the type of Textual Enhancement used in this study did not benefit learners' production or noticing of the preterit and imperfect tenses. They attribute this finding to

not providing students in the Enhanced group with explicit instructions to focus on the enhanced, target structures.

Lastly, LaBrozzi (2016) studied how different types of textual enhancements affected form recognition and reading comprehension of a previously learned grammatical form, the Spanish preterit tense of '-er' verbs (76). The 125 participants of this study consisted of third-semester Spanish second language learners who were divided into seven different groups reflecting the Textual Enhancement treatment they received. These included: the Control group (no enhancement), the Underline group, the Italics group, the Bold group, the Capital letters group, the Increase in Font Size group, and the Change in Font Type group. These enhancements were added to the present (i.e., '-e') and preterit morpheme (i.e., '-i') for first person plural '-er' verbs (e.g., italics, com*e*mos/com*i*mos) found in a text written by LaBrozzi and a collaborator (81).

To measure the efficacy of each treatment, participants completed two translation tasks (a pre-test and immediate post-test) and multiple-choice comprehension task (a post-test). For the translation tasks, participants had to translate 40 Spanish verbs to English, and for the comprehension task, they answered 40 comprehension questions of the texts' content. LaBrozzi found that type of textual enhancement did not affect reading comprehension; however, he found that increased font size fomented the use of the preterit tense by participants, that is, Textual Enhancement had a positive effect on form recognition (88). He attributes the effectiveness of increase font size to the fact that students deduced the morpheme was intentionally modified to draw their attention to it (85).

Overall, the results of the studies summarized in this section are varied, inconclusive, and conflicting concerning the effectiveness of Textual Enhancement on the acquisition of certain grammatical structures for Spanish L2 learners. Some studies suggest that Textual Enhancement does not increase learners' intake or accuracy of target structures (e.g., Loewen & Inceoglu 2016; Leow 2001; Overstreet 1998), while others suggest Textual Enhancement can increase the use but not the accuracy of the linguistic target form (e.g., LaBrozzi 2016; Bowles 2003; Jourdenais et al. 1995). According to LaBrozzi (2016), these differences in the findings of these studies can be attributed to different factors such as different types of enhancement (e.g., bolding, underlining, and change in font color), learners' previous knowledge of a target form, the type of tasks implemented (e.g., production vs. judgment), and the proficiency level of participants (e.g., beginner-level students vs. intermediate-level students). Nevertheless, controlling for these factors in studies on the effects of Textual Enhancement is important as it makes the results comparable and will gauge the best approach and conditions to utilize this type of instruction.

Table 7 provides an overview of the target linguistic structure, the types of Textual Enhancements used, and the results of the Textual Enhancement SLA studies summarized in this section.

Table 7. Overview of Textual Enhancement Studies

Study	Target Structure	Types of Textual Enhancement	Results
Jourdenais et al. 1995	Preterit and Imperfect tenses in Spanish	Underlining and boldface for imperfect verbs Underlining and shadowing for preterit verbs	Enhanced group noticed and used target structure more in tasks than the unenhanced group.
Overstreet 1998	Preterit and Imperfect tenses in Spanish	Underlining and boldface for imperfect verbs Underlining and shadowing for preterit verbs	Text familiarity and Textual Enhancement did not have a positive effect on production, recognition, or comprehension.
Leow 2001	Formal (*usted*) imperative in Spanish	Underlined verb form and bolding verb ending (final vowel)	No significant differences between enhanced and unenhanced groups regarding noticing, producing, nor comprehending target structure.
Bowles 2003	Formal (*usted*) imperative in Spanish	Underlined verb form and bolded imperative ending (final vowel)	Small effect, deeper levels of processing and hypothesis testing, for two students in enhanced group for recognition and production tasks.
Loewen and Inceoglu 2016	Spanish Preterit and Imperfect Structures	Preterit forms in green and imperfect forms in red	Participants in the enhanced group did not report noticing enhanced forms more than the control group nor did they perform better on cloze test

			and oral production task.
LaBrozzi 2016	Spanish Present and Preterit Tense of first person plural '-er' verbs	Six types of individual textual enhancements: 1. Underlining 2. Italics 3. Bold 4. Capital letter 5. Increase font size 6. Change font type	Increased font size had a positive effect on participants' performance on the translation task; however, enhancement did not affect participants' comprehension of the text.

2.3. Pedagogical Approaches to Discourse Markers (SSL)

In this section, I summarize research published on the teaching of discourse markers to SSL learners (de la Fuente 2009; Hernández 2011; Hernández & Rodríguez-González 2013). These studies question whether Implicit (i.e., Input flood, Textual Enhancement, and Consciousness-Raising tasks) or Explicit Instruction is an ideal pedagogical approach to teaching discourse markers to this language learner population.

De la Fuente (2009) compares the effectiveness of a Consciousness-Raising (C-R)[6] task, an explicit method, and an Input Enrichment (I-E) task, an implicit method, on the comprehension and production of discourse markers for 24 fifth-semester Spanish students who were native English speakers (213). Consciousness-Raising tasks are meant to raise a learner's awareness of a particular linguistic form by requiring learners to talk explicitly about its function (212). In contrast, Input Enrichment tasks do not require

[6] According to Wong 2005, like Input Flood and Textual Enhancement, Consciousness-Raising tasks are a type of Input Enhancement technique whose goal is to "make learners aware (or conscious) of the rules that govern the use of particular language forms while providing them with opportunities to engage in meaningful interaction" (79).

learners to comment on the function of a linguistic form, but rather, the form is more salient in the input to allow learners to notice it, such as highlighting or italicizing the form in a written task (212).

For this study, the students were divided into two groups and then divided into pairs, that is, six pairs completed the C-R task, and six pairs completed the I-E task. Each pair, regardless of the task, was given the same text that contained four Spanish discourse markers in bold print to make them salient; however, the task they had to complete after reading the text differed. For the C-R task, each pair had to provide an English translation for each discourse marker; while for the I-E task, each pair had to answer questions regarding the content of the text (214).

Upon completing the task, each pair were interviewed in a stimulated recall session, where participants reflected on and answered questions related to their levels of attention during the task. After the recall session, each individual had to complete two assessment tasks. First, they were given a text in Spanish with eight blanks which they had to fill with the four discourse markers from the previous task. For the second assessment task, which was given the following day, they were given a text written in English in which they had to translate four discourse markers into Spanish. These two tasks measured the participants' comprehension and retrieval of each discourse marker's meaning (214).

De la Fuente found that the more explicit method, that is, the Consciousness-Raising task, was more effective than the implicit, Input Enrichment task, since the participants of the C-R task showed statistically significant higher scores for both assessment tasks. She found that the SSL learners who completed the C-R task showed

more immediate comprehension of the discourse markers, as shown by the results of the first assessment task. She also found that the SSL learners who completed the C-R task were more successful in retrieving the discourse markers, as was shown by the results of the second assessment task (215). As supported by the results, de la Fuente suggests that "C-R tasks seem more effective by focusing learner's attention to [discourse marker's] forms, meanings, and uses, and consequently raising learners' awareness of such forms, and promoting explicit learning" (217).

Hernández (2011) continues and expands the results and findings of de la Fuente 2009; however, he utilized a different methodology, such as experimental treatments, a pre-test, immediate post-test, and a delayed post-test. For this study, he included a total of 91 undergraduate students, who were native English speakers, enrolled in fourth-semester Spanish courses (164). Sixty-six of the participants were divided into two groups for the experimental treatments and one control group of 25 participants, who did not receive the experimental treatment. The experimental treatments in this study refer to whether the participants received Explicit Instruction (EI) and Input Flood (IF), or simply received IF instruction (164). Explicit Instruction is providing students with the specific rule and explanation of a linguistic form (Hernández & Rodríguez-González 2013: 4), while Input Flood makes a form more salient in a task to ensure learners notice it (5). The purpose of these two experimental groups were to test whether EI and IF had a greater impact on student's use of discourse markers than just IF instruction.

To test this, the EI and IF group were given explicit instruction and feedback on discourse markers; the explicit instruction they received was in the form of a handout which explained the function of discourse markers and also contained a list of Spanish

discourse markers with their English translation. The IF group was not given this explicit instruction and feedback as part of their experimental treatment (Hernández 2011: 165). Prior to the start of the experimental treatments, each group was given a pre-test, in the form of a picture description task, and after the experimental treatment, each group was given a picture description task 24 hours after their treatment and another picture description task four weeks after the experimental treatment (167). These pre- and post-tests were given to collect data and compare the differences in the production and the retention of discourse markers for each group.

The results of Hernández (2011) indicated that both experimental treatments were just as effective regarding the use and retention of discourse markers. One of the only differences found between both groups was that the EI + IF group used a greater range of discourse markers than the IF group in both the immediate and delayed post-tests (169). Although this study contradicts de la Fuente (2009) in that it shows that sole IF instruction is an effective pedagogical approach for discourse markers, Hernández (2011) suggests that his results differ because the experimental groups were provided with three IF texts with a total of 49 discourse markers, as opposed to one IF text with 15 discourse markers. This gave students more time to draw their attention to and notice the use of discourse markers (176).

Hernández & Rodríguez-González (2013), a study that builds on the methodology and findings of Hernández (2011), added a new variable that had not been previously considered; the researchers measured the effects of EI + IF instruction and IF only instruction on the use of new or unfamiliar discourse markers. This new variable was important to their study because it helped them determine “if instruction had an impact on

learning of the target structure or if it was because the target structure was familiar to…L2 learners or was part of their L1 knowledge base" (8). For this study, 40 students, who were not the participants of the study, were asked to complete a questionnaire where they rated their familiarity and knowledge of 37 DMs[7]. Hernández & Rodríguez-González (2013) measured participants' familiarity of DMs to determine if either experimental treatment (i.e., EI + IF and IF only) fostered the acquisition of new or unfamiliar DMs (13). Not surprisingly, they found that IF only instruction was just as effective as EI + IF instruction; these results support those of Hernández (2011). However, with regards to the use of new or unfamiliar discourse markers, they found that EI + IF instruction had a greater impact on the consistent use of these discourse markers (23-24).

Although the studies summarized above analyze the use and production of discourse markers in oral production, Saíz (2003) is one of the only studies that focuses on the teaching of DMs in the context of argumentative texts written by Spanish Foreign Language learners. Saíz (2003) recommends students be provided with a list of DMs that are commonly used in the specific genre of writing being taught in a course. For example, in this article, she provides a list of DMs that are used in argumentative essays. She suggests that fill-in-the-blank activities are not appropriate for acquiring the pragmatic functions of DMs. Rather, students should be provided with a text in which the DMs are

[7] The 37 DMs were: *antes* (before), *después* (after), *pero* (but), *durante* (during), *porque* (because), *cuando* (when), *también* (also), *por ejemplo* (for example), *entonces* (then), *primero* (first), *mientras* (while), *finalmente* (finally, in the end), *sabes que* (you know that), *pues* (so), *por eso* (for that reason), *en realidad* (actually, in fact), *entonces* (therefore), *hasta que* (until), *al principio* (at first), *más tarde* (later), *al contrario* (on the contrary), *de repente* (suddenly), *es que* (the thing is that), *en cambio* (instead), *sin embargo* (however), *además* (besides), *es decir* (that is), *así que* (so), *de hecho* (as a matter of fact), *mejor dicho* (better said), *por lo tanto* (therefore), *en cuanto* (as soon as), *ya que* (since, given that), *en el fondo* (deep down), *a todo esto* (speaking of that), *puesto que* (since, given that), and *o sea* (that is).

modified (similar to Input Enrichment (see de la Fuente 2009)), and students should also analyze how DMs contribute to the argumentative structure of the essay (similar to Consciousness-Raising (see de la Fuente 2009) and Explicit Instruction (see Hernández 2011)) (Saíz 2003: 700-701). Nevertheless, Saíz does not empirically test this assertion in her article nor provide activities that can be used to teach discourse markers.

The studies summarized in this section show the pedagogical approaches that foster the learning of discourse markers by SSL learners (see Table 8). Although these studies are primarily limited to the use of discourse markers in oral production, these pedagogical approaches can be applied to the teaching of discourse markers in Spanish writing courses to determine if they are just as effective for written discourse. These studies indicate that there is more to be researched with regards to the acquisition and production of discourse markers in Spanish second and heritage language written texts.

Table 8. Overview of Spanish Second Language Acquisition Studies on Discourse Markers

Reference	Participants	Methodology	Results
de la Fuente 2009	24 fifth-semester SSL students	• One group completed a Consciousness-Raising (CR) task and the other an Input Enrichment (IE) task	The CR group comprehended and retrieved DMs more effectively and quickly
Hernández 2011	91 fourth-semester SSL students	• IF group, EI + IF group, and control • One pre-test and two post-tests	Both experimental treatments were just as effective regarding the use and retention of discourse markers
Hernández & Rodríguez-González 2013	53 fifth-semester SSL students	• IF group, EI + IF group, and control • One pre-test and two post-tests • DM familiarity questionnaire	IF only instruction was just as effective as EI + IF instruction; however, EI + IF instruction had a greater impact on the consistent use of newly acquired DMs
Saíz 2003	N/A	N/A	Recommends advanced students be provided with a list of DMs that are commonly used in specific genres (e.g. argumentative). She suggests students should be provided with a text in which the DMs are highlighted, and students **should also analyze how DMs contribute to the argumentative**

			structure of the essay.

2.4. Conclusion

The studies summarized in this chapter indicate that Explicit Instruction (e.g., rule presentation) is beneficial for SHL learners' regarding the interpretation and production of the Spanish subjunctive and Spanish dative case marking (Montrul & Bowles 2010; Potowski et al. 2009). In contrast, studies on the use of Implicit Instruction (e.g., Input Flood and Textual Enhancement) among second language learners are inconclusive regarding their interpretation and production of certain linguistic structures (e.g., French adverb placement, the Spanish preterit and imperfect, etc.). Due to the inconclusive nature of the effects of Implicit Instruction and given that it has been suggested (see Hernández 2018; de la Fuente 2009) and tested by researchers (see Hernández 2011; Hernández & Rodríguez-González 2013), the current Dissertation provides SHL participants with a combination of Explicit and Implicit Instruction to determine the combined effect of this type of instruction on the use of DMs in narrations. Furthermore, the studies mentioned above have primarily measured the effects of Explicit and Implicit Instruction on the acquisition of a limited set of grammatical structures (e.g., preterit vs. imperfect and dative case marking). For this reason, it is crucial to continue and advance this line of research by testing the effects of instruction on the use of other linguistic structures, such as discourse markers.

Although studies in the field of Instructed Heritage Language Acquisition indicate SHL learners can benefit from Explicit Instruction, it remains unclear how Implicit Instruction benefits Spanish Heritage Language learners. It is important to empirically test the efficacy of both types of instruction on SHL learners since Explicit and Implicit Instruction have been shown to benefit SSL learners (e.g., LaBrozzi 2016; Hernández & Rodríguez-González 2013). Since both learner profiles (i.e., SSL learners and SHL learners) often enroll in Spanish language courses together (Torres 2020), knowing what types of instruction benefit both types of learners will allow language instructors to design course curricula and materials that will benefit both types of learners. Additionally, research on the use of discourse markers among Spanish language learners has been dedicated to ideal teaching practices that foster the acquisition and learning of discourse markers in oral discourse (Hernández & Rodríguez-González 2013; de la Fuente 2009). Given this lack of research on the teaching of discourse markers in written discourse to SHL learners, this Dissertation empirically tests the effectiveness of Explicit and Implicit Instruction in teaching this linguistic structure to SHL learners.

Chapter 3

Research Questions and Methodology

3.0. Overview of Chapter

The main goal of the present study is to determine whether the use of Explicit and Implicit Instruction is beneficial for SHL learners, as has been documented in previous studies in Instructed Heritage Language Acquisition (Montrul & Bowles 2010; Potowski et al. 2009). This study borrows from the methodologies implemented in the studies summarized in the previous chapters (e.g., Camus & Rafael-Adrada 2015; Hernández & Rodríguez-González 2013; Zyzik & Marqués Pascual 2012) with the intention of understanding how SHL students use and learn to use DMs in their writing. In addition to this primary goal, I also detail the types of DMs used in SHL narrations and analyze the syntactic complexity, morpho-syntactic accuracy, and fluency of their writing.

The following chapter presents the three research questions that are the focus of this Dissertation and it describes the methodology used to collect the data that was analyzed to answer these questions. To begin this chapter, in Section 3.1, I first introduce three research questions and their respective predictions. In Section 3.2, I describe the recruitment process and the characteristics of the participants who volunteered for this study, and I describe the steps used to collect data from participants, including a description of the tasks and activities they completed. In Section 3.3, I explain how the following variables were operationalized in this study: *discourse marker*, *clause type*, *t-unit*, *syntactic complexity*, *morpho-syntactic accuracy*, and *fluency*. Following this explanation, I provide an example of how the narrations were coded for these variables (see Section 3.4). Lastly, in Section 3.5, I conclude with a summary of this chapter.

3.1. Research Questions and Predictions

The following are the three research questions, and their respective predictions, that were tested in this dissertation:

1. What is the frequency of use (i.e., number and type) of discourse markers in narrations written by Spanish Heritage Language (SHL) learners?
    a. Prediction 1-Since it has been shown that SHL learners struggle to use connectors to produce paragraph-like discourse in spoken discourse (Carreira & Kagan 2018), it is hypothesized that SHL learners will use few DMs, in number and type, in their narrations.
2. Is the following pedagogical intervention (i.e., Explicit Instruction + Input Flood + Textual Enhancement) effective for SHL learners regarding the use of less-familiar discourse markers?
    a. Prediction 2- It is hypothesized that the pedagogical intervention stated above will have a positive effect on SHL learners' use of less-familiar discourse markers in their written narrations. Given that discourse markers are not salient in discourse, it is expected that SHL learners, much like Spanish Second Language learners, will require a more explicit teaching intervention to learn how to use new DMs in narrations (de la Fuente 2009; Hernández & Rodríguez-González 2013).
3. Do the narrations of SHL learners with different experiences with Spanish (i.e., early SHL speakers vs. late SHL speakers), enrolled in a third-year Spanish writing course, differ in syntactic complexity, morphosyntactic accuracy, and

fluency measures? If so, what are the differences and/or similarities in the syntactic complexity (i.e., mean length of T-Unit and mean number of clauses per T-Unit), morphosyntactic accuracy (i.e., error-free T-Units per T-Unit and error type), and fluency (i.e., number of words, number of T-units, and number of subordinate clauses per text) of narrations produced by these two types of SHL learners?

a. Prediction 3- Given that early SHL learners have spent more time speaking Spanish, it is hypothesized that early SHL learners will produce more syntactically complex t-units (i.e., longer t-units, utilize more subordinate clauses, etc.), have a higher percentage of error-free T-units, and write longer narrations than later SHL learners (Azevedo 2018).

3.2. Participants, Materials and Procedures

3.2.1. Participant Profile

Before delving into the main focus of this section, I would like to provide an explanation of the context in which the recruitment and data collection processes took place. Unfortunately, the data used in this study were collected during a difficult time for instructors, students, and everyone, that is, data collection took place during the global COVID-19 pandemic. I, as the researcher, faced difficulties recruiting participants and adapting my original methodologies to an online platform. I provide this disclaimer to inform the reader that the data collection circumstances were not ideal.

A total of 39 students enrolled in a southwestern university in the U.S (classified as Research I, Flagship and Hispanic-Serving Institution) were recruited for this study

(age range: 18-55; mean: 22 years old). All participants were undergraduate students enrolled in SPAN 302, "Developing Spanish Writing Skills," a writing course required for Spanish majors and minors at the 300-level. Students enrolled in this advanced writing course often have different linguistic profiles and experiences with Spanish, that is, Spanish Second Language (SSL) learners, Spanish Heritage Language (SHL) learners, and native speakers of Spanish enroll in this course.

The participants of this study were students enrolled in four sections of SPAN 302: two sections in Spring 2021 and two sections in Fall 2021. All students enrolled in these four sections were asked to participate in the study. Students who agreed to participate in the study were asked to complete two necessary documents: 1) the Language Background Questionnaire via *Opinio* and 2) a consent form, to allow me, as the Student Investigator, to access their responses to the tasks described in section 3.2.4. A total of 46 students completed and submitted the necessary documents to participate in the present study; these students were divided into three different Spanish language learner profiles: 1) Spanish Heritage Language learners, 2) native speakers of Spanish, and 3) Spanish Second Language (SSL) learners.

Of the 46 students who participated in the study, a total of 39 students were identified as SHL learners, three students were identified as native speakers of Spanish[8], and four students were identified as Spanish second language learners[9]. Due to the small number of SSL learners who participated in the study, only the data of the 39 SHL

[8] Students who responded "Since I was 2 years old or younger" to Question 10 (i.e., Since when have you been able to speak Spanish?) and "Since middle school or high school" to Question 11 (i.e., Since when have you been able to speak English?) were identified as native speakers of Spanish.
[9] Students who responded "No" to Question 8 (Do your parents, grandparents or other family members speak Spanish?), "Since middle school or high school" to Question 10 (i.e., Since when have you been able to speak Spanish?), and "Since I was 2 years old or younger" to Question 11 (i.e., Since when have you been able to speak English?) were identified as SSL learners.

students who submitted and completed all necessary documents and activities were used for this study. The SHL participants were then categorized into two different groups, an Experimental group and a Control group, depending on the semester they were enrolled in SPAN 302. The Experimental group was comprised of 19 SHL students recruited from two sections of SPAN 302 during Spring 2021, while the Control group was comprised of 20 SHL students who were recruited from two sections of SPAN 302 in Fall 2021.

Participants' responses to Question 8 from the "Language Background Questionnaire" (i.e., Do your parents, grandparents or other family members speak Spanish?) were used to determine whether participants were SHL learners. If participants responded "Yes" to this question, they were identified as an SHL learner. In addition to dividing participants into the Experimental or Control groups, participants were also divided into two different groups pertaining to the age they began to speak Spanish. This information was gathered from participants' response to Question 10 of the "Language Background Questionnaire" (Since when have you been able to speak Spanish?) Participants were provided with five options to choose from: 1) Since I was 2 years old or younger, 2) Since I was 4 years old or younger, 3) Since elementary school, 4) Since middle school or high school, or 5) I learned Spanish as an adult. If a participant chose one of the first three options, they were identified in the present study as an Early SHL speaker, and if they chose one of the two last options, they were identified as a Late SHL speaker.

Lastly, each participant was assigned a code with three components: 1) the first letter was either an "E", for Experimental group, or a "C", for Control group, followed by a hyphen; 2) the second letter was either an "E", for Early, or an "L", for Late, depending

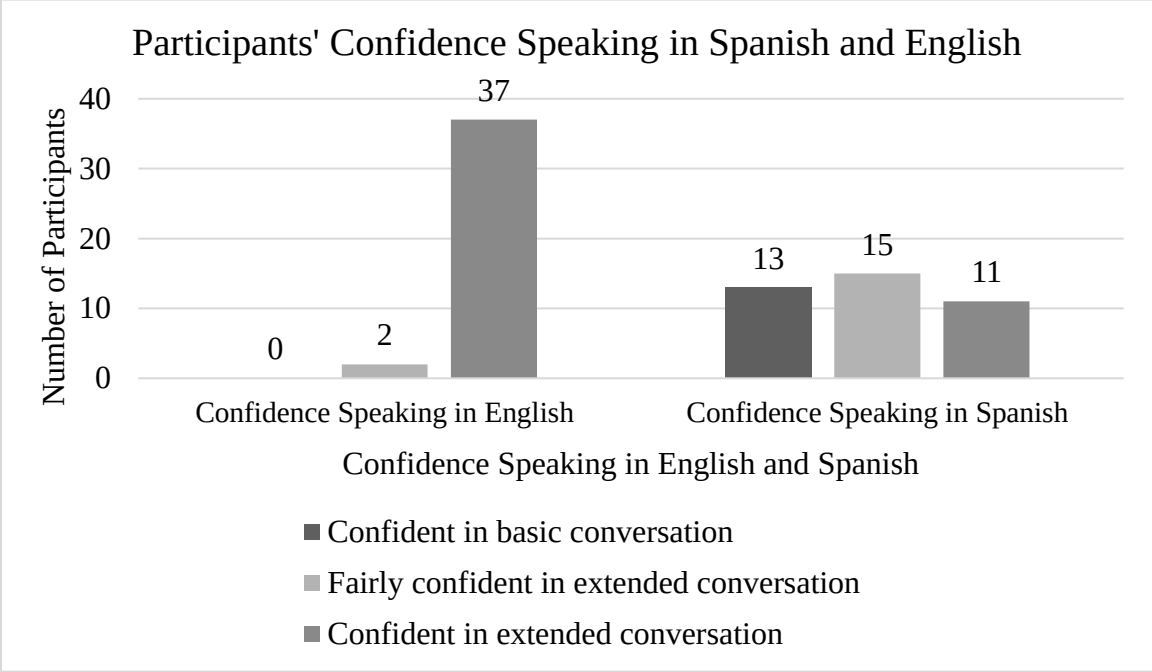
on the age a participant began to speak Spanish; and 3) the last component consisted of a number that identified the order participants' data were coded. For example, Participant E-E1 was the first participant in the Experimental group who was identified as an Early speaker of Spanish.

3.2.2. Participants' Responses to the Language Background Questionnaire

In addition to utilizing participants' "Language Background Questionnaire" responses to identify SHL learners and to determine learner profile (i.e., Early or Late SHL learner), their responses were also used to provide an overview of the language practices of the SHL learner enrolled in SPAN 302. In the questionnaire, participants also answered questions regarding their confidence speaking in Spanish and English (i.e., Questions 12 and 13, respectively), how often they write in English and Spanish (i.e., Questions 23 and 24, respectively), and their confidence writing in English and Spanish (i.e., Questions 25 and 26, respectively).

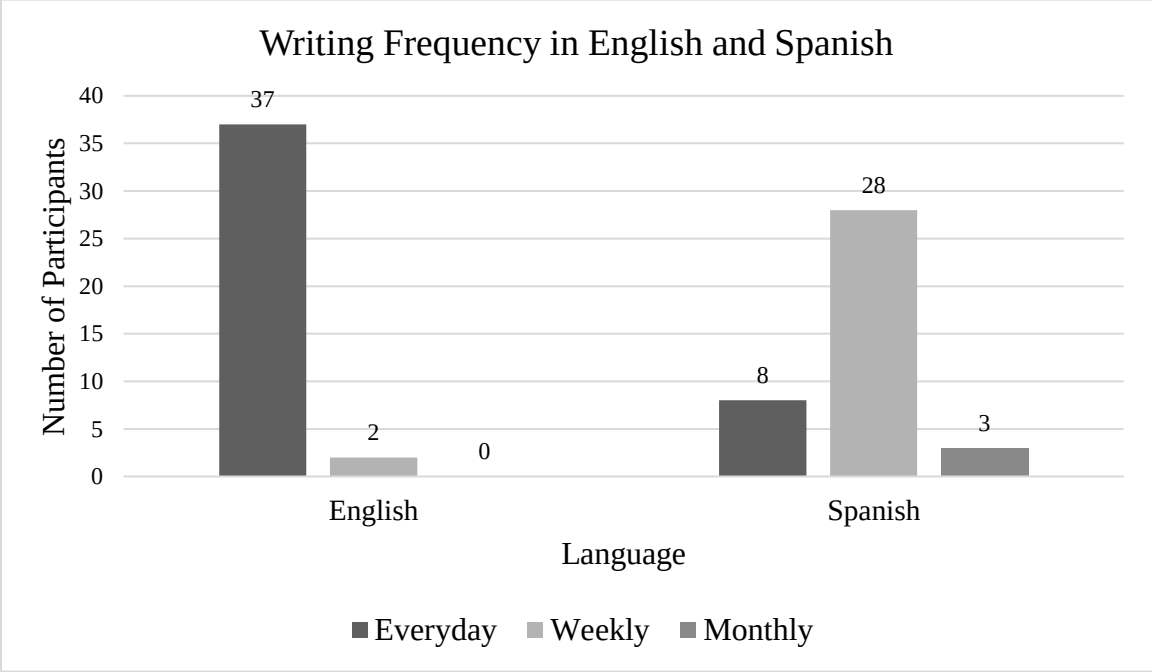
Graph 1 presents participants' responses to Questions 12 and 13 in the "Language Background Questionnaire". Participants' responses to Question 12 indicate that 13 participants (33.3%) are confident in basic Spanish conversation, 15 (38.3%) are fairly confident in basic Spanish conversation, and 11 (28.2%) are confident in extended Spanish conversation. Their responses to Question 13 show that 37 (94.9%) participants are confident in extended conversation in English and 2 participants (5.1%) are fairly confident in extended conversation in English. Participants' responses to these two questions indicate that they are more confident speaking in English than in Spanish.

Graph 1. Participants' Confidence Speaking in Spanish and English



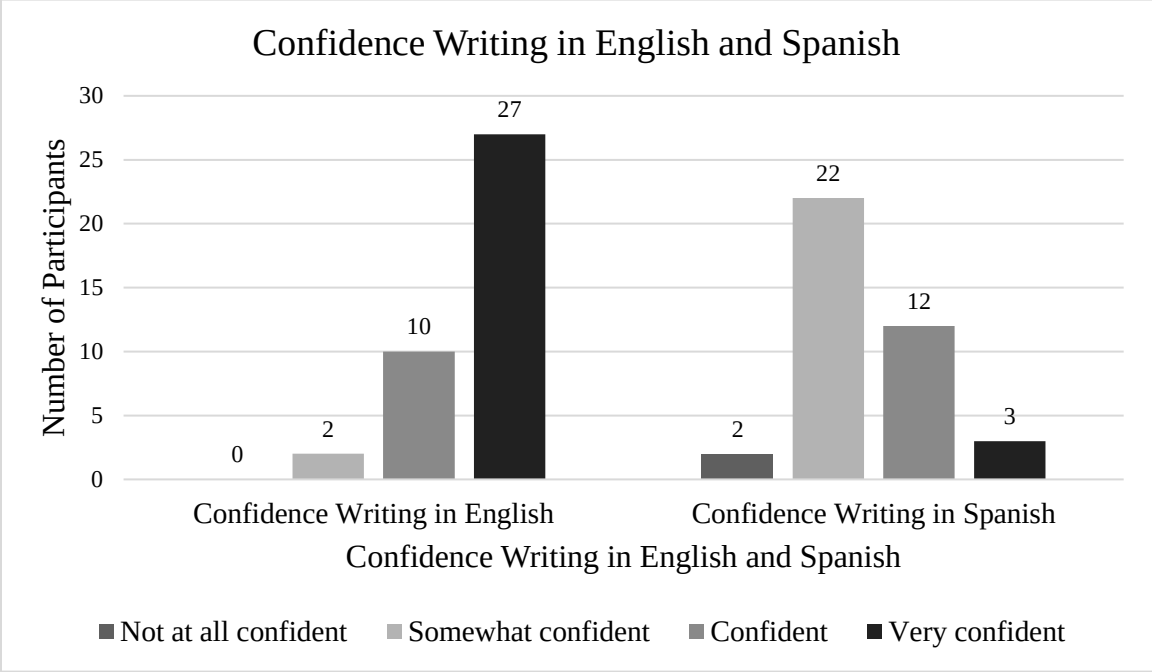
Graph 2 demonstrates participants' responses to Question 23 (How often do you write in English?) and Question 24 (How often do you write in Spanish?) of the "Language Background Questionnaire". Regarding how often participants write in English (Question 23), 37 participants (94.9%%) write in English every day and 2 participants (5.1%) write in English on a weekly basis. Regarding participants' responses to Question 24, 8 participants (20.5%) write in Spanish every day, 28 participants (71.8%) write in Spanish on a weekly basis, and 3 participants (7.7%) write in Spanish monthly. These responses indicate that the participants of this study write in English more often than in Spanish.

Graph 2. Writing Frequency in English and Spanish



Graph 3 presents participants responses to Question 25 (How confident are you in your English writing skills?) and Questions 26 (How confident are you in your Spanish writing skills?) of the "Language Background Questionnaire". Participants' responses to Question 25, 2 participants (5.1%) are somewhat confident writing in English, 10 participants (25.7%) are confident writing in English, and 27 participants (69.2%) are very confident writing in English. Regarding participants' confidence writing in Spanish, 2 participants (5.1%) are not at all confident writing in Spanish, 22 (56.4%) are somewhat confident writing in Spanish, 12 participants (30.8%) are confident writing in Spanish, and 3 participants (7.7%) are very confident writing in Spanish. Participants' responses to Questions 25 and 26 suggest that the majority of participants are more confident writing in English than in Spanish.

Graph 3. Participants' Confidence Writing in English and Spanish



Overall, participants' responses to the questions presented in this section reveal that most of the SHL participants of this study are more confident speaking and writing in English than in Spanish. Also, the majority (i.e., about 95%) write in English daily while only about 8% of the participants write in Spanish on a daily basis.

3.2.3. Steps and Procedures

As previously mentioned, the methodology used in this Dissertation builds on the methodologies used in previous studies on the acquisition of discourse markers (Sánchez-Naranjo 2018; Hernández & Rodríguez-González 2013; Hernández 2011, 2008; de la Fuente 2009; Jalilifar 2008; Lahuerta Martínez 2004; Saíz 2003). It consisted of the following steps, which differed for both groups of participants (i.e., Experimental and Control).

For the Experimental Group, I, as the instructor of the two sections of SPAN 302 in Spring 2021 from which participants were recruited, implemented the following activities in the course curriculum: the "Discourse Marker Familiarity Activity" (borrowed and modified from Hernández 2011 and Hernández & Rodríguez-González 2013) (see Appendix A for the complete list of DMs); a narration (i.e., the Pre-Test) written during Week 4 of the semester; during Week 5 of the semester, students watched a 10-minute video (i.e., the pedagogical intervention) (see Appendix C for pedagogical intervention script) and were provided with pdf file of a list of Spanish discourse markers and their English translation (see Appendix D) and a pdf file of the narration reviewed in the pedagogical intervention (see Appendix E); after watching the pedagogical intervention, students wrote a second narration (i.e., the Immediate Post-Test); and, during Week 8 of the semester, students wrote a third narration (i.e., a Delayed Post-Test) (see Appendix B for prompts and instructions for the first two narrations).

At the end of the Spring 2021 semester, students were asked, via email, if they were willing to participate in the study. Those students who were interested in participating were asked to complete the "Language Background Questionnaire" to determine their language profile (i.e., SSL learner, SHL learner, or native speaker) and gauge their self-perceptions of writing in Spanish and English (see Appendix F). They were also asked to read and submit an electronically signed copy of the consent form via email.

For the Control Group, in Fall 2021, 20 participants were recruited from two sections of SPAN 302 taught by a fellow Teaching Assistant. The instructor of this course implemented the same activities that were completed by participants in Spring

2021; however, this group of students did not watch the video, that is, the pedagogical intervention, that the Experimental group watched in Week 5 of the Spring 2021 semester. At the end of the Fall 2021 semester, students who agreed to participate in the study were asked to complete the "Language Background Questionnaire" to examine their linguistic profile and gauge their self-perceptions of writing in both English and Spanish. They were also asked to read and submit a signed, electronic copy of the consent form.

3.2.4. Materials and Procedures

As mentioned above, during Week 4 of their respective semester, students completed two tasks, the "Discourse Marker Familiarity Activity" and the Pre-Test. For the "Discourse Marker Familiarity Activity," students were presented with a list of 33 discourse markers on the *UNM Learn* page (*BlackBoard* platform) of their SPAN 302 course. For this activity, students were presented with three different responses to rate their familiarity of 33 different DMs (see Appendix A). The DMs markers that were used in this activity were those used in Hernández & Rodríguez-González 2013, with the exception of *hasta que* ("until"), *en el fondo* ("deep down"), *a todo esto* ("speaking of that"), and *puesto que* ("since" or "given that"). For this activity, students were asked to rate their familiarity of each DM using the following three responses: 1) "Very familiar/Know the meaning and use", 2) "Familiar/Know the meaning but not regular use", and 3) "Not familiar/Do not know the meaning and/or use". Example 1 is an example of how each DM was presented to students and the three different responses provided.

Example 1. Sample Discourse Marker Familiarity Question Presented to Participants

Así que

- ☐ Very familiar/Know the meaning and use
- ☐ Familiar/Know the meaning but not regular use
- ☐ Not familiar/Do not know the meaning and/or use

In addition to completing the "Discourse Marker Familiarity Activity" during Week 4, students also wrote the first narration that served as the Pre-Test. This task consisted of a 10 to 15 sentence narration of the short *Pixar* film "For the Birds" (see Appendix B). Students were provided with a link to the video in their *UNM Learn* course page. Students were instructed to watch the video on *YouTube* and then write a narration describing the events of this short film. Students received a 100 for completing the task, regardless of grammatical and orthographic errors; students who did not complete the activity received a zero.

During Week 5, students in both groups were also asked to review p. 44 of *Taller de escritores* (2nd edition, Guillermo Bleichmar and Paula Cañón) which was a list and description of the following *expresiones de transición* ("transitional expressions") (bolded words were used in the narration reviewed during the pedagogical intervention):

> *ahora* ("now"), *anoche* ("last night"), *antes* ("before"), *asiduamente* ("often"), *aún* ("still"), *ayer* ("yesterday"), *constantemente* ("constantly"), ***después*** ("after"), *entretanto* ("meanwhile"), *finalmente* ("finally"), *frecuentemente* ("frequently"), *hoy* ("today"), *inicialmente* ("initially"), *inmediatamente* ("immediately"), *jamás*

(“never”), ***luego*** (“after”), *mañana* (“tomorrow”), ***mientras*** (“while”), *nunca* (“never”), *ocasionalmente* (“occasionally”), *posteriormente* (“later”), *primeramente* (“first”), *pronto* (“soon”), *recientemente* (“recently”), *repentinamente* (“all of a sudden”), *siempre* (“always”), *tarde* (“late”), *temprano* (“early”), *todavía* (“still”), *ya* (“already”), *antes (de) que* (“before”), *apenas* (“as soon as”), *cuando* (“when”), *después (de) que* (“after”), ***en cuanto*** (“as soon as”), *en el momento que* (“at the moment when”), *hasta que* (“until”), *siempre que* (“every time that”), and ***tan pronto (como)*** (“as soon as”).

On pg. 44, these words and expressions are categorized as adverbs (e.g., *mañana*, “tomorrow”), adverbial phrases (e.g., *el viernes por la tarde*, “Friday evening”), or conjunctions that introduce an adverbial clause (e.g., *tan pronto como*, “as soon as”). These words and expression, listed above, are presented in two separate tables with their respective English translation. They are also described as adverbs that explain when an event or action occurred relative to another action, and the authors also explain that the conjunctions that introduce an adverbial clause are followed by a verb and, sometimes, by the subjunctive.

Some of these words and phrases were also found in the list of DMs provided to students in the Experimental group and used in the narration reviewed in the pedagogical intervention video. These included: *tan pronto como* (“as soon as”), *en cuanto* (“as soon as”), *antes* (“before”), *después* (“after”), *finalmente* (“finally”), *luego* (“later”), *mientras* (“while”), and *cuando* (“when”). However, in the list on page 44 and in Activity 1 on page 45, students were taught that the use of *tan pronto como* (“as soon as”) and *en cuanto* (“as soon as”) can signal the use of the subjunctive in adverbial clauses when

referring to future events or events that have not yet occurred (see Sentences 2, 3 and 5 in Example 2 below). In the pedagogical intervention, *tan pronto como* ("as soon as") and *en cuanto* ("as soon as") were shown to signal the use of the indicative when referring to past events; *en cuanto* ("as soon as") was also used with this function in Sentence 1 of Exercise 1, pg. 45.

As mentioned above, during Week 5, students also completed Práctica-Exercise 1 on pg. 45 of this textbook. The activity is as follows:

Example 2. Exercise 1 (pg. 45) from *Taller de escritores*

Completa las oraciones seleccionando una expresión de tiempo.

1. Felipe me llamó _____ llegó a casa. (**en cuanto**/hasta que)
2. Te compraré una motocicleta _____ apruebes el examen. (**en cuanto**/hasta que)
3. Azucena viajará a España _____ tenga el dinero suficiente. (hasta que/**tan pronto como**)
4. José quiere esperar _____ se gradúe para casarse. (**hasta que**/cuando)
5. Voy a tener más dinero _____ mi jefe me aumente el sueldo. (antes de/**en cuanto**)
6. Cuando llenas un cheque _____ debes escribir la cantidad exacta. (mientras/**siempre**)
7. Cuando era niña, _____ pasaba días enteros leyendo. (**a menudo**/antes de que)
8. Mi familia visita a mi abuela todos los domingos y ella viene a mi casa _____. (ya/**de vez en cuando**)

During Week 5, students enrolled in the two SPAN 302 sections in Spring 2021 (i.e., the Experimental group) watched a 10-minute video created using *Kaltura Media* on the *BlackBoard* course platform, *UNM Learn*. In this video, that served as the pedagogical intervention, the course instructor explained the functions and uses of different discourse markers in a narration of the short *Pixar* film, "For the Birds". In this narration, which was written by the course instructor and specifically for the pedagogical intervention, Input Flood and Textual Enhancement were used to draw students' attention

to the DMs. Along with this video, students were provided with two separate pdf documents: 1) a list of discourse markers with their respective English equivalents (See Appendix D; this document was adopted from Hernández 2011 and Hernández & Rodríguez-González 2013) and 2) a pdf document of two versions of the narration (See Appendix E; one unmodified narration and a flooded and enhanced narration).

The flooded and enhanced text that was provided to students in the Experimental group consisted of a 259-word narration, not including conjunctions, that contained a total of 13 discourse markers. The following DMs were used in the narration: in the first paragraph, *al principio* ("at first", "in the beginning"), *tan pronto como* ("as soon as"), *ya que* ("given that"), *mientras* ("while"), *de repente* ("suddenly"), *es decir* ("that is") were used; these DMs were reviewed in the video. In the second paragraph, *después* ("after"), *luego* ("then"), *en cuanto* ("as soon as"), *de repente* ("suddenly"), *por eso* ("for that reason"), *sin embargo* ("however"), and *al final* ("in/at the end") were used but were not reviewed in the video. Students were encouraged to review these DMs on their own. In both the video and pdf document provided to students, DMs were typographically modified using boldface print (e.g., ***tan pronto como*** *aterrizó* ("as soon as he landed") and *y* ***mientras*** *los dos discutían* ("while both of them argued")). With the exception of the use of boldface print for DMs, all words in the pdf document of the narration were presented in the same font, Times New Roman, and font size, 12pt. Additionally, Input Flood was implemented in the script created for the video. That is, students were aurally exposed to a flood of DMs in the script used in the pedagogical intervention (see Appendix C for video script). The DMs used in the script included, but were not limited to: *finalmente* ("finally"), *por lo tanto* ("therefore"), and *no obstante* ("nevertheless").

After watching the pedagogical intervention in Week 5 of the semester, students were presented with instructions to complete the Immediate Post-test. For the second narration, students were provided with a *YouTube* link to the video, "Pip", in their *UNM Learn* course page. Students were instructed to watch the video and then submit a narration through *UNM Learn* relating the events of the video. Lastly, during Week 8, students watched a different short film, "The Present", and were asked to write and submit a narration through *UNM Learn* (see Appendix B for instructions and prompts to the first two narrations). The instructions for these post-tests did not specify the length of each narration. Like the first narration, students received a 100 for completing the second and third narrations, regardless of grammatical errors; students who did not submit the last two narrations received a zero. Table 9 provides an overview of the tasks that were completed by the participants in each group.

Table 9. Overview of the Tasks Completed Each Week

Week	**Experimental Group**	**Control Group**
Week 4	1. Discourse Marker Familiarity Activity 2. Narration 1 (Pre-test)	1. Discourse Marker Familiarity Activity 2. Narration 1 (Pre-test)
Week 5	1. *Taller de escritores* pgs. 44-45 2. Pedagogical intervention 3. Narration 2 (Immediate Post-test)	1. *Taller de escritores* pgs. 44-45 2. Narration 2 (Immediate Post-test)
Week 16	1. Submitted Signed Consent Form 2. Language Background Questionnaire	1. Submitted Signed Consent Form 2. Language Background Questionnaire

3.2.5. Pre-Test and Immediate Post-Test

As mentioned in the previous section, students completed three narrations (i.e., the Pre-Test, the Immediate Post-Test, and the Delayed Post-Test); however, only the first two narrations were analyzed given that some participants did not complete the last narration or wrote a narration of less than a hundred words. Regarding the prompts of the narrations, students were asked to watch the same videos for comparison purposes. That is, presenting students with the same stimuli demonstrated how language learners use their writing and linguistic skills to narrate the same sequence of events. The Pre-Test served as the baseline regarding the use of DMs by SHL learners, while the Immediate Post-Test was analyzed to measure the differences in the effectiveness of both instructional approaches for the Experimental and Control groups. The Pre-Test and Immediate Post-Test were similar in format given that participants were instructed to watch a short, silent film and then write a narration; however, the film utilized in the Immediate Post-Test, "Pip," was different from the film utilized in the Pre-Test (i.e., "For the Birds") since this film was used as part of the pedagogical intervention. Both tasks were also used to quantify and compare the syntactic complexity, morpho-syntactic accuracy, and fluency (CAF) between Early and Late SHL learners. In the next section, I describe how these tasks were coded and analyzed to answer the present study's research questions.

3.3. Coding of Data

In this section, I explain the coding process for the following measures: *discourse markers*, *t-units*, *clause type*, *syntactic complexity*, *morphosyntactic accuracy*, and

fluency. These measures were used to assess the effectiveness of the pedagogical intervention and to calculate the differences in CAF measures between Early SHL learners and Late SHL learners.

3.3.1. Discourse Markers

To begin the coding process, each discourse marker from the Pre-Test and the Immediate Post-Test was identified and coded for DM type. The categories used to differentiate DM Type were adopted from Hernández (2011) and Hernández & Rodríguez-González (2013). These included:

- Sequence Events (e.g., *antes* ("before"), *cuando* ("when"), and *durante* ("during")),
- Add Information (e.g., *también* ("also")),
- Contrast (*en realidad* ("actually"), *no obstante* ("nevertheless"), and *sin embargo* ("however")),
- Condition (e.g., *porque* ("because"), *en cuanto* ("as soon as")),
- Result (e.g., *por eso* ("for that reason"), *entonces* ("therefore"), and *por lo tanto* ("therefore"),
- Reformulate (e.g., *es decir* ("that said"), *mejor dicho* ("better said"), and *o sea* ("that is")),
- Conclusion (e.g., *así que* ("so") and *en conclusión* ("in conclusion"))

3.3.2. T-units and Clause Type

After each DM was coded for type, each narration was separated into T-units, which is defined as "an independent clause and any dependent clauses attached to it" (Torres 2020, 11). The T-unit is used to calculate certain syntactic complexity (e.g., Mean Length of T-unit), morphosyntactic accuracy (e.g., Error-Free T-Units), and fluency (e.g., Number of T-units) measures (e.g., Torres 2020; Camus & Rafael-Adrada 2015). In addition to identifying T-units in each narration, every dependent clause was identified. Following Sánchez-Abchi and DeMier 2017, the three types of dependent, or subordinate, clauses identified in the narrations were: 1) nominal clauses, 2) relative, or adjectival, clauses, and 3) adverbial clauses. A nominal clause is a clause that functions as a noun phrase in an independent clause (e.g., Ellos vieron *que el pájaro esta muy pesado*. Participant E-E2; English "They saw that the bird was very heavy."); a relative clause is a clause that modifies a noun phrase (e.g., "Todos los pajaritos están animando a los pajaritos *que están picoteando*." Participant E-E7; English, "All of the small birds are encouraging the small birds who are pecking."); and an adverbial clause is a clause that functions as an adverb, that is, provides information pertaining to "location, time, manner, cause, purpose, comparison and condition" (e.g., "*Cuando los pajaritos sacan al pajarito del alambre,* son catapultados al aire." Participant C-L7; English "When the birds removed the little bird from the powerline, they are catapulted into the air.') (134-135).

3.3.3. Syntactic Complexity

Once all narrations had been separated into T-units, the syntactic complexity of each narration was calculated. Syntactic complexity is defined as "the range and the sophistication of grammatical resources exhibited in language production" (Ortega 2015, 83) and is considered a multidimensional construct that is calculated using various measures (Torres 2020, 10). For example, Azevedo (2018) calculated syntactic complexity as the number of words per T-unit (87). Camus and Adrada (2015) calculated syntactic complexity using three different measures: 1) mean length of T-unit, 2) mean number of clauses per T-unit, and 3) mean length of clause by word (37). Additionally, Sánchez Abchi and De Mier (2017) measured syntactic complexity by calculating the total number of subordinate clauses per total number of T-units (134).

For the following study, I utilized the following measures to calculate the syntactic complexity of each narration: 1) mean length of T-unit (MLTU, i.e., average number of words per T-unit) and 2) mean number of clauses per T-unit (MC/TU, i.e., average number of clauses per T-unit). Given that MLTU is a common calculation used in many studies and MC/TU provides similar information as total number of subordinate clauses per T-Unit, these two measures were chosen to calculate syntactic complexity.

3.3.4. Morpho-syntactic Accuracy

Once each of the syntactic complexity measures of each narration had been calculated, I identified the morpho-syntactic errors in each T-unit to calculate the morpho-syntactic accuracy of each participant. Accuracy has been defined as "the ability

to be free from errors[10] while using language" (Wolfe-Quintero et al. 1998, 33) or as "the degree of control students have over Spanish morphosyntactic components" (Belpoliti and Bermejo 2020, 78). In this study, morpho-syntactic accuracy was defined as "no morphosyntactic deviations in a single T-unit" (Torres 2020, 10) and was calculated using the following measure: number of Error-Free T-units (EFTU) per total number of T-units (TU) (Torres 2020; Azevedo 2018; Camus & Adrada-Rafael 2015). For this measure, the higher the percentage of EFTU/TU, the smaller number of errors contained in a narration, and the lower the percentage, the more errors contained in a narration.

Another morpho-syntactic accuracy measure I adopted in this study was Belpoliti and Bermejo (2020)'s use of error type, or "error distribution according to word class, agreement, and word order" (78). This morpho-syntactic accuracy measure was adopted to provide insight into the types of errors produced by SHL learners enrolled in an advanced Spanish writing course. In their study, they classified errors based on the omission, addition, and selection of articles, personal pronouns, relative pronouns, reflexive pronouns, prepositions, and possessive adjectives (79). They also included and classified agreement errors as nominal (gender and number), predicative (gender and number), subject-verb (number and person), and relative clause (number and person) (80).

The types of grammatical errors that were included and coded in the present study were: grammatical gender agreement (Example 1), grammatical number agreement (Example 2), tense, aspect, and mood (TAM) errors (Example 3), DOM errors (Example

[10] To clarify, error is defined as "a linguistic form or combination of forms which, in the same context and under similar conditions of production, would, in all likelihood, not be produced by the speakers' native speaker counterpart" (Lennon 1991, 182; as cited in Polio & Shea 2014, 10).

4), and preposition errors (Example 5). Although some studies have included orthographic errors (i.e., misspelled words) and accent marking errors (i.e., words missing an accent marking or having an incorrectly placed accent marking) (Torres 2020; Azevedo 2018), these types of errors were not included in the morpho-syntactic accuracy calculation given that SHL learners have difficulties with these components of writing (Torres 2020, 9), see Examples (6) and (7).

(1) *Los pájaros perdieron **todos** de sus plumas azules.* (C-E2)

English: "The birds lost all of their blue feathers."

(2) ***El** pies del pájaro cayeron despacio.* (E-E5)

English: "The birds' feet fell slowly."

(3) *y en vez de correr al pájaro grande, trataron de picar los pies del pájaro para que se **vaya**.* (C-E3)

"and instead of getting rid of the big bird, they tried to peck the bird's feet so that it could leave."

(4) *y anima **Ø** personas **Ø** ser amable, especialmente a personas diferentes.* (E-L5)

"and it encourages people to be kind, especially to different people."

(5) *pero no alcanzo avisarles a los del medio **en** tiempo.* (E-E4)

"but he was unable to warn the ones in the middle on time.

(6) *Cada **ves** que pican al pajaro el alambre se va bajando hasta el suelo…* (E-E3)

"Every time that they peck the bird on the powerline it lowers to the ground."

(7) *Al pricipio de la película **estan** unos pájaritos sentados...* (E-E1)

"In the beginning of the film there are some birds seated…"

The purpose of measuring accuracy in the narrations of SHL learners is not to identify linguistic deficiencies or criticize this group of language learners, but rather to identify linguistic structures that instructors could consider for teaching interventions and/or feedback in Spanish language courses. Once these linguistic structures have been identified, instructors and researchers can test the efficacy of pedagogical interventions in helping SHL learners develop these structures.

3.3.5. Fluency

After the morpho-syntactic accuracy of each narration was calculated, the fluency of each narration was calculated. Fluency is a measure of linguistic output that can be calculated using various indices, such as the number of words, sentences, or T-units produced within a specific timeframe (Belpoliti & Bermejo 2020, 76). Although fluency is not always considered a useful measure, fluent language production is an indicator of language development (Azevedo 2018, 83). For this reason, fluency measures were analyzed to determine whether the age at which SHL learners began to speak in the heritage language affected their linguistic output.

In this study, the measures of fluency used for each individual participant and both groups of SHL learners (i.e., Early or Late SHL learners) were: 1) number of words, 2) number of T-units, 3) number of subordinate clauses, and 4) number of different types of subordinate clauses (i.e., nominal, relative, and adverbial clauses). When conjunctions (e.g., *y* and *o*) were used to coordinate two sentences or clauses, they were excluded from

fluency calculations because they are “triggers to coordination” that separate T-units (Azevedo 2018, 73).

3.4. Example of Coding Process (Participant C-E3)

Below is an example, from Participant C-E3, of how narrations were coded and how each measure described above (i.e., syntactic complexity, morpho-syntactic accuracy, and fluency) was calculated for the 78 narrations analyzed in this Dissertation. In the next chapter, I present the results of the narrations (i.e., the Pre-Test and the Immediate Post-Test) regarding the use of discourse markers and the syntactic complexity, morpho-syntactic accuracy, and fluency of the participants in this study.

Example 3. Coding Process Participant C-E3’s Pre-test

[Los pajaritos llegaban uno por uno, peleando por un lugar en el cable eléctrico.] [**De repente** llega un pájaro grandote; queriendo convivir con los pajaritos.] [**Cuando** se acerca el pájaro grandote, los pajaritos se burlan de el.] [Los pajaritos creían que se estaban alejando de el pájaro grande **hasta que** voló el pájaro grande a donde se fueron ellos.] [Por el peso del pájaro grande se fue bajando el cable eléctrico.] [Esto hizo que los pajaritos se molestaran] y [en vez de correr al pájaro grande, trataron de picar los pies del pájaro **para que** se <u>vaya</u>. (fuera)] [Se dieron cuenta uno por uno que el cable se bajo demasiado,] [todos pararon de picar al pobre pájaro grande.] [**Cuando** los últimos dos pajaritos se dieron, cuenta era demasiado tarde.] [El pájaro grande decidió bajar del cable eléctrico.] [Inmediatamente después de bajar el pájaro grande los pajaritos salieron

volando del cable eléctrico.] [**Cuando** aterrizaron en el piso llegaron los pajaritos sin plumas, causando que el pájaro grande se burlara de ellos.]

Syntactic Complexity Measures

1) Mean length of T-unit: 12.9 words

2) Mean number of clauses per T-unit: 22 total clauses / 13 T-units = 1.69

Morpho-syntactic Accuracy Measures

1) Error-free T-units per T-unit: 12 Error-free T-units/13 T-units = 92.3%
2) Types of errors: One error: Tense error: Use of imperfect subjunctive required

Fluency Measures

1) Number of words in text (minus conjunctions): 169 words – 1 conjunction = 168 words
2) Number of T-units: 13 T-units
3) Number of subordinate clauses: 9 Subordinate Clauses
4) Number of different types of subordinate clauses:
    i. Nominal clauses: 3
    ii. Relative Clauses: 0
    iii. Adverbial Clauses: 6

3.5. Conclusion

To answer the three research questions presented in this chapter, the narrations of two groups of SHL learners (i.e., Experimental group and Control group) were analyzed to determine the effectiveness of Explicit Instruction (i.e., metalinguistic knowledge) and Implicit Instruction (i.e., Input Flood and Textual Enhancement) on the use of DMs. In addition, syntactic complexity, morpho-syntactic accuracy, and fluency measures were calculated for each narration to determine the differences between Early and Late SHL participants. In the next chapter, I provide the results regarding the use of DMs and CAF measures of the Pre-Test and Immediate Post-Test produced by SHL learners.

Chapter 4

Results

4.0. Overview of Chapter

This section presents the results of the data collected from the Experimental and Control groups. First, I analyze participants' responses to the Discourse Marker Familiarity Activity to present the DMs with which participants are most and least familiar (see Section 4.1.1). After, I present the use of DMs, by frequency and type, utilized by both groups of participants in the Pre-Test and Immediate Post-Test (see Section 4.1.2). Then, I present the results of research question 2, that is, whether the pedagogical intervention influenced the use of less-familiar DMs in the Immediate Post-Test for the Experimental group (see Section 4.2). Lastly, I present the results of the syntactic complexity, morpho-syntactic complexity, and fluency measures of both groups' Pre-Tests and Immediate Post-Tests (see Section 4.3).

4.1. Results of Research Question 1

4.1.1. Results of the Discourse Marker Familiarity Activity

To determine the effectiveness of the pedagogical intervention on the use of less-familiar DMs, students completed the Discourse Marker Familiarity Activity in which they ranked 33 different DMs as very familiar, familiar, or not familiar. Table 10 provides the familiarity averages for the 33 DMs from the Discourse Marker Familiarity Activity; these averages are ranked from most familiar to least familiar. The DM averages were calculated from the responses of the 39 participants. The averages from this activity suggest that the discourse markers participants were most familiar were: *antes* ("before") (3), *cuando* ("when") (3), *después* ("after") (3), and *durante* ("during")

(3). These four discourse markers share the same function, that is, they are used to sequence events. The four DMs that participants ranked as least familiar were *ya que* ("given that") (2.12), *mejor dicho* ("better said") (2.09), *o sea* ("that is") (2), and *no obstante* ("nevertheless") (1.62). Unlike the four most familiar DMs, the four least familiar DMs differ in function. Two of these DMs reformulate information (i.e., *mejor dicho* ("better said") and *o sea* ("that is")), while *ya que* ("given that") presents a condition, and *no obstante* ("nevertheless") introduces a contrast. Another notable fact regarding the familiarity averages of the 33 DMs is, overall, these students ranked single-word DMs as more familiar (e.g., *bueno* ("okay"), *también* ("also"), and *pero* ("but")) and ranked multi-word DMs (e.g., *mejor dicho* ("better said"), *sin embargo* ("however"), and *por lo tanto* ("therefore")) as least familiar.

Table 10. Discourse Marker Familiarity Averages (39 Participants)

Discourse Marker (DM)	Overall DM Averages	DM Function
Antes (“Before”)	3	Sequence Events
Cuando (“When”)	3	Sequence Events
Después (“After”)	3	Sequence Events
Durante (“During”)	3	Sequence Events
También (“Also”)	2.96	Add information
Pero (“But”)	2.95	Contrast
Porque (“Because”)	2.95	Condition
Primero (“First”)	2.92	Sequence Events
Finalmente (“Finally”, “In the end”)	2.91	Sequence Events
Bueno (“Well”, “So”)	2.89	Conclusion
Entonces (“Then”)	2.84	Sequence Events
En realidad (“Actually”, “In fact”)	2.79	Contrast
Mientras (“While”, “Meanwhile”)	2.77	Sequence Events
Más tarde (“Later”)	2.78	Sequence Events
Luego (“Later”, “Then”)	2.74	Sequence Events
Por eso (“For that reason”, “Therefore”)	2.67	Result
Entonces (“Therefore”)	2.63	Result
Sabes que (“You know that”)	2.6	Add Information
Es que (“The thing is that”)	2.6	Add Information
Pues (“So”)	2.58	Conclusion
Sin embargo (“However”, “Nevertheless”)	2.55	Contrast
Al principio (“At first”)	2.51	Sequence Events
Así que (“So”)	2.43	Conclusion
Al contrario (“On the contrary”)	2.33	Contrast
De repente (“Suddenly”)	2.28	Sequence Events
Es decir (“That is”)	2.23	Reformulate
Por lo tanto (“Therefore”)	2.23	Result
Tan pronto como (“As soon as”)	2.21	Sequence Events
En cuanto (“As soon as”)	2.14	Condition
Ya que (“Given that”)	2.12	Condition
Mejor dicho (“Better said”)	2.09	Reformulate
O sea (“That is”)	2	Reformulate
No obstante (“Nevertheless”, “however”)	1.62	Contrast

4.1.2. Total Number of DMs Used in Pre-Test and Immediate Post-Test

The total number of DMs produced by the Experimental group in the Pre-Test was 154 and it increased to 172 in the Immediate Post-Test. The average number of discourse markers produced in the Pre-Test was 8.1 (median: 8; range: 3 to 14), while the average number of discourse markers produced in the Immediate Post-Test increased to 9.05 (median: 9; range: 3 to 16). Table 11 details the total number of DMs produced by each participant in the Experimental group for both tasks. For these participants, the first "E" refers to "Experimental group; the second "E" refers to "Early SHL learner" while "L" refers to "Late SHL learner"; the number refers to the order in which their data was coded.

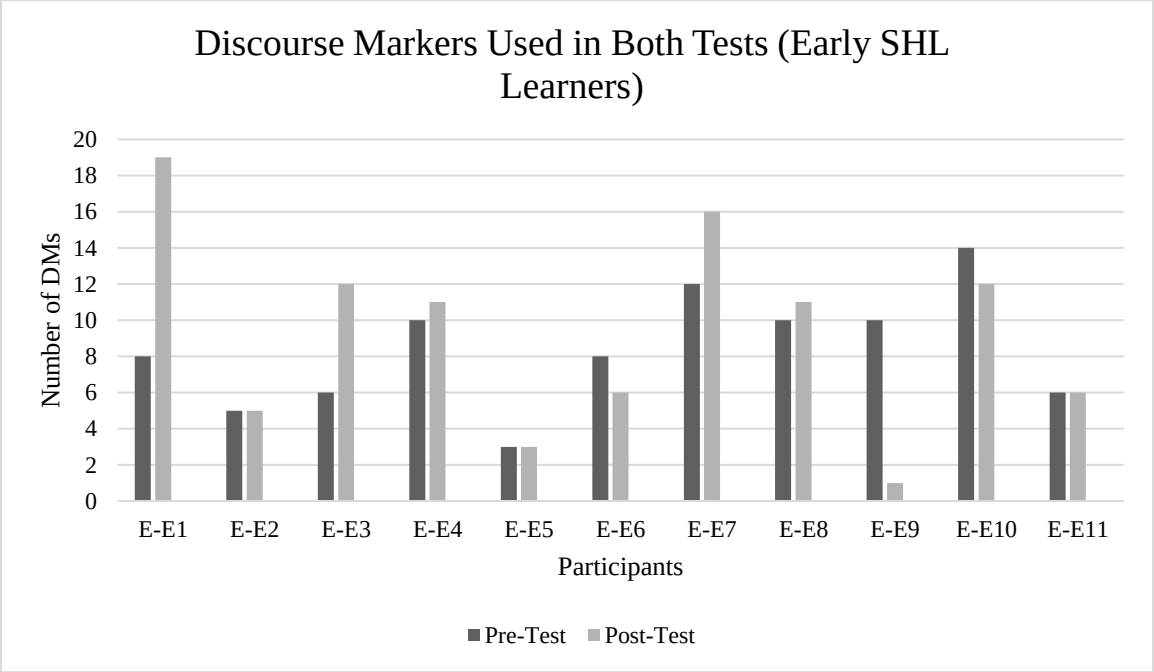
Table 11. Total Number of DMs in Both Narrations (Experimental Group)

Participant Code	DMs in Pre-Test	DMs in Immediate Post-Test
E-E1	8	19
E-E2	5	5
E-E3	6	12
E-E4	10	11
E-E5	3	3
E-E6	8	6
E-E7	12	16
E-E8	10	11
E-E9	10	1
E-E10	14	12
E-E11	6	6
E-L1	4	15
E-L2	10	11
E-L3	6	5
E-L4	5	7
E-L5	9	5
E-L6	12	13
E-L7	5	5
E-L8	11	9
Total	154	172
Average	8.1	9.05
Median	8	9

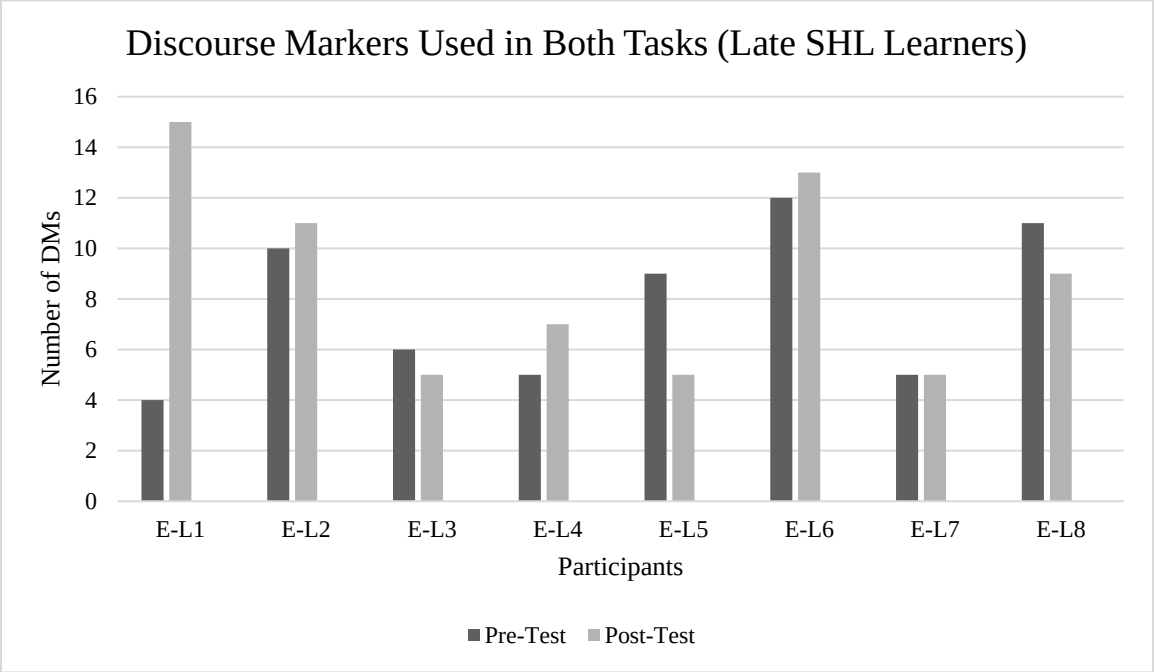
Graphs 4 and 5 present the information in Table 2 in the form of bar graphs. Graph 4 shows the data for the Early SHL learners in the Experimental group, while Graph 5 shows the data for the Late SHL learners. Graphs 4 and 5 indicate that of the 19 SHL learners in the Experimental group, nine participants (47.4%) produced more DMs in the Immediate Post-Test than in the Pre-Test (i.e., E-E1, E-E3, E-E4, E-E7, E-E8, E-L1, E-L2, E-L4, and E-L6), six participants (31.6%) produced more DMs in the Pre-Test than in the Post-Test (i.e., E-E6, E-E9, E-E10, E-L3, E-L5, and E-L8), and four

participants (21%) used the same number of DMs in both narrations (i.e., E-E2, E-E5, E-E11, and E-L6).

Graph 4. Discourse Markers Used in Both Tests by Early SHL Learners in Experimental Group



Graph 5. Discourse Markers Used in Both Tests by Late SHL Learners in Experimental Group



For the Control group, a total of 155 DMs were used in the Pre-Test while a total of 119 DMs were used in the Immediate Post-Test. The average number of discourse markers produced in the Pre-Test was 7.75 (median: 7; range: 4 to 16), and an average of 5.95 discourse markers were produced in the Immediate Post-Test (median: 5.5; range: 3 to 15). Table 12 shows the number of discourse markers produced by each participant in the Control group in the Pre- and Immediate Post-Tests.

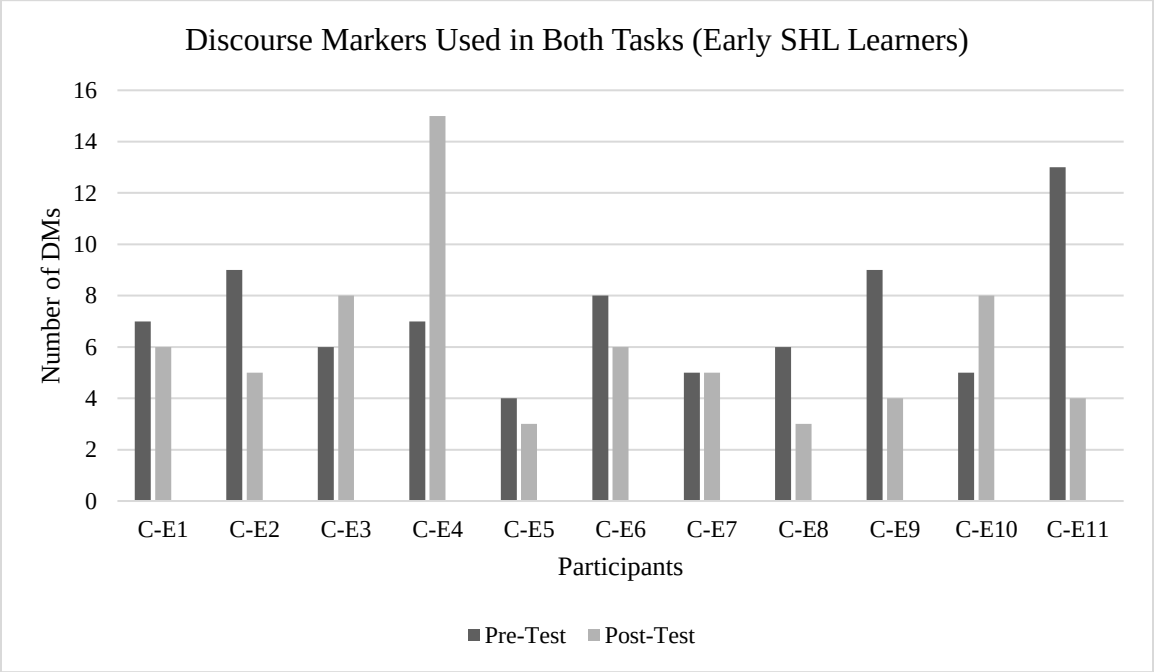
Table 12. Total Number of DMs in Both Narrations (Control Group)

Participant Code	DMs in Pre-Test	DMs in Immediate Post-Test
C-E1	7	6
C-E2	9	5
C-E3	6	8
C-E4	7	15
C-E5	4	3
C-E6	8	6
C-E7	5	5
C-E8	6	3
C-E9	9	4
C-E10	5	8
C-E11	13	4
C-L1	11	5
C-L2	5	6
C-L3	9	5
C-L4	16	8
C-L5	10	6
C-L6	5	6
C-L7	8	5
C-L8	6	6
C-L9	6	5
Total	155	119
Average	7.75	5.95
Median	7	5.5

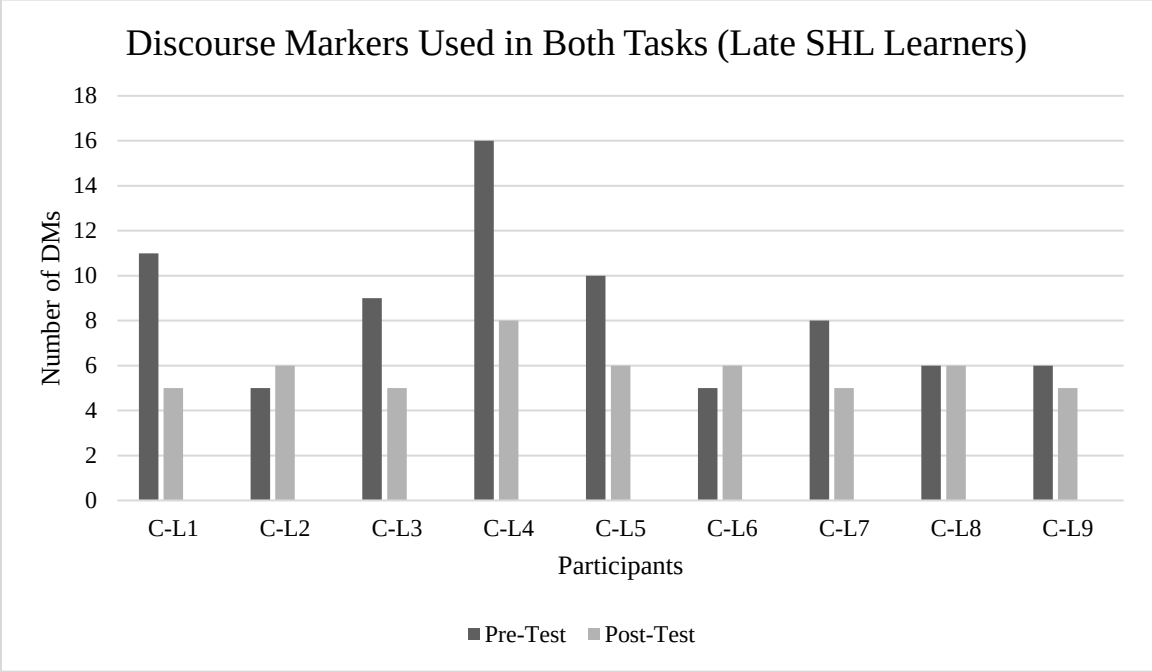
Graphs 6 and 7 demonstrate the results presented in Table 12. Graph 6 presents the total number of DMs used by the Early SHL learners in the Control group in both narrations while Graph 7 presents this information for the Late SHL learners. Graphs 6 and 7 show that of the 20 SHL learners in the Control group, five participants (25%) produced more DMs in the Post-Test than in the Pre-Test (i.e., C-E3, C-E4, C-E10, C-L2, and C-L6), thirteen participants (65%) produced more DMs in the Pre-Test than in the Post-Test (i.e., C-E1, C-E2, C-E5, C-E6, C-E8, C-E9, C-E11, C-L1, C-L3, C-L4, C-L5,

C-L7, and C-L9), and two participants (10%) used the same number of DMs in both narrations (i.e., C-E7 and C-L8).

Graph 6. Discourse Markers Used in Both Tests by Early SHL Learners in Control Group



Graph 7. Discourse Markers Used in Both Tests by Late SHL Learners in Control Group



The data presented in Tables 11 and 12 and Graphs 4 to 7 indicate that the participants in the Experimental group increased the number of DMs used in the Immediate Post-Test, both as a group (154 DMs in the Pre-Test vs. 172 DMs in the Immediate Post-Test) and as individuals (i.e., 47.4% of the participants increased the number of DMs used in the second narration). On the other hand, the participants in the Control group decreased the number of DMs used in the Immediate Post-Test as a group (i.e., 155 DMs in the Pre-Test vs. 119 DMs in the Immediate Post-Test) and individually (i.e., 65% of the participants decreased the number of DMs used in the Immediate Post-Test). This finding could suggest that the pedagogical intervention raised participants' awareness of the use of DMs and encouraged them to incorporate more in their narrations. Additionally, an independent samples *t*-test comparing the number of DMs utilized in the post-test narrations of both the Experimental and Control groups produced

a significant *t* value ($t_{(37)} = 2.53$, $p = .016$). An examination of the means, excluding one outlier from the Control group (i.e., Participants C-E4), revealed that the Control group had a lower mean than the Experimental group ($M = 5.95$ and $M = 9.05$, respectively).

Regarding the frequency and the types of DMs used in both narrations, Tables 13 and 14 provide a list of all the DMs used in both tasks by the Experimental group and the Control group, respectively. Given the nature of the task, i.e., a narration of the events of a short video, DMs that sequence events (e.g., *cuando* ("when"), *luego* ("later, then"), *entonces* ("then"), *mientras* ("while"), etc.) were used at a high rate in both narrations. Furthermore, both groups produced the same discourse markers at a similar rate. For example, the DMs *pero* ("but"), *cuando* ("while"), *porque* ("because"), and *entonces* ("then") comprised about 46% (150/326) of the DMs used in both narrations for the Experimental group and about 49.3% (135/274) of the DMs produced by the Control group.

Table 13. Discourse Markers Used in Pre-Test and Immediate Post-Test (Experimental Group)

Discourse Marker	Pre-Test	Immediate Post-Test
pero (“but”)	30	31
cuando (“when”)	27	21
luego (“then”, “later”)	11	17
porque (“because”)	11	11
entonces (“then”)	8	11
para que (“so that”)	10	9
hasta que (“until”)	12	5
despues (“after”)	8	8
mientras (“while”)	5	7
de repente (“suddenly”)	3	8
al final (“in the end”)	3	5
finalmente (“finally”, “in the end”)	3	5
primero (“first”)	3	3
al principio (“at/in the beginning”)	1	3
asi que (“so”)	1	3
ahora (“now”)	2	2
como (“as”, “like”)	2	2
aunque (“although”)	1	2
a pesar de que (“even though”)	0	3
en cuanto (“as soon as”)	0	2
mas tarde (“later”)	0	2
tambien (“also”)	0	2
a medida que (“as”)	1	1
por lo tanto (“therefore”)	1	1
sin embargo (“however”)	1	1
ya que (“given that”)	1	1
mientras que (“while”)	2	0
de inmediato (“immediately”)	0	1
en realidad (“actually”, “in fact”)	0	1
por eso (“for that reason”, “therefore”)	0	1
por ultimo (“lastly”)	0	1
tan pronto como (“as soon as”)	0	1
proximo (“next”)	0	1
al parecer (“apparently”)	1	0

asi (“like this”, “thus”)	1	0
debido a (“due to”)	1	0
despues que (“after”)	1	0
pues (“so”)	1	0
siguiente (“next”)	1	0
una vez que (“once”)	1	0
Total	154	172

Table 14. Discourse Markers Used in Pre-Test and Immediate Post-Test (Control Group)

Discourse Marker	Pre-Test	Immediate Post-Test
cuando (“when”)	28	22
pero (“but”)	13	24
entonces (“then”)	20	6
porque (“because”)	14	8
mientras (“while”)	10	8
hasta que (“until”)	11	3
sin embargo (“however”)	8	4
luego (“later”, “then”)	6	3
para que (“so that”)	2	6
de repente (“suddenly”)	4	3
ahora (“now”)	5	1
asi que (“so”)	4	1
al final (“in the end”)	2	3
al principio (“at/in the beginning”)	1	4
durante (“during”)	0	5
pronto (“immediately”)	4	0
despues (“after”)	3	1
ya que (“given that”)	3	1
por eso (“for that reason”, “therefore”)	2	2
finalmente (“finally”, “in the end”)	1	3
antes de que (“before”)	1	2
como (“like”)	0	3
al empezar (“at/in the beginning”)	2	0
primero (“first”)	3	0
al fin (“finally”, “in the end”)	1	1
de pronto (“suddenly”)	0	2

tambien (“also”)	0	2
a medida que (“as”)	1	0
aunque (“although”)	1	0
en el principio (“in the beginning”)	1	0
mientras que (“while”)	1	0
por lo tanto (“therefore”)	1	0
siguiente (“next”)	1	0
sin que (“without”)	1	0
una vez que (“once”)	0	1
Total	155	119

For each group, there were certain DMs not used in the Pre-Test that were used at least once in the Immediate Post-Test, at both the group level and individual level. As indicated in Table 13, the following DMs were not used by any participants in the Experimental group but used at least once in the Immediate Post-Test: *a pesar de que* (“even though”), *en cuanto* (“as soon as”), *más tarde* (“later”), *tambien* (“also”), *de inmediato* (“immediately”), *en realidad* (“in reality”), *por eso* (“for that reason”), *por último* (“lastly”), *tan pronto como* (“as soon as”), and *proximo* (“next”). Table 14 shows that none of the participants in the Control group used the following DMs in the Pre-Test: *como* (“like”), *durante* (“during”), *de pronto* (“suddenly”), *también* (“also”), and *una vez que* (“once”); however, these DMs were used at least once in the Immediate Post-Test. In the next section, I explain the relevance of this increase in use of certain DMs and how it relates to the effectiveness of the pedagogical intervention implemented in this study.

To summarize the results presented in this section, 47.5% (285/600) of the DMs used in SHL learners’ narrations consisted of four familiar DMs, that is, *pero* (“but”), *cuando* (“when”), *porque* (“because”), and *entonces* (“then”). Table 15 presents these four DMs, their respective function, and the total number of occurrences in the Pre-Tests and Immediate Post-Tests.

Table 15. Most Frequently Used DMs by Group

		Experimental Group		Control Group		
Discourse Marker	**Discourse Marker Type**	**Pre-Test**	**Immediate Post-Test**	**Pre-Test**	**Immediate Post-Test**	**Total**
pero (“but”)	Contrast	30	31	13	24	98
cuando (“when”)	Sequence Events	27	21	28	22	98
porque (“because”)	Condition	11	11	14	8	44
entonces (“then”)	Sequence Events	8	11	20	6	45

4.2. Results of Research Question 2

4.2.1. New DMs Used in Immediate Post-Test

As mentioned in the previous section, participants completed the Discourse Marker Familiarity Activity to gauge the effectiveness of the pedagogical intervention for the participants in the Experimental group. In this section, I focus on participants’ use of less-familiar DMs (i.e., a DM they evaluated as “Familiar/Know the meaning but not regular use” or “Not Familiar/Do not know meaning and/or use”) in the Immediate Post-Test that they did not utilize in the Pre-Test because their usage suggests the pedagogical intervention raised participants’ awareness regarding their function and allowed participants to attempt to use them. In the Experimental group, there were six participants who produced a less-familiar DM in their Immediate Post-Test that was not utilized in their Pre-Test. These discourse markers were: *en cuanto* (“as soon as”), *más tarde* (“later”), *luego* (“later”, “then”), *por eso* (“for that reason”, “therefore”), *tan pronto como* (“as soon as”), *de repente* (“suddenly”), *al principio* (“at first”), *entonces* (“then”), and *ya que* (“given that”). Table 16 provides the DMs produced by the six participants and the

participant's individual DM familiarity response and both groups' average familiarity for the particular DM.

Table 16. New Low Familiarity DMs in Immediate Post-Test for Experimental Group Participants

Participant	Discourse Marker	Participant's Familiarity	Overall Group Familiarity
E-L1	*En cuanto* ("As soon as")	1	2.24
E-L1	*Más tarde* ("Later")	2	2.68
E-L1	*Luego* ("Later", "Then")	2	2.74
E-L4	*Por eso* ("For that reason", "Therefore")	2	2.58
E-L4	*Tan pronto como* ("As soon as")	1	2.34
E-L5	*De repente* ("Suddenly")	2	2.24
E-L5	*Luego* ("Later", "Then")	2	2.74
E-L7	*Al principio* ("At first")	2	2.53
E-L8	*Entonces* ("Then")	2	2.84
E-E4	*Ya que* ("Given that")	2	2.18

As mentioned in the Chapter 3, in addition to the pedagogical intervention video, participants also reviewed a list of transition words and phrases, or *expresiones de transición*, in Bleichmar and Cañón's *Taller de escritores*, 2nd edition (pg. 44), and completed a fill-in-the-blank exercise (*Práctica*, Exercise 1, pg. 45) related to these transition words. Eight of these words and phrases were also provided in the list of DMs given to students or were also used in the narration of "For the Birds" reviewed in the intervention video. These DMs included: *tan pronto como* ("as soon as"), *en cuanto* ("as soon as"), *antes* ("before"), *después* ("after"), *finalmente* ("finally", "in the end"), *luego* ("later", "then"), *mientras* ("while"), and *cuando* ("when"). However, in the list of *expresiones de transición* on page 44 and in Activity 1 on page 45, students reviewed the

uses of *tan pronto como* (“as soon as”) and *en cuanto* (“as soon as”) to prompt the use of the subjunctive in adverbial clauses. In contrast, in the pedagogical intervention, *tan pronto como* (“as soon as”) and *en cuanto* (“as soon as”) were shown to prompt the use of the indicative when referring to past events. For this reason, it can be inferred that the list of expressions on pg. 44 and Exercise 1 did not have much effect on participants given that those students who used *tan pronto como* (“as soon as”) and *en cuanto* (“as soon as”) in the Immediate Post-Test were able to use these DMs with the indicative form of the verbs in adverbial clauses.

Two participants who did not use the DM *luego* (“later”, “then”) in the Pre-Test ranked this DM as “Familiar/Know the meaning but not regular use” in the Discourse Marker Familiarity Activity. However, after the pedagogical intervention, these students utilized this DM in the Immediate Post-Test. This DM was provided on both lists reviewed by students; however, it was not used in Exercise 1 (pg. 45) of the textbook, but it was used in the narration reviewed with students during the pedagogical intervention video. Other less familiar DMs (e.g., *por eso* (“for that reason”), *al principio* (“in the beginning”), and *ya que* (“given that”)) were only provided to students on the pedagogical intervention list and used in sample narration. Three different participants produced these less familiar DMs in their Immediate Post-Test: E-L4 used *por eso* (“for that reason”), E-L7 used *al principio* (“in the beginning”), and E-E4 used *ya que* (“given that”).

This fact lends support to the effectiveness of the pedagogical intervention in allowing students to attempt to use less-familiar DMs after the intervention. Given that both types of SHL learners produced DMs in the Immediate Post-Test that they did not

produce in the Pre-Test, it can also be inferred that the pedagogical intervention had a slight positive effect for both types of SHL learners (i.e., Early and Late). Nevertheless, at the individual level, it seems to benefit Late SHL learners more than Early SHL learners since they incorporate less-familiar DMs in their narrations more than Late SHL learners (i.e., 5 Late SHL participants vs. Early SHL 1 participant).

The results for the Control group are similar to those of the Experimental group since participants from both groups utilized less-familiar DMs in the Immediate Post-Test. However, as shown in Table 17, a total of five participants in the Control group produced six DMs that they rated as less familiar. Of these five DMs, only *mientras* ("while") and *finalmente* ("finally", "in the end") were provided in the list on pg. 44 of the course textbook. The remaining three DMs, i.e., *al principio* ("in the beginning"), *de repente* ("suddenly"), and *así que* ("so"), were not provided in the textbook list nor, to the author's knowledge, taught to students in the Control group. Given that it is unknown what type of instruction prompted these participants to utilize these DMs in their Immediate Post-Tests, it cannot be commented on further.

Table 17. New Low Familiarity DMs in Immediate Post-Test for Control Group Participants

Participant	**Discourse Marker**	**Participant's Familiarity**	**Overall Familiarity**
C-L2	*Al principio* ("At first")	2	2.53
C-L4	*Al principio* ("At first")	2	2.53
C-L8	*Mientras* ("While")	2	2.74
C-L9	*De repente* ("Suddenly")	1	2.24
C-L9	*Finalmente* ("Finally", "In the end")	2	2.89
C-E7	*Así que* ("So")	2	2.37

Participants in both groups (i.e., the Experimental and Control groups) used DMs they were less familiar with in their Immediate Post-Tests that were not used in their Pre-Tests. This usage suggests that both teaching approaches, i.e., 1) Explicit Instruction + Input Flood + Textual Enhancement and 2) providing a list of *expresiones de transición* ("transitional expressions"), had a positive effect regarding the use of less-familiar DMs. However, participants in the Experimental group produced nine different less-familiar DMs compared to participants in the Control group who used five different less-familiar DMs in their Immediate Post-Tests. This difference between both groups suggests that the pedagogical intervention had more of an effect than the instruction provided to the Control group.

Overall, the results of the Immediate Post-Test suggest that the pedagogical intervention had a positive impact on the use of DMs in participants' narrations. This effect is evident in the use of less-familiar DMs in six participants' narrations. These DMs were utilized in the narration reviewed with participants in the pedagogical intervention, which supports this interpretation of the results. Although participants in the Control group also utilized less-familiar DMs in the Immediate Post-Test that they did not utilize in the Pre-Test, most of these DMs cannot be attributed to the list of DMs (pg. 44 of *Taller de escritores*) reviewed by participants nor the activity completed during Week 5 (pg. 45 of *Taller de escritores*). Furthermore, participants in the Control group only used five less-familiar DMs while participants in the Experimental group used nine less-familiar DMs. Of the less-familiar DMs used in the Immediate Post-Test, 60% (3/5) of the DMs used by the Control group were multi-word DMs (i.e., *de repente* ("suddenly"), *asi que* ("so"), and *al principio* ("in the beginning")) and 77.8% (7/9) of

the DMs used by the Experimental group were multi-word DMs (i.e., *en cuanto* ("as soon as"), *más tarde* ("later"), *por eso* ("for that reason"), *tan pronto como* ("as soon as"), *de repente* ("suddenly"), *al principio* ("in the beginning"), and *ya que* ("given that")). The Experimental group's use of DMs in the Immediate Post-Test indicates that the pedagogical intervention had a greater effect on the use of less-familiar, multi-word DMs than the instruction received by the Control group.

In the next section, I provide the results regarding the syntactic complexity, morpho-syntactic accuracy, and fluency measures calculated in participants' Pre-Tests and Immediate Post-Tests. The syntactic complexity and fluency measures analyzed in the following subsections (see Sections 4.3.1. and 4.3.3) relate to the previous research questions concerning discourse markers since an increase in the use of DMs that prompt subordination (e.g., *tan pronto como* ("as soon as") and *ya que* ("given that")) is expected to increase these two measures.

4.3. Results of Research Question 3

The last research question addresses the syntactic complexity, morpho-syntactic accuracy, and fluency (CAF) measures of SHL learners. The purpose of calculating CAF measures was to compare these indices between two SHL leaner profiles, i.e., between Early SHL learners (i.e., participants who began speaking Spanish at an earlier age) and the Late SHL learners (i.e., participants who began speaking Spanish at a later stage in life). It was expected that Late SHL participants would produce less syntactically complex sentences in their narrations, produce narrations that were less morpho-syntactically accurate, and produce shorter texts than Early SHL participants. In the

following subsections, I present the results of the syntactic complexity measures for both groups (see Section 4.3.1), followed by the morpho-syntactic accuracy results (see Section 4.3.2), and end with a description of fluency measures (see Section 4.3.3). Tables 18 and 19 provide an overview of the results of the CAF measures (e.g., number of T-Units, number of subordinate clauses, etc.) in the Pre-Tests and Immediate Post-Tests of each participant in the Experimental group and the Control group, respectively.

Table 18. Complexity, Accuracy, and Fluency Results for Experimental Group

Part. Code	# Words	# T-Units	MLTU[11]	EFTU[12] (%)	TC/TU[13]	# SC[14]
Pre-Test						
E-E1	141	20	7.05	85%	1.20	4
E-E2	122	18	6.8	88.90%	1.28	5
E-E3	272	31	8.8	93.50%	1.29	9
E-E4	268	20	13.4	90%	1.35	7
E-E5	150	17	8.8	41.18%	1.24	4
E-E6	129	16	8.1	87.50%	1.38	6
E-E7	253	23	11	91.70%	1.52	13
E-E8	206	17	12.1	70.60%	1.47	8
E-E9	322	21	15.3	85.70%	1.62	13
E-E10	240	27	8.9	85.20%	1.33	9
E-E11	250	26	9.6	65.40%	1.31	8
E-L1	178	24	7.4	45.83%	1.21	5
E-L2	241	21	11.5	85.70%	1.43	9
E-L3	152	19	8.0	63.15%	1.37	7
E-L4	116	12	9.7	50%	1.17	2
E-L5	192	19	10.7	22.20%	1.42	8
E-L6	209	22	9.5	90.90%	1.41	9
E-L7	127	20	6.4	65%	1.20	4
E-L8	234	21	11.1	95.23%	1.48	10
Immediate Post-Test						
E-E1	352	33	10.7	93.80%	1.61	20
E-E2	139	16	8.7	87.50%	1.38	6
E-E3	296	33	9.0	87.90%	1.58	19
E-E4	387	27	14.3	77.80%	1.41	11
E-E5	113	13	8.7	69.20%	1.08	1
E-E6	133	15	8.9	73.30%	1.40	6
E-E7	297	25	11.9	84%	1.48	12
E-E8	191	17	11.2	88%	1.41	7
E-E9	210	18	11.7	94.40%	1.39	7
E-E10	255	25	10.2	92%	1.68	17
E-E11	210	25	8.4	76%	1.28	7
E-L1	182	20	9.1	40%	1.45	9

[11] MLTU represents for "Mean Length of T-Unit."
[12] EFTU represents "Error-Free T-Units."
[13] TC/TU represents "Total Number of Clauses (Main Clauses + Subordinate Clauses) per Total Number of T-Units."
[14] #SC represents "Total Number of Subordinate Clauses."

E-L2	553	55	10.1	72.70%	1.42	23
E-L3	185	21	8.8	85.70%	1.38	8
E-L4	160	17	9.4	70.60%	1.29	5
E-L5	118	16	7.4	50%	1.13	2
E-L6	184	25	7.4	88%	1.32	8
E-L7	157	17	9.2	82.40%	1.47	8
E-L8	157	11	14.3	100%	1.64	7

Table 19. Complexity, Accuracy, and Fluency Results for Control Group

Part. Code	# Words	# T-Units	MLTU	EFTU (%)	TC/TU	# SC
Pre-Test						
C-E1	160	17	9.4	82.4%	1.59	10
C-E2	178	20	8.9	80.0%	1.30	6
C-E3	168	13	12.9	92.30%	1.69	9
C-E4	311	21	14.8	90.50%	1.81	17
C-E5	157	14	11.2	92.50%	1.71	10
C-E6	137	17	8.1	64.70%	1.24	4
C-E7	107	14	7.6	78.60%	1.29	4
C-E8	235	26	9.0	88.50%	1.27	7
C-E9	107	14	7.6	85.70%	1.43	6
C-E10	183	14	13.1	78.60%	1.79	11
C-E11	272	23	11.8	78.30%	1.48	11
C-L1	240	25	9.6	92.0%	1.36	9
C-L2	156	21	7.4	71.40%	1.14	3
C-L3	206	18	11.4	55.60%	1.39	7
C-L4	324	36	9.0	77.80%	1.44	16
C-L5	136	13	10.5	15.40%	1.54	7
C-L6	104	13	8.0	69.20%	1.54	7
C-L7	135	18	7.5	94.40%	1.17	3
C-L8	115	14	8.2	57.10%	1.00	0
C-L9	151	17	8.9	82.4%	1.18	3
Immediate Post-Test						
C-E1	110	15	7.3	100%	1.27	4
C-E2	147	24	6.1	76%	1.13	3
C-E3	187	16	11.7	93.80%	1.44	7
C-E4	284	24	11.8	91.70%	1.63	15
C-E5	129	11	11.7	81.80%	1.45	5

C-E6	163	18	9.1	88.90%	1.44	8
C-E7	89	17	5.2	100%	1.18	3
C-E8	133	16	8.3	87.50%	1.25	4
C-E9	103	17	6.1	94.10%	1.06	1
C-E10	223	24	9.3	91.70%	1.46	11
C-E11	167	19	8.8	73.70%	1.26	5
C-L1	269	28	9.6	78.60%	1.21	6
C-L2	156	15	10.4	80%	1.20	3
C-L3	138	17	8.1	82.40%	1.24	4
C-L4	306	31	9.9	87.10%	1.58	18
C-L5	129	17	7.6	47.10%	1.24	4
C-L6	154	17	9.1	41.20%	1.35	6
C-L7	96	14	6.9	92.90%	1.21	3
C-L8	156	18	8.7	83.30%	1.39	7
C-L9	182	27	6.7	92.60%	1.15	4

The results presented in Tables 18 and 19 are described in detail in the following subsections, beginning with syntactic complexity (Section 4.3.1), followed by morpho-syntactic accuracy (Section 4.3.2), and, lastly, fluency (Section 4.3.3).

4.3.1. Syntactic Complexity

The calculations used to measure the syntactic complexity of each narration were Mean Length of T-Unit (MLTU) and Mean Number of Clauses per T-Unit (MC/TU). Table 20 provides the MLTU for each group by SHL learner profile (i.e., Early or Late) for the Pre-Test. To determine whether the difference between the means of both SHL learner profiles was significant, an independent samples *t*-test was conducted. The results of the *t*-test indicated that the difference between the means for Early and Late SHL learners in the Pre-Test was not significant ($t_{(37)} = 1.55$, $p = .064$).

Table 20. Mean Length of T-Units for Group for Pre-Test

Group	N	M	SD
Early	22	10.19	2.53
Late	17	9.11	1.57
TOTAL	**39**	**9.72**	**2.21**

Table 21 provides the MLTU for Early and Late SHL learners in the Immediate Post-Test. The results of an independent samples *t*-test indicated that the differences between the means of both groups was not statistically significant ($t_{(36)}$[15] = .79, p = .22). Overall, the results presented in Tables 20 and 21 suggest that Early and Later SHL learners do not differ in MLTU.

Table 21. Mean Length of T-Units for Group for Immediate Post-Test

Group	N	M	SD
Early	22	9.5	2.24
Late	16	8.65	1.77
TOTAL	**38**	**9.14**	**1.89**

Tables 22 and 23 show the Mean Number of Clauses per T-Unit (MC/TU) for the Pre-Test and the Immediate Post-Test, respectively, for Early and Late SHL participants. The results of both independent samples *t*-tests revealed no significant differences between the means for Early and Late SHL speakers, i.e., Pre-Test: $t_{(37)}$ = 2.02, p = .05 and Immediate Post-Test: $t_{(37)}$ = .81, p = .21.

Table 22. Mean Number of Clauses Per T-Unit for Pre-Test

Group	N	M	SD
Early	22	1.44	.19
Late	17	1.32	.16
TOTAL	**39**	**1.39**	**.18**

[15] The *t*-test was performed excluding an outlier that was above 2.5 times the standard deviation (Participant E-L8, MLTU = 14.3).

Table 23. Mean Number of Clauses Per T-Unit for Immediate Post-Test

Group	N	M	SD
Early	22	1.38	.17
Late	17	1.33	.15
TOTAL	**39**	**1.36**	**.16**

4.3.2. Morpho-syntactic Accuracy

The following section presents the results of the calculations for the two measures utilized to calculate morpho-syntactic accuracy (i.e., Error-Free T-Units/T-Unit (EFTU) and type of morpho-syntactic error) for each group of participants (i.e., Experimental and Control groups) and for each type of SHL learner (i.e., Early and Late SHL learners). As mentioned in Chapter 3, orthography and accent placement were not considered as errors. Tables 24 and 25 present the mean EFTU, in percentages, for the Pre-Test and the Immediate Post-Test for Early and Late SHL learners. For the Pre-Test, an independent samples *t*-test indicated that there was a significant difference between the mean EFTU measures of both groups ($t_{(36)}$[16] = 3.03, p = .004); a similar *t*-test resulted in a significant difference between the means of both groups for the Immediate Post-Test ($t_{(37)}$ = 2.53, p = .016). These results suggest that Early SHL learners produce more accurate, or error-free, T-units than Late SHL learners.

[16] The *t*-test was performed excluding an outlier that was above 2.5 times the standard deviation (Participant E-E5, mean EFTU = 41.18%).

Table 24. Mean EFTU for Pre-Test (in Percentages)

Group	N	M	SD
Early	21	83.6	12.26
Late	17	66.67	23.17
TOTAL	**38**	**76**	18.93

Table 25. Mean EFTU for Immediate Post-Test (in Percentages)

Group	N	M	SD
Early	22	86.5	8.86
Late	17	74.98	18.31
TOTAL	**39**	81	15.06

The last index used to measure morpho-syntactic accuracy was Error Type, which consisted of twelve different categories. These categories are presented below with examples from the narrations written by the participants of this study:

1. Gender Agreement Errors-
    a. "Los pájaros perdieron **todos** de sus plumas azules…" (Participant C-E2, Pre-Test)
    b. "y miraba las fotos de Ace, un perro que gano **muchas** premios a la universidad." (Participant E-E11, Immediate Post-Test)
2. Number Agreement Errors
    a. "**El** pies del pájaro cayeron despacio." (Participant E-E5, Pre-Test)
    b. "**Ningunos** de los pajaritos se gustaban al pájaro grande." (Participant C-L2, Pre-Test)
3. Preposition Errors
    a. "Los pájaros perdieron todos **de** sus plumas azules" (Participant C-E2, Pre-Test)

b. “pero no alcanzo avisarles a los del medio **en** tiempo.” (Participant E-E4, Pre-Test)

4. Pronoun Errors
    a. “y se queda mirando los cuadros que están colgados en la pared hasta que **te** topa con una mano que lo asusta.” (Participant E-E3, Immediate Post-Test)
    b. “y **se** falló porque cometió errores.” (Participant C-L6, Immediate Post-Test)
5. Verb Errors
    a. “Despues de **peleando**, los pequeños forzó el grande fuera del cable.” (Participant C-L8, Pre-Test)
    b. “y el cable **volar**.” (Participant E-E5, Pre-Test)
6. Vocabulary Errors
    a. “era convertirse en un **perro canino**” (Participant E-E7, Immediate Post-Test)
    b. “Al entrar, empezó a **realizar** que el era mas chico y no tan bueno en las actividades como sus compañeros.” (Participant E-E5, Immediate Post-Test)
7. Tense Errors
    a. “Cuando ellos **llegaría** al tierra, el pájaro grande fuera se riendo.” (Participant C-L5, Pre-Test)
    b. “Los pajaritos se **molestan**” (Participant E-L3, Pre-Test)
8. Aspect Errors

a. “Mientras Pip **caminó** a la entrada de la escuela, un grupo de perros grandes corrió alrededor de él.” (Participant E-L2, Immediate Post-Test)
b. “cada día la entrenadora **tropezó**” (Participant C-E2, Immediate Post-Test)

9. Mood Errors
    a. “Los dos pájaros al lado decidirán que sería divertido picotear sus garras hasta que **tuvo** que dejar ir y **caería** al suelo.” (Participant C-L4, Pre-Test)
    b. “y **siéntate**” (Participant E-L7, Pre-Test)
10. Word Order Errors
    a. “Pero cuando vino el día del **final examen**, el no lo paso.” (Participant E-E2, Immediate Post-Test)
    b. “y pudó **la guiar** a la seguridad.” (Participant C-L5, Immediate Post-Test)
11. Relativizer Errors
    a. “Entonces Pip se fijo que en uno de los retratos **que** estaba un pero chaparrito igual que el.” (Participant E-E1, Immediate Post-Test)
    b. “entonces le pega para **Ø** se quite.” (Participant C-E11, Pre-Test)
12. Determiner Errors
    a. “Mientras que todos los pajaritos tenían vergüenza, el pájaro grande se rio en **la** victoria.” (Participant C-L3, Pre-Test)

b. “El perro vio los periódicos que se pavorearon a Ace (**un** otro perro de la escuela).” (Participant C-L6, Immediate Post-Test)

Table 26 provides an overview of the total number of errors produced by each group in both narrations. As shown in Table 26, Early SHL participants produced less errors than Late SHL participants (i.e., 149 vs. 252, respectively). Early SHL participants produced an average of 6.8 errors while Late SHL participants produced an average of 14.8 errors. Although Early and Late SHL learners differed in the total amount of errors they produced in their narrations, both groups showed a similar pattern regarding the types of errors they produced. That is, Preposition Errors and Vocabulary Errors were the errors both groups produced at the highest rate. Preposition Errors comprised 30.2% of the errors produced by Early SHL participants and 24.2% of the errors produced by Late SHL learners, and Vocabulary Errors comprised 16.8% of the errors produced by Early SHL participants and 22.2% of the errors produced by Late SHL participants.

Table 26. Error Type per Group (Pre-Test and Immediate Post-Test Combined)

Type of Error	**Early SHL Participants Errors (N/%)**	**Late SHL Participants Errors (N/%)**
Gender Agreement	13 (8.7%)	16 (6.4%)
Number Agreement	13 (8.7%)	14 (5.6%)
Preposition Errors	**45 (30.2%)**	**61 (24.2%)**
Pronoun Errors	19 (12.8%)	32 (12.7%)
Verb Errors	9 (6%)	16 (6.3%)
Vocabulary Errors	**25 (16.8%)**	**56 (22.2%)**
Tense Errors	7 (4.7%)	17 (6.7%)
Aspect Errors	4 (2.7%)	18 (7.1%)
Mood Errors	6 (4%)	9 (3.6%)
Word Order Errors	1 (0.7%)	3 (1.2%)
Relativizer Errors	2 (1.3%)	3 (1.2%)
Determiner Errors	5 (3.4%)	7 (2.8%)
TOTAL	**149**	**252**

4.3.3. Fluency

As mentioned in Chapter 4, fluency, or the amount of language produced by an individual, can be measured using various indices. This study used four different measures to calculate the fluency of SHL learners. These included: 1) the average number of words per text, 2) the average number of T-units per text, 3) the average number of dependent, or subordinate, clauses per text, and 4) the use of different types of subordinate clauses. Although each measure was calculated individually for each participant, the results presented here will be the averages of each group (i.e., Early SHL learners vs. Late SHL learners) for each task (i.e., Pre-Test and Immediate Post-Test) to determine the differences between each group regarding fluency.

Tables 27 and 28 present the mean number of words for Early and Late SHL participants in the Pre-Test and Immediate Post-Test, respectively. The results of two independent samples *t*-tests revealed no significant differences between both groups in either narration, i.e., Pre-Test: $t_{(37)} = 1.03$, $p = .30$ and Immediate Post-Test $t_{(36}$[17]$_{)} = 1.08$, $p = .29$. These results indicate that both groups did not differ from one another regarding the number of words used to construct both narrations.

Table 27. Mean Number of Words in Pre-Test

Group	N	M	SD
Early	22	198.6	66.88
Late	17	177.4	58.95
TOTAL	**39**	**189.3**	**63.6**

[17] The *t*-test was performed excluding an outlier that was above 2.5 times the standard deviation (Participant E-L2, Total Number of Words in Immediate Post-Test = 553).

Table 28. Mean Number of Words in Immediate Post-Test

Group	N	M	SD
Early	22	196.3	83.91
Late	16	170.6	52.26
TOTAL	**38**	**185.4**	**72.6**

Table 29 shows the means for Early and Late SHL participants in the Pre-Test; the results of an independent samples *t*-test indicated that there was no significant difference between the means of these two groups ($t_{(36}$[18]$_{)}$ = .63, p = .53). Regarding the Post-Test, Table 30 shows the means of both groups of participants for this task. An independent samples *t*-test revealed no statistically significant difference between both means ($t_{(36}$[19]$_{)}$ = .48, p = .63). Similar to the previous fluency index, both groups of participants do not differ with regards to the number of T-units produced in each narration.

Table 29. Mean Number of T-Units in Pre-Test

Group	N	M	SD
Early	22	19.5	4.9
Late	16	18.56	3.93
TOTAL	**38**	**19.1**	**4.49**

Table 30. Mean Number of T-Units in Immediate Post-Test

Group	N	M	SD
Early	22	20.36	6.06
Late	16	19.44	5.55
TOTAL	**38**	**19.97**	**5.79**

[18] The *t*-test was performed excluding an outlier that was above 2.5 times the standard deviation (Participant C-L4, Total Number of Words in Pre-Test = 36).
[19] The *t*-test was performed excluding an outlier that was above 2.5 times the standard deviation (Participant E-L2, Total Number of T-Units in Immediate Post-Test = 55).

Tables 31 and 32 present the mean number of subordinate clauses used in both narrations by both groups of participants, that is, Early and Late SHL participants. An independent samples *t*-test produced statistically significant results for the Pre-Test ($t_{(35}$[20]$_{)}$ = 2.06, p = .047); however, the results of the independent samples *t*-test for the Immediate Post-Test was not statistically significant ($t_{(36}$[21]$_{)}$ = 1.10, p = .28).

Table 31. Mean Number of Subordinate Clauses in Pre-Test

Group	N	M	SD
Early	21	7.81	2.87
Late	16	5.81	2.99
TOTAL	**37**	**6.95**	**3.05**

Table 32. Mean Number of Subordinate Clauses in Immediate Post-Test

Group	N	M	SD
Early	22	8.14	5.51
Late	16	6.38	3.76
TOTAL	**38**	**7.39**	**4.87**

Additional independent samples *t*-tests were conducted for the mean number of nominal, relative, and adverbial clauses for both Early and Late SHL participants in the Pre-Test and Immediate Post-Test. Neither of these *t*-tests resulted in statistically significant differences between the mean number of either type of subordinate clause for both groups of participants in both narrations. Given that these tests did not produce any significant results, they are presented in Appendix G.

[20] The *t*-test was performed excluding two outliers that were above 2.5 times the standard deviation of their respective group (Participant C-E4, Total Number of Subordinate Clauses in Pre-Test = 17 and Participant C-L4, Total Number of Subordinate Clauses = 16).

[21] The *t*-test was performed excluding an outlier that was above 2.5 times the standard deviation (Participant E-L2, Total Number of Subordinate Clauses in Immediate Post-Test = E-L2).

4.4. Conclusion

The results presented in this chapter confirm a few of the predictions made in Chapter 3. First, the results indicate that SHL learners, regardless of group (i.e., Experimental or Control), resorted to using to a set of four DMs (i.e., *pero* ("but"), *cuando* ("when"), *porque* ("because"), and *entonces* ("then")), which accounted for about 47.5% (285/600) of the DMs used in their narrations. These four DMs ranked high in the results of the Discourse Marker Familiarity Activity completed by participants, that is, most participants reported being familiar with these DMs and using them frequently. These DMs also differ in function; *pero* ("but") is a DM that introduces a contrast, *cuando* ("when") and *entonces* ("then") are used to sequence events, and *porque* ("because") introduces a condition.

Secondly, the data from the Experimental group's Immediate Post-Test suggest that SHL learners benefit from a combination of Explicit and Implicit Instruction regarding the use of less-familiar DMs in narrations. Although there were not enough data to perform a statistical analysis, six participants in the Experimental group used nine less-familiar DMs in the Immediate Post-Test while only five participants in the Control group used five less-familiar DMs in the Immediate Post-Test. This difference suggests the pedagogical intervention (i.e., a combination of Explicit Instruction, Input Flood, and Textual Enhancement) allowed participants in the Experimental group to notice the function of certain less-familiar DMs and utilize them in the Immediate Post-Test.

Lastly, regarding CAF measures, Early and Late SHL speakers differed in the amount of Error-Free T-Units they produced in their writing, with the latter group producing, on average, less EFTUs in their narrations. Nevertheless, the narrations written by Early and Late SHL leaners did not differ in syntactic complexity (i.e., Mean

Length of T-Unit (MLTU) and Mean Number of Clauses per T-Unit (MC/TU)) nor fluency (i.e., average number of words per text, average number of T-units per text, average number of subordinate clauses per text, and different types of subordinate clauses). In the next chapter, I provide an analysis and interpretation of the results presented in this chapter.

Chapter 5

Discussion

5.0. Overview of Chapter

In this chapter, I relate the results presented in the previous chapter to the three research questions proposed in Chapter 3. In doing so, I compare the results presented in Chapter 4 with those of the articles that served as a foundation for the present study regarding the teaching and use of DMs and the research that has been carried out on the CAF measures of texts written by Spanish Heritage Language (SHL) learners. The following chapter is divided as such: Section 5.1 compares the use of discourse markers in SHL narrations to that of Spanish Second Language (SSL) learners; Section 5.2 is divided into two section, Section 5.2.1 compares the effectiveness of the pedagogical intervention used in the present study with previous studies, and, in Section 5.2.2, I provide an example as to how a combination of pedagogical approaches and strategies can be used to teach Spanish DMs to Spanish language learners; in Section 5.3, I compare the results of the CAF calculations with the CAF measures of SHL learners in previous studies; and, lastly, Section 5.4 provides a summary of this chapter.

5.1. Use and Familiarity of Discourse Markers in SHL Narrations

The first research question inquired about the number and type of DMs utilized by Spanish Heritage Language (SHL) learners in written narrations. The results indicated that SHL learners used an average of 15.4 DMs (i.e., 600 total DMs / 39 participants) in these narrations. This average is higher than that of Spanish Second Language (SSL) learners in similar studies. For example, the SSL participants in Hernández and

Rodríguez-González (2013) produced an average of 10.9 DMs (i.e., 577 DMs / 53 participants) in their oral narratives. Although this difference can be attributed to SHL learners' early exposure to and early production of Spanish, the difference between SHL and SSL learners use of DMs could be a result of the difference in coding procedures used in these studies. In the present study, I extracted all DMs from the narrations, including those not found on the list of DMs provided to students (see Appendix D), e.g., *sin que* ("without"), *a pesar de que* ("even though"), among others. Hernández and Rodríguez-González (2013) limited the DMs analyzed in their study to a set of 37 DMs, 25 of which were found in participants' recordings (15). Including all DMs in the narrations written by participants of the present study could have contributed to a higher DM average for SHL learners.

Despite the difference in DM averages between SHL and SSL learners, the results also indicate similarities between both types of language learners regarding their familiarity and use of DMs. In Chapter 4, I presented participants' familiarity averages to a list of 33 DMs (see Appendix A); a similar activity was implemented in Hernández and Rodríguez-González (2013) for SSL participants Although a few of the DMs provided in Hernández and Rodríguez-González (2013) were not listed in the "Discourse Marker Familiarity Activity" completed by the SHL participants in this study, the majority of the DMs were used and can be compared with the averages in Hernández and Rodríguez-González (2013).

The results of the "Discourse Marker Familiarity Activity" completed by SHL learners revealed that SSL learners and SHL learners have a similar knowledge of DMs. For example, both groups reported being most familiar with the DMs *antes* ("before"),

después (“after”), and *pero* (“but”). Additionally, they are most familiar with single-word DMs than multi-word DMs (see pgs. 10-11 of Hernández & Rodríguez-González 2013). This DM familiarity pattern is also confirmed by de la Fuente (2009), who utilized four multi-word Spanish DMs with which the participants of her study (i.e., advanced-level Spanish Second Language learners) were unfamiliar. These included: *o sea* (“that is”), *puesto que* (“because”), *entre tanto* (“meanwhile”), and *en cuanto a* (“regarding”, “in reference to”) (213). This indicates that regardless of language learner profile (i.e., second language or heritage language learner), Spanish language learners are less familiar with multi-word DMs and use single-word DMs less than multi-word DMs.

Additionally, the DMs *pero* (“but”), *cuando* (“when”), *porque* (“because”), and *entonces* (“then”) were the most frequently used DMs among both the SHL participants of this study and the SSL learners in Hernández & Rodríguez-González (2013). Similarly, the SSL participants in Hernández (2011) also showed a preference for the use of *pero* (“but”), *cuando* (“when”), and *entonces* (“then”) in their spoken narrations; these DMs comprised about 65% of the DMs used in all tasks (i.e., pre-test, immediate post-test, and delayed post-test) completed by the SSL participants of that study.

In addition to the studies previously mentioned, the few studies that analyze the types of DMs used by Spanish Second Language learners (SSLers) in their writing demonstrate that there are both differences and similarities in the types of DMs used in narratives written by both types of learners. First, Sánchez-Naranjo (2018) found that SSLers on average, used more DMs in narrative essays than in expository and argumentative essays. In the narrative essays written by SSLers, additive DMs (e.g., *y* (“and”), *además* (“in addition”), and *encima* (“on top of that”)), consecutive DMs (e.g.,

así (“like this”, “thus”), *por tanto* (“therefore”), and *en consecuencia* (“consequently”)), and causal DMs (e.g., *porque* (“because”), *de esta forma* (“in this way”), and *por esta razón* (“for this reason”)) comprised about 72.4% (936/1,292) of all DMs. Of these DMs, the SSL participants in Sánchez-Naranjo and the SHL participants of this study only share the DMs *porque* (because)[22] and *así* (“like this”, “thus”). These differences can be due to Sánchez-Naranjo not including DMs such as *cuando* (“when”), *mientras* (“while”), and *después* (“after”) in her list of DMs extracted from the essays. Also, Sánchez-Naranjo did not specify the topic of the narrative essays that were analyzed, only that they were anecdotes of participants’ choosing. These differences in methodologies used in both studies could account for the differences in the specific DMs used in the texts produced by both Spanish language learners.

Lastly, Vande Casteele and Collewaert (2013) also found that Spanish Second Language learners also frequently used the contrastive DM *pero* (“but”), with some use of other contrastive DMs such as *no obstante* (“nevertheless”), *en cambio* (“however”), and *al contrario* (“on the contrary”). Additionally, the SSL learners in that study also preferred the use of *entonces* as both a consequential DM (i.e., “therefore”) and as an ordering DM (i.e., “then”). Much like the tasks completed by participants in this study, the SSL learners in Vande Casteele and Collewaert (2013) completed a “story-telling task, titled *Nunca olvidaré el día en que…”* (552); that is, the task was also a narration. This finding, once again, shows that SHL and SSL learners use similar DMs when writing a narration.

[22] The SHL participants of this study did use *y* (and) in their narrations; however, this DM was not included in this study as it was not included in the previous studies that served as a basis for comparison for this Dissertation.

In sum, the frequent use of certain DMs [i.e., *pero* ("but"), *porque* ("because"), *entonces* ("then"), and *cuando* ("when")] among both Spanish Second Language learners and Spanish Heritage Language learners suggests that both groups can benefit from instruction that focuses on teaching DMs that have a similar, albeit more nuanced, function to these frequently used Spanish DMs. This type of activity or lesson can be implemented in mixed, SSL-SHL courses as it could help both types of learners incorporate a variety of DMs in their speech or writing, which is important as it has been shown that the repetitive use of DMs can make a text dull (Jalilifar 2008). Also, DMs are a device, or a strategy, used by a speaker or writer to direct to their listener or reader to the inferences they want to make (Saíz 2003, 695). Teaching SHL learners this function of DMs is important given that it has been documented that some SHL learners believe that being provided with "learning strategies for Spanish writing in the HL course would have decreased anxiety and supported writing skills in general" (Torres et al. 2020, 93). Thus, providing SHL learners with the ability to appropriately use Spanish DMs as a writing strategy, that is, to help them guide their interlocutor or reader, can help them improve their Spanish writing and provide them with the confidence they need to produce cohesive and coherent texts (Jalilifar 2008; Saíz 2003).

5.2. Effectiveness of Pedagogical Intervention and Applications

As previously mentioned, the pedagogical intervention tested in this Dissertation had a positive effect on the Experimental group's use of less-familiar, complex DMs in the Immediate Post-Test. In comparison, the Control group, who reviewed a list of Spanish DMs with their respective English translations and completed a fill-in-the-blank

activity using the DMs provided on the list, had a smaller effect on the Control group's use of less-familiar DMs. These results contribute to the findings of previous studies in Second Language Teaching concerning the efficacy of Explicit and/or Implicit Instruction for teaching DMs to Second Language Learners. For this reason, in the following sections, I compare the effectiveness of the pedagogical intervention implemented in this study with the findings of previous studies that used similar pedagogical interventions among Second Language Learners (see Section 5.2.1). I also explain how the use of Implicit Instruction (i.e., Input Flood and Textual Enhancement) can be combined with other approaches currently used in Heritage Language Teaching (e.g., Critical Language Awareness and Task-Based Instruction) to develop SHL learners' use of DMs in writing (see Section 5.2.2).

5.2.1. Effectiveness of Pedagogical Intervention

To answer the second research question (i.e., does a combination of Explicit and Implicit Instruction have a positive effect on the use of DMs in narrations written by SHL learners) participants in the Experimental group watched a 10-minute video that incorporated an explicit explanation of DMs and input flood and textual enhancement in the sample narration reviewed in the video. The analysis of the Immediate Post-Test revealed a slight increase, at the participant level, of less-familiar DMs for both the Experimental group (i.e., an increase of nine different DMs for six participants) and the Control group (i.e., an increase of five different DMs for five participants). Nevertheless, seven of the less-familiar DMs used by these participants in the Experimental group, in their Immediate Post-Tests, were used in the pedagogical intervention. This use of less-

familiar DMs by the participants in the Experimental group suggests that Explicit and Implicit Instruction benefits SHL learners' use of DMs in their writing.

An early study in Second Language Acquisition that investigated the use of Explicit Instruction as a means of teaching discourse, or interactional, markers to second language learners is Yoshimi (2001). This study showed that Explicit Instruction, when paired with corrective feedback, native speaker models, and communicative practice, allowed second language learners of Japanese to utilize the target forms accurately to produce cohesive and coherent narratives. Although the participants in Yoshimi (2001) and the current study differed in language learner profile (i.e., second language learner vs. heritage language learner), target language (i.e., Japanese vs. Spanish), and task modalities (i.e., oral narratives vs. written narrations), the results of both studies on a similar target structure suggests that explicit instruction, when paired with other strategies such as corrective feedback or input flood and textual enhancement, can benefit both types of learners.

The results of this Dissertation also pattern those of studies that tested the effects of Explicit and Implicit Instruction on the acquisition and use of DMs among Spanish Second Language learners (e.g., de la Fuente 2009; Hernández 2011; Hernández and Rodríguez-González 2013). For example, the results of de la Fuente (2009) indicated that Consciousness-Raising (CR) tasks were more effective than Input Enrichment (I-E) tasks, such as Textual Enhancement, at "focusing learners' attention on their forms, meanings, and uses, and consequently raising leaners' awareness of such forms, and promoting explicit learning" (217). Consciousness-Raising tasks, a type of explicit focus on form, are activities in which learners are given examples of a target structure and asked to find

patterns or rules that govern the use of the target form (Loewen 2020, 109). For this reason, these types of tasks develop a learners' explicit knowledge of a linguistic structure.

Although de la Fuente (2009) found a positive effect of Input Enrichment on learners' noticing of DMs in L2 input, she also advocates for further research on the effects of combining different types of tasks, such as CR and I-E tasks (217). The pedagogical intervention implemented in the present study combined both Explicit and Implicit Instruction (i.e., Input Flood and Textual Enhancement). The results of this Dissertation suggest that this combination does raise SHL learners' noticing of DMs and encourages them to use less-familiar DMs in their writing.

One difference between the present study and de la Fuente (2009) was the interaction between participants, that is, participants in de la Fuente (2009) were paired with another participant to complete the pedagogical treatment. She placed participants in the Consciousness-Raising group in pairs to negotiate the meaning of DMs in the text provided; she also paired participants in the Input Enrichment group to determine whether they would negotiate the meaning of the enhanced DMs. Although the results of the pedagogical intervention used in the present Dissertation suggest the efficacy of Explicit Instruction, Input Flood, and Textual Enhancement regarding the use of DMs in SHL writing, SHL students may show more gains in the use of DMs if they complete activities and view the pedagogical intervention in pairs to allow them to discuss and negotiate the function and meaning of DMs used in their narrations. The benefits of having SHL students work in pairs has also been documented in other studies, such as

Torres (2020), where SHL-SHL pairs produced more accurate and syntactically complex business emails than SHL-SSL pairs.

Given that the data collected for this study suggest a positive effect of Explicit Instruction, Input Flood, and Textual Enhancement on the use of DMs for SHL learners, the results of this study are also similar to the findings of Hernández and Rodríguez-González (2013) for SSL learners. Although Hernández and Rodríguez-González (2013) found "that the combined effect of [Explicit Instruction] and [Input Flood] did not have a greater impact on learners' overall use of Spanish discourse markers than [Input Flood] alone," they found that the Explicit Instruction and Input Flood group "demonstrated a more consistent use of new discourse markers, or at the least, an emerging knowledge…of new discourse markers" (25). This positive impact of Explicit Instruction and Implicit Instruction strategies (i.e., Input Flood and Textual Enhancement) on the use of less-familiar DMs was also found for the SHL learners in this study.

Much like the studies in the field of Instructed Heritage Language Acquisition (IHLA) presented in Chapter 2 (i.e., Montrul & Bowles 2010; Potowski et al. 2009), the results of this Dissertation also support the use of Explicit Instruction in the SHL classroom given that the combined use of Explicit Instruction and Implicit Instruction allowed some of the SHL participants to attempt to use less-familiar DMs in their narrations (i.e., production tasks). Similarly, SHL participants in previous IHLA studies showed gains regarding the use of the Spanish imperfect subjunctive in adjectival clauses with indefinite referents (Potowski et al. 2009) and Spanish Dative Case Marking (Montrul & Bowles 2010) in interpretation and production tasks. These studies indicate that Explicit Instruction benefits SHL learners' development of different linguistic

structures, e.g., the subjunctive, Dative Case Marking, and discourse markers. Also, in addition to aligning with the results of previous studies, the results of the second research question also provide support for the recommendation made by Beaudrie et al. (2014), that is, that SHL learners should be explicitly taught how to incorporate transitional words and expressions (e.g., "similarly," "in contrast," "furthermore," and "thus") in their essays to make them more sophisticated (145).

As has been stated by researchers in Heritage Language Acquisition, heritage learners are exposed to "input that is different both qualitatively and quantitatively from the monolingual learner; as a result, they could arrive at a different mental representation of their linguistic knowledge" (Polinsky & Scontras 2020, 5). That is, Spanish monolingual learners and Spanish heritage language learners (i.e., who are to a degree bilingual in Spanish and the societally dominant language) are exposed to different types of input (e.g., oral and written) in different contexts (e.g., the home, school, etc.); for this reason, their Spanish grammars develop differently. This difference in the quality and quantity of input to which SHL learners are exposed could explain why certain DMs are less-familiar to SHL learners. Nevertheless, the increase in the use of less-familiar DMs in SHL learners' narrations suggests that modifying the input provided to SHL learners in the classroom through implicit strategies (e.g., Input Flood and Textual Enhancement) allowed the SHL participants in this study to notice less-familiar DMs. It also suggests that these strategies could potentially be integrated into SHL curricula, that is, in activities and lesson plans. For this reason, more research should be conducted, similar to those studies in IHLA mentioned above, utilizing other target structures as variables to

identify whether SHL learners benefit from Implicit Instruction in other areas of grammar.

To conclude, the results of the second research question contribute to the lack of pedagogical research that identifies the best approaches for SHL learners (Sanz & Torres 2018, 191). The most recent studies carried out on the pedagogical approaches for developing SHL writing have focused on the effects of Task-Based Instruction and collaborative SSL-SHL or SHL-SHL learner writing pairs (Torres & Vargas Fuentes 2021; Torres 2020; Fernández-Dobao 2020). These studies showed how SSL-SHL pairs produce more lexically dense texts (Torres & Vargas Fuentes 2021) and how SHL-SHL pairs can produce more syntactically complex texts (Torres 2020). The current study focused on the effects of Explicit and Implicit Instruction on the use of DMs in individually written narrations; however, future studies on the effects of instruction on this specific target form can investigate how collaborative writing tasks, with SHL-SHL and SSL-SHL dyads, affect the learning and use of DMs in texts written by Spanish language learners. Since the pedagogical intervention used in this study showed a positive effect on the use of DMs in SHL writing, the next section presents an example of how the type of instruction used in this study can be combined with other pedagogical approaches (e.g., Task-Based Instruction) used in Spanish Heritage Language Teaching.

5.2.2. Application of Pedagogical Intervention to Other Types of Writing

In this study, the texts analyzed were narrations of short, silent animated films given that, according to ACTFL Proficiency Guidelines 2012, language learners at the Intermediate High level (the proficiency level of students enrolled in SPAN 302) can

"narrate and describe different time frames when writing about everyday events and situations" (ACTFL Proficiency Guidelines 2012). That is, writing narrations are easier for students enrolled in this course than writing expository, argumentative, and other essays, and this could facilitate the learning of less-familiar DMs during the narration module of the course. Also, the use of narrations could elicit multiple types of DMs such as *después* ("after") and *de repente* ("suddenly") that sequence events and *ya que* ("given that") and *sin embargo* ("however") that provide a condition and contrast, respectively. Lastly, the use of narrations provided results that were comparable with those of previous studies that implemented narrations as part of their data collection process (e.g., Hernández 2011; Hernández & Rodríguez-González 2013).

Nevertheless, the methodology used in this Dissertation can be developed and applied to other genres or types of writing, such as argumentative or expository essays (e.g., op-ed article in Saíz 2003). In applying this methodology to other types of writing, two approaches to language teaching, which are currently used in Spanish Heritage Language Teaching, can be combined to design materials and activities: Task-Based Instruction (Richards & Rodgers 2014) and Critical Language Awareness (Leeman 2018). An example of a task that incorporates these two approaches is writing an op-ed in reaction to the *YouTube* video, "10 Spanish Words You've Been Saying Wrong[23]", posted by *Pero Like*, in which an interpreter explains to one the web series' staff members the "correct" way to refer to certain objects or actions in Spanish.

According to Leeman (2016), Critical Language Awareness based pedagogies "encourage students to question taken-for-granted assumptions about language and to

[23] To watch this video, "10 Spanish Words You've Been Saying Wrong", visit: https://www.youtube.com/watch?v=VVkVktvCe7A&t=153s

analyze how such assumptions are tied to inequality and injustice." It also can "promote students' understanding of the social, political and ideological dimensions of language as a means to promote students' agency in making linguistic choices with the broader goal of challenging linguistic subordination and promoting social justice both inside and outside the school setting" (Leeman 2018, 345-46). For this reason, this specific video can be used because it allows students to engage in a conversation concerning the perpetuation of the ideology that the Spanish spoken in U.S. Latinx communities is incorrect and that certain lexical items should be replaced by standardized variants.

To begin the lesson, an instructor can limit the number of DMs to a set of four or five less-familiar markers commonly used in formal written discourse, as was carried out in de la Fuente (2009) who limited her study to four DMs with which participants were least familiar [i.e., *o sea* ("that is"), *entre tanto* ("meanwhile"), *en cuanto a* ("regarding", "in reference to"), and *puesto que* ("because")] (213). Given that the current study asked participants to rate their familiarity of a list of 33 DMs, it has been documented that *ya que* ("given that"), *mejor dicho* ("better said"), *o sea* ("that is"), and *no obstante* ("nevertheless") are the four DMs with which participants are least familiar. However, other less-familiar DMs such as *al contrario* ("on the contrary") and *por lo tanto* ("therefore") can be added to the list of DMs that can be used in the activities and tasks completed by students.

Although Task-Based Instruction (TBI) promotes the execution of real tasks on behalf of the student, focus-on-form instruction can be incorporated into the TBI lesson as long as the focus on meaning is maintained (Richards & Rodgers 2014, 181). For this reason, having chosen the DMs that will be used in the lesson, an instructor can provide

students with an op-ed piece in which the chosen DMs are used, or added, and manipulated in terms of frequency (i.e., Input Flood) and typologically enhanced (i.e., Textual Enhancement). During this pre-task activity, students can be asked to pair up with another student and read the text. After, students can answer content questions about the op-ed piece and questions such as, How does the author justify their arguments? or What counterarguments does the author provide? (see Saíz 2003 for other questions that can be asked during this type of activity). Upon answering these types of questions, the instructor can draw students' attention to the DMs that are used to lead the reader to make these inferences. Once students have discussed and completed this part of the activity, the instructor would review and discuss these questions with the class. Finally, students can then watch the video mentioned above and work in pairs to write a similar op-ed piece defending the use of the lexical items criticized in the video.

5.3. Syntactic Complexity, Accuracy, and Fluency

The third and final research question addressed the differences in syntactic complexity, morpho-syntactic accuracy, and fluency (CAF) measures between Early and Late SHL participants. That is, the narrations were analyzed for complexity, accuracy, and fluency to determine whether the age at which a participant began to speak Spanish (i.e., the heritage language) affected their abilities to write complex, accurate, and fluent narrations in Spanish. Table 33 compares the CAF measure results of the SHL participants of this study with those from previous studies.

Table 33. Comparison of Syntactic Complexity Measures

	Camus & Adrada-Rafael 2015	**Sánchez Abchi & De Mier 2017**	**Belpoliti and Bermejo 2020**	**Torres 2020**	**Present Study**
SHL Learner Profile	Advanced university SHL learners	Children	Beginner-level university SHL learners	Advanced university SHL learners in HL-HL dyads	Advanced university SHL learners
Genre	Expository	Narratives	Expository	Business e-mail	Narrations
Complexity: Mean Length of T-unit	17.31	6.93	14.1	16.84	**Pre-Test** Early SHL: 10.19 Late SHL: 9.11 **Immediate Post-Test** Early SHL: 9.5 Late SHL: 8.65
Complexity: Subordination (number of clauses per T-unit)	2.03	Total number of subordinate clauses/Total number of T-units: 0.2	2	1.80	**Pre-Test** Early SHL: 1.44 Late SHL: 1.32 **Immediate Post-Test** Early SHL: 1.38 Late SHL: 1.33
Accuracy: Error-free T-units (%)	68.04%	Error-free Clauses: 22.23%	Not Applicable	97%	**Pre-Test** Early SHL: 83.6% Late SHL: 66.7%

					<u>Immediate Post-Test</u> Early SHL: 86.5% Late SHL: 74.98%
Fluency: Total number of words	427	87.3	183	Not Applicable	**<u>Pre-Test</u>** Early SHL: 198.6 Late SHL: 177.4 **<u>Immediate Post-Test</u>** Early SHL: 196.3 Late SHL: 170.6

5.3.1. Syntactic Complexity

Beginning with syntactic complexity, this index was calculated using two measures: Mean Length of T-Unit (MLTU) and Number of Clauses per T-Unit. The results of the independent samples *t*-tests indicated that there were no significant differences between Early and Late SHL participants in the Pre-Test nor in the Immediate Post-Test. These results suggest that age of oral productive abilities in the HL does not affect the length of the T-units nor the number of clauses per T-unit produced by SHL learners when constructing a narration. The results of the independent samples *t*-tests do not support the prediction made regarding the differences in syntactic complexity between both SHL profiles (see Chapter 3). Additionally, the means of the two syntactic complexity measures utilized in this study, for both groups of participants, differed from the averages of previous studies that measured the syntactic complexity of SHL learners'

writing (i.e., Torres 2020; Azevedo 2018; Sánchez Abchi & De Mier 2017; Camus & Adrada-Rafael 2015).

As shown in Table 33 above, the Mean Length of T-unit averages for the Early and Late SHL participants in both the Pre-Test (10.19 and 9.11, respectively) and the Immediate Post-Test (9.5 and 8.65, respectively) differed from those of the advanced-level SHL participants in Camus and Adrada-Rafael (2015) (i.e., MLTU = 17.31), the young SHL participants (ages 8.6 to 13.7 years old) in Sánchez Abchi and De Mier (2017) (i.e., MLTU = 6.93) and the advanced Spanish HL-HL dyads in Torres (2020) (i.e., 16.84). Similarly, the Mean Clauses per T-unit (MC/TU) averages of the present study's participants, both Early SHL participants (i.e., 1.44 in the Pre-Test and 1.38 in the Immediate Post-Test) and Late SHL participants (i.e., 1.32 in the Pre-Test and 1.33 in the Immediate Post-Test), are lower than those of the SHL participants in Camus and Adrada-Rafael (2015) (i.e., 2.03) and the SHL learner pairs in Torres 2020 (i.e., 1.8) (see Table 33).

The differences in MLTU and MC/TU averages for the SHL participants in this study and those in previous studies can be a result of the difference in the genre of the written tasks completed by participants. The tasks used in this study, that is, narrations of short, silent films, are similar to the task used in Sánchez Abchi and De Mier (2017), in which participants also narrated the events of th silent, animated short film, "Something Fishy" (134). However, for the other studies, participants wrote essays on the consequences of using smartphones (Camus and Adrada-Rafael 2015, 37), an editorial article on privacy and the internet (Belpoliti and Bermejo 2020, 20), a business email (Torres 2020), or multiple essays of different genres (Azevedo 2018). The topics and

genres implemented in the essays and written tasks in previous studies perhaps allowed students to have more freedom as to express their opinions or state facts. On the other hand, having students narrate a sequence of events may have limited the information participants could relay.

5.3.2. Morpho-syntactic Accuracy

The first measure used to calculate morpho-syntactic accuracy for the participants of this study was Error-Free T-Units. The results of both independent samples *t*-tests showed a statistically significant difference between the EFTU means of both groups (i.e., Early and Later SHL participants) in the Pre-Test ($t_{(36)} = 3.03$, $p = .004$) and the Immediate Post-Test ($t_{(37)} = 2.53$, $p = .016$). These results suggest that the age at which participants began to speak Spanish does affect an SHL learners' productive accuracy in the heritage language. This difference between Early and Late SHL learners is similar to the difference found between SHL learners and SSL learners in Camus and Adrada-Rafael (2015). Future research should determine if Late SHL learners have a similar EFTU mean to SSL learners.

Although there were significant differences between Early and Late SHL participants regarding Mean EFTU, the results of the Error Type analysis revealed similarities regarding the inaccurate use of prepositions and vocabulary in terms of percentages. The high percentage of preposition and vocabulary errors produced by the SHL participants in the current study patterns with the types of errors produced by SHL learners in previous studies. For example, Sánchez Abchi and De Mier (2017) found that among their participants "preposition and verbal mode errors were highly frequent, while

syntactic order problems were almost absent" (136). Additionally, participants in the present study also produced less syntax errors (i.e., 4/401 errors) compared to other types of errors.

Azevedo (2018) included orthographic, accent, and punctuation errors in her analysis of the accuracy of SHL learners' essays; however, with regards to morpho-syntactic errors, she found that preposition errors consisted of 7-8% of all the errors in participants' essays written by the SHL participants in her study while vocabulary errors consisted of 6-12% of the errors in their essays. If we disregard mechanical errors (e.g., spelling, punctuation, capitalization, and accent errors), vocabulary and preposition errors are the two types of errors produced the most by the four SHL participants in Azevedo (2018).

For the beginner-level SHL participants in Belpoliti and Bermejo (2020), 49.6% of the errors found in participants' essays were agreement errors. Gender agreement in nominal phrases comprised 40.7% of agreement errors, while subject-verb number agreement accounted for 17.3%. However, regarding word class errors, which included omission, selection, and addition of prepositions, these accounted for 40.8% (i.e., 497/1,218) of the word class errors and 19.3% (i.e., 497/2,581) of all the errors (i.e., word class, agreement, and word order errors) produced by participants (87-88).

Moreover, SHL participants' omission of prepositions in certain contexts aligns with data shown in previous studies. For example, it has been documented that SHL learners omit the preposition *a* in Differential Object Marking (i.e., marking animate and specific direct objects using the Spanish preposition *a*) and they also omit obligatory *a* "with dative experiencers with *gustar*-type psych verbs" (Montrul and Bowles 2009,

367). In the narrations analyzed in the present study, some SHL participants omitted the preposition *a* in these contexts. See Sentence 1 for omission of the preposition *a* in a DOM context and Sentence 2 for the omission of obligatory *a* with the verb *gustar*.

(1) *y caminó* ***Ø*** *la mujer por los obstáculos.* (Participant E-L4, Immediate Post-Test)

"and he walked the woman through the obstacles."

(2) ***Ø*** *Los pajaritos no les gustan el pájaro grande.* (Participant E-L3, Pre-Test)

"The birds do not like the big bird."

Moving to vocabulary errors, heritage language learners have smaller vocabularies than monolingual speakers and this vocabulary can be limited to "common objects used in the home and childhood vocabulary" (Montrul 2010, 6). HL learners' smaller lexicon is also attributed to the fact that the HL is used less and they have been exposed to reduced input and output conditions in the HL (Montrul & Mason 2020, 35). This explains the large percentage of vocabulary errors in the narrations analyzed in this study. Because participants have taken courses at the university-level, one can assume that their vocabulary is not limited to household objects. Although it has been attested that SHL learners' use of formal and technical vocabulary increases as SHL learners complete more Spanish courses (Fairclough & Garza 2018), some SHL participants in this study were unable to produce certain lexical items. For example, instead of using *perro guía* for "guide dog" in the film "Pip," one participant used the term *perro canino* (English translation, "dog canine"); another participant used the verb phrase *hacer diversión* instead of *burlarse* ("to make fun of") in the film "For the Birds". This could be a result of the nature of the task, that is, despite completing the narrations as part of the

SPAN 302 course curriculum, students possibly viewed the tasks as informal assignments given that they were untimed and graded on a Credit/No Credit scale.

5.3.3. Fluency

Lastly, regarding the results of the fluency calculations, there were no significant differences between Early and Late SHL participants for the following measures: 1) average number of words per text, 2) average number of T-units per text, and 3) use of different types of subordinate clauses. These results suggest that the age at which an SHL learner begins to speak Spanish (i.e., the heritage language) does not affect the amount of their linguistic output in terms of words, T-Units, and types of subordinate clauses in the HL. Nevertheless, for the fluency measure "Average Number of Subordinate Clauses," Early and Late SHL participants only differed in the Pre-Test ($t_{(35)} = 2.06$, $p = .047$). This change in a statistically significant difference between Early and Late SHL learners can be attributed to a decrease in the use of DMs that prompt subordination for both the Experimental and Control groups in the Immediate Post-Test.

In comparison to previous studies that measured the fluency (i.e., average number of words per text) of SHL learners' written texts (e.g., Belpoliti & Bermejo 2020; Sánchez Abchi & De Mier 2017; Camus & Adrada-Rafael 2015), the 39 participants of this study wrote an average of 187.4 words. Although the participants of this study were enrolled in an advanced Spanish writing course, their fluency average is similar to the fluency average of the beginner-level SHL learners of Belpoliti and Bermejo (2020) (i.e., 187.4 vs. 183 words) and less than the fluency average of other advanced SHL learners (e.g., 427 words, see Camus & Adrada-Rafael 2015). However, their fluency average is

higher than that of the young SHL participants (ages 8 to 13) in Sánchez Abchi and De Mier (2017) (i.e., 87.3 words).

Fluency measures could also have been affected by the instructions and nature of the tasks implemented in this study. For the first narration, students were asked to watch a silent, short film and narrate the important events in a written narration of 10 to 15 sentences (see Appendix B). Requiring a minimum number of sentences could have limited the total number of words each participant wrote. Likewise, although students were not given a minimum length for the Immediate Post-Test, the videos that served as stimuli for both narrations were short, silent films, i.e., "For the Birds" is 3 minutes and 26 seconds long and "Pip" is 4 minutes and 5 seconds long. Students had a limited amount of scenes and actions in the videos that they could narrate which could have possibly affected the total number of words they produced in each task.

5.4. Conclusion

The results of the discourse marker analysis of this Dissertation indicated that Spanish Heritage Language learners and Spanish Second Language learners have a similar knowledge, or familiarity, of Spanish discourse markers and repeatedly use a similar set when producing a narration. The results also indicated that the pedagogical intervention implemented in an advanced Spanish writing course, that is, a combination of Explicit Instruction + Input Flood + Textual Enhancement, had a positive effect on the use of less-familiar DMs by SHL leaners. A positive effect of similar pedagogical interventions has also been shown to benefit SSL learners in oral production of DMs.

Therefore, the results suggest that regarding the use of DMs, both language learner profiles can benefit from this type of instruction in mixed SSL-SHL courses.

In contrast, the results of the syntactic complexity and fluency analyses differed from previous studies in that the SHL participants of this study produced less syntactically complex and fluent written texts. However, these differences can be attributed to differences in the genre, style, and register prompted by differences in the essay topics and/or the type of instruction provided to participants. Nevertheless, regarding the results of the morpho-syntactic accuracy analysis, the participants of this study pattern with SHL learners in previous study given that they produced similar types of errors in their narrations (i.e., preposition and vocabulary errors). To conclude this Dissertation, in the next chapter, I provide a summary of the current study and relate its contributions to research on Heritage Language Teaching and Spanish Heritage Language Writing. I also explain the limitations of the present study and describe areas of future research.

Chapter 6

Conclusion and Future Research

6.1. Summary of Dissertation

The main goal of this Dissertation was to contribute to the fields of the Scholarship of Teaching and Learning and Instructed Heritage Language Acquisition regarding Spanish Heritage Language writing. This Dissertation had three objectives: 1) to determine what types of and the number of DMs SHL learners used in written narrations; 2) to empirically test whether SHL learners benefit from a combination of Explicit Instruction, Input Flood, and Textual Enhancement regarding their acquisition and use of DMs in written narrations; and 3) to measure the syntactic complexity, morpho-syntactic accuracy, and fluency of SHL learners' narrations. The data collected for this study indicated that SHL learners are familiar with single-word DMs that sequence events [e.g., *antes* ("before") and *durante* ("during")], and less familiar with multi-word DMs that serve other functions [e.g., *o sea* ("that is") and *no obstante* ("nevertheless")]. Also, when constructing a narration, SHL learners reuse a set of familiar and frequent DMs, that is, *pero* ("but"), *cuando* ("when"), *porque* ("because"), and *entonces* ("then").

Concerning the effect of the pedagogical intervention, the results indicate that a combination of Explicit Instruction and Implicit Instruction did have a positive effect on SHL learners use of less-familiar, multi-word DMs as measured in the Experimental groups' Immediate Post-Test. The results also suggest that Early and Late SHL learners' narrations do not differ in terms of the syntactic complexity and fluency; however, the latter group produced a statistically significant higher rate of Error-Free T-units in both

narrations in comparison to the Early SHL participants. Despite the difference in accuracy between Early and Late SHL participants, both groups were similar in the types of errors they produced, that is, preposition and vocabulary errors were the two types of errors produced the most by both groups of SHL learners.

6.2. Limitations and Future Studies

Like most studies, the current Dissertation is not without its limitations. One of the most challenging components of this project was data collection; data were collected during the global COVID-19 pandemic. Originally, I planned on collecting data in face-to-face workshops where I could observe students' interactions and answer any questions they had. However, due to the pandemic, the only way I was able to collect data during the 2020-2021 academic year was by recruiting participants from fully online SPAN 302 courses. In the future, I plan on continuing this line of research in a face-to-face context to determine whether learning gains differ in a face-to-face setting vs. a fully online course.

Another limitation of this study is the lack of Spanish Second Language (SSL) learners, or participants. Unfortunately, this Dissertation was not able to ascertain the effectiveness of the pedagogical intervention on the use of DMs in narrations written by SSL learners. Although previous studies (e.g., Hernández & Rodríguez-González 2013; Hernández 2011; de la Fuente 2009) indicate that SSL learners benefit from Explicit and Implicit Instruction regarding the learning and use of DMs in oral narrations, it is necessary to determine whether this type of instruction benefits SSL writing as well since it has been documented that many SHL learners enroll in Spanish language courses with

SSL learners (Torres 2020). For this reason, knowing whether both groups of learners benefit from similar interventions is beneficial for instructors of mixed SSL-SHL courses.

Also, due to the small sample size of participants, I was unable to include multiple experimental groups to determine whether Implicit Instruction alone (i.e., Input Flood Only or Textual Enhancement Only groups) benefits SHL learners' learning and use of DMs without the use of Explicit Instruction (i.e., metalinguistic instruction), as was attested in Hernández & Rodríguez-González (2013) for SSL learners in oral narratives. Testing the effects of an Implicit Instruction only intervention will allow language instructors to know whether SSL and SHL learners benefit from the same type of instruction regarding the use of DMs and will ultimately benefit mixed, SSL-SHL course curriculum. Also, future studies will include an analysis of a delayed post-test as this is necessary to determine the lasting effects of the intervention on the linguistic systems of SHL learners (Bowles 2018; Montrul & Bowles 2017). In the current study, participants were assigned a delayed post-test three weeks after completing the immediate post-test; however, some participants did not complete the assignment or wrote less than 100 words. For these reasons, I did not present the data of these narrations in this Dissertation.

Another way the present research can be expanded is to provide more interventions during the semester. In the current study, I only provided students with one pedagogical intervention during the semester to measure the effects of Explicit and Implicit Instruction on the use of DMs in written narrations. However, language learners may require multiple pedagogical interventions to have more time to become aware of the target structure (Leow 2001, 506). This can be implemented by providing Explicit Instruction, Input Flood and Textual Enhancement for DMs commonly used in narrative,

expository, and argumentative essays completed in Spanish writing courses with a genre-based approach.

Future research can also measure the effects of other types of approaches and strategies on the use of DMs in texts written by SHL learners. For example, SHL students can reflect on their understanding and use of DMs in their writing and determine whether the use of DMs is an effective strategy that lowers their anxiety when writing in Spanish (Torres et al. 2020; Schwartz 2003). Also, future research can investigate the effects of a flipped classroom model in SHL or mixed SSL-SHL writing courses in fully online, hybrid, and face-to-face courses. Torres (2016) found that SHL students responded positively to the use of videos, watched before class (i.e., at home), that were designed to teach students about Spanish writing conventions; however, as he did not analyze how these videos benefitted SHL learners' written texts, future studies should consider how these types of videos used in a flipped classroom model help SHL learners develop their writing as measured through the use of DMs, increase in accuracy, or other Spanish writing conventions.

Despite the current study's limitations, it is my hope that this research on SHL writing also contributes to RAD Scholarship, as proposed by Richard Haswell, that is, research that is Replicable (i.e., "systematic enough and descriptive enough to be replicated"), Aggregable (i.e., "able to be built upon and extended"), and Data-supported (i.e., "presents clear evidence in support of claims") (Driscoll & Perdue 2014, 106; Haswell 2005). Although more research needs to be carried out on this topic, this research also yields positive contributions and implications for Spanish Heritage Language teaching curricula given that it demonstrates measurable, positive effects of

Explicit and Implicit Instruction regarding a target form that helps SHL learners develop their writing. Lastly, it is important to research how Heritage Language learners develop and improve their writing skills in the heritage language as these skills are and will be used in different contexts and situations of their lives, such as, at school, at work, or on social media (Graham 2019). Researching how HL learners develop and can improve their writing will allow instructors to provide them with appropriate, consistent, and research-supported instruction.

Appendix A-Discourse Marker Familiarity Activity

Please rate how familiar you are with each discourse marker listed below:

Discourse Marker	Very familiar/Know the meaning and use	Familiar/Know the meaning but not regular use	Not familiar/Do not know the meaning and/or use
1. Así que			
2. De repente			
3. Sin embargo			
4. Antes			
5. Cuando			
6. Después			
7. Durante			
8. En realidad			
9. Entonces (then)			
10. Finalmente			
11. Entonces (therefore)			
12. Mientras			
13. Pero			
14. Por eso			
15. Porque			
16. Pues			
17. Sabes que			
18. También			
19. No obstante			
20. Luego			
21. Es decir			
22. O sea			
23. Bueno			
24. Tan pronto como			
25. Primero			
26. Al principio			
27. Al contrario			
28. Más tarde			
29. Es que			
30. Por lo tanto			
31. En cuanto			
32. Mejor dicho			
33. Ya que			

Appendix B-Instructions and Prompts for the Three Narrations

Pre-Test Essay

Instrucciones para la siguiente actividad:

1. Ve el siguiente video: [HD] Pixar - For The Birds | Original Movie from Pixar - YouTube
2. Luego, escribe una narración en la que narras los eventos importantes/sobresalientes del video.
3. Utiliza el pretérito simple (p.ej., comí, comiste, comió, etc.) y el imperfecto (p.ej., comía, comías, comía, etc.) en los contextos apropiados. La narración debería consistir en 10-15 oraciones completas.

Immediate Post-Test Essay

Instrucciones para la siguiente actividad:

1. Ve el siguiente video: Pip | A Short Animated Film - YouTube

2. Luego, escribe una narración (utilizando el pretérito simple (p.ej., comí, comiste, comió, etc.) y el imperfecto (p.ej., comía, comías, comía, etc.) en el contexto apropiado)) en la que narras los eventos importantes/sobresalientes del video tomando en cuenta lo que hemos repasado esta semana (el pretérito, el imperfecto, los adverbios y los marcadores discursivos).

3. Finalmente, sube tu narración a este foro de discusión y lee algunas de las narraciones de tus compañeras/os. (No tienen que responder a las narraciones de tus compañeras/os)

Appendix C-Pedagogical Intervention Video Script

Hola clase! En este video van a aprender sobre los marcadores discursivos, es decir, las funciones de los MDs y, también, cómo se utilizan en una narración. En este video,

- Primero, vamos a repasar algunas definiciones de la palabra "narración".
- Luego, repasaremos los usos de los marcadores discursivos (MDs), es decir, sus funciones y algunos ejemplos de MDs que se utilizan en la narración. y
- Al final del video, analizaremos el uso de los marcadores discursivos en una narración del video "For the Birds".

Cómo mencioné en la diapositiva anterior, primero, vamos a repasar algunas definiciones y funciones de la narración.

- La narración es contar algo o, mejor dicho, es relatar un conjunto de acciones o eventos, sea real o ficticio.
- También, una narración informa a un lector o interlocutor sobre lo que ha ocurrido. Por lo tanto, podemos escoger los eventos o las acciones que queremos compartir con el lector o interlocutor.
- Además, una narración puede instruir, divertir o conmover a un lector o interlocutor.
    - Por ejemplo, un cuento de hadas se utiliza para instruir y divertir a los ninos.

Bueno, ahora vamos a aprender sobre los marcadores discursivos y cómo se utilizan en una narración.

- Los marcadores discursivos son palabras o frases que señalan una relación entre dos oraciones o dos párrafos.
- También, estas palabras o frases ayudan con la organización del discurso que creamos y producimos, sea en el habla o en la escritura. Veremos esta funcion, mas adelante, en el ejemplo al final del video.
- Además, guían al lector o al interlocutor y les ayuda hacer inferencias. Asi que, los marcadores discursivos ayudan con la comprensión de un texto.

Aquí les presento una lista de algunos marcadores discursivos que se pueden utilizar para desarrollar una narración. No es una lista exhaustiva, es decir, existen muchos MDs, pero los MDs de esta lista se utilizan con más frecuencia en las narraciones. Por ejemplo, los MDs primero, después, luego, de repente, y finalmente, se usan para organizar los eventos de una narración cronológicamente. También, he subido una lista de marcadores discursivos a UNM Learn. Por favor, repasen esta lista porque ahí tienen ejemplos de marcadores discursivos (que no están en esta lista) que pueden utilizar en sus ensayos.

Finalmente, para terminar esta lección y este video sobre los MDs, vamos a analizar el uso de éstos en una narración. La semana pasada, ustedes escribieron una narración sobre el video “For the Birds.” Para esta lección sobre los MDs, he escrito dos narraciones del video “For the Birds”: una narración sin MDs y una con MDs. He subido a UNM Learn un pdf que contiene ambas versiones.

Bueno, aquí ven el primer parrafo de la narracion sin MDs. Primero, quiero que escuchen las dos versiones, así que, les voy a leer este párrafo, que no tiene MDs, y luego, les voy a leer el mismo párrafo con MDs.

Bueno, creo que notaron que este parrafo de la narración, sin MDs, tiene propiedades de una lista ya que de alguna manera se enumeran los eventos y no se presentan los eventos en un párrafo coherente ni cohesivo porque carece de MDs que nos ayudan hacer ciertas inferencias y relaciones entre las oraciones.

Ahora, este es el primero párrafo, pero, este párrafo contiene MDs. He utilizado los siguientes MDs: al principio, tan pronto como, ya que, mientras, de repente, y es decir.

Los MDs “al principio”, “tan pronto como”, “mientras” y “de repente” hacen referencia al tiempo en el que ocurre la narración ya que le ayudan al escritor organizar los eventos que relata. Por ejemplo, señalan que una acción ocurrió primero, que una acción ocurrió al mismo tiempo que otra, o que una acción ocurrió inmediatamente después de otra.

Los MDs “ya que” y “es decir” presentan una explicación de la oración anterior. Por ejemplo, “ya que” es otra forma de decir “esta es la consecuencia del evento anterior” y “es decir” es un MD que presenta una reformulación de lo que se ha dicho en la oración anterior, es decir, señala que lo que se presenta después de este MD es otra manera de percibir o parafrasear lo que se dijo anteriormente.

Para no quitarles mucho tiempo, no voy a leer ni repasar el segundo párrafo de la narración con ustedes. No obstante, quiero que vean que en este párrafo se utilizan los siguientes MDs, después, luego, y al final, para organizar, cronológicamente, la narración. Pero, ya que tienen el pdf de estas narraciones, espero que ustedes repasen el segundo párrafo detenidamente.

Bueno, espero que este video les haya ayudado y que hayan aprendido algo nuevo. Saben que si tienen preguntas, me pueden enviar un mensaje por UNM Learn o por email. Hasta luego!

Appendix D-Handout-Lista de marcadores discursivos

Marcador Discursivo	Traducción en inglés
1. Así que	So
2. De repente	Suddenly
3. Sin embargo	Nevertheless, however
4. Antes	Before
5. Cuando	When
6. Después	After(ward), then
7. Durante	During
8. En realidad	Actually, in fact
9. Entonces	Then
10. Finalmente	Finally, in the end
11. Entonces	Therefore
12. Mientras	While, meanwhile
13. Pero	But
14. Por eso	For that reason, therefore
15. Porque	Because
16. Pues	So
17. Sabes que	You know that
18. También	Also
19. No obstante	Nevertheless, however
20. Luego	Later, then
21. Es decir	That is
22. O sea	That is
23. Bueno	Well, so
24. Tan pronto como	As soon as
25. Primero	First
26. Al principio	At first
27. Al contrario	On the contrary
28. Más tarde	Later
29. Es que	The thing is that
30. Por lo tanto	Therefore
31. En cuanto	As soon as
32. Mejor dicho	Better said
33. Ya que	Since, given that

*Adapted from Hernández, T. A. & E. Rodríguez-González. 2013. “Impact of Instruction on the Use of L2 Discourse Markers.” *Journal of Second Language Teaching and Research.* 2.1. 3-32.

Appendix E-Example Narrations of "For the Birds"

Narración **sin** marcadores discursivos:

Un pajarito azul aterrizó en una línea eléctrica. Otro pajarito azul llegó a su lado. Los dos empezaron a pelearse y un grupo de pájaros aterrizó en la misma línea eléctrica. Todos empezaron a pelearse y hacer mucho ruido. Todos los pajaritos dejaron de discutir, miraron hacia la derecha, y vieron un pájaro enorme que les saludó. Al verlo, los pajaritos empezaron a burlarse de él y hacer muecas porque este pájaro no era como ellos: no era pequeño.

Los pajaritos dejaron de burlarse del pájaro grande y se alejaron de él. El pájaro voló hacia ellos y aterrizó en medio del grupo de pajaritos. La línea eléctrica se hundió y todos los pajaritos se enojaron porque se amontonaron sobre el pájaro grande. Los pajaritos que estaban al lado del pájaro enorme empezaron a picarle los pies para que se cayera de la línea eléctrica. Uno de los pajaritos se dio cuenta de que ellos serían lanzados hacia arriba si el pájaro grande. Este pajarito les avisó al grupo. El pájaro grande se cayó de la línea eléctrica y los pajaritos fueron lanzados hacia el cielo. Los pajaritos cayeron a la tierra uno por uno, y, después de verlos, el pájaro grande empezó a reírse porque los pajaritos cayeron desde el cielo sin su plumaje.

Narración **con** marcadores discursivos:

Al principo del video, un pajarito azul aterrizó en una línea eléctrica. **Tan pronto como** aterrizó, otro pajarito azul llegó a su lado. **Ya que** ese pájaro aterrizó muy cerca de él, los dos empezaron a pelearse, y **mientras** los dos discutían, un grupo de pájaros aterrizó en la misma línea eléctrica. Todos empezaron a pelearse y hacer mucho ruido. **De repente**, todos los pajaritos dejaron de discutir, miraron hacia la derecha, y vieron un pájaro grande que les saludó. Al verlo, los pajaritos empezaron a burlarse de él y hacer muecas porque este pájaro no era como ellos, **es decir**, no era pequeño.

Después, los pajaritos dejaron de burlarse del pájaro grande y se alejaron de él. **Luego**, el pájaro voló hacia ellos y aterrizó en medio del grupo de pajaritos. **En cuanto** aterrizó el pájaro grande en la línea eléctrica, se hundió y todos los pajaritos se enojaron porque se amontonaron sobre el pájaro grande. Los pajaritos que estaban al lado del pájaro grande empezaron a picarle los pies para que se cayera de la línea eléctrica. **De repente**, uno de los pajaritos se dio cuenta de que ellos serían lanzados hacia arriba si el pájaro grande se cayera. **Por eso**, este pajarito les avisó al grupo. **Sin embargo**, el pájaro grande se cayó de la línea eléctrica y los pajaritos fueron lanzados hacia el cielo. Los pajaritos cayeron a la tierra uno por uno, y, **al final**, después de verlos, el pájaro grande empezó a reírse porque los pajaritos cayeron desde el cielo sin su plumaje.

Appendix F-Language Background Questionnaire

1. Name: _____
2. Age: _____
3. Place of birth: (City, State, Country) _____
4. Number of years studying Spanish-Elementary School:
   □ 0
   □ 1-2
   □ 3-4
   □ 5

5. Number of years studying Spanish-Middle School:
   □ 0
   □ 1-2
   □ 3 or more

6. Number of years studying Spanish-High School:
   □ 0
   □ 1-2
   □ 3-4

7. Number of years studying Spanish-College/University:
   □ 0
   □ 1-2
   □ 3-4

8. Do your parents, grandparents or other family members speak Spanish?
   □ Yes
   □ No

9. Do you speak to your parents, grandparents or other family members in Spanish?
   □ Yes
   □ No

10. Since when have you been able to speak Spanish?
    □ Since I was 2 years old or younger
    □ Since I was 4 years old or younger
    □ Since elementary school
    □ Since middle school or high school
    □ I learned Spanish as an adult

11. Since when have you been able to speak English?
    □ Since I was 2 years old or younger

□ Since I was 4 years old or younger
□ Since elementary school
□ Since middle school or high school
□ I learned Spanish as an adult

12. On a scale of 1 to 4, how well do you feel you can speak Spanish?
□ 1-I only know some words and expressions
□ 2-Confident in basic conversation
□ 3-Fairly confident in extended conversation
□ 4-Confident in extended conversation

13. On a scale of 1 to 4, how well do you feel you can speak English?
□ 1-I only know some words and expressions
□ 2-Confident in basic conversation
□ 3-Fairly confident in extended conversation
□ 4-Confident in extended conversation

14. Which language(s) did your mother speak to you while you were growing up (if applicable)?

□ Spanish
□ English
□ Spanish and English
□ Not applicable
□ Other (Please specify): _____

15. Which language(s) did your father speak to you while you were growing up (if applicable)?
□ Spanish
□ English
□ Spanish and English
□ Not applicable
□ Other (Please specify): _____

16. Which language(s) did your caregiver or guardian speak to you while you were growing up (if applicable)?
□ Spanish
□ English
□ Spanish and English
□ Not applicable
□ Other (Please specify): _____

17. Through which language(s) were you predominantly taught during in elementary school?

□ Spanish
□ English
□ Spanish and English
□ Other (Please specify): _____

18. Through which language(s) were you predominantly taught in during middle school?
□ Spanish
□ English
□ Spanish and English
□ Other (Please specify): _____

19. Through which language(s) were you predominantly taught in during high school?
□ Spanish
□ English
□ Spanish and English
□ Not applicable
□ Other (Please specify): _____

20. Did you receive your Bilingual Seal in high school?
□ Yes
□ No

21. Did you complete AP Spanish courses (Language and/or Literature), take Dual Enrollment Spanish courses or any other type of Spanish course or Spanish placement exam for which you received college/university credit? Please specify below.
If you have completed AP Spanish courses in high school, did you take the AP exam(s)? If so, what scores did you receive on the exam(s)? Please specify below.

22. What was the first college/university-level Spanish course you took at UNM?
□ Beginning-level (100 or 1000 level course)
□ Intermediate-level (200 or 2000 level course)
□ Advanced-level (300 or 400 level course)

23. How often do you write in English? (Circle one)
□ Everyday
□ Weekly
□ Monthly
□ Never

24. How often do you write in Spanish? (Circle one)
□ Everyday

□ Weekly
□ Monthly
□ Never

25. On a scale from 1 to 4, how confident are you in your English writing skills?

□ Not at all confident 1
□ Somewhat confident 2
□ Confident 3
□ Very confident 4

26. On a scale from 1 to 4, how confident are you in your Spanish writing skills?
□ Not at all confident 1
□ Somewhat confident 2
□ Confident 3
□ Very confident 4

27. What are the challenges you face when writing in Spanish?
□ Finding the words I want to say in Spanish
□ Connecting sentences
□ Grammar issues
□ Punctuation and accent marking
□ Other (Please specify): _____

28. What are the challenges you face when writing in English?
□ Finding the words I want to say in English
□ Connecting sentences
□ Grammar issues
□ Punctuation and accent marking
□ Other (Please specify): _____

29. Rate your English language skills (Reading, Listening, Writing, and Speaking) from **weakest to strongest**:
    - _____
    - _____
    - _____
    - _____
30. Rate your Spanish language skills (Reading, Listening, Writing, and Speaking) from **weakest to strongest**:
    - _____
    - _____
    - _____
    - _____

31. What type of texts do you usually write in English (text messages, essays, emails, short stories, poems, etc.)?

_____
_____
_____
_____

32. What type of texts do you usually write in Spanish (text messages, essays, emails, short stories, poems, etc.)?

_____
_____
_____
_____

33. Do you edit your writing in English before submitting an activity for a course grade?
□ Yes
□ No

34. Do you edit your writing in Spanish before submitting an activity for a course grade?
□ Yes
□ No

35. When writing in Spanish, do you first write in English and the translate it to Spanish?
□ Yes
□ No (Please explain below)
□ Sometimes. It depends on the kind of writing I am doing. (Please explain below)

36. Have you taken a course (or courses) that helped you write essays in English? If so, please describe the types of activities you had to complete in this course(s). (Example: My teacher in X writing course showed me an example of a similar essay as a model and I had to write multiple drafts of the same type of essay.)
□ Yes (Please explain below)
□ No

37. Have you taken a course (or courses) that helped you write essays in Spanish? If so, please describe the types of activities you had to complete in this course(s).

(Example: My teacher in X writing course showed me an example of a similar essay as a model and I had to write multiple drafts of the same type of essay.)
□ Yes (Please explain below)
□ No

Appendix G-Independent Samples *t*-test for Nominal, Relative, and Adverbial Subordinate Clauses

Two separate independent samples *t*-test did not produce significant results between the mean number of nominal clauses used by both Early and Late SHL participants in the Pre-Test ($t_{(37)} = .91$, $p = .37$) nor in the Immediate Post-Test ($t_{(36}$[24]$_{)} = .14$, $p = .89$) (see Tables 34 and 35).

Table 34. Mean Number of Nominal Clauses in Pre-Test

Group	N	M	SD
Early	22	1.91	1.54
Late	17	1.47	1.42
TOTAL	**39**	**1.71**	**1.49**

Table 35. Mean Number of Nominal Clauses in Immediate Post-Test

Group	N	M	SD
Early	22	1.95	1.81
Late	16	1.88	1.63
TOTAL	**38**	**1.92**	**1.71**

Two separate independent samples *t*-test did not produce significant results between the mean number of relative clauses for both groups in the Pre-Test ($t_{(36}$[25]$_{)} = 1.14$, $p = .26$) nor in the Immediate Post-Test ($t_{(36}$[26]$_{)} = 1.05$, $p = .30$) (see Tables 36 and 37).

[24] The *t*-test was performed excluding an outlier that was above 2.5 times the standard deviation (Participant E-L2, Total Number of Nominal Subordinate Clauses in Immediate Post-Test = 8).
[25] The *t*-test was performed excluding an outlier that was above 2.5 times the standard deviation (Participant C-E5, Total Number of Relative Subordinate Clauses in Pre-Test =8).
[26] The *t*-test was performed excluding an outlier that was above 2.5 times the standard deviation (Participant E-L2, Total Number of Relative Subordinate Clauses in Immediate Post-Test = 9).

Table 36. Mean Number of Relative Clauses in Pre-Test

Group	N	M	SD
Early	21	1.48	1.47
Late	17	1	1
TOTAL	**38**	**1.26**	**1.29**

Table 37. Mean Number of Relative Clauses in Immediate Post-Test

Group	N	M	SD
Early	22	2.14	1.93
Late	16	1.5	1.71
TOTAL	**38**	**1.87**	**1.85**

The results of two separate independent samples *t*-test did not produce significant results between the mean number of adverbial clauses in the Pre-Test ($t_{(37)} = .73$, $p = .47$) nor in the Immediate Post-Test ($t_{(37)} = .97$, $p = .34$) (see Tables 38 and 39).

Table 38. Mean Number of Adverbial Clauses in Pre-Test

Group	N	M	SD
Early	22	4.55	2.65
Late	17	3.94	2.38
TOTAL	**39**	**4.28**	**2.52**

Table 39. Mean Number of Adverbial Clauses in Immediate Post-Test

Group	N	M	SD
Early	22	4.05	3.34
Late	17	3.18	1.81
TOTAL	**39**	**3.67**	**2.78**

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