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The Effects of Processing Instruction on Chinese Learners' Acquisition of Spanish Copulae

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The Effects of Processing Instruction on Chinese Learners'

Acquisition of Spanish Copulae

by

Wesley Curtis

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
Department of Teaching and Learning
College of Education
and
Department of World Languages
College of Arts and Sciences
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Dedication

This dissertation is dedicated to the memory of my father, whose love, support, and friendship were constant, and whose faith and integrity will forever define what it means to be a man of character.

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The completion of this dissertation would not have been possible without the support and guidance of numerous individuals. I would like to take this opportunity to acknowledge their contributions to my success.

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Abstract

Processing instruction (PI) is a language teaching technique based upon the model of input processing developed by VanPatten (1993, 1996, 2002, 2004). The present study investigated the effects of PI as well as two other experimental conditions (traditional instruction and control) on the acquisition of the Spanish copulae *ser* and *estar* by 66 Chinese university students enrolled in a blended (partially presential and partially online) fourth-semester language course. The PI treatment condition included non-paradigmatic grammar explanations, processing strategies designed to help learners avoid committing errors they may be predisposed to make, and structured input activities which eliminate redundant features of language that may make difficult the establishment of form-meaning connections. The traditional instruction (TI) treatment condition included paradigmatic explanations of grammar as well as production-based activities and exercises. Participants assigned to the control condition did not receive any instruction during the course of the study.

The results of an experiment comparing the effects of each treatment condition on learners' scores on the Knowledge Test of Spanish Copulae, a measurement instrument designed for this study, found PI to be superior to TI at the immediate posttest level for tasks of interpretation and production. However, mean difference scores for the PI group were not significant when compared to those of the control group. Moreover, the

learning gains exhibited by the PI group at immediate posttest were not durative, as they were not significant at the delayed posttest.

Chapter 1:

Introduction

The history of second language acquisition (SLA) is long and varied, and it is beyond the scope of this dissertation to detail every SLA theory or language teaching technique or method. However, in the paragraphs that follow, the researcher has offered, by way of a brief and general overview, insight into how explicit grammar instruction has come to form an integral part of traditional language instruction, especially in the United States. From there, the discussion moves to provide context for a description of the input processing (IP) model and the processing instruction (PI) teaching technique that it engendered.

Background

Though relatively little is known about the language teaching methods employed from the time when Greek and Latin became the *lingua franca du jour* of Western civilization, it is clear that the use of a grammar-translation approach to formal language study became widespread during the Renaissance (Celce-Murcia & McIntosh, 1991), when formal grammars of Classical Latin began to be printed and used in higher education. This approach focused on the analysis of the rules, structure, and syntax of the learner's second (or subsequent) language (L2) and the use of them to carry out translation of classic texts. It was believed that this deductive approach was sufficient for fostering L2 acquisition, and for centuries very little in the way of methodical, empirical

study countered this approach. Nevertheless, according to Celce-Murcia and McIntosh, there were those, like Comenius, von Humboldt, and Gouin, who espoused a belief in a more natural, inductive approach to language learning. Over time, however, the emphasis on the study of grammar in L2 classrooms became firmly entrenched in Western education, and it continues to form part of instructed SLA curricula today. In the 1980s and 1990s, this approach to teaching and learning languages became an integral part of the Chinese system of education as well (Kong, 2011). Prior to this development in Chinese language instruction, however, a number of methods were developed in the West whose following waxed and waned with the prevailing *Zeitgeist* of the era.

The dawn of World War II and the needs of the American military led to the development and adoption of the Audiolingual Method (ALM) of language teaching. The ALM marked a departure from the established method of using the grammar of a L2 to translate L2 texts into a learner's first language (L1). The approach, while still holding to the notion that the internalization of grammar rules led to fluency in the target language (TL), did not employ explicit instruction in, or analysis of, grammar. Instead, it followed a behaviorist approach that emphasized the repetition and drilling of structures and stock phrases, which were based upon contexts and situations in which the American G.I. might find himself (Celce-Murcia & McIntosh, 1991). Additionally, the ALM made use of explicit error correction, which was intended to prevent errors from fossilizing or becoming a permanent part of the learner's underlying L2 linguistic system. The ALM soon found its way in civilian classrooms and homes as well, and audiolingual drilling persisted well after it was shown to be relatively ineffective when compared to a more traditional, analytical approach to grammar.

The relative ineffectiveness of the ALM and criticism from prominent linguists like Noam Chomsky (who claimed that cognition, not habit formation, was necessary for language learning to take place) promoted interest in seeking an alternative approach to language instruction (Shrum & Glisan, 2009). Because explicit grammar instruction was seen to offer a more cognitive approach to language learning (as opposed to the behaviorist approach of the ALM), it again became a dominant approach to language instruction. There were those, however, who sought to promote a more communicative approach that saw language use as opposed to capability in translation as the goal of instruction (Shrum & Glisan, 2009). As a result, in the 1970s and 1980s communicative language teaching approaches began to proliferate in the United States and elsewhere. Among these were Krashen and Terrell's Natural Approach and James J. Asher's Total Physical Response method, both of which were believed to resemble the acquisition of a learner's L1 much more than traditional grammar-centric approaches. Moreover, Krashen's introduction of the monitor model, a group of five hypotheses articulating how languages are acquired (and distinguishing between the natural development of competence in a L2 – *acquisition* – and the unnatural, conscious *learning* of a L2), provided a theoretical framework for these communicative approaches and diminished the perceived efficacy of explicit grammar instruction. Though Krashen's hypotheses were not empirically tested when first postulated, they quickly gained a following among language educators who felt the monitor model resonated with their personal experiences in learning a L2. At the epicenter of all Krashen's claims was that in order for language acquisition to take place, input must be provided for the learner that is comprehensible. It must not be too hard or too easy. While it has become clear that this explanation alone is

not sufficient to describe the processes in SLA (Gass & Selinker, 2008), the focus Krashen's proposition placed on input and its role in SLA is difficult to overstate.

VanPatten (1987b) shared an anecdote that was particularly illustrative of the influence Krashen's monitor model spawned. In his article, VanPatten described one university-level Spanish department that abandoned all instruction in grammar solely on the basis of Krashen's input hypothesis and *not* on evidence-based enquiry. This speaks to the manner in which educators identified with what seemed to be an accurate description of their shared experience as language learners.

While VanPatten (1987b) did not promote or extol the monitor model per se, he did contend that the focus it placed upon input was not only warranted; it was of great importance. Despite this, he sought to move beyond the discussion of the importance of input alone and, instead, draw attention to the relationship between input and traditional (grammar-based) instruction. Further, he outlined the need for empirical studies of the role of both input and explicit grammar instruction in the development of language proficiency. It was with this backdrop that VanPatten began to formulate the IP model that serves as the basis for the present PI inquiry.

Processing instruction. PI relies on the presentation of explicit information including; (1) non-paradigmatic grammatical explanations and (2) processing strategies that serve to counter the ineffective ones learners may carry over from their L1 or another previously acquired language (VanPatten, 2004). Additionally, PI depends heavily upon structured (in contrast with authentic) input activities that reduce or eliminate the redundancies of language that make difficult the development of form-meaning connections (VanPatten & Oikkinen, 1996).

PI studies have explored numerous features of language that learners seem to have difficulty acquiring. Among these are several studies dealing with the acquisition of Spanish, including Spanish direct object pronouns (VanPatten & Cadierno, 1993; VanPatten & Sanz, 1995), the subjunctive mood (Collentine, 1998; Farley, 2001b, 2004; Russell, 2009, 2012), the past tense (Cadierno, 1995), and Spanish copulae (Cheng, 1995, 2002). Each of these studies dealing with the Spanish language had in common the fact that the principal L1 of learners involved in the study was English. In fact, most PI studies to date have been carried out with language learners enrolled in American universities (DeKeyser & Prieto Botana, 2015). More studies are needed among linguistically diverse populations in order to truly evaluate the efficacy of PI and the assumptions of the IP model upon which it is based (see p. 11 for more on the assumptions underlying the IP model). The present study helps to fill this gap by sampling an under-studied population, specifically Chinese learners of Spanish. Moreover, the present research study focused on the acquisition of Spanish copulae, a topic that has received relatively little attention in PI research.

To date, Cheng (1995, 2002) is the only published study to examine the effectiveness of PI on the acquisition of Spanish copulae. According to Cheng (2004), the purpose of her PI study examining *ser* and *estar* was to determine if the results of VanPatten and Cadierno (1993) are generalizable to the acquisition of a semantic-aspectual feature of language, as the original study was limited to an examination of the effectiveness of PI on the acquisition of Spanish object pronouns and word order. Cheng (2004) also indicated that Spanish copulae are problematic for acquisition because, while they carry little intrinsic lexical meaning, they do possess semantic value because in

certain syntactic contexts they contrast with one another semantically and pragmatically. This is particularly true of the expression of the perfective/imperfective nature of actions expressed with Spanish copulae. For example, if a speaker says *El pan está hecho* (*The bread is done [lit. made]*), he is indicating that the action is complete. If the speaker says, *El pan es hecho por mi papá* [the bread is made by my father], a general statement is being made that does not indicate whether or not the bread to which the speaker is referring has been made or is in the process of being made. Thus, Spanish copula selection does have bearing on the semantic value expressed by the speaker.

Further validation of the claim that the acquisition of Spanish copulae is complex comes in the form of studies evaluating the order of Spanish copula acquisition by adult classroom learners. Despite the fact that most Spanish textbooks introduce both *ser* and *estar* early in the course syllabus, VanPatten (1985b, 1987a) showed that the acquisition of these two copulae takes place in a specific order. First, the applicability of *ser* tends to be overgeneralized and used in most contexts requiring a copula. Second, *estar* tends to be used consistently with locatives, though other situations requiring *estar* will see it used inconsistently. Third, *estar* will begin to appear consistently with adjectives of condition. Other studies on the acquisition of *ser* and *estar* (Briscoe, 1995; Finnemann, 1990; Geeslin, 2000, 2001, 2002, 2003, 2004; Guntermann, 1992; Ramírez-Gelpi, 1995) supported the claims of an order of acquisition in classroom contexts independent of the order of presentation in the course syllabus. It is worth noting here that none of these (non-PI) studies were conducted with the student population sampled in the present study.

One of the purposes of PI is to help learners avoid making erroneous assumptions about language that they might otherwise make and, thereby, facilitate or expedite the

acquisition process. In Cheng's (1995, 2002) study evaluating the effects of PI on the acquisition of *ser* and *estar*, only L1 speakers of English were included in her data analyses, and the results of her study did not fully corroborate those of previous PI research. The results of her work indicated that, for the acquisition of *estar*, PI appears to be at least as effective as traditional instruction (TI) for tasks of interpretation and production, despite the fact that the PI treatment involved no practice in production. Additionally, only PI was significantly better than the control group for interpretation tasks, though the difference between PI and TI was not significant. Cheng stated that this may be owed in part to deviations in the principles of design at work in her instructional materials, which she believed to have included an inadvertent presence of more meaningful input than those of VanPatten and Cadierno (1993). Given the lack of consistency with previous PI research, potential methodological issues or deviation from prior studies, and the importance and perceived difficulty of Spanish copulae acquisition, the present study was carried out to provide the additional evidence necessary to fill the described gap in PI research.

Statement of the Problem

Chinese learners who speak Mandarin as their L1 may have difficulty learning to employ Spanish copulae because, while Mandarin does possess a copular verb (是 [*shì*]), it is not always used in contexts that would necessitate use of a copula in Spanish. It follows, then, that Mandarin speakers' speech might reveal a tendency to omit the copula in certain situations. Stated another way, the degree of difficulty in acquiring these forms may increase because differentiation exists between the L1 and L2 (Gass & Selinker,

2008). It is helpful here to look at some ways in which copula usage is similar between Spanish & Chinese and some ways in which usage differs.

Spanish and Chinese both use a copula for equational sentences with a predicate nominative (Butt & Benjamin, 2004; Yip & Rimmington, 2006). In the case of Spanish, *ser* is the copula of choice for this type of sentence, and in Chinese it is 是 (*shì*).

Essentially, a sentence of this sort states that ‘A is equal to B’ (Butt & Benjamin, 2004).

In Spanish, both *ser* and *estar* may be used in sentences with an adjectival predicate. This type of sentence will generally require the use of *ser* if the description is considered to be an innate or inherent trait of that which is being described. Conversely, *estar* is most often used in sentences referring to a state, location, or temporal condition (Butt & Benjamin, 2004). In Chinese, no copula is used for sentences including an adjectival predicate. Rather, the Chinese language might call for an adverb of degree (often only for the purpose of preserving preferred prosodic features) or simply a stative verb alone. It is worth noting that the verb 是 (*shì*), which is often translated as *to be*, is not considered a stative verb because 是 (*shì*) does not appear with states in Chinese (Li & Thompson, 1981). Instead, the state, which bears meaning and is often translated using a copula and an adjective or participle in English and Spanish, is self-contained in the verb.

In addition to the above, Spanish and Chinese differ in another important way: Whereas Spanish makes use of a conjugated form of the copula *estar* and a past participle (that undergoes morphosyntactic changes for gender and number agreement; i.e., *-ados*, *-adas*, *-ado*, *-ado*, *-idos*, *-idas*, *-ido*, *-ida*) to express temporary states and conditions, Mandarin verbs are not conjugated, and aspect is not expressed by the verb itself.

Instead, in certain circumstances aspect markers may be used in conjunction with stative verbs to indicate the duration and perfective or imperfective nature of the state or condition. For example, 着 [zhe] is one aspect particle used to indicate that a state or condition is ongoing (e.g. 门开着。 = The door is closed.).

As indicated above, stative verbs are used to offer description in sentences containing a subject and adjectival predicate. Unlike Spanish and English, Mandarin sentences of this type do not employ copulae. Instead, an adverb of degree like 很 (hěn) or 非常 (fēicháng) is used as a linking word between the sentence subject and the adjectival/stative verb used in the predicate (Both words may literally be translated into English as *very* or into Spanish as *muy*). When used in this way, the word 很(hěn) conveys little to no meaning. Instead, its role as a link between the subject and predicate is secondary; its principal function is to preserve the preferred prosodic features of Chinese, which is an isolating language with a low morpheme-per-word ratio (Pirkola, 2001). For this reason, when the negator 不 (bù) is placed before an adjectival predicate, the adverb of degree (e.g., 很 [hěn]) is not used.

In English, the copular verb *to be* serves the purpose of connecting grammatical categories that typically possess lexical meaning. The copula itself, however, tends to bear little to no lexical meaning. Thus it may be said that the English verb *to be* has a purely copulative function. This is generally true of the Spanish copulae *ser* and *estar* as well. Nevertheless, because Spanish employs two principal linking verbs in contexts that are often grammatically identical, it cannot be said that the verbs are utterly devoid of semantic meaning. It is, in fact, because the conjugated form of the copula conveys aspect (such as mood) -- in addition to its linking function -- that certain semantic

meanings are able to be connoted. Thus, the selection of one copula over the other can radically alter a hearer's understanding of an utterance even when all other elements of the phrase are identical. For example, the phrase *Jimena es muy linda* indicates that Jimena is a beautiful person, whereas *Jimena está muy linda* indicates that Jimena is uncharacteristically (or especially) beautiful at this moment.

While both *ser* and *estar* tend to be used in conjunction with numerous adjectives, the situations in which one verb is preferred over the other are tied to the meaning the speaker wishes to convey. *Ser* is often deployed to describe more durative characteristics of the noun described. It is also used for expressing possession and time. In contrast, *estar* is often deployed to describe that which is temporal, including things such as mood, location, and ongoing actions. Nevertheless, as Cheng, Lu, and Giannakouros (2008) point out, many adjectives may be utilized with both *ser* and *estar*, but some, under normal conditions, may only be paired with one verb or the other; e.g., *ser responsable* (to be responsible). It is important to note, too, that while the verbs may be utilized in grammatically similar contexts, they do not necessarily occur with the same frequency in natural language usage. In sum, there are essentially three types of Spanish predicative adjective: (1) those which may only appear with *ser*, (2) those which may only appear with *estar*, and (3) those which may appear with either (Cheng et al., 2008). It is imperative to point out, however, that there is some variance in accepted copula usage among native Spanish speakers of different dialects.

While Chinese does possess a copular verb, 是 (shì), it does not utilize it, as Spanish does, in the pre-adjectival position to connect a referent with a descriptor (Cheng et al., 2008). In addition to 是 (shì), Li and Thompson (1981), have stated that 了 (le), an

aspect marker, and 在(zài), a locative preposition, may also be considered copulae in Mandarin when appearing in certain contexts. This does not apply, however, to the linking of nouns and descriptive adjectives in Mandarin Chinese. For this task, Mandarin typically requires the use of either a zero copula (as when the negator 不 [bù] precedes the adjective) or an adverb of degree, such as 很 (hěn) or 非常 (fēicháng) plus a stative verb, which functions as an adjective and is often classified as such. An example of this would be the following phrase "她很可爱" or "She is cute." In this case, though the adverb of degree 很 (hěn), which is often translated to English as *very* and to Spanish as *mu*y, is used between the subject and the adjective, its true purpose here is not to express degree, but rather, to preserve prosodic features of Chinese while linking the subject and predicate. For this reason, negative constructions employing the negator 不 (bù) typically result in the elimination of the linking adverb from the sentence (See Table 1.1 for an example.). This is in contrast to Spanish, which requires the use of a copula in this position. Additionally, the allusion to a more durative characteristic of the subject being described would necessitate the use of the verb *ser*, as in *Ella es mona*. Table 1.1 provides additional examples that serve to highlight the differences among English, Spanish, and Chinese. Note again that because Spanish copular verbs are inflected to indicate number and aspect, and because they do include some semantic meaning, the subject can be, and often is, omitted (Chinese also permits the user to omit the subject or agent in speech; generally after a previous reference.).

In sum, when employing strategies that work in L1 sentence parsing, native Mandarin speakers may be pre-disposed to ignore or even omit Spanish copulae, thereby making an error. Given that PI is an instructional technique that seeks to help language

learners circumvent the erroneous assumptions about language they are predisposed to make (VanPatten, 1993, 1996, 2002, 2004), it is appropriate to evaluate its effectiveness with the population sampled in the present study.

Table 1.1: Comparison of Chinese, English, and Spanish Copulae with Descriptive Adjectives

Utterance	Meaning	Translation	Parts of Speech
他很聰明。 Tā hěn cōngmíng.	He very clever.	He is clever.	Subj. + adv. + stative verb
Él es listo.	He is clever.	He is clever.	Subj. + copula + adj.
Es listo.	Is clever.	He is clever.	copula + adj.
他不聰明。 Tā bù cōngmíng.	He not clever.	He isn't clever.	Subj. + neg. + stative verb
Él no es listo.	He not is clever.	He isn't clever.	Subj. + neg. + copula + adj.
No es listo.	Not is clever.	He isn't clever.	Subj. + neg. + copula + adj.

Purpose

To date, only one PI research study on the acquisition of Spanish copulae has been published. This study (Cheng, 1995, 2002) explored the effectiveness of PI with speakers of a copular-verb language (i.e., English) on the acquisition of another copular-verb language (i.e., Spanish). Thus, it may not be appropriate to assume that the implications of Cheng's study can be generalized to learners of Spanish hailing from a language background that does not use copulae to handle states, conditions, or descriptions including a subject and adjectival predicate. Moreover, it is yet unclear how the addition of non-meaning-bearing morphemes (e.g., *-o*, *-as*, *-a*, *-amos*, *-an*, *-áis*, etc.) will be processed by native speakers of a language that does not possess the property of verb tense. This is important because the ways in which two languages differ

qualitatively and quantitatively may have some impact on the ease or difficulty of acquisition.

In Stockwell, Bowen, and Martin's (1965a, 1965b) framework, for each L2 learner a hierarchy of difficulty exists that has as its basis the differences between the L1 and the TL. The hierarchy of difficulty includes four distinct types of differences: differentiation, new category, absent category, and coalescing. When the L1 possesses one form, but the L2 has two, *differentiation* is present (Gass & Selinker, 2008). If a form exists in the L2 that is not present in the L1, a *new category* exists that must be acquired. Conversely, if a form is missing from the L2 that exists in the L1, an *absent category* may present a problem to the learner. Finally, when a learner's L1 possesses two forms but the L2 has only one, *coalescing* must occur. When the L1 and L2 utilize each utilize a form in relatively the same way, it is said that there is *correspondence* between the two languages. Examples of each category in the hierarchy are found in Table 1.2.

In the case of the acquisition of *ser* and *estar* by Chinese learners of Spanish, it may be said that both differentiation and an absent category exist. Chinese possesses only one verb meaning *to be*; it is the verb 是 (*shì*). For Spanish expressions using *ser* in the simple past and simple present tenses, Chinese employs 是 (*shì*) in a roughly equivalent manner (It is not, however, used in the formal passive voice as in Spanish.). There is no single verbal equivalent to *estar* in Chinese, however; hence, differentiation is present. Additionally, in the case of the expression of temporary states or conditions, Spanish uses the copula *estar* + *participle*, while Chinese employs non-copula stative verbs, which are absent from Spanish, and thus, constitute an absent category (Chinese

does not use copulae with adjectival predicates, and therefore, the Chinese copula 是 [*shì*] would be better described as an equative verb and not a stative verb.). According to the hierarchy of difficulty, differentiation constitutes the most difficult category (Gass & Selinker, 2008), and the differences highlighted in the present study (discussed in greater detail in the previous section) are under-represented in the literature. To date, no published study has examined the efficacy of PI on the acquisition of *ser* and *estar* by Chinese learners of Spanish. The need for the type of inquiry represented by the present study was made salient when Cheng (1995) asked, “What would be the effects of processing instruction for subjects whose first language does not have a copula with adjectives of condition such as Chinese or Russian?” (p. 193). The present study was carried out, in part, to answer that question.

Table 1.2: Hierarchy of Difficulty

<i>Category</i>	<i>Example</i>
Differentiation	English L1, Spanish L2: verb <i>to be</i> vs. Spanish <i>ser</i> and <i>estar</i>
New category	Chinese L1, Spanish L2: article system
Absent category	Chinese L1, Spanish L2: verb inflection
Coalescing	Chinese L1, Spanish L2: negation
Correspondence	Chinese L1, Spanish L2: verbs 知道, 认识 and <i>saber, conocer</i>

Examples of each category of difficulty. Table adapted from Gass & Selinker, 2008.

In addition to the research impetus described in the preceding paragraphs, the processing model upon which PI is based has been described by its original proponent as

a working model (VanPatten, 2004). In fact, it is currently in its third iteration. As more research is conducted with L2 learners that do not hold English as either a L1 or L2, it is possible that a clearer picture of the universality of IP principles may evolve. More specifically, future PI studies may show that the applicability of the current iteration of IP principles is dependent, in part, on the L1 of the learner and on the L2 to be acquired.

Chinese students' processing of Spanish copulae may not conform to some sub-principles of VanPatten's input processing model because of the manner in which copulae and states (as opposed to actions) are handled in Chinese: As in Spanish, the subject pronoun is sometimes omitted in Chinese. However, in Chinese, unlike Spanish, no morphosyntactic changes occur that indicate who the agent might be. This characteristic of Mandarin, as well as the use of stative verbs for adjectival sentences, could potentially affect Chinese learners' parsing of Spanish copular verbs. In sum, prior to carrying out the research, it was postulated that the relevant principles outlined in the input processing model may or may not hold true for this student population. Therefore, the present study, which examined the effectiveness of PI on the acquisition of copular verbs used for the expression of temporal states with learners whose L1 uses non-copula stative verbs fills a gap in the present body of knowledge on the efficacy of PI.

Research Questions

For the present study, the following research questions were developed:

1. Does instruction type (PI, TI, and no instruction [control group]) lead to differential performance by Chinese learners of Spanish on tasks of interpretation administered immediately following the instructional treatment for sentence-level passages containing *ser* or *estar*?

- a. Are the effects of instruction (if any) durative as measured by retention over time?
2. Does instruction type (PI, TI, and no instruction [control group]) lead to differential performance by Chinese learners of Spanish on tasks of production administered immediately following the instructional treatment for sentence-level passages containing *ser* or *estar*?
 - a. Are the effects of instruction (if any) durative as measured by retention over time?

Research Hypotheses

Based upon the results of previous PI research that has revealed PI to be superior to TI on the acquisition of target forms measured by comprehension tasks; superior or equally effective to traditional instruction on the acquisition of target forms measured by production tasks; and superior to control groups on the acquisition of target forms for both comprehension and production tasks (Buck, 2000; Cadierno, 1995; VanPatten & Cadierno, 1993; VanPatten & Wong, 2004), the following hypotheses were posited for the present study:

Hypothesis 1: Participants exposed to the PI treatment (see Appendix D) will outperform participants exposed to the TI treatment (see Appendix C) on interpretation tasks of the *ser/estar* knowledge test (see Appendices E - G) over time.

Hypothesis 2: Participants exposed to PI (see Appendix D) will perform at least as well as those exposed to TI (see Appendix C) on production tasks included in the *ser/estar* knowledge test (see Appendices E - G) over time.

Hypothesis 3: Participants in the PI group (see Appendix D) will outperform participants in the control group on interpretation tasks of the *ser/estar* knowledge test (see Appendices E - G) over time.

Hypothesis 4: The PI treatment (see Appendix D) group will outperform the control group on production tasks of the *ser/estar* knowledge test (see Appendices E - G) over time.

Hypothesis 5: Participants in the TI treatment (see Appendix C) group will outperform participants exposed to the control (no instruction) condition on interpretation tasks of the *ser/estar* knowledge test (see Appendices E - G) over time.

Hypothesis 6: Participants in the TI treatment (see Appendix C) group will outperform participants exposed to the control (no instruction) condition on production tasks of the *ser/estar* knowledge test (see Appendices E - G) over time.

Significance of the Study

The present study represents a unique and distinct contribution to the PI strand of SLA research. It has sought to build upon previous PI studies by examining the effectiveness of PI on the acquisition of the Spanish copulae *ser* and *estar* when used for the purposes of linking subjects with adjectival predicates (description) and indicating states or conditions. The study may be viewed as a conceptual replication of Cheng (1995, 2002) the only previously published PI study exploring Spanish copulae. However, the present study is not a duplication of Cheng and represents an original contribution to the PI strand of SLA inquiry that should serve to further fill a gap in existing research. Among the ways in which this study differs from Cheng are the

following: learning context, participants' L1, treatment instruments (see Appendices C - D), fidelity and analyses, and learning environment.

First, the learning context is very different from that of Cheng's (1995, 2002) study. Her study was carried out at a large urban university in the United States of America; the present study was conducted at a small to mid-sized private university located in the People's Republic of China. Second, the predominant L1 of the students participating in Cheng's study was English. For the current study, learners had as their L1 one of a number of dialects of the Chinese language, all of which are devoid of verb inflection and tense (Norman, 1988). For all participants, however, "Standard Mandarin" was the principal language/dialect used in the educative context. As established above, the differences between the handling of copulae are quite different among English, Spanish, and Chinese, and the effectiveness of PI on the developing linguistic system of learners from the population identified had yet to be explored prior to the completion of this study. Additionally, it is noteworthy that the majority of the participants in this study are female, a reality which reflects the institution's overall population. Personal conversations with students and faculty at the college suggested that this phenomenon is related, in part, to a common, culturally-situated belief that females are innately better equipped for language learning than their male counterparts. Such claims as "Chinese people believe girls are better than boys at learning languages" were explicitly vocalized in the presence of the researcher on multiple occasions. It is feasible, then, that such a belief lead to a larger female enrollment than one might find at other tertiary education institutions that are not language-centric.

Third, Cheng (1995, 2002), encountered unexpected variance from the results of previous PI studies when analyzing the data for her own. Specifically, when examining the effects of PI, TI, and no instruction on the acquisition of *ser* and *estar*, she found that while both PI and TI were better than no instruction, they did not differ significantly from one another on tasks of interpretation or tasks of production. She stated that this variance may potentially be attributable to her deviation from the materials design of prior PI research. For the present study, every attempt was made to adhere to the principles outlined in the IP model and the tenets of PI outlined in other published works to avoid such variance. Specifically, no composition task of the type used by Cheng was created for the current study, as the task and its scoring procedures pose a number of problems related to measurement and construct analysis. For example, despite attempts to elicit the use of a given structure, natural language use may dictate that one Spanish copula be used more frequently than the other. This leads to the creation of a score for composition tasks that may heavily favor one verb over another, and therefore, threatens the validity of statistical analyses and the inferences that may be drawn from them.

Additionally, Cheng's (1995, 2002) research design called for an examination of the acquisition of the Spanish copulae as a unitary construct. Later, when failing to find the significance expected in the data, she analyzed the acquisition of *estar* separately. Nevertheless, as her study was not designed with this eventuality in mind, the low number of tokens for each individual copula made such analysis undesirable. Moreover, as described above, natural language use largely dictates the frequency of a given copula in relation to another in composition tasks, and this posed a threat to the conclusions that could be drawn from Cheng's analyses. Despite this, Cheng claimed that prior research

(VanPatten, 1985b, 1987a) had shown *ser* to be the default copula of choice for learners of Spanish, and therefore, it was really only the acquisition of *estar* that was of interest in her study. However, given the methodological issues outlined above and the proclivity of Mandarin speakers to use adjectival/stative verbs in sentences containing a subject and adjectival predicate (and the L1 of the research participants of Cheng and VanPatten's studies), for the present study, the learners' handling of both *ser* and *estar* was of interest. For these reasons, the present study dealt only with *ser* and *estar* as a unitary construct, i.e., Spanish copulae

Fourth, Whereas Cheng's (1995, 2002) research examined the face-to-face instructional environment, the present study is among the few PI studies (Lee & Benati, 2009; Cameron, 2010; Russell, 2009, 2012) to delve into the online learning milieu. For deployment of instructional treatments (see Appendices C - D) and data collection, *CourseSites by Blackboard* was employed. *CourseSites* is a full-featured version of Blackboard that individual instructors without institutional access to Blackboard may employ free of charge for educative purposes. The introduction of this learning management system (LMS) to the courses in which participants were enrolled was of import for several reasons.

First, the institution had limited resources at its disposal. In order for the college to be able to keep pace with changes in international education, specifically the move to online and hybrid learning, it is necessary for a low- or no -cost alternative to be found to the costly commercial options now available. Second, the institution caters to students who have not obtained a sufficiently high score on the national college entrance exam to enroll in more prestigious and respected state institutions which possess far greater

infrastructure and resources. A failure to adopt new technologies available at government-funded colleges and universities could result in a disadvantage to the student body, and the study provided a glimpse of the feasibility of implementing a free alternative in this unique learning context. Finally, because few studies (Lee & Benati, 2009; Cameron, 2010; Russell, 2009, 2012) have explored the efficacy of PI in the online milieu, further research is needed to determine the efficacy of PI in an asynchronous online environment.

Definition of Terms

Prior to tracing the history of PI research, it is pertinent to define a number of terms relevant to the literature to be reviewed. These definitions should make the discussion to follow a little more comprehensible and accessible to all readers.

- **Input:** Input may be defined as the language into which meaning is encoded (VanPatten, 1993). Stated another way, it is linguistic data to which learners *may* attend for the message it seeks to convey. (VanPatten, 1996).
- **Input processing:** The strategies and mechanisms involved in the conversion of input to intake constitute *input processing* (VanPatten & Cadierno, 1993).
- **Intake:** Not all input is available for accommodation into the developing linguistic system (VanPatten, 1996). Input which -- through the act of comprehension -- has undergone the processing necessary for eventual incorporation into the system is called *intake* (VanPatten, 1996).

- Attention: The direction of one's limited processing capabilities to a given data set or input.
- Output: The production of oral and/or written language.
- L1: A learner's first, or native language.
- L2: Traditionally, a learner's second language. However, the term is commonly used to describe any additional language acquired (or in the process of being acquired) by the learner (Gass & Selinker, 2008).
- Processing instruction: An instructional approach based upon the principles of input processing posited by VanPatten (1993, 1996, 2002, 2004). PI relies on non-paradigmatic grammatical explanations that focus on only one form at a time (such as the third person singular in the simple present indicative) and the presentation of processing strategies that seek to assist learners in circumventing the erroneous assumptions about language they are predisposed to making (VanPatten, 1993, 1996, 2002, 2004). Additionally, PI depends heavily upon structured (in contrast with authentic) input that reduces or eliminates the redundant elements of language that might make difficult the establishment of form-meaning connections. For example, in the Spanish sentence, *Se lo compro a ella*, the clarifying tag *a ella* is, strictly speaking, redundant and unnecessary, as the same information is communicated by the indirect object pronoun *se*. This clarifying tag would be eliminated in a structured input exercise focusing on a target form other than the tag itself (e.g., indirect object pronouns) in order to increase the saliency of the structure of focus.

Again, structured input has as its goal the increased saliency of morphology and syntax that learners might otherwise fail to notice.

Delimitations

A number of boundaries were set for the present study in order to permit a thorough, yet focused examination of the phenomenon of interest. First, the institutional context in which the study was carried out, and in which the participants were students/stakeholders, is representative of a new kind of education in the PRC. The special population hosted in this context is one about which little is known, and among which little research has been carried out. Therefore, the generalizability of the results of the study will be limited to private colleges of similar size located within the PRC that house a student population possessing comparable socio-economic characteristics and gender, ethnic, and dialect distribution. Second, the present inquiry is a comparison study that explores the effectiveness of PI on the acquisition of Spanish copulae. Unlike some more recent PI studies that included a non-TI output-based group (Farley, 2004; Qin, 2008; VanPatten, Inclezan, Salazar, & Farley, 2009), however, the instructional technique against which the efficacy of PI is compared it is neither meaning-based output instruction (MOI) nor meaningful output-based instruction (MOBI). Rather, PI was compared with TI in order to provide a more consistent comparison with previous PI research that has used Spanish copulae as the grammatical form of interest (*see* Cheng, 1995, 2002). By delimiting the study in this way, it is believed that the results and findings are more directly comparable to that of existing research. Moreover, this comparability may contribute to a more complete view of the processes at work in

Spanish copula acquisition, something that could lead to either a confirmation or refinement of VanPatten's working model of input processing and SLA.

Limitations

The present study explored the effects of input processing instruction on Chinese students' acquisition of Spanish copulae. Though every effort has been made to construct a study of sound design and methodological rigor, a number of contextual and extemporaneous factors may present potential threats to the internal and external validity of this inquiry.

The desire to establish and preserve the ecological validity of the present study necessitated that the research be conducted with intact student cohorts (a group of 25 – 30 students who take all non-elective courses together throughout their four-year undergraduate program of studies is called a *class* in China). For the purposes of this study, this grouping of participants offered inherent advantages and disadvantages. One advantage of this type of grouping is that it strengthened the study's ecological validity. Another advantage it afforded was the avoidance of the potential for bias endemic to self-selection for participation in research studies. However, using intact classes of students also presents a potential threat to the validity of the research. Specifically, the study did not employ the random sampling of individual participants. Nonetheless, the students were randomly assigned to one of the three treatment groups, PI (see Appendix D), TI (see Appendix C), or control.

Organization of the Study

The first chapter of this document was crafted in order to offer an overview of the study, including the phenomenon examined and the need of the inquiry conducted.

Chapter 2 employs a review of relevant research literature to facilitate the development of an understanding of VanPatten's IP model, the PI strand of inquiry, and the broader context of SLA studies related to the acquisition of Spanish copulae. Chapter 3 explicates how the present research study was carried out by describing the methodology employed by the researcher. Chapter 4 presents the results of the data analyses carried out for the present experiment. Chapter 5 includes a discussion of the results of the present study and their implications for theory and pedagogy. Additionally, Chapter 5 further outlines the limitations of the study, offers suggestions for future research, and presents conclusions which may be drawn from the study.

Chapter 2:

Review of Relevant Literature

Introduction

This chapter is dedicated to offering an understanding of the development of PI inquiry and the results of studies germane to the present research study. The chapter opens with an introduction to the areas of research that informed and contributed to the development of VanPatten's IP model. It subsequently describes the nature of processing instruction before reviewing the existing body of literature from the PI strand of research. Finally, gaps in the literature are exposed and suggestions for a PI research agenda are offered.

Development of an Input Processing Model

PI research began in earnest with VanPatten and Cadierno (1993). This foundational work set the stage for over two decades of subsequent investigation into the efficacy of PI. Nevertheless, as discussed in the previous chapter, the PI strand of SLA inquiry finds its genesis in the broader discussion of the import of input in the learning of a L2. Additionally, the IP model from which PI is derived draws from the fields of cognitive psychology and psycholinguistics. In the next section, the nature and development of PI are outlined.

Key contribution from cognitive psychology. In addition to the contribution of the 1980s' prominent dialog about input in SLA (described in Chapter 1 of the present

study), the IP model drew inspiration from the field of cognitive psychology. The construct of attention may be that of most import, as VanPatten (1996) has described L2 learners as limited capacity processors with the ability to attend only to an unspecified, yet limited amount of linguistic data at any given time. This means, essentially, that a well-functioning human brain will, out of necessity, naturally filter out unwanted or superfluous stimuli. VanPatten has claimed that the construct of attention is essential to a sound understanding of the processes inherent to learning in general, and SLA in particular, because people will not learn from stimuli to which they do not *attend*.

Input processing. While VanPatten (1985a, 1987b, 1996) readily accepted the notion that input is an important ingredient in the acquisition of language, he did not accept Krashen's (1981, 1985) claim that conscious learning is available to the performer only as a monitor. To the contrary, PI, which is based on the IP model, includes an element of explicit grammar instruction. VanPatten (1996) has stated that the grammar instruction of PI is unique in that it has as its motive a modification of the ways learners attend to input. Moreover, he has distinguished PI explicit grammar instruction from other types of explicit instruction (EI) on form by signaling the distinct foci of TI and PI: Whereas PI is input-based, TI is output-based.

VanPatten (1996) has further elucidated how PI differs from traditional form-focus approaches by highlighting the activity type associated with each. He has stated that TI places the emphasis on the application of learned rules during output activities. Conversely, PI seeks "to alter how learners process input and to encourage better form-meaning mapping that results in grammatically richer intake" (VanPatten, 1996, p. 8). This focus on input, as opposed to output and production, is an aspect of PI that meshes

well with what Krashen (1981) has stated about the role of production in language teaching methods and SLA. Neither Krashen nor VanPatten believe that early production is conducive to SLA or the development of the underlying system. Therefore, just as Krashen and Terrell (1983), and TPR progenitor Asher (1981) have discouraged premature language production until the learner is ready, the PI approach guides learners by employing interpretation activities instead of output tasks.

There are two principal precepts set forth in IP. Each of these rests upon a number of sub-principles that has grown over time. The latest iteration of the principles of the still-developing IP model was offered in VanPatten (2004). The importance of the IP model in the development of PI activities and research warrants reproduction of the principles and sub-principles germane to the present study below:

Principle 1. The Primacy of Meaning Principle. Learners process input for meaning before they process it for form.

Principle 1a. The Primacy of Content Words Principle. Learners process content words in the input before anything else.

Principle 1b. The Lexical Preference Principle. Learners will tend to rely on lexical items as opposed to grammatical form to get meaning when both encode the same semantic information.

Principle 1c. The Availability of Resources Principle. For learners to process either redundant meaningful grammatical forms or nonmeaningful forms, the processing of overall sentential meaning must not drain available processing resources.

Principle 1f. The Sentence Location Principle. Learners tend to process

items in sentence initial position before those in final position and those in medial position (VanPatten, 2004, p. 14).

Implications for input-processing principles in the present study. PI is a technique for language instruction that has as its basis the input processing model developed by VanPatten (1993, 1996, 2002, 2004). VanPatten's IP model contains two key principles and several sub-principles. The present study concerned itself principally with the principles and sub-principles discussed below.

PIa. The Primacy of Content Words Principle. In the case of Chinese learners of Spanish copulae, this principle indicates that learners would be more likely to process meaning-bearing adjectives and participles than the copulae themselves.

PIb. The Lexical Preference Principle. According to this principle, learners tend to rely more on Spanish subject pronouns to determine agency than verb inflection when both are present in an utterance. It is, as yet, unclear if this holds true for learners whose L1 is a language in which the omission or dropping of pronouns (sometimes called a pro-drop language) is common, like Chinese.

PIe. The Availability of Resources Principle. Though PI has shown itself to be effective at aiding learners to correctly process various target forms in a number of languages, the application of explicit information for some target forms may result in a greater cognitive load, which could affect processing of the targeted forms.

PIf. The Sentence Location Principle. Remembering that many of the principles of the IP model may be acting simultaneously at any time, PI f indicates that Chinese learners of Spanish as a L2 might tend to process copulae before processing adjectives or participles, as Spanish copulae most often appear (though not always) in constructions in

which the copula precedes the adjective. This principle, however, appears to be in competition with P1a, as Spanish adjectives are content words that possess more inherent meaning than copulae. This means that a Chinese learner of Spanish might overlook the meaning encoded in Spanish copulae. This seems especially likely because Mandarin Chinese copulae are not used in sentences containing an adjectival predicate. This could complicate the process of distinguishing between resultant states and the Spanish passive voice, as meaning is encoded into the Spanish copula.

Although the preceding principles and sub-principles of the IP model are of most concern for the present study, it is important to remember that at any time it may be possible for more than one principle or sub-principle to be at work in the processing of input for further accommodation into the underlying linguistic system (VanPatten, 1993, 1996, 2002, 2004).

Processing Instruction

Prior to reviewing studies in the PI research strand, it is helpful to discuss the nature of processing instruction. As mentioned previously, PI offers language learners grammatical instruction or explanations of syntax in a fashion similar to that of traditional approaches (VanPatten, 1996). However, PI differs from TI in that the explanations of grammar are non-paradigmatic. This is to say that, unlike grammar explanations in TI, non-paradigmatic grammar explanations focus on one form at a time. For example, whereas a textbook employing TI might offer several example sentences, each of which uses a different agent and more than one verb tense, a non-paradigmatic explanation would use only one form for the target structure covered in any given

section. Verbs, for instance, might only be conjugated in the simple present with a third-person singular agent (see Figure 3.3 in Chapter 3).

PI has as its ultimate objective the alteration of strategies that language learners naturally or inherently tend to use in order to maximize the efficiency of all input received. Therefore, PI relies on the presentation of input processing strategies in addition to the non-paradigmatic grammatical explanations described above. These strategies are said to help learners sidestep the erroneous assumptions about language they are predisposed to make and thereby avoid input processing delays (VanPatten, 1993, 1996, 2002, 2004). Therefore, PI contributes explicit details regarding the fallibilities inherent in those natural strategies which are ineffective or counterproductive (VanPatten, 1993, 1996, 2002, 2004). Finally, in addition to non-paradigmatic grammar explanations and the presentation of input processing strategies, PI makes use of structured input.

SI activities force learners to make form-meaning connections by requiring them to attend to both form and meaning simultaneously. This is to say that the learner is not required to produce language, but he or she is asked to indicate understanding of the meaning of input that contains certain forms (VanPatten, 1993, 1996, 2002, 2004). SI differs from authentic input in that it reduces or eliminates the redundancies of language that might make it difficult for learners to make form-meaning connections. SI is intended to increase the saliency of morphology and syntax that learners might not be inherently inclined to notice. Like non-paradigmatic grammar explanations, structured input should also be designed to present only one target form at a time.

The following pages provide an overview of studies in the PI strand that have compared the effectiveness of PI to that of other pedagogical interventions.

IP and SLA: A role for instruction. VanPatten and Cadierno (1993) examined the efficacy of altering IP strategies by offering explicit information regarding the flawed premise of a naturally occurring learner strategy of English-speaking learners of Spanish. The particular strategy in question was one that, while useful in English, was of questionable value in Spanish (VanPatten & Cadierno, 1993). Specifically, native English speakers tend to assign agency to the first noun they encounter in a phrase, which fails to consistently function in Spanish because of the flexibility of sentence structures in the language (VanPatten & Cadierno, 1993).

The study (VanPatten and Cadierno, 1993) involved one control group for which no EI related to object pronouns was provided and two experimental groups. The first experimental treatment, TI, involved explicit grammar instruction related to object pronouns, but no mention of the SVO processing strategy. The second treatment, the PI condition, included the same relative explicit grammar instruction as well as additional information regarding the flawed nature of the aforementioned processing strategy on Spanish word order. Additional elements of the latter treatment included listening activities that checked for comprehension of content but never required production. The former treatment engaged in activities of varying sorts; all of which required production.

The effectiveness of these treatments was measured by way of pre- and post- tests that included both interpretation and written production tasks (VanPatten and Cadierno, 1993). The results of a one-way ANOVA revealed significant main effects for both instruction and task type, as well as a significant interaction between the two. Thus, a

post-hoc Sheffé was conducted that led the researchers to draw the conclusions outlined below.

PI, while not requiring production of the learners who received it, provided better processing of input that foments intake and “is apparently also available for production” (VanPatten and Cadierno, 1993, p.54). TI, however, appeared to have little effect on interpretation.

The findings of VanPatten and Cadierno (1993) provided the basis for all PI studies that have been conducted since. The present study is a conceptual replication of Cheng (1995, 2002), which sought to evaluate the generalizability of the findings of VanPatten and Cadierno to semantic-aspectual features of the Spanish language as exhibited in Spanish copulae.

Formal instruction from a processing perspective. Cadierno (1995) conducted a study that sought to isolate Spanish tense verb morphology in order to see if the tenets of PI were applicable to morphosyntactic features of the language. The study’s design was very similar to that of VanPatten and Cadierno (1993). It differed, however, in that there were only two treatments (as opposed to four), and the sample size was substantially smaller: There were 202 participants in VanPatten and Cadierno (1993) and only 61 in Cadierno (1995). The pre- and post- tests were also like in kind to VanPatten and Cadierno (1993) as they examined both interpretation and production. MANOVA, ANOVA, and post-hoc Scheffé tests were used to analyze the data; the results of which led the researcher to conclude the following: PI was more effective at assisting learners to successfully interpret the meaning of an aural interpretation passage. Further, for the interpretation task there was no statistical difference between the scores of those who

received no instruction and those who were taught with a TI approach. Interestingly, while both the PI and TI groups yielded statistically significant differences from the scores of those receiving no instruction, there was no statistically significant difference between the two treatment groups themselves. The author contended that these data revealed that TI was not equal to PI in facilitating interpretation, nor was it superior to PI for tasks requiring production.

Cadierno (1995) represented the first conceptual replication of VanPatten and Cadierno (1993) that evaluated the effectiveness of PI on a form other than Spanish object pronouns. The study's conclusions mirrored those of VanPatten and Cadierno and set the stage for additional PI research evaluating the effectiveness of PI on other target features of Spanish. The present study draws upon Cadierno's conclusions to provide support for the research hypotheses presented in chapter three.

Other Studies of Note and Their Conclusions

Cheng (1995, 2002) attempted to measure how PI would affect the acquisition of the Spanish copulae *ser* and *estar*. The participants included 197 fourth-semester college-level students of Spanish (No further information about the institution was provided.). This study produced mixed results that only partially corroborated earlier findings by previous PI studies. Specifically, Cheng concluded that PI was at least as effective as traditional instruction (TI) for the acquisition of *estar* on tasks of interpretation and tasks of production, but only PI was significantly better than the control group for interpretation tasks, though the difference between PI and TI was not significant. Of most interest in Cheng (1995, 2002) is the fact that all three groups, PI, TI, and control exhibited statistically significant gains from the pretest to delayed posttest

stages of evaluation. This could be interpreted to call into question the efficacy of PI and TI to produce long-term acquisition of the Spanish copula verbs *ser* and *estar*, but the author believed it was more likely due to the low number of “tokens” included in testing. Thus, she called for further examination of this particular grammatical feature of the Spanish language, especially with L1 learners of Chinese and Russian. The present study examined the effectiveness of PI on the acquisition of Spanish copulae with L1 Chinese learners of Spanish and may be considered a response to Cheng’s suggestions for further research.

Numerous other studies have sought to replicate VanPatten and Cadierno’s (1993) research design while focusing on other grammatical forms. These include (but are not limited to) Benati (2001, 2004, 2005), Cadierno (1995), VanPatten and Sanz (1995), and VanPatten and Wong (2004). Generally speaking, their findings have been analogous to those of VanPatten and Cadierno. This is to say that PI has been found more effective than TI on interpretation tasks and as effective as TI for production tasks, despite the fact that production is not part of PI treatments (Russell, 2009, 2012). Others, however, have produced results less congruent with these.

DeKeyser and Sokalski (1996), for example, believed that the results of VanPatten and Cadierno ran counter to Anderson’s Adaptive Control of Thought (ACT) theory, and that participants exposed to PI in VanPatten & Cadierno should have only improved on comprehension tasks and not production tasks. Therefore, they sought to replicate VanPatten & Cadierno by examining the same target form, Spanish object pronouns, and word order. Additionally, they added an experiment targeting the effectiveness of PI and output-based instruction on the Spanish conditional. They found

that participants in their study who received PI on Spanish object pronouns improved only on comprehension tasks, while those who received output-based instruction improved only on production tasks. For both groups, these gains disappeared over time. The control group, while not showing significant improvement on the immediate posttest, did show improvement on the delayed posttest for Spanish object pronouns. For the conditional, the output group held an advantage over both PI and control on the immediate posttest, but these gains disappeared over time. For both experiments, the results did not correspond to those of VanPatten and Cadierno. VanPatten (2004), however, pointed out that DeKeyser and Solkaski did not adhere to the same principles as VanPatten & Cadierno in the PI treatment. Specifically, by following the progression of mechanical to meaningful to communicative exercises in both the PI and output treatments, they failed to adhere to the tenet of PI that requires only SI activities. Thus, because the researchers deviated from the design principles for PI activities, comparing the results to VanPatten & Cadierno is of dubious validity.

Two studies of sound design (i.e., that adhere to IP principles) have, however, also produced findings incongruous with VanPatten and Cadierno (1993) and, thus, added to the understanding of PI. The first of these is VanPatten and Oikkenon (1996). VanPatten and Oikkenon sought to evaluate the importance of the explicit grammar instruction component of PI by isolating SI as a stand-alone treatment. In addition to the SI treatment group, there was a PI treatment group and an EI only group. The researchers found that both SI and PI resulted in statistically significant gains over the EI-only group. However, both SI and PI performed equally well. Therefore, the researchers argued that SI was responsible for the effectiveness of PI, not explicit grammar

instruction (VanPatten & Oikkenon, 1996). However, the results of the study have been called into question by Sanz and Morgan-Short (2004) who argued that the SI group received incidental input through in-class feedback that the PI group did not receive. To control for this possibility, the present study employed a Web-based delivery of instructional treatments.

Farley (2001a) also sought to evaluate the role of explicit grammar instruction in the efficacy of PI. Contrary to the discovery of VanPatten and Oikkenon (1996), however, Farley (2001a) found that PI (including explicit grammar instruction) resulted in greater gains than SI alone. Because he was working with the Spanish subjunctive mood, considered to be a relatively complex form, Farley posited that explicit grammar instruction may be beneficial when the form is complex.

Because previous research (Farley, 2001a; Fernández, 2008; Henry, Culman, & VanPatten, 2009; Russell, 2009, 2012; VanPatten & Oikkenon, 1996) has yielded conflicting results on the necessity of the EI component of PI, VanPatten, Collopy, Price, Borst, and Qualin (2013) sought to isolate EI as a variable to determine if it is necessary for PI-based pedagogical interventions to include EI in order to be efficacious.

Additionally, because previous research had failed to take into account individual differences, VanPatten et al. sought to evaluate whether or not grammatical sensitivity, a type of aptitude measured by the Modern Language Aptitude Test (MLAT), correlated with learner outcomes in the controlled setting of their IP-based study. The study, which consisted of four different experiments (one language per experiment) exploring the effectiveness of +EI and -EI conditions in aiding acquisition, focused on structures of four different languages (French, German, Russian, and Spanish) that were all related to

the processing problem described in the First-Noun Principle (FNP) of the IP model. The FNP states “Learners tend to interpret the first (pro)noun they encounter in an utterance as the subject/agent” (VanPatten, 1993, 1996, 2002, 2004; VanPatten, Collopy, Price, Borst, & Qualin, 2013). This study was unique in that, like Fernández, the outcome measured was not gain scores for tasks of production and interpretation. Rather, it was trials-to-criterion, which was defined as how many attempts at interpreting a sentence-level passage were necessary before correct processing occurred. Reaching the criterion was described as the correct processing of three successive Object-Verb-Subject strings. The researchers found that for the French and German experimental groups, EI played a significant role in how many trials it took for learners to reach criterion. For the Spanish and Russian groups, it did not. However, the researchers also noted that for all groups EI did not play a significant role in determining final outcomes, i.e., whether or not learners were able to correctly process the structure related to the FNP. Thus, they concluded that while EI may be beneficial for assisting learners with the real-time processing of some structures, it is not necessary for helping learners to reach criterion; that is to successfully process the target sentences. Additionally, they found that grammatical sensitivity was not correlated with trials-to-criterion with any of the experimental groups except for the +EI group in the experiment with learners of German. The researchers concluded that, when examining all of the data in aggregate, the latter finding was anomalous. Therefore, they posited that grammatical sensitivity does not play a role in acquisition when it is defined as the processing of input, or form-meaning mapping (which they distinguished from the internalization of rules). In sum, the researchers concluded that EI

affects processing when the information is sufficiently easy and portable to be applied in real time.

The findings of VanPatten et al. (2013) provide some additional insight into the importance of EI in PI interventions. However, because they were only examining the FNP problem, and because they were focused on FNP related structures of only four languages, their results are far from conclusive. Moreover, as with most previous PI studies, the study participants were all students in American universities whose L1 was English (DeKeyser & Prieto Botana, 2015). Therefore, the role explicit grammar instruction plays in the efficacy of PI is still not completely understood, and gaps remain in PI research literature.

DeKeyser and Prieto Botana (2015) carried out a review of PI research studies in order to synthesize the research and determine what conclusions could be made regarding: (1) differences between PI and SI on learner performance; (2) differences between PI and production-based (PB) treatments on acquisition; and (3) factors which might moderate the effects of PI. They found that while EI did not make significant differences in a number of studies, this may have been due to incomplete learning of EI, which – with the exception of two studies (Prieto Botana, 2013; Marsden & Chen, 2011) – had not been assessed. Additionally, the research indicated that EI has been shown to be beneficial for increasing the speed with which some structures are processed, a finding which VanPatten et al. (2013) seemed to dismiss (DeKeyser & Prieto Botana, 2015). For this and other reasons, DeKeyser and Prieto Botana argued that the exclusion of the explicit grammar instruction component of PI from input-based instructional interventions does not seem warranted at this time. Thus, the present study included the

explicit grammar instruction element that has formed part of PI interventions from VanPatten and Cadierno (1993) to present.

VanPatten et al. (2009) had as its principal motive the examination of claims about the efficacy of PI as compared to dictogloss instruction (DG). More specifically, the article was a response to Qin's (2008) publication reporting the findings of a study on the effectiveness of PI and DG on the acquisition of the English passive voice by Chinese L1 learners of the English. Qin reported that PI was superior to DG for tasks of comprehension but equal to DG for tasks of production at the immediate posttest. However, on two delayed posttests, both PI and DG groups exhibited significant improvement, and the statistical differences between the PI and DG group had disappeared. This led Qin to conclude that both instructional techniques were effective for aiding learners to acquire the English passive voice. But as VanPatten et al. pointed out, Qin's study suffered from various flaws in design and implementation. The altered or *corrected* design of VanPatten et al. produced results comparable to those of other PI studies, with PI being as effective as other methods at yielding linguistic gains on assessments of production, and better than those with which it has been compared on interpretation tasks. However, the population studied in VanPatten et al. consisted of L1 English learners of Spanish studying in an American university, and as such, still left a research gap that remains to be filled. Qin's study, while methodologically flawed, was the first to examine the effectiveness of PI on language acquisition by Chinese L1 learners. Nevertheless, to date, no PI studies have been conducted with Chinese L1 learners of a L2 other than English. The present study was conducted with this infra-represented population and represents a step toward filling this existing research gap.

Another step toward advancing the PI agenda in instructed SLA is the move toward technology enhanced instructional interventions. A number of studies have made use of technology to implement instructional treatments, assessment measures, or both (Morgan-Short & Bowden, 2006; Russell, 2009, 2012; Sanz & Morgan-Short, 2004; VanPatten et al., 2013). Sanz and Morgan-Short's (2004) study was one of the first PI studies to use computer-enhanced treatment impartation. This method of instructional delivery was not only indicative of a shift in the field of SLA study toward computer-assisted language learning (CALL), it also helped to control for teacher effects. Thus, the researcher made the decision to use technology-enhanced instructional delivery for the present study. Specifically, the present study attempted to further move PI into the online realm by administering instructional treatments through a Web-based course management system.

Future Directions for PI Research

Owing in part to the predominant research paradigm of the scholars engaged in the examination of the efficacy of PI, to date, studies in this strand of SLA research have focused almost exclusively on the controlled classroom environment. While VanPatten (2004) has admitted that there is a lack of research in naturalistic contexts, he has also contended that the principles of PI should be at play regardless of the context in which the learner may find himself. This, however, has yet to be examined by the research, and, indeed, the nature of the PI approach – which falls into the category of instructed SLA – makes directly testing such claims problematic. Future research might seek to measure the effects of PI by employing communicative tasks that approximate natural more settings.

Additionally, though much research has been conducted over the last two decades on languages other than the Romance languages that formed the initial basis for PI inquiry -- including Arabic, German, and Russian (see Culman, Henry, & VanPatten, 2009; Radwan, 2009; VanPatten et al., 2013; VanPatten, Collopy, & Qualin, 2012) -- claims that PI results in greater gains on exercises of interpretation and equal or greater gains on exercises of production have not been tested with many learners who speak a L1 other than English and who also study a L2 other than English. Therefore, more research is needed with these populations.

VanPatten has indicated that, like English, most of the world's languages generally follow the Subject-Verb-Object (SVO) sentence construction. Nevertheless, it is possible, that substantial differences among these SVO languages will show the effectiveness of processing strategy alteration to be less robust than previously believed. Therefore, it is important to seek empirical evidence of the efficacy of PI with learners of various languages who, likewise, come from different L1 backgrounds than those which have been included in PI studies to date. PI research needs to be carried out with these infra-represented populations to see if their learning also supports the claims of the principles outlined by VanPatten's model. This would permit further development of the model, which is still in a state of development and has not attained to the level of theory (VanPatten, 2004).

Finally, in the second decade of the new millennium, it has become essential for institutions of higher education to move into the online milieu and engage learners at a distance. In 2012, more than 6.7 million students took at least one course online (Allen & Seaman, 2013). As universities seek to expand online offerings, this number will

continue to grow. Additionally, universities are increasingly offering hybrid courses for which students only need to attend classes face-to-face on a reduced schedule. For these blended courses, students complete at least 20% of their work at a distance, mostly through Web-based technologies. Currently, there exist few studies that have examined the efficacy of PI in this context. One notable study is Russell (2009, 2012), who explored the efficacy of PI when compared to SI and visual input enhancement instructional techniques. Her work was conducted with online learners of Spanish at two tertiary education institutions located in the southeastern United States. Because of the specificity of her study's context, Russell has claimed that the findings are not generalizable to all distance language learners. Therefore, studies like hers should be replicated to examine the effectiveness of PI with online learners (and/or speakers) who possess an L1 other than English and who study a L2 other than English. Moreover, different structures or IP problems must be explored to help further researchers' understanding of PI.

Concluding Remarks

PI has shown itself to have a certain degree of staying power as a strand of SLA research. While the IP model and its emphasis on input may not be accepted by all, research has shown that PI is effective in producing statistically significant language interpretation and production gains in some contexts. Among studies that utilize quantitative analyses of instructed SLA, this is noteworthy.

Though VanPatten and Fernández (2004) have described the long-term effects of PI, the classroom context in which PI studies have been conducted and the exclusive use of SI in PI tasks make it difficult to extract definitive conclusions about the processing of

authentic language input. Additionally, the lack of linguistic diversity among the populations sampled to date has created a gap in the research literature that future studies should endeavor to address.

Chapter Summary

Numerous studies have shown PI efficacious to result in performance gains on both interpretation and production tasks, despite the fact that PI does not include any output-based activities or instruction.

Over time, there has been a shift in emphasis among PI studies. VanPatten and Cadierno (1993a), the foundational study in the PI strand, compared the efficacy of PI and TI. While PI has been operationalized to include non-paradigmatic explanations of TL grammar, instruction on processing strategies, and structured input activities, TI was operationalized to include paradigmatic explanations of TL grammar without information on processing strategies and production activities (Cadierno, 1995; VanPatten & Cadierno, 1993a, 1993b; VanPatten & Sanz, 1995). In early PI studies, PI was shown to be superior to TI on interpretation tasks and equal to TI on tasks of production, despite the fact that participants in PI groups did not receive any production practice. These studies, however, made researchers question the source of PI gains, and it was believed that the meaningfulness of PI activities may be responsible for the superior performance over TI. Therefore, subsequent studies began to isolate different elements of PI.

Farley (2001a), for instance, sought to determine if structured input activities were responsible for PI's efficacy by comparing it to meaning-based output instruction (MOI). MOI, as operationalized, is very similar to PI. The difference lies in the type of activities that form part of the treatment. Whereas PI activities are input-based, MOI

activities are output-based. Farley (2001a) found that PI was superior to MOI on interpretation tasks and equal to MOI for production tasks. However, a subsequent study contradicted these results (Farley, 2001b) by showing PI and MOI to be equal on both interpretation and production tasks. He surmised that the change in results might be due to the receipt of additional incidental input through the feedback the MOI group received from the treatment administrator during review of the targeted structure. Benati's (2005) research confirmed the earlier findings of Farley (2001a), leaving a lack of clarity regarding the matter.

Morgan-Short and Bowden (2006) sought to isolate feedback that would provide incidental input – like that in Farley (2001a, 2001b) and Benati (2005) – by administering the treatments via personal computers. Though the results of Morgan-Short and Bowden (2006) were not consistent with previous findings, as MOBI (which was defined as a treatment identical to PI except for the mode of practice) was found to be equal to PI on interpretation tasks, and the only treatment to yield a statistically significant gain on the production tasks (though these gains disappeared over time). As Russell (2009, 2012) points out, these effects may be due to Morgan-Short and Bowden's (2006) failure to completely control for feedback, as students who did not answer correctly in the MOBI treatment were not shown the correct answer, while those who did were informed of the correctness of the response. Thus, feedback may have been responsible for the variation exhibited in the results.

In sum, this chapter has sought to facilitate the development of an understanding of VanPatten's input processing model and the processing instruction strand of inquiry. The chapter opened with an introduction to the areas of research that spurred VanPatten

to formulate his input processing model. Additionally, the chapter has discussed the literature relevant to the present study. Finally, the chapter highlighted the gaps remaining in the PI strand of inquiry and presented some suggestions for future research.

Chapter 3:

Research Methodology

Introduction

This chapter outlines the research methodology that was employed in the present study. First, the overarching design of the research study is summarized. Then, the population and sample of the study are described in depth. The context and setting of the investigation are also described in detail. Subsequently, the materials that were utilized in the implementation of the study's treatments (see Appendices C - D) and assessment are chronicled. The method for determination of the validity and reliability of these materials is also outlined. Finally, the procedures for data analysis are relayed to the reader.

Research Design

The design of the present research study may be described as quasi-experimental. Though the study made use of a control group (receiving no instruction on the target forms during the timeframe of the study), the lack of true randomization in the population precludes it from being considered an experimental study. Participants were, however, randomly assigned to one of the testing groups: TI (see Appendix C), PI (see Appendix D), or control (no instruction).

The study made use of a pretest/posttest design intended to measure the efficacy of two distinct instructional treatments (see Appendices C - D) and permit comparisons

of the same. One pretest was presented immediately after completion of the instruction modules, and a delayed pretest was completed two weeks after the administration of the immediate pretest.

Research questions. For the present study, the following research questions were developed:

1. Does instruction type (PI, TI, and no instruction [control group]) lead to differential performance by Chinese learners of Spanish on tasks of interpretation administered immediately following the instructional treatment for sentence-level passages containing *ser* or *estar*?
 - a. Are the effects of instruction (if any) durative as measured by retention over time?
2. Does instruction type (PI, TI, and no instruction [control group]) lead to differential performance by Chinese learners of Spanish on tasks of production administered immediately following the instructional treatment for sentence-level passages containing *ser* or *estar*?
 - a. Are the effects of instruction (if any) durative as measured by retention over time?

Population and Sample

All participants in the present study were students in the Spanish program of a small- to mid-size private college located in a very large municipality in Southwest China. The Spanish program is relatively young, having begun admission of new students in September 2012. At the time of data collection, participants of the target

population were enrolled in fourth-semester elementary Spanish classes. The textbook used for in-class activities and much of the production-oriented homework exercises is a text entitled *Español Moderno*. The textbook and its accompanying practice texts are produced by the sponsoring public university of the private college where data collection took place. The textbook is written primarily in Chinese, including the directions for most exercises. The exercises themselves, however, are written in the TL.

While some studies have sought to carry out PI research with non-Spanish majors in order to mitigate the potential differential effects of motivation on student performance, factors within the institutional context would make the implementation of such a measure undesirable. First, in Western tertiary education contexts, students often have significant prior exposure to the L2 before engaging in study of the same. In the case of participants of the present study, little to no such prior exposure exists. This is especially true because foreign language study in primary and secondary education institutions in the PRC is often limited to the English language, which is considered to be the international language of commerce. Furthermore, China has far fewer L1 Spanish speakers than the United States. As a result, Chinese students studying in their home country are presented with fewer opportunities for extra-curricular exposure to the language of study and the people who speak it. Therefore, fewer motivating external impetuses for L2 study were present among the population of study. Additionally, non-Spanish majors at the institution where the present study was realized are also foreign language majors who must select a third language as an elective. Among these majors, English is the predominant major of choice, with over 90% of the students enrolled in that program. Anecdotal evidence suggests that motivation for learning a third language

is relatively low among the students, because standardized testing upon which student graduation is dependent is required only for the major language. No requisite for graduation exists requiring proficiency testing or oral interviews for either the elective or major languages.

A number of distinguishing factors set this particular population apart from others that have been examined in previous PI studies. For example, the participants were part of a cohort system and took all courses except for electives in classes that require working alongside the same group of approximately 30 people throughout the four years of study. Most Western institutions of higher education do not employ this type of system in undergraduate programs (with the exception, perhaps, of the phenomenon of *Honors Colleges*), and it is unclear, to what degree such a system affects things like group cohesion, willingness to communicate, affective stimuli, and receptiveness to new or innovative instructional techniques. Furthermore, all students enrolled in a given major share living quarters with other students of the same cohort (known as a *class* in China) and major.

Another distinguishing characteristic of the population of study was its relative lack of familiarity with formal online education and course management systems. While the students frequently employ the use of informal online study groups facilitated through Tencent QQ Messenger (a software that is ubiquitous in China and currently possesses an active membership of nearly 800,000,000 users), formal online learning, hybrid courses, and Web-based supplementation of classroom instruction are all quite novel.

In addition to the characteristics outlined above, one very notable feature of the population of study was the exceptionally high ratio of female to male students. While it

has been stated that females in Western countries select language majors at a higher rate than their male counterparts, this same tendency is highly exaggerated in China, with over 95% of the students enrolled in this institution (which specializes in language-based majors) being female. Conversation with numerous students, faculty, administrators, and non-college affiliated members of the community indicated that this seeming disparity is owed to deeply-held cultural beliefs; namely, that females are innately more adept at learning languages than males.

Finally, it is imperative to report that most students enrolled in this private college find themselves among those who have failed to pass the national college entrance examination, known as 高考 (or *gāokǎo*) with a score sufficiently high for enrollment in a public institution funded by the central government of the People's Republic of China, or a provincial or city government. Were they to have obtained entrance into one of these public institutions, they would have received a highly-subsidized education. However, because they are enrolled in a private college, the participants or their family members are required to pay tuition and fees that are significantly higher than those of students enrolled in public institutions. And although some of the students come from higher middle-class and wealthy families, the vast majority of the students enrolled at this college form part of China's emerging middle class, though many could be classified as possessing low socio-economic status.

Context and Setting

The present study was carried out at a private college located in a very large municipality situated in the southwest region of the People's Republic of China. The institution currently has an enrollment of approximately 13,500 students. It is financed

by a real estate development corporation, and it is operated in partnership with a state-owned, four-year university located in another district of the city. This partnership is a requirement of the central government, which only approved the development and offering of private tertiary education in the last couple of decades.

Private tertiary education is under-developed in China, and it does not possess the reputation for academic excellence or quality that is enjoyed by public institutions of higher learning (Zhou & Xie, 2007). Nevertheless, many people within the government and established educational entities believed that the expansion, improvement, and accessibility of privately-owned, yet publicly-accountable colleges and vocational schools was crucial to the overall development of China's workforce and the obtainment of national interests (Mok, 2009; Zha, 2006; Zhou & Xie).

Most, if not all, of the students at this private college failed to receive a passing score on the 高考 (*gāokǎo*), the PRC's national college entrance examination, which is required for admission into a highly-subsidized education program at a state college or university. While passing this examination may be indicative of academic potential, it is not necessarily so, as many of the students enrolled at this institution, and in other private colleges located within the PRC, have not received educational opportunities in the past equivalent to those of their higher-performing peers. This is especially true for the large number of students enrolled in these non-public institutions that come from rural parts of China, where over half of the nation's population lives.

A high percentage of the college's students, including those from the Spanish major, hope to obtain employment as educators, tour guides, flight attendants, cruise ship personnel, and sales representatives of domestic, international, and multinational firms

operating or based in China. While proficiency in English is considered highly desirable for many of these positions, the competition is much greater, as the job market is saturated with those whose education or credentials (such as the Test for English Majors Certificate) allow college graduates from many fields of study to boast some degree of English competence. Those who can boast proficiency in other languages are far fewer, with Japanese and Korean being the next most common L2 of choice. Those with proficiency in Romance languages are far fewer. Persons with proficiency in these languages, however, are becoming increasingly necessary as Chinese companies seek to make economic inroads and/or increase marketshare in other developing nations, especially in Africa and Latin America (Domínguez, 2006; Ellis, 2009).

Materials

Assessment instruments and measures. For this study, the measurement instruments included 3 distinct versions of the Knowledge Test of Spanish Copulae (KTSC), an assessment developed specifically for this research investigation. Each version of the test included two subtests: an interpretation subtest and a production subtest. In addition, a pre-treatment questionnaire was employed to assist in analysis of the data (see Appendix B). Additional detail regarding each of these instruments is related below.

Pre-treatment questionnaire. A pre-treatment questionnaire (see Appendix B) was crafted to assist in the collection of demographic information as well as data related to participants' previous exposure to the language of study, participants' exposure to the language outside of the classroom, and participants' attitudes toward online/blended learning. The questionnaire was originally composed in English and subsequently

translated into Chinese by a university-educated bilingual individual who possesses high proficiency in both English and Standard Mandarin Chinese. The translation was subsequently read by other university-educated speakers of Chinese on the faculty and staff of the college where the research study was conducted in order to ensure accuracy and clarity of the translation. The Chinese version of the pre-treatment questionnaire (see Appendix B) was administered at the time of participant recruitment with the researcher and a bilingual assistant serving as instrument proctors.

Knowledge Test of Spanish Copulae. For the present study, three ser/estar knowledge tests were developed. These knowledge tests include two task types that serve to maintain consistency and ensure comparability with Cheng (1995, 2002): The tasks include sentence- and picture-interpretation and sentence completion. A third task type employed by Cheng, guided composition, was eliminated in order to avoid the threats to study validity inherent to such tasks. These threats include whether or not points should be awarded for partially-correct answers, disparity in the number of tokens produced, and how to account for the potential for participant preference for, or omission of, one copula or the other.

The knowledge tests included two parts: an interpretation subtest and a production subtest. Additional detail is provided below.

Iniciar: CUESTIONARIO PRE-TRATAMIENTO

Cancelar Comenzar

1. Instrucciones

Prueba con limitación de tiempo El tiempo límite de este/a Sondeo es 1 hora.

Configuración de temporizador Se le notificará cuando se acabe el tiempo y podrá continuar o enviar la prueba.

Forzar terminación Una vez haya empezado, deberá completar el/la Survey de una vez. No salga de la prueba antes de hacer clic en **Guardar y enviar**.

Haga clic en **Iniciar** para iniciar: CUESTIONARIO PRE-TRATAMIENTO. Haga clic en **Cancelar** para volver atrás. Estará viendo una vista previa de esta actividad y sus resultados no se registrarán.

2. Enviar

Click Begin to start. Click Cancel to quit.

Cancelar Comenzar

Vista preliminar de sondeo: CUESTIONARIO PRE-TRATAMIENTO

Descripción Este cuestionario debería completarse antes de que el/la participante comience el tutorial instruccional.

Instrucciones

Prueba con limitación de tiempo El tiempo límite de este/a Sondeo es 1 hora. Se le notificará cuando se acabe el tiempo y podrá continuar o enviar la prueba. Se mostrará una advertencia cuando falte la mitad del tiempo, 5 minutos, 1 minuto y 30 segundos. (No aparecerá el temporizador en la vista preliminar de este sondeo)

Intentos múltiples Prohibido. Este sondeo sólo se puede realizar una vez.

Forzar terminación Una vez haya empezado, deberá completar el sondeo de una vez.

Estado de terminación de la pregunta:

Pregunta 1

中文姓名:

Pregunta 2

西班牙语姓名:

Pregunta 3

年龄 (请写年龄和月份, 比如: 21岁5个月大)

Pregunta 4

请打勾:

女

男

Pregunta 5

你曾经成长的地方人们说那种语言或者方言?

Pregunta 6

在你的家乡, 如今人们使用那种语言或者方言?

Figure 3.1. Pretest Questionnaire. The screenshots above show the actual pre-treatment questionnaire (see Appendix B) that was deployed as part of the present study.

Interpretation subtest. The interpretation subtest of the *estar/ser* knowledge test was designed to measure participants' comprehension of the target form. The design was based upon that of PI measures of assessment employed in numerous studies, though, unlike Cheng (1995, 2002), which contained two interpretation task types, the *ser/estar* interpretation subtest for this study contained three types of tasks. One of the tasks involved choosing between two illustrations to indicate which one corresponded to a statement spoken in the TL that included the targeted forms. Another task required listening to a statement in the TL and choosing among two sentences composed in Chinese to indicate which one most accurately represented the scene being described in the TL statement. A third task required participants to listen to a TL statement delivered by a native speaker of Spanish and choose among two illustrations to indicate which one was most representative of what they heard.

Production subtest. The production subtest of the *ser/estar* knowledge test designed for this research study contained two task types. One of the task types required the completion of incomplete statements composed in Spanish. Like Cheng (1995, 2002), the participants were provided with a statement written in the L1, in this case standard Mandarin Chinese, that provided context for the Spanish-language dialogue. The dialogue was missing phrases that required utilizing the target forms to be made complete. In order to elicit the use of the target form tokens, a list of Spanish adjectives/past participles were provided to the participants. They were prompted to use one of these for the most logical completion of each sentence.

Test version comparisons. The interpretation and production scores for each version of the pretest were submitted to separate one-way ANOVAs to ensure that the

tests were comparable in terms of difficulty. In this section, descriptive statistics for the pretest scores for each of the three test types, including number of subjects, means, standard deviations, minimum scores, maximum scores, and score ranges are presented (see Table 3.1); then, the results of the analyses for interpretation scores are presented, followed by the results for production test analyses.

Table 3.1

Descriptive Statistics for Test Version Comparisons for Pretest Data

Subtest	Version	n	Mean	SD	Min.	Max.	Range
Interpretation	A	19	5.26	1.04	2	6	4
	B	18	5.33	0.68	4	6	2
	C	21	5.06	1.06	3	6	3
Production	A	19	2.63	2.19	0	6	6
	B	18	3.27	1.96	0	6	6
	C	29	2.75	1.82	0	6	6

Preliminary review of the mean scores and standard deviations for pretest scores for the interpretation subtest offered no indication of marked difference among the test versions. Likewise, the means and standard deviations for pretest scores for the production subtest indicated that the test versions were comparable in terms of difficulty. Two separate one-way ANOVAs were carried out on the interpretation subtest data and the production subtest data to ensure that no significant differences existed for test type. The results are presented below.

The pretest scores for the interpretation subtest of each of the three test versions were analyzed using a one-way ANOVA with a between-subjects design with three levels. The analysis did not reveal a statistically significant effect for test version, $F(2, 63) = 0.47, p = 0.62$. The null hypothesis for this test was that the interpretation subtests did not significantly vary in difficulty. Given the non-significant results, the null hypothesis was not rejected. Therefore, the researcher concluded that any difference among group scores at the immediate posttest and delayed posttest levels would not be attributable to differences in test version difficulty. The results of the one-way ANOVA for pretest scores on the interpretation subtests are presented in Table 3.2.

Table 3.2

*One-way Between Subjects ANOVA for Pretest Interpretation Subtest
Scores for Assessing Test Version Difficulty*

Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>
Score x Test Version				
Between-Subjects	2	0.89	0.45	0.47
Within-Subjects	63	59.55	0.95	
Total	65	60.44		

The pretest scores for the production subtest of each of the three test versions were analyzed using a one-way ANOVA with a between-subjects design with three levels. The analysis did not reveal a statistically significant effect for test version, $F(2, 63) = 0.57, p = 0.56$. The null hypothesis for this test was that the interpretation subtests did not significantly vary in difficulty. Given the non-significant results, the null hypothesis was not rejected. Therefore, the researcher concluded that any difference among group scores at the immediate posttest and delayed posttest levels would not be

attributable to differences in test version difficulty. The results of the one-way ANOVA for pretest scores on the production subtests are presented in Table 3.3.

Table 3.3

One-way Between Subjects ANOVA for Pretest Production Subtest Scores for Assessing Test Version Difficulty

Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>
Score x Test Version				
Between-Subjects	2	4.43	2.22	0.57
Within-Subjects	63	245.34	3.89	
Total	65	249.77		

Validity and reliability of the study. A number of measures were taken in order to ensure the validity and reliability of the assessment measures described above. First, all three versions of the *estar/ser* knowledge test were submitted to a panel of five native Spanish speakers who are also college-level instructors of the Spanish language. Each of these individuals hailed from a different country of the Spanish-speaking world, and each was asked to complete the *estar/ser* knowledge test to ensure that the test items (a) measure what they were intended to measure, (b) did not possess regional or dialectal differences that could potentially create confusion, and (c) utilized a lexicon that could reasonably be understood by students enrolled in a fourth-semester university Spanish course. Whenever 100% agreement was not found on a given test item, the instructors were consulted as to their understanding of the item in question and the potential source of influence or a variation. Any questionable item was then either modified or eliminated

until all remaining items produced 100% agreement and testing accuracy. In total, two items were changed; one that contained a typographical error in a distracter item and another that yielded distinct responses from reviewers. Additionally, the tests were presented to advanced non-native speakers of Spanish from China, some of whom have studied abroad, in order to ascertain whether or not the test items were level-appropriate and able to be accurately answered by non-native speakers of the TL.

With regard to the internal validity of the research study, the following measures were taken. First, the study's design called for the researcher to control for teacher effects by placing all treatment materials on a Web-accessible CMS. The participants were given basic training with the CMS prior to reviewing any treatment materials or taking part in any assessment, including the pretest. This training was carried out via screen cast and followed up by hands-on practice. The practice was completely unrelated to the treatment and language of study. Second, an experimental design including a control group receiving no instruction, a comparison group receiving traditional instruction, and a third group receiving processing instruction provided the basis of the study. This design was used to mitigate any potential threat to the proper interpretation of any potential gain scores measured over time. Third, the pretesting and posttesting were deployed using a split-block design that reduced the possibility of an effect for the order of test administration or test item variation.

The external validity of the study was bolstered by the provision of relevant demographic data that assisted in describing the generalizability of the results. Moreover, the context and participants selected for inclusion in the study have been outlined at length earlier in this chapter. Additionally, the design decision to use intact classes for

inclusion in the present study in place of recruiting participants through a process of self-selection strengthened the external and ecological validity of the study.

Instructional treatments. The instructional treatments (see Appendices C - D) for this study consisted of two distinct instructional modules delivered via the CourseSites CMS. One of the instructional modules was based upon traditional language instruction (see Appendix C), and the other was based upon PI (see Appendix D). Prior to completing the assigned instructional modules, participants received a training session in the use of the CMS, and they were asked to complete non-language instruction simulation tasks in order to familiarize themselves with the website and mitigate the potential effects of a lack of familiarity with the tools or navigation of the CMS upon their ability to successfully complete the pretest (see Appendices E - G), instructional treatment modules (see Appendices C – D), or the posttests. Both the TI (see Appendix C), and PI (see Appendix D) modules focused on the utilization of the target forms with descriptive adjectives and adjectives of condition, which in the Spanish language, are essentially past participles that have been modified for gender and number agreement. The two instructional modules are described in more detail on the pages that follow.

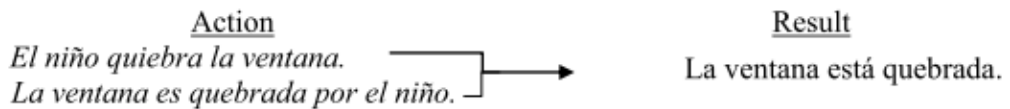
Traditional instruction. The TI treatment module (see Appendix C) followed the format used by Cheng (1995, 2002), which was itself derived from the second edition of *Pasajes: Lengua* (Bretz, Dvorak, & Kirschner, 1992). The materials were first composed by the researcher and subsequently translated into Chinese by an L1 Chinese speaker with a degree in English translation from an accredited Chinese university.

Resultant States

While *ser + past participle* can be used to express actions in the passive voice in Spanish, using *estar + past participle* is used to express the result of an action (also known as its condition or state).

La ventana está quebrada. → The window is broken.

Now let's compare an action described in both active and passive voice. Then we'll see the resultant state.



Activity 1:

Instructions: *Change each sentence from active voice to passive voice using the verb ser. A model is provided for you.*

MODELO: *El profesor enseña la clase. → La clase es enseñada por el profesor.*

1. En los Estados Unidos más de 40 millones de personas hablan español.

2. Shakira baila muchos tipos de danza.

3. Peyton Manning lanza la pelota.

4. Mi madre cocina muchos platos típicos de mi país.

5. El hermano mayor de Pepe lava el auto familiar.

6. En China hacen muchos productos electrónicos.

Figure 3.2. Example of TI. This example of traditional instruction is an excerpt of the English translation of TI materials that were used in data collection (See Appendix C).

The Chinese language version of the TI materials was then reviewed for accuracy by two Chinese educators holding PhDs in language acquisition from American universities.

TI, as operationalized in VanPatten and Cadierno (1993), consists of explicit grammar explanations and production-based activities related to the form or forms of focus. For the present study, TI was operationalized as a digitized version of TI that could be considered analogous to shovelware. Shovelware is considered to be the unaltered presentation of analog content in digital format in online courses.

The TI instructional materials (see Appendix C) included an explicit explanation of the uses of *ser* and *estar* with adjectives and past participles, especially those indicating the state or condition of an object. This explanation was written principally in standard Mandarin Chinese, and it was immediately followed by production-oriented exercises of various types, including fill-in-the-blank, sentence transformation tasks, translation tasks (from Chinese to Spanish, a prominent feature in the text), and sentence-level composition tasks. No interpretation tasks formed part of the TI treatment module. Additionally, the grammar explanation related uses of both *ser* and *estar* simultaneously.

Processing instruction. Lee and VanPatten (1995, 2003) first proposed the guidelines for the development of PI materials. According to their work, PI includes certain essential elements. First, explicit grammar explanations should be offered in a non-paradigmatic manner. This means, in essence, that the grammar explanations should not contain multiple forms of focus, nor should they present all possible uses of a single form. Rather, grammar explanations should offer only one point at a time, and this explanation should then be followed by information regarding potentially faulty

processing strategies that language learners might employ. Instruction on the strategies is then followed up with interpretation-based structured input activities. SI activities vary from their authentic input counterparts in that SI seeks to eliminate the unnecessary, redundant elements of language that could impede the processing of the form of focus. In addition to the non-paradigmatic explanations of grammar described above, participants assigned to the PI treatment were provided with information regarding the faulty processing strategies that Chinese learners of Spanish have a natural tendency to employ. According to VanPatten's (1993, 1996, 2002, 2004) model of IP and the nature of the Chinese language, it was hypothesized that Chinese learners of Spanish would have difficulty in copula selection, copula conjugation, and the production of adjective/participle agreement of gender and number with the noun modified.

Following the instructional presentation over *ser*, *estar*, and processing strategies, interpretation exercises employing SI were utilized. These exercises constitute an important part of PI and were crafted upon the basis of Lee and VanPatten's (2003) guidelines.

Resultant States

While *ser + past participle* can be used to express *actions* in the passive voice in Spanish, using *estar + past participle* is used to express the *result* of an action (also known as its condition or state).

La ventana está quebrada. → The window is broken.

Take a look at the example below. Then, choose the statement that you believe best corresponds to its meaning.

La casa está pintada.

A) Something is painting the house.
B) The house is already painted.

If you selected (B), great job!

Let's try another one:

El carro está lavado.

A) The car is being washed.
B) The car has already been washed.

If you guessed (B), "The car has already been washed," you are to be commended.

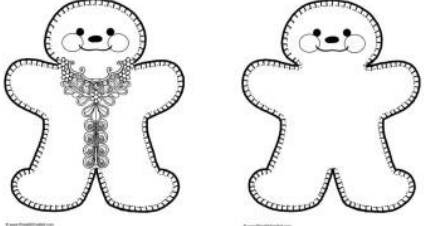
¡ESTRATEGIA!

Don't make the mistake of thinking *ser* and *estar* unimportant words to which you don't really need to pay attention. The choice or one of these verbs over another can tell us whether the speaker is talking about an action or the result of a previously completed action.


Actividad 3

Instructions: For each item, you will hear a sentence in Spanish. After hearing the sentence, choose the image that best corresponds to the meaning of the sentence you heard. (There should be 8 image pairs in total.)

1.



2.



3.




Figure 3.3. Example of PI. This example of processing instruction is an excerpt of the English translation of PI materials that were used in data collection (See Appendix D).

Delivery platform. All instructional and assessment materials utilized in the study were hosted on and delivered through CourseSites.com, a CMS which makes freely available the tools of the latest iteration of the commercially-offered Blackboard CMS for individual educators. Most of the features of the Blackboard platform are available to users developing and delivering their own courses via CourseSites, including many which may or may not be used at colleges or universities that employ Blackboard because of the costs associated with purchasing the rights to specific premium tools. CourseSites users are limited in some ways, however.

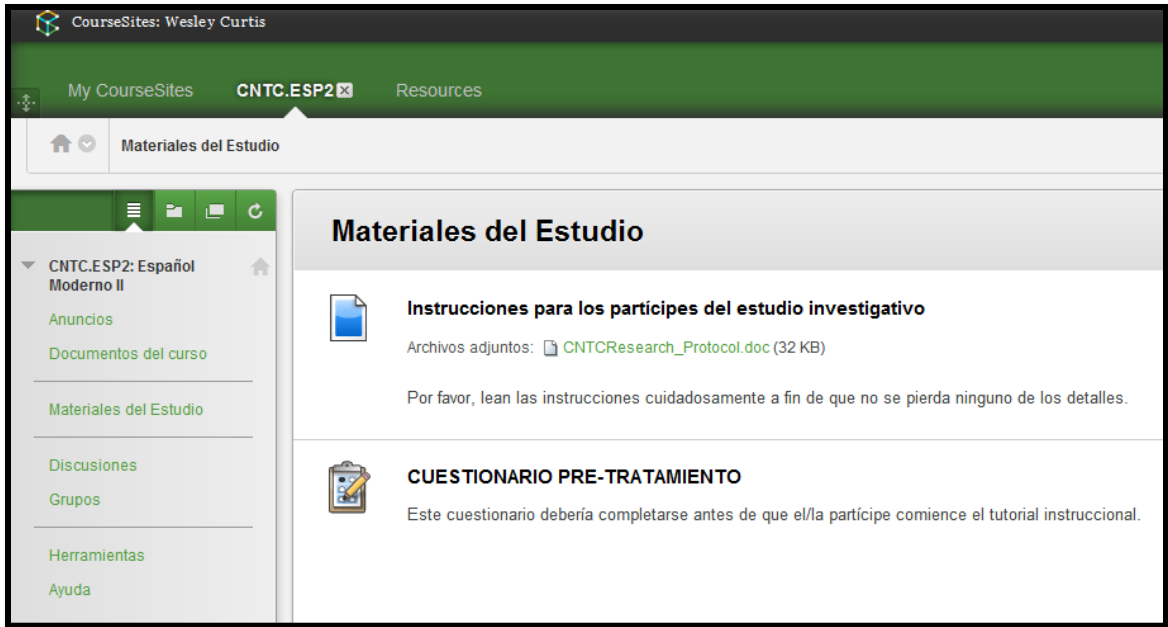


Figure 3.4. CourseSites Platform for Course Management. The study materials and instruments were hosted on and delivered via the CourseSites CMS. The platform is essentially identical to the commercially available Blackboard CMS that is generally deployed at the institutional level. CourseSites, in contrast, is made available to individual educators only.

First, each instructor user (as opposed to a student user) is limited in terms of the number of courses he or she can make available to student users at any given time. The limit is currently five courses. Second, CourseSites is able to import SCORM packages from Blackboard. A Shared Content Object Reference Model (SCORM) package is a special type of compression file (similar to a *.zip* or *.rar* file) that enables a person to export data and files from his or her CMS so that the course format, materials, and settings may be imported elsewhere and/or re-used. However, the CourseSites platform is only available to individual users and cannot be systemically deployed at the institutional level. For the present study, the course module, test, and survey/questionnaire features of the platform were used.

Usability testing of instructional treatments. Prior to participant recruitment, usability testing (see Figure 3.5) was conducted with nine student volunteers pursuing an academic major other than Spanish. The volunteers, though not Spanish majors, had taken elective courses in the language and possessed sufficient proficiency to gauge the usability of the study materials and the CMS on which they were hosted. The volunteers were expected to provide feedback related to the learnability, error rate and subjective satisfaction of the aforementioned CMS and study materials. Convenience sampling was utilized for the recruitment of the usability testing volunteers.

The goal of the evaluation of user performance was to identify potential difficulties that might be encountered by users and their causes. The data from usability testing were then used to maximize the ease of use of the study's CMS-hosted materials and instruments. Specifically, the researcher sought to measure how easy it would be for a new user of the website to accomplish the assigned tasks while also taking into account the time the user took to complete them. Additionally, the researcher's objective was to determine the error rate of the website by recording and analyzing the number of errors made in the completion of a given task. Finally, the usability testing assisted the researcher in identifying user satisfaction levels with the presentation of study materials (see Appendices C – D) and making adjustments to improve the site's usability.

Before beginning the usability testing session the researcher/proctor presented the volunteers with a document containing a list of tasks assigned for the purpose of evaluating the CMS and study materials. The volunteers were required to read the tasks and then ask any questions they had regarding the instructions before commencing to use the system. During the usability testing session, the researcher used Tullis and Albert's

(2008) Usability Test Observation Coding Form (see Figure 3.5) for later consideration of the volunteers' verbal and non-verbal behaviors as they pertained to the assigned tasks. This form also allowed the administrator to make notes of participants' comments or utterances during completion of the tasks.

Upon volunteer completion of the tasks, the researcher asked the participants to rate the learnability, error rate, and subjective satisfaction of the CMS and study materials. A survey and questionnaire created for this purpose was then administered. The instrument contained several 5-point likert scale items ranging from the easiest to the most difficult. The instrument also included five open-ended questions related to the use of the CMS and study materials (See Figure 3.6).

With respect to the navigability of the website, 11% of volunteers said the website was the easiest they had ever used; 56% reported that the website was very easy to use; 22% reported that the website was easy to use; 11% said the website was somewhat easy to use; and 0% said the website was not easy to use. When asked about the difficulty of task completion, 33% of volunteers said the tasks were exceptionally easy to complete; 33% said the tasks were very easy to complete; 33% said the tasks were easy to complete; 0% said the tasks were somewhat easy to complete; and 0% of the volunteers indicated that the tasks were not easy to complete. Volunteers participating in usability testing were also asked the following: "If you had the opportunity to use a free website like this for language learning, how likely would you be to use it?" When volunteers were asked how likely they would be to use a free website like the one tested, 89% said very likely; 11% said they would be somewhat likely to use it; and 0% said it was not likely at all that they would use such a site.

Usability Test Observation Coding Form

Date: _____ Participant ID: _____ Task #: _____

Start Time: _____ End Time: _____

Verbal Behaviors	Notes
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Strongly positive comment	_____
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Other positive comment	_____
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Strongly negative comment	_____
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Other negative comment	_____
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Suggestion for improvement	_____
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Question	_____
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Variation from expectation	_____
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Stated confusion	_____
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Stated frustration	_____
Other: _____	_____

Non-verbal Behaviors	Notes
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Frowning/Grimacing/Unhappy	_____
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Smiling/Laughing/Happy	_____
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Surprised/Unexpected	_____
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Furrowed brow/Concentration	_____
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Evidence of Impatience	_____
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Leaning in close to screen	_____
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Variation from expectation	_____
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Fidgeting in chair	_____
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Random mouse movement	_____
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Groaning/Deep sigh	_____
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Rubbing head/eyes/neck	_____
Other: _____	_____

Task Completion Status:	Notes:		
<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;"> Incomplete: <input type="checkbox"/> Participant gave up <input type="checkbox"/> Task "called" by moderator <input type="checkbox"/> Thought complete, but not </td> <td style="width: 50%;"> Complete: <input type="checkbox"/> Fully complete <input type="checkbox"/> Complete with assistance <input type="checkbox"/> Partial completion </td> </tr> </table>	Incomplete: <input type="checkbox"/> Participant gave up <input type="checkbox"/> Task "called" by moderator <input type="checkbox"/> Thought complete, but not	Complete: <input type="checkbox"/> Fully complete <input type="checkbox"/> Complete with assistance <input type="checkbox"/> Partial completion	
Incomplete: <input type="checkbox"/> Participant gave up <input type="checkbox"/> Task "called" by moderator <input type="checkbox"/> Thought complete, but not	Complete: <input type="checkbox"/> Fully complete <input type="checkbox"/> Complete with assistance <input type="checkbox"/> Partial completion		

Figure 3.5. Usability Test Observation Coding Form. During usability testing, the volunteers were observed by the researcher as they completed five tasks designed to simulate the potential experience of participants in the study who would be using the CourseSites CMS. The researcher made use of Tullis and Albert's (2008) Usability Test Observation Coding Form to assist in this task.

8. How easy to use was the website/lesson you just viewed?

Not easy at all Somewhat easy Easy Very easy It's the easiest website I've ever used

9. How easy was the website to navigate (i.e., get from one page to another)?

Not easy Somewhat easy Easy Very easy The easiest thing I've ever done

10. If you had the opportunity to use a free website like this for language learning, how likely would you be to use it?

Not likely at all

Somewhat likely

Very likely

Figure 3.6. CMS Usability Survey & Questionnaire. This screen capture image shows an excerpt from the questionnaire used with the Usability Test Observation Coding Form to rate the learnability, error rate, and subjective satisfaction of the CMS and study materials.

Data Collection Procedures

For this study, all fourth-semester Spanish classes offered as part of the newly developed Spanish major of a mid-sized private institution of higher education located in Southwest China formed part of the inquiry. Students enrolled in these courses were informed that a research study was being conducted in their classes. However, they were not provided with any information regarding the nature of the investigation or its foci. Any student not desiring to have his or her data included in the final reporting and analysis could do so by opting not to sign an IRB-approved form of consent. All instructions regarding the consent and participation in the the study were explained to the

students in standard Mandarin Chinese by their instructors. The instructors were provided with an IRB-approved notification letter and told not to deviate from the words written therein. Subsequently, students indicating their desire to participate in the study were provided with the appropriate IRB-approved consent form drafted for this purpose. The rationale for conducting the query with intact classes as opposed to seeking only students who self select for enrollment in the study was that self-selection could potentially weaken the ecological validity and, therefore, methodological rigor of the investigation. Nevertheless, students were informed that they had the right to withdraw from the study at any point in time, and they were also made aware that their participation was completely confidential.

All students choosing to participate in the study were asked to complete a questionnaire at the time of recruitment, which took place approximately one week prior to the administration of a pretest measuring participants' knowledge of the target forms. This questionnaire served to provide demographic information and also relevant data regarding participants' previous exposure to and study of the Spanish language, current extra-curricular exposure to the TL, and regular study habits. Participants were notified that the information would be used strictly for the purpose of better understanding data collected as part of the research study and would not be attached to any identifying information.

Study participants were randomly assigned to one of three treatment groups: PI, TI, or no instruction (control). The 'no instruction' group did not receive any instruction on the target forms during the course of the investigation. Given that the duration of the data collection phase of the present study was less than one month, the faculty of the

college department in which data collection took place assured the researcher that their syllabus contained sufficient flexibility to accommodate the study. Thus, the no instruction group received instruction on the target forms only *after* the delayed posttest had been completed by study participants.

For this study, a test measuring participants' knowledge of the target forms was utilized in both pre- and post- testing. The pretest was administered within one week of the administration of the pre-treatment questionnaire. The lapse of one week permitted more time for participants to consider if they would like to withdraw from the study prior to pre- testing. In order to maintain consistency and maximize comparability with Cheng (1995, 2002) and other PI studies, the *ser/estar* knowledge test (see Appendices E - G) included two task types: sentence- and picture-interpretation and sentence completion. The test included two parts: an interpretation subtest and a production subtest. As with previous PI studies, participants who scored higher than 60% on either of the two subtests were excluded from inclusion in the data analysis. The rationale for exclusion was that a score surpassing 60% on either test was indicative of a basic comprehension of the target forms.

Given that the instructional treatments (see Appendices C - D) for the study were administered via Web-enabled computers, assessment was also administered using this medium. Both the pretest and posttests made use of the Knowledge Test of Spanish Copulae described above. A split-block design was employed in pre-testing and post-testing in order to control for task variation and the administration order of different test versions. In total, three versions of the *ser/estar* knowledge test were utilized.

Participants that received Test A (see Appendix E) in pretesting received Test B (see Appendix F) for the immediate posttest and Test C (see Appendix G) for the delayed posttest. Likewise, those receiving Test B for the pretest received Test C for the immediate posttest and Test A for the delayed posttest. Finally, participants receiving test C in pretesting were administered test A in immediate post-testing and B in delayed post-testing.

Data Analysis

Statistical procedures. For the present study, data analysis was carried out using SAS® 9.2 for Windows, a robust statistical analysis package. The data were examined for any outliers prior to carrying out the analyses.

First, a one-way ANOVA with one between subjects factor (test version, with three levels) was carried out on pretest scores for the interpretation subtest of the KTSC in order to ensure there was no statistically significant difference for test type, which could have been indicative of differing test difficulty among the three versions of the KTSC. Likewise, a one-way ANOVA with one between subjects factor (test version, with three levels) was carried out on the pretest scores of the production subtest of the KTSC to ensure that the test versions were of comparable difficulty. Subsequently, the researcher carried out a one-way ANOVA with one between subjects factor (treatment group, with three levels) on the pretest scores of the interpretation subtest of the KTSC in order to establish equivalence of groups. Likewise, a one-way ANOVA with one between subjects factor (treatment group, with three levels) on the pretest scores of the production subtest of the KTSC was performed.

In order to answer the research questions (which are reproduced below) and evaluate the effects of the independent variable (instruction type) on the dependent variable (participant performance on interpretation and production tasks for *ser* and *estar*) the following analyses were performed:

For RQ1 and RQ1a, a repeated measures ANOVA with one between subjects factor (treatment) with three levels (PI, TI, and control) and one within subjects factor (time, with three levels) was carried out. Likewise, for RQ2 and RQ2a, a repeated measures ANOVA with one between subjects factor (treatment) with three levels (PI, TI, and control) and one within subjects factor (time, with three levels) was carried out.

1. Does instruction type (PI, TI, and no instruction [control group]) lead to differential performance by Chinese learners of Spanish on tasks of interpretation administered immediately following the instructional treatment for sentence-level passages containing *ser* or *estar*?
 - a. Are the effects of instruction (if any) durative as measured by retention over time?
2. Does instruction type (PI, TI, and no instruction [control group]) lead to differential performance by Chinese learners of Spanish on tasks of administered immediately following the instructional treatment production for sentence-level passages containing *ser* or *estar*?
 - a. Are the effects of instruction (if any) durative as measured by retention over time?

For each repeated measures ANOVA, the researcher first examined the data to ensure that the assumptions underlying the tests had not been violated. Specifically, the researcher examined the excess skewness and excess kurtosis values in order to ensure that the assumption of distribution normality had not been violated. Shapiro-Wilk tests were carried out to further assess the normality of the distribution of interpretation scores for each treatment group at each level of time, and Mauchly's test of sphericity was carried out to ensure that the assumption of sphericity had not been violated.

The researcher examined the results to ascertain if there was a time x treatment interaction. Additionally, the researcher examined the results to determine if there was a main effect for treatment and/or a main effect for time. When a significant treatment x time interaction was found, the researcher first plotted the interaction to help visually verify where the interaction had occurred. Then, the researcher conducted a post-hoc Tukey's HSD test on the mean difference scores in order to determine where the treatment group differences were.



Figure 3.7. Example Interpretation Task from KTSC. This screen capture image shows an example interpretation task from the online version of Knowledge Test of Spanish Copulae Assessment A.

◀ 上一页 下一页 ▶ 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |

习题 1b:

像上面发生在人们生活中的改变，你们中很多大概也已经经历了生活中的改变。下面那个对你来说是真实的。

答案写在每个问题下的空白处。

Mis amigos dicen que estoy más flaco/a.

[标记所有正确的回答。]

a. Sí

b. No

Como muchas cosas y ahora estoy gordo/a.

[标记所有正确的回答。]

a. Sí

b. No

Mis padres me pagan por lavar platos; estoy rico/a.

[标记所有正确的回答。]

a. Sí

b. No

Aquí llueve a diario, pero hoy hace sol. Estoy afortunado/a.

[标记所有正确的回答。]

a. Sí

b. No.

Figure 3.8. Example Exercise from Online PI Module. This screen capture image shows an example interpretation exercise from the online PI Module.

Descriptive statistics reported by the researcher include group means, standard deviations, excess skewness, and excess kurtosis. The researcher reported the following values as well: degrees of freedom, sum of squares, mean squares, F , and p .

Chapter Summary

In this chapter, the author has provided an exposition of the methodology employed in the present research study. The overall design of the study was also discussed, and the sample and population of the study was described. Next, the context and setting of the present research were reported. Following this, the procedures for data analysis were delineated, and the researcher described the materials utilized in the implementation of the study's treatments and assessment (see Appendices C - G). Finally, the validity and reliability of these materials was discussed.

Chapter 4:

Results

Introduction

This chapter reports the results of the analyses of the Knowledge Test of Spanish Copulae described in Chapter 3 (see also Appendices H – M), which included an interpretation subtest and a production subtest. In total, participants completed three separate, but similar versions of the test in the form of a pretest, immediate posttest, and delayed posttest. A split-block design was used, and participants receiving one test version for the pretest received a different version for the immediate posttest and the final version for the delayed posttest. The first section of this chapter presents demographic information obtained through a pre-treatment questionnaire (see Appendix B), while the second section presents descriptive statistics for interpretation data. The third section provides inferential statistics for interpretation data. In the fourth sections and fifth sections, the results of descriptive statistical analyses and inferential statistical analyses for production are shared. The chapter closes with a brief summary of the overall results of major statistical analyses.

Pre-Treatment Questionnaire

During participant recruitment, a pre-treatment questionnaire was administered that solicited demographic information and included queries regarding participants' language background, learning preferences and study habits. This information was

solicited to assist in describing the population and also to assist in the interpretation of the study's results. The questionnaire was completed by 101 students at a mid-sized private college in southwest China, though not all of them met the inclusion criteria for the research study, which had 67 participants in total.

The mean age of students completing the pre-treatment questionnaire was 19.91 years, with the range extending from 19 to 22 years. The standard deviation for age was 0.67. Of those responding to the questionnaire, 83% were female, and 17% were male. Respondents were asked to indicate if they had studied Spanish prior to enrolling in college and, if so, how long they had studied the language. None of the respondents indicated prior study of the TL.

Participants were asked a number of questions regarding their language use, as the host institution for the research study is in a large city in the southwest of China where the predominant dialect of Chinese spoken is not Standard Mandarin. Additionally, some students at the host institution come from other areas of the country where dialects other than Standard Mandarin are dominant in daily discourse. Of all questionnaire respondents, 55% reported using Standard Mandarin as the dominant dialect for daily interactions while at the university (but not in class), and 43% reported that a variant of Sichuan Dialect (part of the Southwestern Mandarin branch of the Chinese language family) was their primary dialect for daily communication while at the university. Only 2% of respondents reported daily using a dialect other than Standard Mandarin or a variant of Sichuan Dialect in the university context.

In addition to asking about students' daily dialect usage while at the university, participants were asked to indicate if a dialect other than Standard Mandarin was spoken

at home more than 50% of the time and, if answering in the affirmative, which dialect was used. Sichuan Dialect (any variant) was reported by 53% of respondents as the language of communication used with their family, while 19% reported using Standard Mandarin, and 28% reported using other dialects.

Participants were also asked to identify how long they had studied the TL. The vast majority of respondents (97%) indicated that they had studied the TL for 3 semesters, while 3% indicated that they had studied the language 2 semesters or less. Additionally, participants were asked to describe their contact with the language outside of the classroom while studying at the university. Only 13% of respondents indicated that they had no contact with the TL outside of class, while 66% indicated that they had occasional contact with the TL, 10% reported seldom having contact, 4% described having weekly contact with the TL, and 6% indicated daily contact with the TL outside of the classroom.

Participants were asked to indicate how much time they dedicate to their studies each week. Six percent of participants indicated that they spend at least 25 to 30 hours studying each week, 23% indicated studying at least 15 to 20 hours weekly, 40% reported studying 10 to 15 hours per week, 27% reported studying at least 5 hours per week, while 5% said they never study.

The questionnaire also asked students to rate their proficiency using computers. Three percent of respondents said they were highly proficient using computers, 80% said they were proficient, 14% said they were not very proficient, while 1% said they find using a computer difficult. Participants were also asked to indicate their interest in taking a fully-online language course if one were to be offered by their institution. In response

to this question, 43% said they would enroll in such a course, 51% said they may be interested in taking a fully online language course, while 6% said they would not be interested. Additionally, participants were asked if they believed a language could be successfully learned in a well-developed online course: 43% responded in the affirmative, 44% responded by saying 'maybe,' and 14% said 'no.'

Descriptive Statistics for Interpretation Data

The interpretation data for the KTSC were submitted to a repeated measures ANOVA. Prior to this, the assumptions underlying the repeated measures ANOVA were evaluated. Specifically, univariate procedures were employed to assess the normality and sphericity of the distribution, independence, and random sampling.

Univariate normality was assessed by examining the excess skewness and excess kurtosis values of interpretation score distributions for each group at the pretest, immediate posttest, and delayed posttest levels. Skewness values ranged from -0.99 to -0.77 for the pretest, -1.02 to 0.05 for the immediate posttest, and -1.23 to 0.01 for the delayed posttest. The excess skewness values at each level of time were indicative of a fairly normal distribution. Likewise, excess kurtosis values were indicative of a relatively normal distribution. For the pre-test, excess kurtosis values ranged from -0.34 to 0.30. Immediate posttest excess kurtosis values ranged from -0.62 to 2.27, while excess kurtosis values for the delayed posttest ranged from -0.82 to 1.24. It is worth noting that the larger excess kurtosis values at the immediate posttest and delayed posttest levels both appeared in the control group. However, the highest of these values was less than 3.0, which is still indicative of a mesokurtic, or normal distribution. Excess

skewness and excess kurtosis values for each group at every level, as well as mean scores and standard deviations are presented in Table 4.1.

In addition to examining the skewness and excess kurtosis values described in the preceding paragraph and presented in Table 4.1, Shapiro-Wilk tests were carried out to further assess the normality of the distribution of interpretation scores for each treatment group at each level of time. The results of the Shapiro-Wilk tests indicated that the assumption of normality was met by all groups at the level of immediate posttest and by the PI and TI groups at the delayed posttest level. The Shapiro-Wilk test yielded a W -value of 0.85 for the distribution of interpretation scores for the control group at the delayed posttest level; $p < 0.01$. Additionally, the distribution for pretest interpretation scores for all groups appeared to violate the assumption of normality, with all p -values falling below 0.05.

Given that the excess skewness and excess kurtosis values for interpretation data at the delayed posttest level were indicative of a mesokurtic distribution, the violation reported by the Shapiro-Wilk test did not seem to be cause for concern. The present study employed random assignment of subjects to treatment groups, and when this criterion is met, repeated measures ANOVA is relatively robust to violations of the assumption of normality. Moreover, as with Russell (2009, 2012), the violation of the assumption of normality indicated by the Shapiro-Wilk test for all groups at the pretest level was likely due to the fact that participants scoring higher than 60% on the interpretation subtest did not meet the criteria for study inclusion and, therefore, were not represented in the distribution for interpretation scores.

Because the univariate assumption of normality appeared to be partially violated, the researcher examined the data for outliers by reviewing box plots by for each dependent variable by treatment group. No salient outliers were detected in the data for interpretation scores. Given the lack of outliers, the mesokurtic distribution indicated by excess skewness and excess kurtosis values, and the fact that ANOVA is relatively robust to violations of the assumption of univariate normality, it seemed acceptable for the researcher to perform further analysis.

In order to determine if the sphericity assumption for the repeated measures ANOVA had been met, Mauchly's test of sphericity was performed. The test yielded a W -value of 0.97, which was not statistically significant at $p = 0.67$. Thus, the assumption of sphericity was not violated, and the researcher determined that the use of the univariate repeated measures ANOVA for interpretation scores could proceed.

Analysis of interpretation scores for the Knowledge Test of Spanish Copulae.

In order to answer RQ1 and RQ1a (which are reproduced below), the scores for the interpretation subtest of the Knowledge Test for Spanish Copulae were submitted to a repeated measures ANOVA with one between-subjects factor, treatment, and one within-subjects factor, time.

3. Does instruction type (PI, TI, and no instruction [control group]) lead to differential performance by Chinese learners of Spanish on tasks of interpretation for sentence-level passages containing *ser* or *estar*?
 - a. Are the effects of instruction (if any) durative as measured by retention over time?

There were three levels for the between-subjects factor, treatment: PI, TI, and control. The within subjects-factor, time, also had three levels: pretest, immediate posttest, and delayed posttest.

Table 4.1

Descriptive Statistics for Scores on the Interpretation Subtest by Group at Pretest, Immediate Posttest, and Delayed Posttest

Treatment	<i>n</i>	Time of Testing			
		Pretest	Immediate	Delayed	
PI	27				
	<i>M</i>	5.00	6.52	5.67	
	<i>SD</i>	1.14	1.31	1.47	
	<i>sk</i>	-0.99	-0.21	-0.16	
		<i>ku</i>	0.30	-0.61	-0.82
TI	23				
	<i>M</i>	5.43	5.70	6.09	
	<i>SD</i>	0.66	1.40	1.53	
	<i>sk</i>	-0.77	0.05	0.01	
		<i>ku</i>	-0.34	-0.62	-0.08
Control	16				
	<i>M</i>	5.19	5.69	6.43	
	<i>SD</i>	0.98	1.40	1.41	
	<i>sk</i>	-0.91	-1.02	-1.23	
		<i>ku</i>	-0.23	2.27	1.24

The highest possible score for the interpretation subtest was 10, though as previously mentioned, participants receiving a score higher than 6 on the pretest were not included in the data pool for analysis, as they already possessed a certain level of mastery of the

target forms prior to being assigned to a treatment group. The results of the repeated measures ANOVA are illustrated in Table 4.2.

Table 4.2

Repeated Measures ANOVA of ser/estar Interpretation Test Scores by Treatment Group and Time

Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>	η^2
Between-subjects Effects						
Treatment	2	0.06	0.03	0.01	0.99	
Error (treatment)	63	126.47	2.01			
Within-Subjects						
Time	2	27.69	13.84	9.36	0.00**	0.19
Error (time)	126	186.42	1.48			
Treatment x Time	4	19.42	4.86	3.28	0.01*	0.13
Total						

* $p < .05$; ** $p < .0005$

The results from the repeated measures ANOVA revealed a significant treatment x time interaction, $F(4, 126) = 3.28, p = .0135$. A significant main effect for time was also found, $F(2, 126) = 9.36, p = .0002$. There was no significant main effect for treatment type, however, $F(2, 63) = 0.01, p > .05$. The effect size for the treatment x time interaction was relatively large, $\eta^2 = .13$. Likewise, the effect size for the main effect of time was large, $\eta^2 = .19$. An interaction plot was created in order to assist in identifying where the differences might lie; it is presented in Figure 4.1.

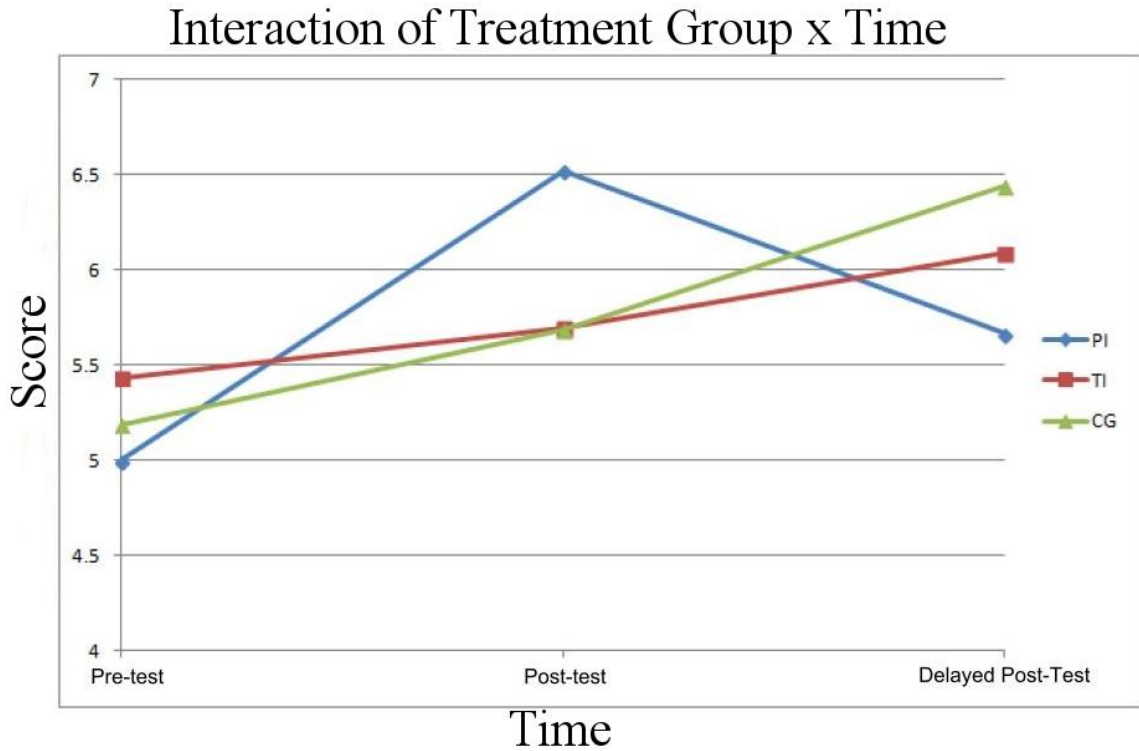


Figure 4.1. Interaction Plot for Instruction Type and Time for Interpretation of *Ser/Estar*

A post-hoc Tukey's HSD test was employed to determine which treatment groups exhibited significant differences in mean interpretation scores over time. Tukey's HSD revealed that the PI treatment group had a significantly higher mean score on the interpretation subtest of the KTSC than the TI treatment group at the immediate posttest level of time when compared to the pretest ($p < .05$). However, neither the PI treatment group nor the treatment TI group had a significantly different mean score from that of the control group at the delayed posttest level of time when compared to the pretest.

The post-hoc Tukey's HSD did not reveal any significant mean interpretation score differences for any treatment group from pretest to delayed posttest. However, the comparisons of mean interpretation scores from immediate posttest to delayed posttest revealed significant differences between the TI group and the PI group, and between the

control group and PI, with both TI and control having higher mean difference scores for interpretation than the PI group from immediate posttest to delayed posttest ($p < .05$).

The TI and control group mean difference scores for interpretation from immediate posttest to delayed posttest did not differ significantly from each other, however.

As mentioned above, the repeated measures ANOVA for the interpretation subtest of the KTSC also yielded a main effect for time. The interpretation subtest data were submitted to post-hoc contrast tests to determine if the mean interpretation scores were significant at each level of time. The results of the contrast tests showed that the mean interpretation test score at the immediate posttest level was significantly higher when compared to the mean interpretation score for the pretest, $F(1, 63) = 13.53, p = .0005$.

However, the mean interpretation score at the delayed posttest level was not significantly higher when compared to the immediate posttest, $F(1, 63) = 0.18, p = .6735$.

Nonetheless, the mean interpretation score for the delayed posttest was significantly higher when compared to the pretest, $F(1, 63) = 15.78, p = .0002$. For the interpretation of the post-hoc contrast tests, Bonferroni's correction was applied in order to maintain the familywise error rate and reduce the likelihood of committing a Type-I error.

Bonferroni's correction is applied by dividing α by the number of hypotheses being tested, which in this case, is 3. Thus, $\alpha = .0167$. The main effect for time for the mean scores for the interpretation of *ser/estar* on the KTSC at the pretest, immediate posttest, and delayed posttest levels is illustrated in Figure 4.2

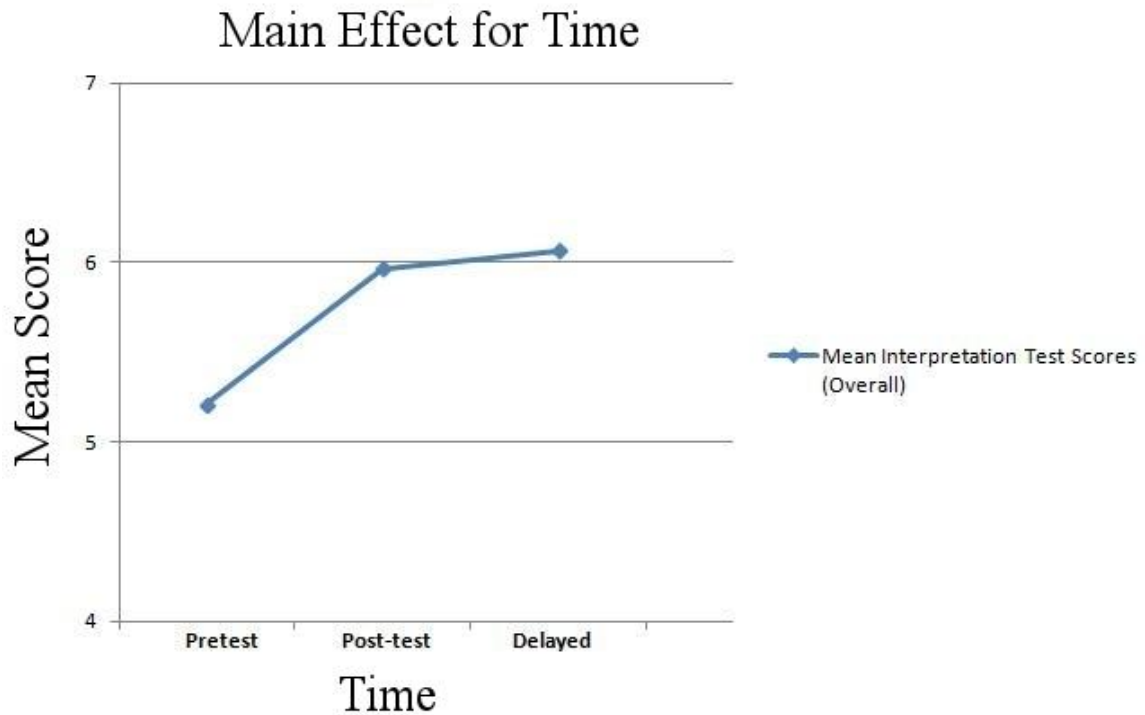


Figure 4.2. Graph of the Main Effect for Time for the Mean Interpretation Test Score of *Ser/Estar* at Pretest, Immediate Posttest, and Delayed Posttest

Descriptive Statistics for Production Data

The production data for the KTSC were submitted to a repeated measures ANOVA. Prior to this, the assumptions underlying the repeated measures ANOVA were evaluated. Specifically, univariate procedures were employed to assess the normality and sphericity of the distribution, independence, and random sampling.

Univariate normality was assessed by examining the excess skewness and excess kurtosis values of production score distributions for each group at the pretest, immediate posttest, and delayed posttest levels. Excess skewness values ranged from -0.66 to 0.55 for the pretest, -1.37 to 0.17 for the immediate posttest, and -0.19 to 0.30 for the delayed posttest. The excess skewness values at each level of time were indicative of a fairly normal distribution. Likewise, excess kurtosis values were indicative of a relatively

normal distribution. For the pre-test, excess kurtosis values ranged from -1.23 to -0.35. Immediate posttest excess kurtosis values ranged from -0.72 to 2.67, while excess kurtosis values for the delayed posttest ranged from -1.10 to 1.50. It is worth noting that the larger excess kurtosis values at the immediate posttest and delayed posttest levels both appeared in the control group. However, the highest of these values was less than 3.0, which is still indicative of a mesokurtic, or normal distribution. Skewness and excess kurtosis values for each group at every level, as well as mean scores and standard deviations are presented in Table 4.3

In addition to examining the excess skewness and excess kurtosis values described in the preceding paragraph and presented in Table 4.3, Shapiro-Wilk tests were carried out to further assess the normality of the distribution of production scores for each treatment group at each level of time. The results of the Shapiro-Wilk tests indicated that the assumption of normality was met by all groups at the level of delayed posttest and by the PI and TI groups at the immediate posttest level.

The Shapiro-Wilk test yielded a W -value of 0.86 for the distribution of production scores for the control group at the delayed posttest level; $p = .02$. Additionally, the distribution for pretest production scores for the PI and TI groups appeared to violate the assumption of normality at the within-subjects level of pretest. The control group yielded a W -value of .89, which was close to the borderline for violating the normality assumption, $p < .0561$.

Table 4.3

Descriptive Statistics for Scores on the Production Subtest by Group at Pretest, Immediate Posttest, and Delayed Posttest

Treatment	<i>n</i>	Time of Testing			
		Pretest	Immediate	Delayed	
PI	27				
	<i>M</i>	2.15	4.11	3.11	
	<i>SD</i>	1.97	2.65	2.24	
	<i>sk</i>	0.55	0.17	0.25	
		<i>ku</i>	-0.92	-0.72	-0.53
TI	23				
	<i>M</i>	3.57	3.78	4.57	
	<i>SD</i>	1.95	1.65	2.68	
	<i>sk</i>	-0.25	-0.09	-0.19	
		<i>ku</i>	-1.23	0.03	-1.10
Control	16				
	<i>M</i>	3.06	4.94	3.69	
	<i>SD</i>	1.61	1.81	1.82	
	<i>sk</i>	-0.66	-1.37	0.30	
		<i>ku</i>	-0.35	2.67	1.50

Given that the skewness and kurtosis values for production data at the immediate posttest level were indicative of a mesokurtic distribution, the violation reported by the Shapiro-Wilk test did not seem to be cause for concern. Likewise, as with Russell (2009, 2012), the violation of the assumption of normality indicated by the Shapiro-Wilk test for all groups at the pretest level is likely due to the fact that participants scoring higher than 60% on the production subtest did not meet the criteria for study inclusion and, therefore, were not represented in the distribution for production scores.

Because the univariate assumption of normality appeared to be partially violated, the researcher examined the data for outliers by reviewing box plots by for each dependent variable by treatment group. No salient outliers were detected in the data for production scores. Given the lack of outliers, the mesokurtic distribution indicated by excess skewness and excess kurtosis values, and the fact that ANOVA is relatively robust to violations of the assumption of univariate normality, it seemed acceptable for the researcher to perform further analysis.

In order to determine if the sphericity assumption for the repeated measures ANOVA had been met, Mauchly's test of sphericity was performed. The test yielded a W -value of 1.00, which was not statistically significant at $p = .95$. Thus, the assumption of sphericity was not violated, and the researcher determined that the use of the univariate repeated measures ANOVA for production scores could proceed.

Analysis of production scores for the Knowledge Test of Spanish Copulae. In order to answer RQ2 and RQ2a (which are repeated below), the scores for the production subtest of the Knowledge Test for Spanish Copulae were submitted to a repeated measures ANOVA with one between-subjects factor, treatment, and one within-subjects factor, time. There were three levels for the between-subjects factor, treatment: PI, TI, and control. The within subjects-factor, time, also had three levels: pretest, immediate posttest, and delayed posttest.

2. Does instruction type (PI, TI, and no instruction [control group]) lead to differential performance by Chinese learners of Spanish on tasks of production for sentence-level passages containing *ser* or *estar*?

- a. Are the effects of instruction (if any) durative as measured by retention over time?

The highest possible score for the production subtest was 10, though as previously mentioned, participants receiving a score higher than 6 on the pretest were not included in the data pool for analysis, as they already possessed a certain level of mastery of the target forms prior to being assigned to a treatment group. The results of the repeated measures ANOVA are presented in Table 4.4 and discussed below.

Table 4.4

Repeated Measures ANOVA of ser/estar Production Test Scores by Treatment Group and Time

Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>	η^2
Between-subjects Effects						
Treatment	2	32.09	16.04	1.71	0.19	
Error (treatment)	63	589.85	9.36			
Within-Subjects						
Time	2	58.96	29.48	9.36	0.00**	0.41
Error (time)	126	263.42	2.09			
Treatment x Time	4	32.98	8.24	3.94	0.00*	0.23
Total						

* $p < .01$; ** $p < .0001$

The results from the repeated measures ANOVA revealed a significant treatment x time interaction, $F(4, 126) = 3.94, p = .005$. A significant main effect for time was

also found, $F(2, 126) = 14.10, p < .0001$. There was no significant main effect for treatment type, however, $F(2, 63) = 1.71, p = .19$. The effect size for the treatment x time interaction was large, $\eta^2 = .23$. However, the effect size for the main effect of time was very large, $\eta^2 = .41$. An interaction plot was created in order to assist in identifying where the differences might lie; it is presented in Figure 4.3.

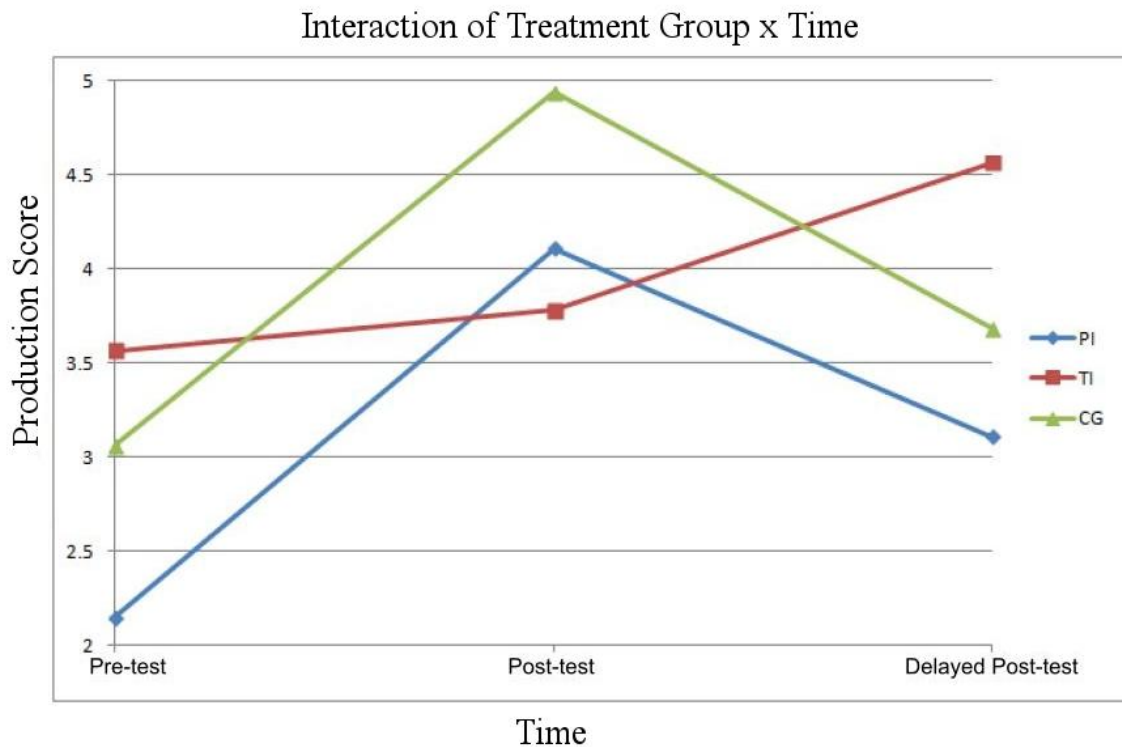


Figure 4.3. Interaction Plot for Instruction Type and Time for Production of *Ser/Estar*

A post-hoc Tukey's HSD test was employed to determine which treatment groups exhibited significant differences in mean production scores over time. Tukey's HSD revealed that the PI treatment group had significantly higher improvement on the production subtest mean score for the KTSC than the TI treatment group at the immediate posttest level of time when compared to the pretest ($p < .05$). However, the PI treatment

group did not exhibit significant improvement over that of the control group on the immediate posttest mean score compared to the pretest. Moreover, like the PI group, the control group had significantly higher improvement on the production subtest mean score than the TI treatment group at the immediate posttest level of time compared to the pretest ($p < .05$).

The post-hoc Tukey's HSD did not reveal any significant mean production score differences for any treatment group from pretest to delayed posttest. However, the comparisons of mean production scores from immediate posttest to delayed posttest revealed significant differences between the TI group and the PI group, and between the TI group and control, with TI exhibiting statistically significant improvement on the mean production scores from immediate posttest to delayed posttest ($p < .05$) over both the PI and control groups. The PI and control group mean production scores from immediate posttest to delayed posttest did not differ significantly from each other, however.

As mentioned above, the repeated measures ANOVA for the production subtest of the KTSC also yielded a main effect for time. The production subtest data were submitted to post-hoc contrast tests to determine if the mean production scores were significant at each level of time. The results of the contrast tests showed that the mean production test score at the immediate posttest level was significantly higher when compared to the mean production score for the pretest, $F(1, 63) = 28.68, p < .0001$. However, the mean production score at the delayed posttest level was not significantly higher when compared to the immediate posttest, $F(1, 63) = 3.50, p = .0660$. Nonetheless, the mean production score for the delayed posttest was significantly higher

when compared to the pretest, $F(1, 63) = 46.83, p = .0015$. The main effect for time for the mean scores for the production of *ser/estar* on the KTSC at the pretest, immediate posttest, and delayed posttest levels is illustrated in Figure 4.4. The repeated measures ANOVA for production scores did not reveal a significant main effect for treatment type, $F(2, 63) = 1.71, p = 0.1885$.

Summary of the Overall Results of Major Statistical Analyses

Interpretation subtest scores. Scores on the interpretation subtest of the KTSC were submitted to a repeated measures ANOVA with one between-subjects factor, treatment, and one within-subjects factor, time. The between-subjects factor had three levels: PI, TI, and control. Likewise, the within-subjects factor had three levels: pretest, immediate posttest, and delayed posttest. The results of the repeated measures ANOVA revealed a significant treatment x time interaction, $F(4, 126) = 3.28, p = .0135$, and the effect size for the treatment x time interaction was relatively large, $\eta^2 = .13$.

A post-hoc Tukey's HSD test revealed that the PI treatment group had a significantly higher mean score for interpretation compared to the TI treatment group at the immediate posttest compared to the pretest ($p < .05$). However, neither the PI group nor the TI group had a significantly different mean score than the control group at the immediate posttest compared to the pretest. The post-hoc Tukey's HSD did not reveal any significant mean interpretation score differences for any treatment group from pretest to delayed posttest. However, both the control and TI treatment groups, whose mean difference scores from immediate posttest to delayed posttest did not differ significantly from one another, had significantly higher interpretation scores than the PI group at the delayed posttest level ($p < .05$).

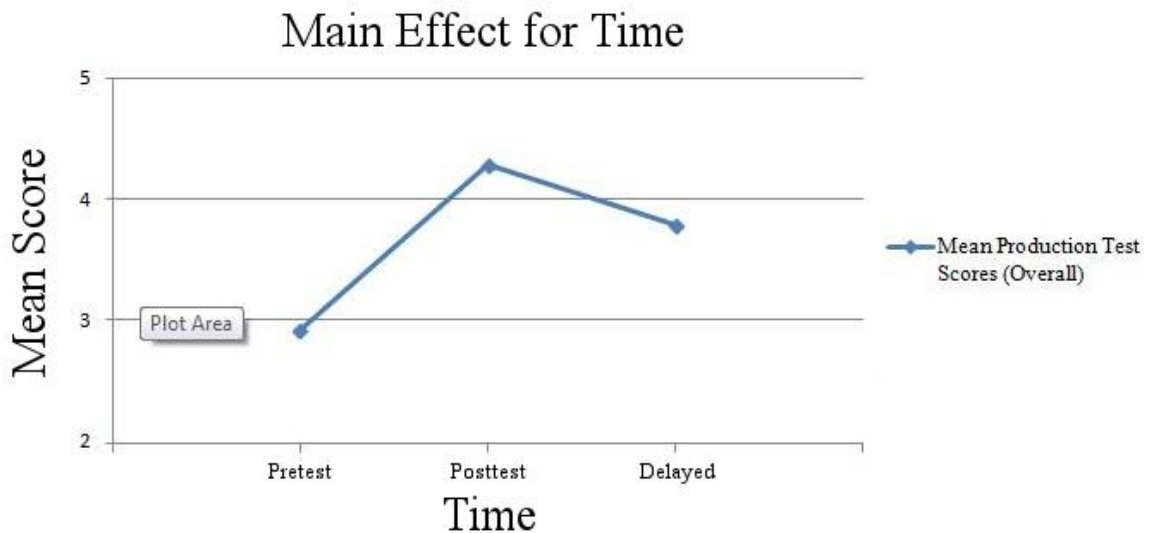


Figure 4.4. Graph of the Main Effect for Time for the Mean Production Test Score of *Ser/Estar* at Pretest, Immediate Posttest, and Delayed Posttest.

In addition to the treatment x time interaction effect, a statistically significant main effect for time was also revealed by the repeated measures ANOVA, $F(2, 126) = 9.36, p = .0002$. The effect size for the main effect of time was large, $\eta^2 = .19$. In order to ascertain if the changes in the mean interpretation score were significant at each point in time, post-hoc contrast tests were carried out. The Bonferroni correction was employed to reduce the likelihood of committing a Type I error; alpha was therefore set at 0.167. The contrast tests revealed that the mean interpretation test score on the KTSC was significantly higher at the immediate posttest level when compared with the pretest, $F(1, 63) = 13.53, p < 0.0005$. At the delayed posttest, the mean interpretation test score was not significantly higher than at the immediate posttest level of time, $F(1, 63) = 0.18, p < 0.6735$. However, the mean interpretation score was still significantly higher at the delayed posttest level when compared with the mean interpretation score for the pretest

level of time, $F(1, 63) = 15.78, p < 0.0002$. The repeated measures ANOVA for interpretation scores did not reveal a significant main effect for treatment type, $F(2, 63) = 0.01, p > .05$.

Production subtest scores. Scores on the production subtest of the KTSC were submitted to a repeated measures ANOVA with one between-subjects factor, treatment, and one within-subjects factor, time. The between-subjects factor had three levels: PI, TI, and control. Likewise, the within-subjects factor had three levels: pretest, immediate posttest, and delayed posttest. The results of the repeated measures ANOVA revealed a significant treatment x time interaction, $F(4, 126) = 3.94, p = .005$, though the effect size for the treatment x time interaction was relatively small, $\eta^2 = .23$. A post-hoc Tukey's HSD test revealed that the PI treatment group had a significantly higher mean score for production compared to the TI treatment group at the immediate posttest compared to the pretest ($p < .05$). However, the control group also had a significantly higher mean production score at immediate posttest compared to the pretest. There were no significant differences between the PI treatment group and the control group on production mean scores from pre-test to immediate posttest. The TI group exhibited statistically significant improvement on the mean production scores from immediate posttest to delayed posttest ($p < .05$) over both the PI and control groups, though the PI and control group mean production scores from immediate posttest to delayed posttest did not differ significantly from each other.

In addition to the treatment x time interaction effect, a significant main effect for time was found, $F(2, 126) = 14.10, p < .0001$. The effect size for the main effect of time was very large, $\eta^2 = .41$. In addition to the treatment x time interaction effect, a

statistically significant main effect for time was also revealed by the repeated measures ANOVA. In order to ascertain if the changes in the mean production score were significant at each point in time, post-hoc contrast tests were carried out. The Bonferroni correction was employed to reduce the likelihood of committing a Type I error; alpha was therefore set at 0.167. The contrast tests revealed that the mean production test score on the KTSC was significantly higher at the immediate posttest level when compared with the pretest, $F(1, 63) = 28.68, p < 0.0001$. At the delayed posttest, the mean production test score was not significantly higher than at the immediate posttest level of time, $F(1, 63) = 3.50, p < 0.660$. However, the mean production score was still significantly higher at the delayed posttest level when compared with the mean interpretation score for the pretest level of time, $F(1, 63) = 11.06, p < 0.0015$. The repeated measures ANOVA for production scores did not reveal a significant main effect for treatment type, $F(2, 63) = 1.71, p = 0.1885$.

Chapter 5:

Discussion

Introduction

This chapter serves to discuss the results of the study described in detail in the preceding pages. The discussion of the study, which compared the effects of different instructional techniques on the acquisition of the Spanish copulae *ser* and *estar*, is divided into four sections. First, the relationship between the experiment's results and the research questions and hypotheses that guided the study are discussed. Then, the theoretical and pedagogical implications of the study are discussed. Finally, some of the study's limitations are described, and the researcher presents suggestions for future research.

Research Questions and Hypotheses

The present study examined the effects of three treatment conditions on the interpretation and production of the copulae *ser* and *estar* by Chinese learners of Spanish. The treatment conditions included a PI group, a TI group, and a control (no instruction) group. Prior to being assigned to a treatment condition, consent was sought from all prospective participants, and a pre-treatment questionnaire requesting demographic information and self-disclosure of language background and prior language study was administered.

One week after participant recruitment was completed, a pre-treatment test called the Knowledge Test of Spanish Copulae (KTSC) was administered to participants. Students scoring higher than 60% on the KTSC were excluded from the study, as their scores indicated some degree of mastery of the target forms. Other students were randomly assigned to one of the three treatment conditions.

The PI group completed an online instruction module that included explicit, non-paradigmatic explanations of the grammatical forms *ser* and *estar*, information on processing strategies that seek to help learners avoid making mistakes that they might otherwise be predisposed to make, and structured input exercises that sought to eliminate redundant elements of language that are unnecessary for comprehension and may make form-meaning connections difficult to establish. The TI group completed an online instruction module that included explicit, paradigmatic explanations of the grammatical forms *ser* and *estar* and production exercises. The control group did not receive any instruction on the targeted forms during the course of the study.

In order to address the research questions, a pretest, immediate posttest, delayed posttest design was employed. Three different versions of an assessment instrument designed for this study were used to measure interpretation and production of the Spanish copulae *ser* and *estar* at each point in time. The pretest was administered one week prior to participant exposure to one of the three treatment conditions. The immediate posttest was administered directly after the treatment (in the case of the control group, the assessment alone was administered), and the delayed posttest was administered two weeks after the immediate posttest. The scores of each test were then analyzed using split-plot repeated measures analyses of variance. The results of these statistical

procedures as well as post-hoc analyses are discussed below in the context of the research questions they address.

Research questions. Each of the research questions for the study is reproduced below, and a discussion of results corresponding to individual questions follows.

RQ1 required an examination of group mean scores of the interpretation subtest of the KTSC at the immediate posttest level compared to the pretest. The question, which is reproduced below, was measured with a repeated measures ANOVA with one between-subjects factor (treatment) with three levels, and one within-subjects factor (time).

RQ1: Does instruction type (PI, TI, and no instruction [control group]) lead to differential performance by Chinese learners of Spanish on tasks of interpretation administered immediately following the instructional treatment for sentence-level passages containing *ser* or *estar*?

The results of the present study revealed that instruction type does lead to differential performance by Chinese learners of Spanish on sentence-level interpretation tasks containing *ser* or *estar*. Specifically, the PI group in the present study performed better than the TI group on the interpretation subtest of the KTSC administered immediately after exposure to the treatment condition. However, the PI group did not perform significantly better than the control (no instruction group) on the immediate posttest. Thus, with respect to RQ1, the results of the present study only partially agree with the findings of previous PI research that found PI yields greater learning gains on interpretation tasks (Benati, 2001, 2005; Cadierno, 1995; VanPatten & Cadierno, 1993a, 1993b; VanPatten & Wong, 2004).

RQ2: Does instruction type (PI, TI, and no instruction [control group]) lead to differential performance by Chinese learners of Spanish on tasks of production administered immediately following the instructional treatment for sentence-level passages containing *ser* or *estar*?

The results of the present study revealed that instruction type does lead to differential performance by Chinese learners of Spanish on sentence-level production tasks containing *ser* or *estar*. Specifically, the PI group in the present study performed better than the TI group on the production subtest of the KTSC administered immediately after exposure to the treatment condition. However, the control group also experienced statistically significant improvement over the TI group from pretest to immediate posttest, though the PI group and control group did not experience significantly different improvement from one another on the immediate posttest compared to the pretest. Thus, with respect to RQ2, the results of the present study only partially agree with the findings of previous PI research that found PI yields greater learning gains on production tasks (Benati, 2001, 2005; Cadierno, 1995; VanPatten & Cadierno, 1993a, 1993b; VanPatten & Wong, 2004).

Research questions RQ1a and RQ2a, which are reproduced below, dealt with the retention of learning gains over time as measured by the administration of the KTSC two weeks after the immediate posttest.

RQ1a: Are the effects of instruction (if any) durative, as measured by retention over time (for tasks of interpretation for sentence-level passages containing *ser* or *estar*)?

RQ2a: Are the effects of instruction (if any) durative, as measured by retention over time (for tasks of production for sentence-level passages containing *ser* or *estar*)?

The results of a repeated measures ANOVA on the interpretation subtest of the KTSC revealed a time x treatment interaction and a main effect for time. A post-hoc Tukey's HSD test was conducted to determine where statistically significant group differences might lie. The Tukey test revealed that the PI group exhibited statistically significant improvement over the TI group at the immediate posttest level, but it was not superior to the control group. Moreover, Tukey's HSD test did not reveal statistically significant improvement between any groups at the delayed posttest compared to the pretest.

A separate repeated measures ANOVA was conducted on the scores of the production subtest of the KTSC and revealed that both the PI and control groups exhibited statistically significant improvement over the TI group at the immediate posttest compared to the pretest. They did not differ significantly from one another at the delayed posttest level compared to immediate posttest, however. Moreover, none of the groups differed significantly from one another at the delayed posttest compared to the pretest. Thus, the gains made by the PI and control groups from pretest to immediate posttest were not durative as measured by a delayed posttest administered two weeks after the immediate posttest. This result, while differing from some PI studies partially corroborated that of others in the PI research strand, which found that PI gains were not retained over time (*see* DeKeyser & Prieto Botana, 2015 for a full discussion on the durative nature of learning gains in PI research).

Research hypotheses. Hypothesis development for the present study was guided by previous research (*see* Buck, 2000; Cadierno, 1995; VanPatten & Cadierno, 1993; VanPatten & Wong, 2004). Each of the study's six hypotheses is reproduced below along with a discussion of the results that are germane to each individual hypothesis.

Hypothesis 1: Participants exposed to the PI treatment (see Appendix D) will outperform participants exposed to the TI treatment (see Appendix C) on interpretation tasks of the *ser/estar* knowledge test (see Appendices E - G) over time.

The results of a repeated measures ANOVA on the scores of the interpretation subtest of the KTSC revealed a significant treatment x time interaction, which was followed by a post-hoc Tukey's HSD test. Tukey's HSD revealed that the PI treatment group had a significantly higher mean interpretation score than the TI group at the immediate posttest level when compared to the pretest ($p < .05$). However, there were no statistically significant differences between any groups at the delayed posttest compared to pretest. Additionally, both the TI and control group difference score means at delayed posttest compared to immediate posttest were significantly higher than those of the PI group, which means that the improvement experienced by the PI group from pretest to immediate posttest diminished significantly from immediate posttest to delayed posttest. Thus, Hypothesis 1 is only partially supported by the results of the present study.

Hypothesis 2: Participants exposed to PI (see Appendix D) will perform at least as well as those exposed to TI on production tasks included in the *ser/estar* knowledge test (see Appendices E - G) over time.

The results of a repeated measures ANOVA on the scores of the production subtest of the KTSC revealed a significant treatment x time interaction, which was

followed by a post-hoc Tukey's HSD test. Tukey's HSD revealed that the PI treatment group had a significantly higher mean production score than the TI group at the immediate posttest level when compared to the pretest ($p < .05$). However, there were no statistically significant differences between any groups at the delayed posttest compared to pretest. Moreover, the TI group difference score mean at delayed posttest compared to immediate posttest was significantly higher than that of the PI group, which means that the improvement experienced by the PI group from pretest to immediate posttest diminished significantly over time. Thus, Hypothesis 2 was only partially supported by the results of the present study.

Hypothesis 3: Participants in the PI group will outperform participants in the control group on interpretation tasks of the *ser/estar* knowledge test (see Appendices E - G) over time.

Hypothesis 3 was not supported by the results of the present study. Though the results of a repeated measures ANOVA on the scores of the interpretation subtest of the KTSC revealed a significant treatment x time interaction, a post-hoc Tukey's HSD test did not reveal any significant differences in the mean interpretation scores of the PI and control groups at immediate posttest compared to pretest. Additionally, there were no statistically significant differences between any groups at the delayed posttest compared to pretest. Moreover, both the TI and control group difference score means at delayed posttest compared to immediate posttest were significantly higher than those of the PI group.

Hypothesis 4: The PI treatment (see Appendix D) group will outperform the control group on production tasks of the *ser/estar* knowledge test (see Appendices E - G) over time.

Hypothesis 4 was not supported by the results of the present study. Though the results of a repeated measures ANOVA on the scores of the production subtest of the KTSC revealed a significant treatment x time interaction, a post-hoc Tukey's HSD test did not reveal any significant differences in the mean production scores of the PI and control groups at immediate posttest compared to pretest, or at delayed posttest compared to immediate posttest. Additionally, there were no statistically significant differences between any groups at the delayed posttest compared to pretest.

Hypothesis 5: Participants in the TI treatment (see Appendix C) group will outperform participants exposed to the control (no instruction) condition group on interpretation tasks of the *ser/estar* knowledge test (see Appendices E - G) over time.

The results of a repeated measures ANOVA on the scores of the interpretation subtest of the KTSC revealed a significant treatment x time interaction, which was followed by a post-hoc Tukey's HSD test. Tukey's HSD revealed neither the TI group nor the PI group had a significantly higher mean interpretation score than the control group at the immediate posttest level when compared to the pretest ($p < .05$). Additionally, there were no statistically significant differences among any groups at delayed posttest compared to pretest, and the TI and control groups' scores were not statistically different from one another at delayed posttest when compared to the immediate posttest. Thus, Hypothesis 5 was not supported by the study's results.

Hypothesis 6: Participants in the TI treatment (see Appendix C) group will outperform participants exposed to the control (no instruction) condition on production tasks of the *ser/estar* knowledge test (see Appendices E - G) over time.

The results of a repeated measures ANOVA on the scores of the production subtest of the KTSC revealed a significant treatment x time interaction, which was followed by a post-hoc Tukey's HSD test. Tukey's HSD revealed that the control (no instruction) group had a significantly higher mean interpretation score than the TI group at the immediate posttest level when compared to the pretest ($p < .05$). However, there were no statistically significant differences between any groups at the delayed posttest compared to pretest. And although the TI group difference score mean at delayed posttest compared to immediate posttest was significantly higher than that of both the PI and control groups, because the gains made by the control group were significantly better than TI at immediate posttest compared to pretest, the researcher concluded that Hypothesis 6 was not supported by the present study's results.

Implications for Theory and Pedagogy

Discussion of the results and their implications for SLA theory. The results of the present study partially corroborate the findings of previous research in the PI strand. Specifically, the PI group showed itself to be superior to TI on tasks of interpretation (Benati, 2001, 2005; Cadierno, 1995; VanPatten & Cadierno, 1993a, 1993b; VanPatten & Wong, 2004) and tasks of production (Benati et al., 2008) at the immediate posttest level, though the learning gains were not durative. The results also showed that only PI was superior to TI on tasks of interpretation. However, PI did not result in significant mean score gains over the control group for tasks of interpretation; and both PI and the control

group, while not significantly different from one another, exhibited statistically significant improvement over the TI group on production tasks at the immediate posttest level.

While the results above do not clearly reveal the degree to which PI results in improved acquisition of Spanish copulae by the population sampled, it is noteworthy that only PI resulted in statistically significant gains over TI for tasks of interpretation. This is in line with previous findings (Benati, 2001, 2005; Cadierno, 1995; VanPatten & Cadierno, 1993a, 1993b; VanPatten & Wong, 2004) and may support the assertion that PI leads to improved strategy alteration and input processing of target forms. Likewise, as with Benati et al. (2008), the present study showed PI to be superior to TI for tasks of production. This, too, lends credence to the assertion that PI leads to improved strategy alteration and input processing. Moreover, given a choice between PI and TI, PI may merit preferential consideration.

The question arises, then, as to why the PI group did not show itself superior to the control group for either tasks of interpretation or tasks of production. There are a number of possibilities. First, while tests of sphericity and examination of the excess skewness and excess kurtosis values for each treatment group on pretest scores were not indicative of a violation of the assumptions of sphericity and normality, the highest excess kurtosis values (which did not exceed $-3/3$) were found in the control group. Additionally, due to issues with participant retention, the number of participants assigned to the control group whose data were eligible for inclusion in the study was only 16. This number, while considered sufficient for the analyses performed was substantially smaller than that of either the PI or TI groups. Increasing the number of participants in the

control group would have increased statistical power for the analyses and made more salient (or reduced) any atypical features in the univariate distribution of the group pretest scores. Thus, increasing the number of participants in the control group and/or having more equal cell means might yield results that are better aligned with those of previous PI studies.

Furthermore, while the control and PI groups did not differ significantly on pretest production scores, it is worthwhile to reiterate that the students' regular classroom instruction makes extensive use of production tasks and very little use of tasks of interpretation. Therefore, the control group participants' familiarity with task type may have contributed to their short-term production score gains over the TI group. The TI group, while also being familiar with production tasks of the type found in the KTSC, might have suffered from diminished processing resources, as they would have been trying to recall all of the paradigmatically presented rules expounded upon in the TI treatment module they received. As humans are limited capacity processors, an increase in cognitive load would have resulted in a decrease in processing capability and, thus, poorer performance on production tasks. VanPatten et al. (2013) argued that the real-time application of EI depends on its easiness and portability. Because the EI offered in TI was paradigmatic in nature, meaning that it presented more than one thing at a time, it would not possess the easiness and portability for real-time application to which they referred. Thus, it is precisely because the control group did not receive EI that participants assigned to this condition did not experience increased difficulty in processing input in production exercises.

Another related possibility explaining the non-significant difference between PI and control for interpretation tasks and the control group's statistically significant improvement over TI for tasks of production is the effect of input exposure from the pretest and immediate posttest on posttest production scores. The pretest included 10 distinct input strings in interpretation tasks that participants were required to process for comprehension. Comprehension was measured by correctly choosing either an image or a sentence that represented the meaning of the utterance heard. On each version of the Knowledge Test of Spanish Copulae, which was used at each level of time, interpretation tasks were presented first and production tasks were presented second. Thus, by the time participants reached the production tasks on the immediate posttest, they would have been exposed to twenty input strings of which they were expected to indicate comprehension. It is likely that this exposure benefitted the control group participants and aided their performance on both interpretation and production measures on the immediate and delayed posttests.

As indicated previously, the TI group, while also receiving this same exposure to structured input on the pre-test and immediate posttest prior to completing the production sub-test of the KTSC, would have had difficulty applying the EI from the paradigmatic grammar explanations on the KTSC due to its difficulty and lack of portability. The EI to which the TI group was exposed would have increased cognitive load and reduced processing resources, thus limiting the effects of exposure to the input present on the KTSC.

It may also be argued that the PI group should have exhibited greater improvement over the control group for tasks of interpretation because the PI group was exposed to

additional structured input by way of the PI instructional treatment. While this is a compelling argument, it is important to keep in mind that while the PI group did not improve significantly over the control group for tasks of interpretation, only PI improved significantly over the TI group. Additionally, VanPatten et al. (2013) asserted that only SI is necessary for alteration of the underlying linguistic system to take place. While the PI group received more exposure to SI than the control group, the control group may have received sufficient exposure for the underlying linguistic system to undergo alteration, making further exposure to SI superfluous.

While not including a control group, VanPatten et al. (2013) used a trials-to-criterion measure to compare the effects of explicit information on the correct processing of targeted forms in structured input activities. Reaching criterion, which was indicative of having correctly comprehended the target form, required participants to correctly interpret the meaning of three consecutive input strings containing the targeted forms plus one distracter item. In total, all participants were presented with 50 of these input strings. One group received explicit information regarding the targeted forms prior to being presented with the 50 input strings designed as an SI activity. The other group received no explicit information on the targeted forms, and instead, they simply received the 50 input strings presented as an SI activity. The researchers found that “the vast majority of learners eventually get [to criterion] whether they receive EI or not prior to treatment” (VanPatten et al., p. 521). This finding would appear to support the above assertion that repeated exposure to input strings on the pretest led to improved processing and, hence, comprehension of the targeted forms on the immediate and delayed posttests for the present study. It could be argued that the TI group also received this same incidental

input via testing. However, as indicated previously, the TI group would have suffered from an increased cognitive load in comparison with the control group, as those receiving TI would have attempted to apply the explicit information presented in the treatment during the pretest. This would have, in turn, interfered with and inhibited their ability to correctly process or benefit from the input to which they were exposed at the pretest and immediate posttest levels of time. Thus, while it could be tempting to dismiss the learning gains exhibited by the control group as anomalous, another plausible conclusion is that the incidental input from testing resulted in learning gains. While this study did not isolate structured input as a separate treatment group, it may be possible to view the improvement of the control group as an indication of the efficacy of SI.

Along with the above, it is important to note that this study was the first to explore the efficacy of PI with L1 Chinese learners of a language other than English. Because Chinese does not typically employ copulae in sentences containing an adjectival predicate, as Spanish does, prior to completing the research, it was unclear as to whether or not PI would result in the same learning gains found in previous studies in the PI strand. Moreover, given that the majority of PI studies have been carried out with L1 English students of other languages, the universality of some principles of the input processing model informing PI have been called into question (see VanPatten, 2009). The present study serves to support the tested tenets of the input processing model (see Ch.2 for a description of the specific principles at play in the present study) and show that PI can be effectively used to aid in the processing and acquisition of certain targeted forms (in the case of this study, *ser* and *estar*). Additional research with the population

sampled in the present study will serve to further understanding of the input processing model as well as the import of EI in PI implementations.

Another unique characteristic of the population sampled in this study is that the participants were students in a blended language learning environment. Given that both the instructional treatments and the KTSC were administered using Web-based tools, it is conceivable that the participants' comfortability with and proficiency using computers and the Internet had bearing on their performance. As stated in Chapter 3, 14% of the participants reported that they were "not very proficient" using computers, and one participant reported that "using a computer is difficult." Although usability testing showed that the online materials used in the present study were relatively easy and simple to use, it is unclear if or to what degree the mode of delivery might have impacted participant performance. The limited timeline for study completion did not permit the collection of post-assessment questionnaire or interview data, which could have shed some light on this question. It is worthwhile to note that Lee and Benati (2009) found that the efficacy of PI is not diminished in online or hybrid class formats.

Pedagogical implications. The findings of the present study have implications for language pedagogy, specifically as they relate to the use of PI for teaching Spanish to learners who speak Chinese as a L1. First, given that PI showed itself to be significantly better than TI for tasks of interpretation and tasks of production in this study, a dialogue should be opened among Chinese educators and textbook publishers (as well as foreign educators working in China) about the nature of instructional materials used in the teaching of Spanish. As discussed in Chapter 1, an evaluation of university-level textbooks used in China for the teaching of Spanish would reveal that the instructional

materials rely heavily on production and translation activities. While there may be a role for production-based exercises, the results of the present study seem to support the proposition that processing instruction foments, and perhaps accelerates, the acquisition of certain targeted forms by altering the underlying linguistic system. Therefore, a dialogue should be opened about how to include PI, replete with SI activities, in Spanish-language curricula designed for use with L1 Chinese learners. A failure to evaluate the implications of a considerable body of research supporting the use of PI and SI would work to the detriment of students whose acquisition of certain Spanish-language forms, such as the copulae *ser* and *estar*, may be enhanced by the development and inclusion of PI materials. As stated previously, numerous studies have shown PI to be efficacious in facilitating improvement for tasks of interpretation and tasks of production.

In addition, this study's use of an online treatment implementation presents encouraging findings in support of PI's use as an effective, self-directed approach to the supplementation of regular classroom instruction. And while the present study did not set out to make claims about the model of instruction often referred to as the flipped classroom, its findings indicate that PI could be effectively used in such a curriculum. The flipped classroom is an educational model in which most instructional content is delivered outside of the constraints of face-to-face class time so that instructor-facilitated sessions can focus on guided practice of that which has been studied in a self-directed – often online – setting. Traditional models of language instruction in China, which were discussed in Chapter 1, are very grammar-centric and tend to leave little time for conversation and the development of proficiency navigating the challenges of real-time speech in a naturalistic context. This is especially true of elective courses for non-

Spanish majors. The present study indicates that PI could be especially helpful in a flipped model using online delivery. This would augment the amount of class time instructors have for helping students develop other abilities important for successful L2 communication, like pragmatic competence. Nevertheless, it is important to caution that the flipped model may not work well for all learners. Allen & Seaman (2014) found that large numbers of academic leaders believe online learners need to possess greater self-discipline than those who learn in a strictly face-to-face setting.

While blended learning and fully online university course offerings are a relatively recent advent in China, adoption has been scant, especially for fully-online language courses offered by accredited colleges and universities. The findings of the present study appear to support the use of PI in such a setting. Approximately 7.27 million students graduated from China's colleges and universities last year alone (Yang & McKenzie, 2015). While many private colleges in China, such as the one where the present study was realized, have faced a myriad of operational difficulties leading to bankruptcy and closure (Zhou & Xie, 2007), the advent of online instruction could permit public institutions to develop and implement language programs employing a research-based framework that includes PI in appropriate contexts. Such a step would augment learner access to effective, quality education.

Study Limitations

There were a number of limitations to the present study that merit mention. One such limitation was that the experimental design did not examine the effects of structured input alone on the acquisition of Spanish copulae. Though Farley (2004) Fernández (2008), and Russell (2009, 2012) did not find structured input to produce learning gains

equal to those of PI for the Spanish subjunctive on tasks of interpretation and production, there remains some question as to what aspects of PI result in enhanced acquisition of target forms. VanPatten and Oikarinen (1996), for example, found that SI alone was equal to the treatment condition of SI plus explicit grammatical information and superior to the treatment condition of explicit grammatical information alone on tasks of interpretation and production of Spanish object pronouns and word order. Farley (2004) has posited that it is, perhaps, the complexity of the grammatical form that determines how beneficial the inclusion of explicit grammatical information (including processing strategies) is to learners' acquisition of the form. Given the present study's finding that PI, while superior to TI for tasks of interpretation and production, did not yield significantly higher gains than control on the KTSC, a design including a structured input only group could have helped to identify which aspects of PI are most beneficial for acquisition of Spanish copulae.

An additional limitation to the present study was the time frame in which it was conducted and related social and institutional constraints. Ideally, the researcher would have followed up the delayed posttest with follow-up interviews and/or a follow-up questionnaire to try to understand the experiences of study participants qualitatively. Such an approach to the problem might have offered a more holistic understanding of the aspects of each treatment condition from which participants *perceived* receiving benefit. However, the test-intensive nature of the academic calendar in the context of the host institution limited the overall length of the study to five weeks from the time of recruitment to the administration of the delayed posttest. Administrators at the institution

were concerned about the potential for testing fatigue, which is also a methodological concern heretofore not examined in PI research.

Another limitation of the present study was that, as with other PI studies, the assessment tasks were designed to permit close monitoring. Because of this, they do not represent the types of communicative tasks that measure implicit knowledge (DeKeyser & Botano, 2015). This study, and the PI strand in general, would benefit from examining the effects of PI, TI, and SI on communicative language tasks.

One final limitation that merits discussion here is the highly specific context of the host institution for the present study. While private colleges in China have proliferated since being approved less than three decades ago, the vast majority of students in China attend publicly funded institutions that benefit from significantly more resources and tend to enroll students with a history of higher academic achievement than those enrolled in private colleges. Thus, a replication of this study in a state institution might yield results from which generalizations can be made that would be applicable to a much larger percentage of the student population enrolled in China's institutions of higher education.

Additionally, though the Web-based delivery of instructional treatments controlled for teacher effects, the research design was not able to control for students' extra-curricular communication and study activities. It is possible that students from the control group may have inferred from their friends that they had been learning about the target structures examined in the present study. In such a scenario, highly motivated learners might have chosen to look up information about these structures of their own accord. There is no evidence to indicate that this transpired, but it is feasible that such a

thing could occur. This represents a threat to PI inquiry employing a repeated measures design, and it is a design limitation that should certainly be taken into consideration when making inferences based upon such studies' results.

Suggestions for Future Research

Additional PI studies need to be conducted with L1 Chinese learners of languages other than English. Despite the fact that China possesses one of the world's largest populations and has the second largest economy in the world, the present study represents the first known foray into PI research in this context. As Chinese businesses continue to expand into foreign markets, and as foreign companies continue working to develop domestic demand in the Chinese market, possessing foreign language proficiency will only grow in importance. PI has consistently shown itself to be superior to TI for tasks of interpretation and at least as good as TI for tasks of production. Further PI studies carried out in China would work to advance understanding of its effects on language acquisition by learners whose L1 differs dramatically from that of their trading partners. This would assist in strengthening the claims of the IP model as well, and it could have an important impact on language pedagogy in Chinese classrooms, which seem to exhibit an over-reliance on production-based pedagogy.

Future PI research carried out with L1 Chinese learners of languages other than English should endeavor to isolate the effects of explicit information on the acquisition of target forms. Findings of the present study revealed the control group to be better than the TI group for production tasks. While not directly examining structured input as an isolated treatment, the control group's improvement may be indicative of the efficacy of SI on the processing of Spanish copulae. Additional research studies should be carried

out that include an EI-only group, an SI-only group, and a control group. Furthermore, such a study should employ a trials-to-criterion measure (see Henry et al., 2009; and VanPatten et al., 2013) to determine at what point the groups assigned to each experimental condition successfully begin to process Spanish copulae, as well as other target forms. As VanPatten et al. (2013) noted, the effects produced by EI may be dependent on the structure and its intersection with the processing problem evaluated. Therefore, more research utilizing the design described above needs to be carried out to elucidate the role of EI and SI in helping learners to correctly process input.

In addition to the above, it is important for PI research to expend more effort examining the effects of PI on communicative activities, as this is one of the most essential skills for people working in the global marketplace of the 21st century. Though it may be difficult to design communicative tasks that would permit the type of monitoring desirable for a controlled experiment, DeKeyser and Prieto Botana (2015) have stated that failing to do so places the emphasis of PI research on short-term gains of declarative knowledge when the field of SLA as a whole is increasingly focused on communicative tasks and implicit knowledge. Moreover, future PI studies need to evaluate the role of task-essentialness in producing gains on assessments of interpretation and production. Task-essentialness refers to the necessity of target structure use for successful task completion (Loschky & Bley-Vroman, 1993). In their extensive review of PI research, DeKeyser and Prieto-Botana found “that all studies reporting a lack of EI effect implemented SI that consisted of task-essential activities” (p. 295). This finding suggests that the controlled nature of PI studies may not accurately underscore the role of EI in aiding learners in processing the target forms. Additionally, the claims that may be

made about the effectiveness of PI and SI may be limited to the controlled, experimental contexts in which they have been examined. A concerted effort to move PI research in the direction of communicative tasks would enhance the research community's ability to make claims regarding the efficacy of PI for real-world situations. Likewise, the comparative examination of +EI and -EI conditions in future PI studies employing non-task-essential activities could aid in the understanding of the importance of EI in PI interventions.

Finally, as blended classes and fully online language courses become the norm, it is important for future PI research to examine the efficacy of PI in these specific contexts. This is especially true for fully online language courses which often do not exhibit either the immediacy or the interaction of face-to-face courses. Farley (2004) has pointed out that the receipt of immediate instructor feedback can result in incidental input that might impact a study's results. Likewise, Russell (2009, 2012) indicated that peer interaction in face-to-face courses could potentially influence a study's outcomes and, therefore, online studies in which little participant interaction occurs might provide a clearer picture of the efficacy of PI than classroom-based studies.

Conclusion

The results of the present study agree with previous research in the PI strand that found PI to be superior to TI on tasks of interpretation (Benati, 2001, 2005; Cadierno, 1995; VanPatten & Cadierno, 1993a, 1993b; VanPatten & Wong, 2004). Likewise, the present study found PI to be superior to TI for tasks of production, a finding which agrees with previous studies that found PI to be at least as good as, if not better than, TI for production tasks (Benati, 2001, 2005; Benati et al., 2008; Cadierno, 1995; VanPatten &

Cadierno, 1993a, 1993b; VanPatten & Wong, 2004). Though the results of the present study did not show PI to be superior to the control (no instruction) group for tasks of interpretation or production, only the PI group mean difference score from pretest to immediate posttest was significantly higher than that of TI for tasks of interpretation. Moreover, the small cell size of the control group and evidence of slight univariate distribution abnormality may mean that the control group's performance is not indicative of the population as a whole. In sum, the relatively small sample size of the present study prevents the researcher from making generalizations for the acquisition of Spanish copulae for the entire population of L1 Chinese speakers.

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Appendices

Appendix A: IRB Approval Letter



RESEARCH INTEGRITY AND COMPLIANCE
Institutional Review Boards, FWA No. 00001669
12901 Bruce B. Downs Blvd., MDC035 • Tampa, FL 33612-4799
(813) 974-5638 • FAX(813)974-7091

March 24, 2015

Wesley Curtis
Teaching and Learning
4202 E. Fowler Ave.
EDU 265
Tampa, FL 33620

RE: **Expedited Approval for Initial Review**

IRB#: Pro00021286

Title: The Effects of Processing Instruction on Chinese Learners' Acquisition of Spanish Copulae

Study Approval Period: 3/23/2015 to 3/23/2016

Dear Mr. Curtis:

On 3/23/2015, the Institutional Review Board (IRB) reviewed and **APPROVED** the above application and all documents outlined below.

Approved Item(s):

Protocol Document(s):

[Effects of PI Study Protocol](#)

Consent/Assent Document(s)*:

[Adult Informed Consent for Minimal Risk - Chinese, V#1, 3.12.15.docx.pdf](#)

[Adult Informed Consent for Minimal Risk - English, V#1, 3.12.15.docx.pdf](#)

*Please use only the official IRB stamped informed consent/assent document(s) found under the "Attachments" tab. Please note, these consent/assent document(s) are only valid during the approval period indicated at the top of the form(s).

It was the determination of the IRB that your study qualified for expedited review which includes activities that (1) present no more than minimal risk to human subjects, and (2) involve only procedures listed in one or more of the categories outlined below. The IRB may review

Appendix A (Continued)

research through the expedited review procedure authorized by 45CFR46.110 and 21 CFR 56.110. The research proposed in this study is categorized under the following expedited review category:

(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

As the principal investigator of this study, it is your responsibility to conduct this study in accordance with IRB policies and procedures and as approved by the IRB. Any changes to the approved research must be submitted to the IRB for review and approval by an amendment.

We appreciate your dedication to the ethical conduct of human subject research at the University of South Florida and your continued commitment to human research protections. If you have any questions regarding this matter, please call 813-974-5638.

Sincerely,

A handwritten signature in black ink that reads "John A. Schinka, Ph.D." in a cursive script.

John Schinka , Ph.D. , Chairperson
USF Institutional Review Board

Appendix B: Pre-Treatment Questionnaire

Cuestionario adaptado de Russell (2009)

Instrucciones

限时小测试 此题限时一小时。时间用完时会自动告知你，你可以选择继续完成此试题，或者保存你已完成的试题答案然后发送。时间自动提醒会出现在接下来的最后 30 分钟，最后 5 分钟和最后 1 分 30 秒。注意：计时器不会出现在测试中的前面部分。

Intentos múltiples Prohibido. Este sondeo solo se puede realizar una vez.

Pregunta 1

中文姓名:

Pregunta 2

西班牙语姓名:

Pregunta 3

年龄（请写年龄和月份，比如：21 岁 5 个月大）

Pregunta 4

请打勾:

- 女
 男

Pregunta 5

你曾经成长的地方人们说那种语言或者方言？

Appendix B (Continued)

Pregunta 6

在你的家乡，如今人们使用那种语言或者方言？

Pregunta 7

你每天最常说的是什么语言或者方言？如果是，那么是那种方言呢？

Pregunta 8

在家时，至少一半的时间你和家人都是用方言交流而不是普通话吗？如果是，那么是那种方言呢？

Pregunta 9

你已经在学校学习了几学期的西班牙语？

Pregunta 10

你在高中学过西班牙语吗？如果学过，你在高中学了几年？

Pregunta 11

你在高中学过西班牙语吗？如果学过，你在高中学了几年？

Appendix B (Continued)

Pregunta 12

在课堂外，你每天或者每周都接触西班牙语吗？

Pregunta 13

在课堂外，你每天或者每周都接触西班牙语吗？

Pregunta 14

你的计算机技能怎么样？

- a. 非常熟练
- b. 一般熟练
- c. 不熟练
- d. 对我太难

Pregunta 15

学习完使用 CourseSites.com 的培训课程后，你认为对你来说使用这网站上的各项功能是简单还是困难？

- a. 非常简单
- b. 简单
- c. 有点简单
- d. 难
- e. 非常难

Appendix B (Continued)

Pregunta 16

如果你的大学提供额外的外语在线网络课程，你要报名参加那些课程中的一门吗？

- a. 是的
- b. 不会
- c. 也许

Pregunta 17

如果你的大学只提供一部分的在线网络课程（只有一部分是面对面的在线网络授课），你要报名参加那些课程中的一门吗？

- a. 是的
- b. 不会
- c. 也许

Pregunta 18

你相信一个人使用完善的在线网络课程能成功的学会一门语言吗？

- a. 是的
- b. 不会
- c. 也许

Pregunta 19

你相信一个人仅使用网络上免费提供的资源能成功的学会一门语言吗？

- a. 是的
- b. 不会
- c. 也许

Appendix B (Continued)

Pregunta 20

作为大学生，在课堂外，你的学习习惯怎么样呢？

- a. 在课堂外，我每周至少学习 25-30 小时
- b. 在课堂外，我每周至少学习 15-20 个小时
- c. 在课堂外，我每周至少学习 10-15 个小时
- d. 在课堂外，我每周至少学习 5 小时
- e. 在课堂外，我从来没学习过

Appendix C: Traditional Instruction Treatment

Ser 和 Estar 加形容词的使用

即使两种语言有时用完全相同的方法却只表达出相近的含义，往往用不同的方式却表达出同样的含义。这点体现在当两种语言源自不相同的语言语系，比如西班牙语和中文（西班牙语是源于罗马帝国语的拉丁语，它是属于印欧语系。然而中文是属于汉藏语系。）。

某种语言有时只能用一种方式方法去表达一个想法或者观念，但别的语言或许会有多种方式方法去传达这个相同的想法或者观念。例如西班牙语，它的两个动词 *ser* 和 *estar* 在英语中常常仅用 *to be* 的动词形式去体现。西班牙语的两个动词 *ser* 和 *estar* 翻译成英语时常常用动词 *to be* 的形式去实现，但是这两个动词在西班牙语中的使用中情形非常不同。这就是为何在西班牙语中的某些情况下，要么使用 *ser*，不然就是 *estar*，但或许用中文不会涉及一个动词的使用。

一般情况下，西班牙语中动词 *ser* 是表示人或物与生俱来，短时间不可变的特性，同时也表示计划中的时间和将要发生的事。然而 *Estar* 表示人，地点或者事物的短时间状态或者位置，也表示一项行动的结果或者事物此刻的状态。

下面表格中是两个动词现在时的动词变位形式。

<i>SER</i>	
yo soy	<i>nosotros somos</i>
tú eres	<i>vosotros sois</i>
usted / él / ella es	<i>ellos /ellas son</i>

<i>ESTAR</i>	
yo estoy	<i>nosotros estamos</i>
tú estás	<i>vosotros estáis</i>
usted / él / ella está	<i>ellos /ellas están</i>

Appendix C (Continued)

Ser + 形容词:

- * 用于表示事物与生俱来的，固有的特性。
- * 用于描述某事物的基本属性。

Ejemplos:

**Wilson es bastante fuerte.*

**Samuel es muy listo.*

**Emma es simpática.*

Estar+ 形容词:

- *用于表示事物的状况，状态（或精神上的，或身体上的），或者非固有的特性。
- *常常表示改变常态。
- *用于描述某物看起来如何。

Ejemplos:

**Hoy Wilson está malito.*

**Hoy Samuel va a llegar tarde porque no está listo.*

**Esta mañana Emma está muy simpática* (looks very cute).

注意某些形容词与其中一个或另外一个动词使用时句意是如何改变的。某些形容词要么仅能和 *ser* 搭配使用，要么仅能和 *estar* 搭配使用，但还是有很多形容词都能和其中任意一个搭配使用。*ser* + 形容词表示对事物的客观评价。然而 *estar*+形容词是表达一个观点和看法。在英语中，通常一个感官动词可以代替 *to be* 动词形式的使用。例如看，觉得，和感觉这些感官动词。在中文中，既需要涉及一个具体的时间点（暗示变化），也需要一个体标记去体现这种变化。

总而言之，需要记住的是动词 *ser* 与 *estar* 的区别不仅仅是事物的永久属性和暂时属性之间的区别。

Appendix C (Continued)

题 1: Ser 或 Estar

提示：下面的这些句子是人们对一些事物的普遍认识。根据句子会话含义，使用 ser 和 estar 的正确动词变位形式完成句子。然后录下自己对这些看法的见解，你的回答可以表示同意或不同意。

1. Los hombres _____ físicamente más fuertes que las mujeres.
2. Los gringos (Caucasians) _____ más fríos que los latinos.
3. En China creen que los productos chinos _____ de baja calidad.
4. La infraestructura de Shanghai _____ más avanzada que la de Chongqing.
5. La gente rica _____ más tacaña (stingy) que la gente pobre.
6. Los europeos _____ más altos que los chinos.
7. Las mujeres _____ más inteligentes que los hombres.
8. Una persona que tiene mucho dinero no _____ muy simpática.

Appendix C (Continued)

题 2: 你感觉怎么样?

提示: 完成下面的句子表示你的感受, 但不能使用任何反身动词。注意语法正确! 把你的答案和你朋友或者同学的比较一下。你会发现下面这些给出单词的实用性。
relajado, agotado, enojado, engañado, decepcionado, feliz, asombrado

1. Después de 16 horas de trabajo, _____.
2. Cuando un amigo me trata mal, _____.
3. Si mi novia sale con otro chico, _____.
4. Cuando no recibo buenas notas, _____.
5. Después de ver un programa sobre la magia, _____.
6. Cuando alguien me miente, _____.

Appendix C (Continued)

题 3: 用 *ser* 或者 *estar* 的动词变位形式完成下面的句子, 确保所填答案的语法正确以及符合语境。

1. Hoy vi a mi sobrino por primera vez en un año. ¡Ha crecido tanto! ¡
_____ tan alto!
2. Necesito un auto pequeño para manejar en la ciudad; tiene mucha gente y muy poco espacio libre. Mi amigo me dice, ‘El carro Smart _____ muy chiquito.’
3. Quiero probar la comida mexicana. Dicen que _____ muy picante.
4. Mi vecina se hizo cirujía plástica. ¡Ahora _____ tan joven!
5. Me encantan las flores, pero estas _____ muertas.
6. Cada año, después del Día de Acción de Gracias, _____ más gordo y tengo que ir a dieta.
7. Yo soy mexicano. Mi departamento _____ ubicado en la ciudad de Guadalajara, Jalisco.
8. Hoy mi padre tiene una cita en el consultorio médico. Le duele el pecho, y por eso _____ un poco preocupado.
9. Dicen que si comes mucho, no _____ sano nadar hasta que hayan pasado 45 minutos.
10. Los bomberos sacaron a mi gato de un árbol esta tarde. Yo _____ tan aliviada.
11. Ahora mi hermana no me habla. Dice que _____ enojada conmigo, ¡pero no sé que hice!
12. No lo puedo creer. _____ un sábado, y mis compañeros de cuarto están estudiando para un examen.
13. Mi novia está bostezando (yawning). Dice que soy _____.

Appendix C (Continued)

题 4: 用 *ser* 或者 *estar* 的正确动词变位形式和给出的形容词搭配使用完成下面的句子。在 *ser* 和 *estar* 都能使用的情况下, 请解释出他们的不同含义。

1. Olivio _____ (trabajador, listo, ingenioso, generoso)
 - a. _____
 - b. _____
 - c. _____
 - d. _____

2. Mi madre _____ (alta, morena, profesional, incomparable)
 - a. _____
 - b. _____
 - c. _____
 - d. _____

Appendix C (Continued)

题 5A: 短对话

Francisco: Hoy (1)_____ muy nublado.
Martha: En Chongqing, eso (2)_____ común. No es para nada que el apodo (nickname) de Chongqing (3) _____ “La Ciudad de la Niebla”.
Francisco: Bueno, espero que no llueva. No traje mi paraguas y mi hotel (3)_____ lejos de aquí.
Martha: ¿(4)_____ el Hotel Hyatt Regency?
Francisco: ¡Claro que no! ¡No (5)_____ rico!
Martha: Tú me dijiste que ya (6)_____ hecho (have it made).
Francisco: No, nunca dije eso. ¿ _____ loca?

题 5B: 首先阅读句子并且录取你的发音, 然后针对每个问题, 录取你的答案。别忘点保存键提交你的录音。

1. Donde tú vives, ¿es común ver mucha niebla?
2. ¿Vives en una casa o en un departamento? ¿Cómo es?
3. Cuando viajas, ¿te hospedas en un hotel lujoso (luxurious)? ¿Está muy caro?
4. ¿Eres derrochador (wasteful) o ahorrativo (frugal)?

Appendix C (Continued)

题 6A: 短对话

Selene: ¡(1)_____ nevando!
Jairo: No me extraña, (it doesn't surprise me) (2)_____ diciembre.
Selene: Sí, yo sé. Pero hoy debo ir a la clínica, y (3)_____ lejos.
Jairo: ¿(4)_____ enferma?
Selene: No, voy a ponerme unas vacunas (vaccinations). Pronto salgo de vacaciones, y la salida (5)_____ miércoles.
Jairo: ¿Tú familia ya (6)_____ allá.
Selene: No, _____ en casa todavía.

题 6B: 首先阅读句子并且录取你的发音, 然后针对每个问题, 录取你的答案。别忘点保存键提交你的录音。

1. Donde tú vives, ¿es común ver la nieve caer en diciembre?
2. ¿Estás listo para las vacaciones de invierno?
3. ¿Vas a regresar a casa para las vacaciones? ¿Cómo es?
4. ¿Dónde están tus familiares ahora mismo?

Appendix C (Continued)

Ser 和 *Estar* 与过去分词连用用作形容词

被动语态和结果状态

在西班牙语里面过去分词起着不同的作用。现在，我们将着重于它与 *ser* 和 *estar* 搭配作为形容词来使用。

变动词为过去分词用于形容词是通过：首先把动词的词尾去掉（去掉以 *-ar* 的动词词尾，以 *-er,-ir* 的动词词尾）。然后在原本以 *-ar* 结尾的动词词尾加上 *-ado*，*-ado* 加在原本以 *-er/-ir* 结尾的动词词尾。下面给出了三个动词变位范例：

lavar	vender	pedir
-ar	-er	-ir
lav	vend	pedi
+ado	+ido	+ido
= lavado	= vendido	= pedido

动词的过去分词或者完成时分词用于形容词，是通过把动词的 *-ar* 词尾换成 *-ado*，以 *-er* 和 *-ir* 词尾换成 *-ido*。

¡Advertencia! 像所有的形容词一样，过去分词形容词也要与其修饰的名词保持性数的一致。

Ejemplos:

El auto está vendido.

这辆车已经卖了。

La lámpara es vendida por mi padre. 这盏台灯被我爸爸卖了。

¡Advertencia! 以下是一些动词以 *-er/-ir* 结尾的不规则过去分词：

Irregular Past Participles

abrir	<i>abierto</i>
decir	<i>dicho</i>
devolver	<i>devuelto</i>
escribir	<i>escrito</i>
hacer	<i>hecho</i>
morir	<i>muerto</i>
poner	<i>puesto</i>
romper	<i>roto</i>
resolver	<i>resuelto</i>
ver	<i>visto</i>

Appendix C (Continued)

西班牙语的被动语态

中文和西班牙语都有不同的方法去表达主动行为和被动行为。中文里的被动语态，最普遍的方法是把介词“被”放到动作的发起者（。。。）和动词短语之前。

老人每天吃面。 *Los ancianos comen fideos todos los días.*
面每天被老人吃。 *Todos los días, los fideos son comidos por los ancianos..*

在主动语态中，动作的发起者，不论是人或是物都是语法上句子的主语，动作的接收者是句子的宾语。在被动语态中，宾语又称为动作的接收者变为了语法上的句子的主语。就像中文一样，西班牙语中的被动语态是为了强调动作的接收者而不是动作的发起者。甚至可以在句子里不写出动作的发起者，但它也可以（以 *por* 加动作的发起者的形式）加在句尾。

西班牙语的被动语态是 *ser* 加过去分词来实现。下面是一个变主动句为被动句的范例。

El niño lanza la pelota. → La pelota es lanzada (por el niño).

注意：被动语态不常用于非正式的对话中，但在正式语中，尤其是对记载性的，书面性的。

Appendix C (Continued)

结果语态

在西班牙语中，使用 *ser* 加过去分词表示被动行为，使用 *-estar* 加过去分词表示行为的结果（又被称为情况或者状态）。

La ventana está quebrada. → 窗户坏了。

现在我们来比较一下被动行为和主动行为，然后再看一看结果语态。

行为

结果

El niño quiebra la ventana.
La ventana es quebrada por el niño. → *La ventana está quebrada.*

Appendix C (Continued)

题 1:

提示: 参照给出的示例, 运用 *ser* 把下面给出的这些主动句变成被动句。

MODELO: El profesor enseña la clase. → La clase es enseñada por el profesor.

1. En los Estados Unidos más de 40 millones de personas hablan español.

2. Shakira baila muchos tipos de danza.

3. Peyton Manning lanza la pelota.

4. Mi madre cocina muchos platos típicos de mi país.

5. El hermano mayor de Pepe lava el auto familiar.

6. En China hacen muchos productos electrónicos.

Appendix C (Continued)

题 2:

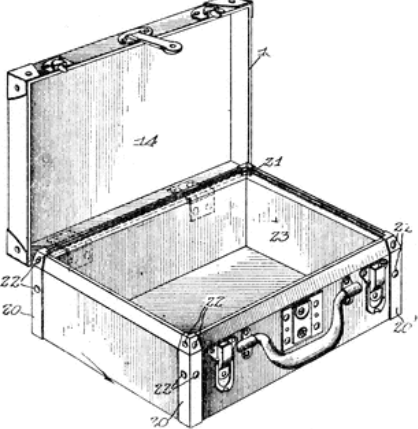

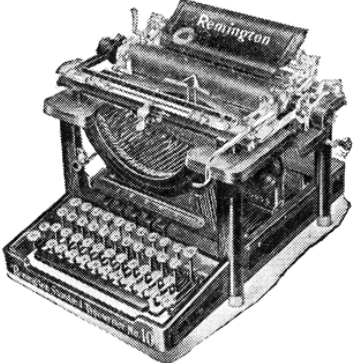
提示：运用给出的西语动词翻译括弧里的中文。注意：所填写的答案必须符合语法规则。

1. El presidente de los Estados Unidos _____ (is followed / *seguir*) por muchos de usuarios de Twitter.
2. El laboratorio de lenguas de mi universidad _____ (is designed / *diseñar*) para ayudarnos a aprender idiomas extranjeros.
3. No tengas miedo de trabajar en este edificio de noche. Todas las noches, desde las 10pm hasta las 7am, las puertas _____ (are locked / *cerrar*) con candado (with a padlock).
4. Todas las noches, las luces _____ (are turned off / *apagar*) por los vigilantes.
5. Ahora las luces _____ (are turned off / *apagar*) porque no queremos desperdiciar electricidad.



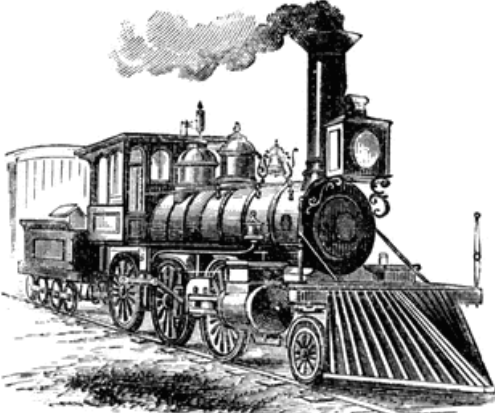
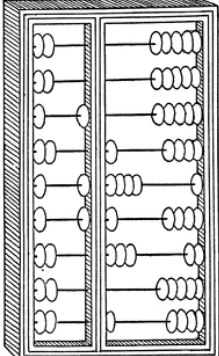
Appendix C (Continued)

题 3:

提示：首先使用 *ser* 或者 *estar* 的正确形式，在其后选用已给出动词的过去式。根据具体情况，必要时可以增添和补充。

<p>1. La maleta / abrir</p> <p>Ya puedes empacar tus cosas porque la maleta</p> <p>_____</p>	
<p>2. Jimena / acostar</p> <p>Hoy, nuestra hija jugó con sus amigas por varias horas, por eso Jimena</p> <p>_____</p>	
<p>3. máquina de escribir / usar</p> <p>Mi autor favorito no sabe usar la computadora. Esta máquina de escribir</p> <p>_____</p> <p>por él.</p>	

Appendix C (Continued)

<p>4. los niños / emocionar Los niños</p> <hr/> <p>porque la criada ha preparado su sopa favorita.</p>	
<p>5. su esposa / callado</p> <p>Él hombre tiene miedo porque su esposa</p> <hr/> <p>Pero normalmente es una persona muy habladora.</p>	
<p>6. La locomotora / encender</p> <p>La locomotora</p> <hr/> <p>porque el tren lleva pasajeros a Chengdu.</p>	
<p>7. Los números / contar Los números</p> <hr/> <p>con un ábaco.</p>	

Appendix C (Continued)

题 4: 问答题。首先需要用到 *ser*, 最后需要用到 *estar*.
提示: 听完下面的问题, 然后录取自己的答案。

1. Los autos: ¿Tienes un carro o una camioneta? ¿Qué modelo es?
¿Normalmente está limpio o sucio? ¿Por qué?
2. La ropa: ¿Con qué frecuencia compras nuevas prendas (outfits / garments)?
¿Tienes mucha ropa nueva? ¿Qué haces con tu ropa vieja?
3. La residencia estudiantil: ¿Cómo son las residencias estudiantiles de tu
universidad? ¿Tienes muchos compañeros de cuarto? ¿Son personas ordenadas?
Ahora su cuarto, ¿está limpio o sucio?

Appendix D: Processing Instruction Treatment

西班牙系动词: Ser 和 Estar

学习一种新的语言时，千万记住每一种语言具有独特的方式去表达某些概念。即使这种概念本身也许非常的相似，但传达它的方式也许大相径庭。如果我们用含有系动词的西班牙语句子区别事物的固有特性和当时情况，我们会发现它和中文的表达方式特别的不一样。

用中文的表达方式去区别事物的固有特性和当时情况往往只是通过涉及时间来实现（今天，现在，，，，，等等。）¹。

Chinese Utterance	Pinyin	Translation
她很漂亮。	<i>Ta1 hen3 piao4liang.</i>	<i>She is pretty</i>
今天她很漂亮。	<i>Jin1tian1 ta1 hen3 piao4liang.</i>	<i>She looks (or seems) pretty today.</i>

ser 和 *estar* 都是西班牙语系动词，意思常常被翻译成“是”，在西班牙语句子里一般情况下不会只用到一个系动词。在西班牙语中，系动词 *ser* 通常被用来描述事物或人的固有特性。

Spanish Utterance	Translation	Meaning
Jimena es preciosa.	<i>Jimena is precious.</i>	<i>Jimena is a precious person.</i>

在上面的例子中，我们看到句子是在描述 Jimena 的一个特性，说话者相信这是一个相对稳定或者有持续性的特征。她现在是可爱的，她过去是可爱的，她在未来也

Appendix D (Continued)

¹ 注意：也可以用感官动词去表达这样的概念，但是涉及时间来清晰的区分事物的固有特性和当时情况仍然是必要的。所以就可能有下面这样的例子：今天她看起来漂亮。/ *Jin1tian1 ta1 kan4 qi3 lai2 piao4liang.* / *She looks pretty today.*

将是可爱的。

对比之下，*estar* 被用来描述关于当时的情况或者状态。那就是说 *estar* 是这样的系动词，用于描述不被视作所涉及的事物或者人的内在固有的特性或特征。请看以下这个例子：

Spanish Utterance	Translation	Meaning
Jimena está preciosa.	<i>Jimena</i> 看起来很漂亮。	<i>Jimena looks more precious than usual.</i>

在这个例子中，明显的看到说话者用系动词 *estar* 来描述一个区别于一般的特性。换句话说，*Jimena* 目前看起来或者似乎比平时更加可爱。这不是说这个说话者相信 *Jimena* 是一个没有魅力的人（不过这也有可能），而是她目前的外观似乎与她平时的有所区别。

如果你在和一个朋友聊天说：“*Belkis, estas tan seria,*”这句话的含义是什么呢？

- a) *Belkis*, 你是一个如此严肃的人，我担心你没有享受生活。
- b) *Belkis*, 你今天太严肃了，是最近发生的事情让你心烦吗？

如果你的朋友将会说：“*Leopoldo, eres tan delgado,*”他的意思是什么？

- a) *Leopoldo*, 你好苗条啊。我每天醒来希望能像你那样苗条。
- b) *Leopoldo*, 你今天看起来好瘦。你有做了什么改变？也许是因为你衬衣的颜色，黑色使你显瘦不少。

Appendix D (Continued)

¡ESTRATEGIA!

许多句子用西班牙语表达需要用到像 *ser* 或者 *estar* 一样的系动词，而用中文表达不会用到一个系动词。因为这样也许会让人认为，这些系动词不含有重要的信息。但是正如我们已经看到的，西班牙语的系动词给我们提供的信息是关于是否说话者相信他或她是在描述内在固有的性质或者一个当时的情况。

Appendix D (Continued)

习题 1: 下面的句子，一个句子描述一个人。考察这些句子然后判断是否每一个句子是在描述一般情况或是一个不同于一般情况的变化。

1. Cecilia es adorable.
 - 一般
 - 不同于一般的变化

2. Aarón está gordito.
 - 一般
 - 不同于一般的变化

3. Paola es morena.
 - 一般
 - 不同于一般的变化

4. Rigoberto está jubiloso.
 - 一般
 - 不同于一般的变化

5. Esteban está entacuchado [well-dressed].
 - 一般
 - 不同于一般的变化

Appendix D (Continued)

习题 2: 判断在下面每个句子中，说话者是否认为画线的单词是所涉及的人或物固有的性质。

	<i>Sí</i>	<i>No</i>
1. Lady Gaga es <u>talentosa</u> .	<input type="checkbox"/>	<input type="checkbox"/>
2. Stefan está <u>guapo</u> .	<input type="checkbox"/>	<input type="checkbox"/>
3. La profesora de español es <u>inteligente</u> .	<input type="checkbox"/>	<input type="checkbox"/>
4. Los españoles son <u>atléticos</u> .	<input type="checkbox"/>	<input type="checkbox"/>
5. El equipo de fútbol de Colombia está <u>impresionante</u> .	<input type="checkbox"/>	<input type="checkbox"/>
6. El chile poblano es <u>picoso</u> .	<input type="checkbox"/>	<input type="checkbox"/>
7. La montaña está <u>bella</u> .	<input type="checkbox"/>	<input type="checkbox"/>
8. El chico está <u>listo</u> .	<input type="checkbox"/>	<input type="checkbox"/>

Appendix D (Continued)

习题 3: 你将听到一系列的陈述，关于一个男人在描述他的狗狗。仔细听每一个陈述，然后判断是否说话者是在描述一般的事情还是不寻常的事情。

<i>Típico</i>	<i>Inusual</i>
1. <input type="checkbox"/>	<input type="checkbox"/>
2. <input type="checkbox"/>	<input type="checkbox"/>
3. <input type="checkbox"/>	<input type="checkbox"/>
4. <input type="checkbox"/>	<input type="checkbox"/>
5. <input type="checkbox"/>	<input type="checkbox"/>

Guion/Clave: [学生将会听到但不会看到以下文本。]

Yo tengo un perrito que se llama Peluchito.

1. Es pequeño.
2. Está energético.
3. Es blanco.
4. Está mugroso.
5. Está enfadado.

Appendix D (Continued)

习题 4: 马上你将听到一个西班牙语的句子。听完此陈述之后选择一个中文句子最能表达你所听到内容的意思。

1. A: Elena 是一个悲观的人。有时我想是否她有开心过。
B: Elena 今天似乎非常伤心。她平时挺开心的。我想知道她怎么了。我希望没有什么问题。
2. A: Asbel 平时细心周到, 但今天他似乎已经忘了他的礼貌。
B: Asbel 不是一个细心周到的人。也许在他是小孩的时候从来没经过礼貌教化。
3. A: 我妈妈的小狗平时超可爱, 但今天他看来不那么吸引人。
B: 我妈妈有一个小狗。实际上长得有点丑, 但今天妈妈给他穿了一件毛衣, 他现在看起来特别的可爱。
4. A: 我爸爸一直很强壮, 但今天他看起来虚弱。
B: 我爸爸是一个身体虚弱, 病怏怏的人。
5. A: 我不喜欢跟 Elizabeth 说话。她总是大声说话。
B: 平时 Elizabeth 说话很温柔, 但今天她似乎很大嗓门。

Guion/Clave: [学生将会听到但不会看到以下文本。]

1. Elena está muy triste hoy.
2. Asbel es considerado.
3. El perrito de mi mamá está feo hoy.
4. Mi padre es débil.
5. La voz de Elizabeth está tan fuerte.

Appendix D (Continued)

习题 5: 给下面的选择一个最佳答案完成每一个句子。

1. Cuándo tengo un examen de español...
a. estoy frío/a. b. estoy lleno/a. c. estoy nervioso/a.

2. Si no duermo lo suficiente, ...
a. estoy guapo/a. b. estoy cansado/a c. estoy feliz.

3. Cuándo mi mamá prepara mi cena favorita...
a. estoy agradecido/a. b. estoy enojado/a. c. estoy alto/a.

4. Si mi novio/a no contesta mis llamadas ...
a. estoy extático/a. b. estoy aliviado/a. c. estoy frustrado/a.

Appendix D (Continued)

早些时候我们了解了系动词 *ser* 和 *estar* 在西班牙语句子中的重要性，因为它们帮助传达说话者的感知，关于他或她所描述的人或者事物的性质。特别是说话者的动词选择帮助我们知道是否他或她在谈论关于涉及的事物或人固有的特性或者当时的状态。这不是指 *ser* 仅是用于描述永久存在的事物，*estar* 是仅用于暂时存在的事物。而是指动词告诉我们一些关于说话者对所描述事物的感知。

让我们假设某人在描述某件似乎具有相当久特性的事情。让我们用身高为例。一旦一个人达到了他或她成人的身高，这是一个相对于稳定的性质。但是你也可能会听到一个西班牙语的说话者像这样说：

Joaquin, ¡qué alto estás! ¿Comes muchas verduras o qué?

Joaquin, how tall you look! Do you eat a lot of vegetables or something?

Joaquin, 你看起来好高呀！你是吃了很多蔬菜或诸如此类的。

在这些例子中，我们看到说话者相信自己熟悉 *Joaquin* 以及他的身高，他惊奇的发现无论出于何种原因 *Joaquin* 似乎比平时要高。（这就是为什么他开玩笑的问他的朋友是不是他吃了很多蔬菜的缘故。）这种诧异是由于对一个意外改变的感知。当这样一个意外的改变被说话者感知到，他或她就会在一个陈述句中用 *estar* 表明这种惊讶。

在某种意义上，选用 *estar* 表达意外的事情揭示说话者已经在心里对于能意料的事和在那一刻此事是如何呈现的做了比较，

某人想对事物的方方面面做一个比较时，基于他们的内在固有性质，她或他会用 ser:

El cigarro cubano es fenomenal.

这例子说明说话者在心里已经对古巴香烟和那些其他地方生产的香烟做了比较。她期望古巴香烟会非同寻常，但她也许对在西伯利亚生产的香烟没有同样的期望。也许这说话者被西伯利亚香烟意想不到的好品质而惊讶（这正如你将记住那样，说话者期待的是品质不好的香烟）：

Este cigarro siberiano está fenomenal.

这个句子表明西伯利亚的香烟远比期望的要好很多。

Appendix D (Continued)

¡ESTRATEGIA!

Ser 和 *estar* 是重要的单词，因为它们教我们读懂关于说话者对他们所描述事情的感知。在下面的习题中对它们的使用一定要注意。

Appendix D (Continued)

习题 1a:

在很多家庭里面，早餐时间是安静的，在此期间家庭成员间能享受静静的谈话、然而对于其他家庭来说，交流也许少了亲切，友善。下面图中最后一幅图，爸爸的话是什么意思？

- a. 你是我的儿子。你不尊重人。
- b. 你曾经是我儿子，但是现在你被踢出遗嘱。



Appendix D (Continued)

习题 1b:

像上面发生在人们生活中的改变，你们中很多大概也已经经历了生活中的改变。下面那个对你来说是真实的。

Sí *No*

1. Mis amigos dicen que estoy más flaco/a.
2. Como muchas cosas y ahora estoy gordo/a.
3. Mis padres me pagan por lavar platos; estoy rico/a.
4. Aquí llueve a diario, pero hoy hace sol. Estoy afortunado/a.

Appendix D (Continued)

习题 2:

给每一个句子选择一个最能表达说话者想法，意图。

1. Sarahí es muy linda...
 - a. todos los días.
 - b. hoy.

2. Angélica está antipática...
 - a. esta tarde.
 - b. cada día.

3. Mi madre es muy fuerte...
 - a. como mi abuela.
 - b. este mes.

4. Mi panza (belly) está gigantesca...
 - a. porque como muchos dulces en clase hoy.
 - b. desde niño.

5. El profesor es aburrido...
 - a. porque los estudiantes no participan en clase hoy.
 - b. y odio ir a su clase.

Appendix D (Continued)

习题 3:

马上你将听到一些西班牙语的句子。想象你坐在你大学里的教室里偷听到每个句子。然后听完每个句子，选择一个中文句子（通过选择A或B）最能叙述你所听到的内容。

1. A: Estefani 今天看起来很讲究。大概是因为她等会要在课堂上做一个陈述。
B: Estefani 总是穿着讲究。一些学生甚至认为她是一个这里的老师。

2. A: Cecilia 总是做好了测试的准备，因为她的机灵。
B: Cecilia 准备好了今天的测试，因为她上个星期全部复习了。

3. A: 自助餐厅的食物今天真辣。可能是他们加多了四川的辣椒。
B: 每天自助餐厅的食物都很辣。在重庆他们爱吃辣的。

4. A: Cortés Barrajas 老师非常帅气。甚至我生病时都想去上他的课。
B: Cortés Barrajas 老师今天好像更帅气。肯定是因为他戴了那新领结的原因。

5. A: Eliezer 超级惹人厌。我讨厌在西班牙语课上坐在他旁边。
B: Eliezer 今天被他同学惹恼了。因为他们把他的背包藏起来了，致使他上课迟到。

Appendix D (Continued)

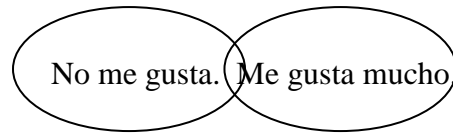
Guion/Clave for 习题3: [学生将会听到但不会看到以下文本。]

1. Estefani es muy elegante.
2. Cecilia está lista para el examen.
3. La comida de la cafetería está muy picosa hoy.
4. Profesor Cortés Barrajas está muy guapo.
5. Eliezer es tan molesto.

Appendix D (Continued)

习题 4:

一个人的喜好常常是随着他们体验新事物和不断成长而改变。习题中，你应该表明你有多么喜欢（或不喜欢）下面所描述的事物。每一项选出一个分值表示你多么喜欢（或不喜欢）所描述的事物，1 分表示你一点都不喜欢，5 分表示你特别喜欢。



Cuándo...

mi novio/a atareado (hint: comes from tarea)	1	2	3	4	5
mi reflexión en el espejo está feo/a	1	2	3	4	5
mi hermano/a está popular	1	2	3	4	5
mi amiga está ocupada	1	2	3	4	5
mi profesor está malhumorado	1	2	3	4	5
el autobús está atrasado	1	2	3	4	5
el tren está tarde	1	2	3	4	5
la música está fuerte (loud)	1	2	3	4	5

Appendix D (Continued)

习题 5a:

用少许时间研究以下这幅图，然后判断下面哪个陈述最能表达这位妈妈的感受。

- 既然我现在老了，但我因你终于毕业了而高兴。
- 昨日还是一平常的天，但是由于你已经毕业了，我感到自己老了。



习题 5b:

改变在生活中会突然或者逐渐的发生。有时改变好像是发生在今天到明天的事。你能想到从你高中毕业后在你生活中或者你朋友生活中任何已经发生的改变吗？看看下面列出的，勾选出已经在你生活中发生的改变。

Sí No

- Mi hermana dice que estoy más grande que ayer.
- Normalmente tengo buena salud, pero hoy estoy enferma.
- La comida de la cafetería está buena.
- La tía de mi compañera de cuarto sufre de depresión, pero hoy está feliz.
- Mis padres van al hospital hoy porque mi abuelo está mal.

Appendix D (Continued)

习题 6:

阅读下面摘录的小故事，阅读完后回答关于这篇故事的问题。

Cuento A: Eliud es un hombre muy trabajador. Todos los días se levanta a las cinco y media de la mañana para alistarse (get ready) e ir a la fábrica donde trabaja. Pero hoy no se va a levantar temprano. ¿Por qué? Porque ayer cerraron la fábrica y todos los empleados perdieron su trabajo. Ahora Eliud está muy preocupado. Piensa que en estos días va a estar muy pobre. No sabe cómo va a pagar la renta ni comprar los comestibles (groceries). Eliud está demasiado triste. Pero no puede estar así mucho tiempo. Mañana va a levantarse temprano... para buscar un nuevo trabajo.

步骤 1: 寻找以上所有 ser 或 estar 与一个形容词连用的句子，记录在一张纸上，然后想想他们的意思。

步骤 2: 判断下面的陈述是对还是错。

1. Eliud es una persona muy floja (lazy).
Cierto Falso
2. Eliud es muy pobre, y nunca tiene dinero.
Cierto Falso
3. Eliud está triste porque ya no tiene trabajo.
Cierto Falso
4. La fábrica donde Eliud trabaja fue destruido en un incendio (fire).
Cierto Falso

Cuento B: A Sharon le gusta cocinar. Pero a su esposo, no le gusta comer lo que ella cocina. Por eso (that's why), Sharon fue a tomar unas lecciones de un chef francés ayer. Al terminar de comer la cena esta noche, el esposo de Sharon exclama “¡Qué buena cocinera estás!”

步骤 1: 寻找以上有 ser 或 estar 与一个形容词连用的句子，记录在一张纸上，然后想想它的意思。

步骤 2: 根据你所记录的短语，补充这个句子，使其意思真实，完整。

比起_____ 莎伦是一个不错的厨子。

Appendix D (Continued)

过去分词形容词

来源于动词的特殊类的形容词是过去分词形容词。一个过去分词形容词是首先通过去掉动词词尾（去掉以-ar, -er 或 -ir 结尾的词尾），然后-ado 替换-ar 词尾，-ido 替换-er 或 -ir 词尾。下面看看一些例子。

lavar	vender	pedir
-ar	-er	-ir
lav	vend	pedi
+ado	+ido	+ido
= lavado	= vendido	= pedido

¡Advertencia! 像所有的形容词一样，过去分词形容词一定要与所修饰的名词在性（男性或女性）和数（是否是单数或复数）上一致。你能判断以下例子的含义吗？

Ejemplos:

el auto vendido
la lámpara pintada

（假如你说：“已经卖掉的汽车”和“已经喷漆的灯”，那么你就对了！）

¡Advertencia! 几个以-er 或 -ir 结尾动词，他们的过去分词是不规则的，这些不规则的过去分词一定要记住。不规则的过去分词可以通过去掉-o 词尾，用适合的词尾替换它变成过去分词形容词（用-ado 或 -ada 或 -ados 或 -adas 替换-o 词尾，其原动词是以-ar 结尾，用-ido 或 -ida 或 -idos 或 -idas 替换-o 词尾，其原动词是以-er 或 -ir 结尾）

Irregular Past Participles

abrir	<i>abierto</i>
decir	<i>dicho</i>
devolver	<i>devuelto</i>
escribir	<i>escrito</i>
hacer	<i>hecho</i>
morir	<i>muerto</i>
poner	<i>puesto</i>
romper	<i>roto</i>
resolver	<i>resuelto</i>
ver	<i>visto</i>

Appendix D (Continued)

西班牙语被动语态

中文和西班牙语都有两种不同的方式表达行为动作：被动语态和主动语态。

在主动语态的句子中，施事者，或人或物发起一个动作行为，是句子的语法主语，然而句子的宾语是动作的接受者。

在主动语态中你会怎样说“老人每天吃面”呢？

如果说，“*Los ancianos comen fideos todos los días*” 那么你就对了！

[翻译：老人每天吃面。]

老人 每天 吃 面。
Subj. verb object

中文的被动语态表达最常见的就是把前置词“被”（bei4）放在施事者的前面（信息在这些情况里面已经被人知道，并且值得包含它）和这个动词。（注意：宾语必须提到句子的最前面。）

面每天被老人吃。
Every day, noodles are eaten by the elderly.

面 每天 被 老人 吃。
Obj. prep. agent verb

被动语态在中文里边不是特别常见，因为最常出现的是在文学作品里面。但是如果施事者（或人或物是动作的执行者）是未知的情况下，某人也许想用被动语态。就像在上面的例子一样，如果说话者不予强调动作的实施者，也是可以用被动语态。如果说话者希望他或她可能完全省略施事者，但也能通过在句尾加上介词短语（以 *por* 加施事者的方式）的情况包括施事者。

西班牙语的被动语态也可以通过 *ser* 加过去分词形容词来实现。

让我们看一下主动语态句子用被动语态是怎样的。

El niño lanza la pelota. → La pelota es lanzada (por el niño).

与中文一样，被动语态结构在非正式的西班牙语对话中也不是经常被使用，更确切地说是被形式化语言保留，尤其是书面，文字作品。

Appendix D (Continued)

习题 1:

下面的被动句，为其选择一个最合理的形容词。特别注意 *ser* 在每个短语中的用法。

1. Los congresistas son _____ por los votantes registrados.
a. elegidos b. ejecutados c. cocidos
2. La música caribeña es _____ en muchas partes.
a. comida b. cantada c. fingida
3. Las cartas románticas son _____ por los novios inteligentes.
a. expuestas b. escritas c. copiadas
4. Las casas viejas son _____ por los albañiles.
a. invertidas b. posadas c. reparadas
5. Los niños mal portados (poorly behaved) son _____ por sus padres.
a. disciplinados b. excomulgados c. pisados

Appendix D (Continued)

习题 2:

阅读下面的句子，然后根据描述来判读谁会是动作的执行者。录下你的答案并且听一下你自己的回答。你清楚了吗？

1. La ropa es diseñada por _____.
2. El baloncesto es jugado por _____.
3. Los libros de texto son leídos por _____.
4. El Presidente de los EEUU, Barack Obama, es criticado por _____.

Appendix D (Continued)

结果状态

虽然在西班牙语中 *ser* 加过去分词可用于表达动作的被动语态，但是用 *estar* 加过去分词用于表达一个动作的结果（也被熟知为情况和状态）。

La ventana está quebrada. → *The window is broken.* 窗户坏了。

看看下边的例子，然后选择你相信最能反映它意思的句子。

La casa está pintada.

- A) 某物在粉刷房屋。
- B) 房屋已经被粉刷了。

如果你选择了（B），好样的！

让我们试一试另外一个例子：

El carro está lavado.

- A) 车正被洗。
- B) 车已经被洗了。

如果你选择（B），你将受到表扬。

Appendix D (Continued)

¡ESTRATEGIA!

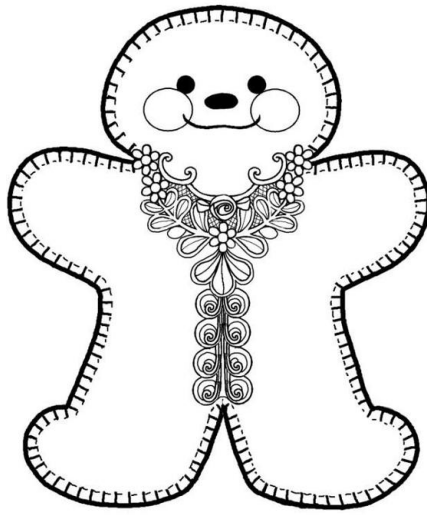
不要误认为 *ser* 和 *estar* 是不重要的单词，因此对他们我们觉得真的不需要注意，选择使用其中一个使用而不是另外一个能告诉我们是否说话者在谈论关于一个动作或者是一个先前完成的动作结果。

Appendix D (Continued)

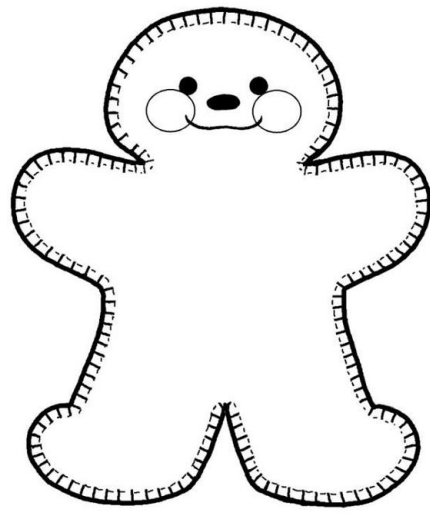
习题 1:

指示：每一小题你将会听到一个西班牙语的句子，听完句子后在两个图中选择最能反映所听句子意思的一幅图。（下面总共应该有 8 对图。）

1.



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2.



Appendix D (Continued)

3.



4.



5.



Appendix D (Continued)

6.



7.



8.



Appendix D (Continued)

Guión para Actividad 1:

1. La galleta está decorada.
2. La ropa es planchada.
3. El café está molido.
4. El teléfono está colgado.
5. La ventana es rota.
6. La uva está verde.
7. La sopa es cocida.
8. El cabello es pintado.

Appendix D (Continued)

习题 2:

根据你所了解的同学（即：同生群成员），判断谁的名字可能被用于补充下面的句子，使其真实可信。最后用中文，录下你的回答并解释为什么每个回答是真实可信的。

1. Mi amiga _____ está enojada con su novio.
2. La puerta de _____ siempre está abierta.
3. Los padres de _____ están divorciados.
4. El teléfono móvil de _____ está roto.
5. Cuando no duerme, _____ está enfadado (annoyed).

Appendix D (Continued)

习题3: 首先研究一下如图的动画, 判断蝙蝠侠对他的助手 Robin 说的是什么?



现在看看下面的陈述, 判断关于你的大学那一个陈述是真实可信? 那一个是虚假错误? 给每一个句子圈出你的选择。

1. Mi compañero/a de cuarto siempre me dice cuando la cena está servida.

Cierto **Falso**

2. Hoy el ceviche está servido en la cafetería.

Cierto **Falso**

3. Mi mamá dice que ahora mismo, en su casa, los mariscos están servidos

Cierto **Falso**

4. Cuando la cafetería sirve bisteces, están bien cocidas.

Cierto **Falso**

Appendix D (Continued)

习题 4:

阅读下面每一个陈述，判断此时此刻它对你来说是否真实可信，然后划勾标出你的选择反映你的回答。

	<i>Sí</i>	<i>No</i>
1. Mi cuarto está sucio.	<input type="checkbox"/>	<input type="checkbox"/>
2. Mis compañeras de cuarto están dormidas.	<input type="checkbox"/>	<input type="checkbox"/>
3. Mi tarea está hecha.	<input type="checkbox"/>	<input type="checkbox"/>
4. El baño está ocupado.	<input type="checkbox"/>	<input type="checkbox"/>
5. Nuestros platos están lavados.	<input type="checkbox"/>	<input type="checkbox"/>
6. La cama está tendida.	<input type="checkbox"/>	<input type="checkbox"/>

Appendix E: Assessment A

测试中的词汇

下面列出的这些词汇在接下来的测试中会出现。需现在熟知这些词汇以及他们的含义，如果离开这个页面，你将不能再返回此页查阅单词。现在你有两分钟的学习时间。

bonita	漂亮的
malhumorado	闷闷不乐的
limpio	使干净
secar	把...弄干
llorar	大叫，哭
sucio	弄脏
mojar	弄湿
encender	打开
romper	折断
viejo	老的，旧的
joven	年轻的
barrer	打扫
aburrir	使烦扰

Appendix E (Continued)

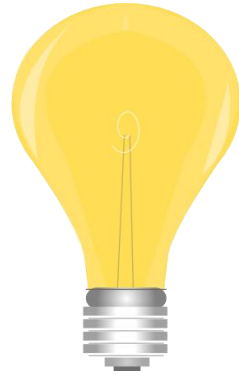
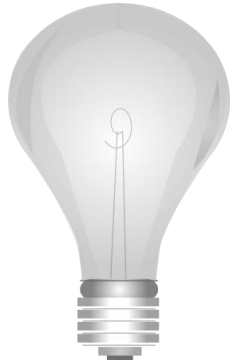
I. DIBUJOS

提示：每一幅图你都将会听到一个西语句子。听完后，选出最符合所听内容。

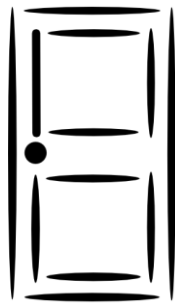
1.



2.



3.



Appendix E (Continued)

II. ESCUCHAR: 马上，你将听到一个西语句子。听完后，从给出的A，B中文句子中选出一个最能表达听力中的含义。

1. A: Jorge 是一个快乐满足的人。每次我看到他，他都微笑着。我想知道他是否有过伤心的时刻。
B: Jorge 平时是一个闷闷不乐的人，但是今天他好像挺高兴。我今天看到他的时候他在遛小狗。我想知道那是否就是使他高兴的事。
2. A: Martin 是非常优秀的学生。他总是能获得好成绩，甚至他的老师们都夸他很聪明伶俐。
B: Martin 的数学老师今天给他妈妈打了电话。他很高兴因为他准备好了参加下周的测试。
3. A: Maria Candelaria 是一个相貌平平的女孩。但是 Eduardo 觉得她今天看起来非常漂亮。
B: Eduardo 觉得 MariaCandelaria 非常漂亮。他每天都赞美她有多么的漂亮。
4. A: Juan 的兄弟告诉他去打扫地板，因为已经特别脏了。
B: 通常是 Juan 的兄弟打扫地板。
5. A: Elizabeth 经常在生物课上睡着。因为这个老师的课基本都很枯燥乏味。
B: Elizabeth 觉得今天的生物课无趣。
6. A: Elena 的妈妈夸她是一个很活泼可爱的女孩。
B: Elena 能存活下来离不开她母亲的悉心照料。

Appendix E (Continued)

III: MÁS DIBUJOS: 马上，你将听到一个西语句子。听完后，从下面给出的A，B图中圈出一个最能体现从听力中描述的情形。

A



B



Appendix E (Continued)

IV. MINI-DIALOGUES

提示：此题是根据情景补充对话。你的回答必须做到语法无误，必须从上面给出的词中选出一个最恰当的，然后通过给出的具体语境添加其他所需的词组或者动词，最后完成对话。注意：给出的中文题目是为了帮助你更好的理解情景对话，从而做到语义精准，语法无误。

MODELO: *Julieta* 和 *Carlos* 正朝着某个地方走去。

choices:	triste	carro	muy lento	grande
-----------------	--------	-------	-----------	--------

Carlos: Apúrate (hurry up), por favor. No queremos llegar tarde.

Julieta: Oye, tú sabes cómo camino.

Carlos: Sí, yo sé. Pero no me gusta llegar tarde a ninguna parte.

Julieta: Bueno, si quieres andar conmigo, _____, porque yo tengo el pie fracturado.

你的回答: caminas muy lento.

1. *Cortes* 老师的学生 *Thalia* 在向他询问他们期末考试的地点。。。

choices:	cibernética	cancelada	confirmada	linda
-----------------	-------------	-----------	------------	-------

Thalía: Profe., ¿dónde va a ser el examen final para nuestra clase?

Profe. Cortés: Pues, no sé. La reservación aún no _____.

Thalía: ¡Qué mal! Yo quería comprar un pasaje de avión para mis vacaciones. Pero no puedo porque todavía no sé cuándo vamos a tener el examen.

Appendix E (Continued)

2. *Pablo* 想要 *Yamile* 陪自己去参加表姐的婚礼。。。

choices:	triste	carro	lento	grande
-----------------	--------	-------	-------	--------

Pablo: Este viernes es la boda de mi prima. ¿Quieres ir conmigo?

Yamile: Ay, ¡me encantan las bodas!

Pablo: ¿De verdad?

Yamile: Sí, pero después siempre _____ porque aún soy soltera.

3. *Jaime* 被一栋新建筑物所震惊, 所以他请教自己的建筑师朋友 *Dimas* 它是如何建造的。。。

choices:	sostenido	celebrado	excelente	maravilloso
-----------------	-----------	-----------	-----------	-------------

Jaime: Ese nuevo edificio es muy impresionante. Pero ¿cómo es posible que no se caiga (doesn't fall) ese arco (arch)?

Dimas: Simple. El arco _____ por varias columnas.

4. *Sharon* 爱吃中国的食物。她和自己的朋友 *Eucaris* 探讨中国的食物。。。

choices:	quemado	dicho	hecho	sabrosa
-----------------	---------	-------	-------	---------

Eucaris: ¿Quién te enseñó a preparar la comida china?

Sharon: Mi madre es de China, y desde niña ella me ha enseñado a cocinar.

Eucaris: ¿Y quién hizo este puerco picoso (hot)?

Sharon: El puerco _____ por mí.

Appendix E (Continued)

5. Rogelio 正在向他的兄弟 Ruben 展示自己的新车。。

choices:	antiguo	orgullosa	presumido	adornado
-----------------	---------	-----------	-----------	----------

Rogelio: Hola hermano, ¿qué opinas de mi nuevo carro?

Rubén: Es muy bonito. ¿Cómo te sientes?

Rogelio: _____ de él. Quiero enseñárselo (show it) a nuestro padre.

6. Jonatan 喜爱 Gerardo 的贝斯吉他。。

choices:	fácil	escondido	rojo	vivo
-----------------	-------	-----------	------	------

Jonatán: ¿Dónde pusiste tu bajo (bass guitar)?

Gerardo: _____. No quiero que me lo rompas (break it).

7. 关于同学和自己好朋友 Laura 的事情, Rocío 发表了自己的看法。。

choices:	creído	inventado	romántica	divertida
-----------------	--------	-----------	-----------	-----------

Rocío: Ese muchacho me cae mal.

Laura: ¿Cómo así? ¡Es muy guapo!

Rocío: No me importa. Él presume (boasts) demasiado. A mi ver (in my opinion), _____.

Appendix E (Continued)

8. Rosita 的叔叔 Wilber 对于她选择青春活力的时尚感到困惑。。

choices:	nuevos	sucias	elegante	genial
-----------------	--------	--------	----------	--------

Wilber: Rosita, ¿a dónde vas con esos pantalones tan viejos?

Rosita: ¿Viejos? Estos jeans _____. Acabo de comprarlos.

Wilber: ¿Cómo puede ser? Tienen muchas manchas (stains).

Rosita: Jaja. Tío, es que tú no sabes nada de la moda.

9. Jimena 想去公园和爸爸 (Aarón) 一起玩。。

choices:	ocupado	difícil	feo	muerto
-----------------	---------	---------	-----	--------

Jimena: Papi, vamos al parque. ¡El clima está perfecto!

Aarón: Ay, m'ija (my child), yo también quiero ir al parque, pero hoy no puedo.

Jimena: ¿Por qué no?.

Aarón: Porque hoy tu papi _____.

10. . Isaí 正在向他的朋友 Daniel 谈论她的感情生活。。

choices:	enamorada	coqueto	decepcionado	roto
-----------------	-----------	---------	--------------	------

Isaí: No sé qué hacer, Daniel. Me siento muy mal.

Daniel: ¿Por qué estás tan triste, hermano?

Isaí: Bueno, ¿tú conoces a mi novia, verdad?

Daniel: ¡Claro! Ella es muy linda.

Isaí: Pues, ahora me dice que quiere salir con otro chavo (guy). Su sobrenombre (nickname) es Sancho.

Daniel: ¿Sancho? Yo lo conozco a él. El otro día me dijo que _____. Pero no sabía de quién.

Appendix F: Assessment B

测试中的词汇

下面列出的这些词汇在接下来的测试中会出现。现在熟悉这些词汇以及它们的含义，如果离开这个页面，你将不能再返回此页查阅单词。现在你有两分钟的学习时间。

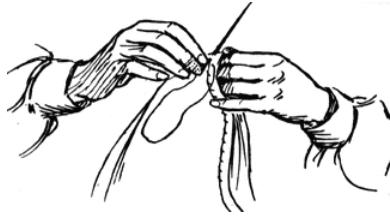
coser	缝合
quemar	灼伤
reconocer	认出
el trapeador	拖把
una esponja	海绵
lindo	靓
regalar	给礼物
un sucursal	分公司（商业）
confundir	使困惑
delgado	薄的
el/la gerente	经理
asustar	惊吓
enfermo	生病的

Appendix F (Continued)

I. DIBUJOS

提示：每一幅图你都将会听到一个西语句子。听完后，选出最符合所听内容。

1.



2.



3.



Appendix F (Continued)

II. ESCUCHAR: 你将马上听到一个西语句子。听完后，从给出的A, B 中文句子中选出一个最能表达听力中的含义。

- A: 老师糊涂了，他认为今天是星期天，所以他正在上一堂不是今天的课。

B: Juanito 总是问一些与课堂上不相干的问题，所以老师被 Juanito 搞迷糊了。
- A: 那块海绵看起来又旧又破，所以我不会用它来洗碗。

B: 那块海绵是我爸爸一直用来洗碗的海绵。
- A: 你的车今天看起来挺靓丽，你是不是刚洗过呢？

B: 你的车很漂亮，等我有钱了我也想买一辆这样的车。
- A: Carla 今天生病了，所以她不能来上课。

B: Carla 病得厉害，她已经在医院里呆了三个月了。
- A: 即使今天是节假日，这个中国邮政银行支行也是开门营业的。

B: 这个中国邮政支行每天早上 8 点是经理来开门。
- A: 你的皮肤很红，我认为是晒伤了。你在太阳底下多久了？

B: 今天一定要涂抹防晒霜，因为你知道你的皮肤容易被太阳晒伤。

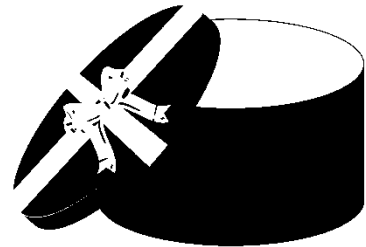
Appendix F (Continued)

III: MÁS DIBUJOS: 你将马上听到一个西语句子。听完后，从下面给出的A, B图中圈出一个最能体现听力中描述的情形。

A



B



Appendix F (Continued)

IV. MINI-DIALOGUES

提示：此题是根据情景补充对话。你的回答必须做到语法无误，必须从上面给出的词中选出一个最恰当的，然后通过给出的具体语境添加其他所需的词组或者动词，最后完成对话。注意：给出的中文题目是为了帮助你更好的理解情景对话，从而做到语义精准，语法无误。

MODELO: *Julieta* 和 *Carlos* 正朝着某个地方走去。。。

choices:	triste	carro	muy lento	grande
----------	--------	-------	-----------	--------

Carlos: Apúrate (hurry up), por favor. No queremos llegar tarde.

Julieta: Oye, tú sabes cómo camino.

Carlos: Sí, yo sé. Pero no me gusta llegar tarde a ninguna parte.

Julieta: Bueno, si quieres andar conmigo, _____, porque yo tengo el pie fracturado.

你的回答: caminas muy lento.

1. *Tania* 想要和 *Fernando* 一起去购物 (*Fernando* 的小名是 *Fercho*)。。。

choices:	listo	lejos	ocupado	desinflado
----------	-------	-------	---------	------------

Tania: ¡Épa! (hey!), Fercho. ¿A dónde vas?

Fernando: Voy a ir de compras.

Tania: ¡Ay! Yo también quiero ir. Por favor, ¿me permites acompañarte?

Fernando: No sé. Es que ya (already) _____, y parece (it seems) que tú aún (still) no lo estás.

Appendix F (Continued)

2. Sharon 正在教她的侄女 Shelby 使用地铁（轻轨）。。。

choices:	lenta	ubicada	asustada	roja
-----------------	-------	---------	----------	------

Sharon: Y ahí es donde compras el pasaje.

Shelby: ¿Dónde?

Sharon: ¿Ves la máquina que _____ en la esquina?
Ésa es la que usas para comprar tu boleto.

Shelby: ¡Ay no! Creo que todo esto va a ser demasiado difícil.

3. David 正建造一栋房屋并且请求他的朋友 Jónatan 的帮忙。。。

choices:	fuerte	edificado	amigable	ignorante
-----------------	--------	-----------	----------	-----------

David: Voy a construir una casa grande para mi esposa, pero necesito ayuda. ¿Me puedes ayudar con el fundamento este fin de semana?

Jónatan: ¡Claro!, tú eres mi mejor amigo, pero hay un problema. No sé nada de construcción. _____. Si tú me puedes enseñar (teach), yo te puedo ayudar.

4. José Belén 想要找一份新工作，所以他在和业务经理交谈。。。

choices:	trabajador	jubilado	alto	talentoso
-----------------	------------	----------	------	-----------

José Belén: Disculpe, señor, ¿es usted el gerente de este negocio?

Gerente: Sí, señor. ¿En qué le puedo servir?

José Belén: Pues, necesito un trabajo. ¿Busca usted nuevos empleados?

Gerente: Sí, señor. Necesito un empleado que pueda trabajar muchas horas diarias.

José Belén. ¡Excelente! A mí me gusta trabajar mucho.

_____.

Appendix F (Continued)

5. *Edith* 正和她的表姐 *Nancy* 因为一件衬衫而争论。。

choices:	bonita	elegante	estrafalaria	rota
-----------------	--------	----------	--------------	------

Edith: ¿Esa blusa es mía?

Nancy: No, mi madre me la dio.

Edith: No te creo. Es el color exacto de mi blusa, y es del mismo estilo. Y ahora ya no la puedo llevar (wear) porque _____.
¿Por qué arruinas las cosas de otras personas?

6. *Carlos* 向他的兄弟 *Wilson* 要钱。。

choices:	pobre	rico	quebrado	perdido
-----------------	-------	------	----------	---------

Carlos: ¿Hermano me das un poco de dinero? Tengo una cita (date) con Angélica, y quiero llevarla al cine.

Wilson: Bueno, yo quiero darte dinero, pero no encuentro mi cartera, y por eso _____ también. Lo siento.

7. *Gabriela* 正准备离开自己的国家去留学。。

choices:	confirmado	boleto	agotador	cansado
-----------------	------------	--------	----------	---------

Gabriela: ¿Puede usted confirmar mi vuelo?

Agente de viajes: Lamentablemente, no podemos hacer eso. Su vuelo _____ por la línea aérea.

Gabriela: Entonces, ¿puede usted darme el número de teléfono de *China Air*, por favor?

Appendix F (Continued)

8. *Kenny* 写好了一首歌并且请求他的兄弟给出对这首歌的意见。。。

choices:	compuesta	cantada	bella	terrible
-----------------	-----------	---------	-------	----------

Kenny: Ronny, ¿tienes un momento para escuchar una canción nueva?

Ronny: ¿Nueva? Claro. Dale (Go ahead).

Kenny: 🎵 🎵 🎵 🎵 ¿Qué opinas de la canción?

Ronny: Me gusta mucho. ¿De quién es la canción?

Kenny: _____ por tu hermano.

Ronny: ¿Es tu canción? ¡Genial, hermano! Tienes mucho talento.

9. *Alesandro* 和 *Eunice* 聊关于最近的难事。。。

choices:	desagradable	fácil	horrendo	deshonesto
-----------------	--------------	-------	----------	------------

Alesandro: Ya no puedo soportar esta situación. No sé qué voy a hacer.

Eunice: Cálmate, Alesandro. Te prometo que todo va a estar bien.

Alesandro: ¿Y cómo lo sabes tú? Nunca tienes problemas.

Eunice: ¡Qué _____ hoy! Normalmente eres tan amable, pero ¡hoy no te soporto a ti!

10. *María* 悔恨自己和妈妈谈话时做的一个糟糕的决定。。。

choices:	decepcionada	excepcional	contenta	emocionada
-----------------	--------------	-------------	----------	------------

María: Mamá, ayer tomé una mala decisión.

Mamá: ¿Qué hiciste, hija?

María: Un chico lindo quiere salir conmigo, pero le dije que no puedo.

Mamá: ¿Por qué dijiste eso? ¿Ya tienes otro novio?

María: Ay, mamá, ¡claro que no! Pero mi amiga dice que este muchacho ya tiene otra novia. _____. Este chico realmente me gusta.

Appendix G: Assessment C

测试中的词汇

下面列出的这些词汇在接下来的测试中会出现。现在熟悉这些词汇以及它们的含义，如果离开这个页面，你将不能再返回此页查阅单词。现在你有两分钟的学习时间。

enviar	递送
escribir	写
pagar	支付
la tiza	粉笔
bolígrafo	铅笔
sabio	明智的
aspirar	用吸尘器清洁
un obsequio	一个礼物
enamorar	是某人坠入爱河
hermoso	可爱的
la alfombra	地毯
pesar	称重
grave	严重地

Appendix G (Continued)

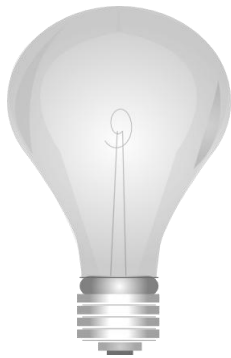
I. DIBUJOS

提示：每一幅图你都将会听到一个西语句子。听完后，选出最符合所听到的内容。

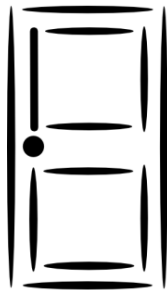
1.



2.



3.



Appendix G (Continued)

II. ESCUCHAR:

你将马上听到一个西语句子。听完后，从给出的A，B中文句子中选出一个最能表达听力中的含义。

1. A: 包裹已传递，应该很快到达。
B: 包裹是通过敦豪速递公司发送，它是一家受欢迎的包裹服务公司。

2. A: 我的女朋友说她爱上了路易斯马吉尔，她最爱的歌手，她还说他非常的帅气。
B: 那个女士是路易斯马吉尔的女朋友。

3. A: 租金已经付了，我们可以用剩下的钱去约会了。
B: 租金被我父亲付了，因为我在课外打工上没挣到足够多的钱。

4. A: Castrillo 老师是一个很可爱的人，他对每一个人都友善和尊重。
B: Castrillo 老师今天看起来难以置信的帅。他一直都在健身吗？

5. A: 现在乌克兰的局势非常的严重。
B: Eucaris 的健康状况很不好。

6. A: 黑板是崭新的，因为它从来没被用过。
B: 黑板非常干净，他们一定用了一种特殊的化学品去清洗它。

Appendix G (Continued)

III: MÁS DIBUJOS: 你将马上听到一个西语句子。听完后，从下面给出的A, B图中圈出一个最能体现听力中描述的情形。



Appendix G (Continued)

IV. MINI-DIALOGUES

提示：此题根据情景补充对话。你的回答必须做到语法无误，必须从上面给出的词中选出一个最恰当的，然后通过给出的具体语境添加其他所需的词组或动词，最后完成对话。注意：给出的中文题目是为了帮助你更好的理解情景对话，从而做到语义精准，语法无误。

MODELO: *Julieta* 和 *Carlos* 正朝着某个地方走去。。。

choices:	triste	carro	muy lento	grande
-----------------	--------	-------	-----------	--------

Carlos: Apúrate (hurry up), por favor. No queremos llegar tarde.

Julieta: Oye, tú sabes cómo camino.

Carlos: Sí, yo sé. Pero no me gusta llegar tarde a ninguna parte.

Julieta: Bueno, si quieres andar conmigo, _____, porque yo tengo el pie fracturado.

Your answer: caminas muy lento .

1. *Castrillo* 老师的学生正计划用蛋糕给他一个生日惊喜。。。

choices:	verde	claro	bacano	hecho
-----------------	-------	-------	--------	-------

Emilia: ¿Has comprado el pastel para la fiesta del Profesor Castrillo?

Jade: No, aún no lo compramos..

Emilia: ¿Qué dices? ¡Tenemos que darle un pastel!

Jade: No te preocupes (don't worry 别担心), Emilia. El pastel ya _____ . ¡Yo lo hice en casa!

Appendix G (Continued)

2. 当另外一个老师进来聊天的时候, *Guadalupe* 老师正在为新学期的到来准备着她的教室。。。

choices:	sucia	humilde	fabulosa	agitada
-----------------	-------	---------	----------	---------

Sra. Escobar: Hola, *Guadalupe*. ¿Cómo estás?

Guadalupe: Hola, Sra. Escobar. Yo estoy muy bien, gracias.

Sra. Escobar: Tu sala de clase se ve muy impresionante.

_____.

Guadalupe: Ay, gracias. Espero que los adornos les gustan a mis nuevos estudiantes.

3. 当 *Yaqui* 向 *Marisabel* 打招呼的时候, 她正等待着学生选举的结果, 因为她是竞争者之一。。。

choices:	publicados	eliminados	elegidos	rechazados
-----------------	------------	------------	----------	------------

Marisabel: Espero que gane la elección. Realmente quiero ser la presidenta de nuestro gobierno estudiantil.

Yaqui: Hola *Marisabel*. ¿Qué haces? ¿Oíste los resultados de la elección estudiantil?

Marisabel: ¡No! ¿_____?

Yaqui: Sí ... Srta. Presidente. ¡Muchas felicidades!

4. *Olivio* 喜爱墨西哥美食, 但是 *Saín* 更喜欢洪都拉斯的。。。

choices:	rica	pobre	caliente	picante
-----------------	------	-------	----------	---------

Olivio: Vamos a cenar en *Las Palmas*. Yo te invito.

Saín: *Las Palmas* tiene buena reputación, pero no quiero cenar comida mexicana.

Olivio: ¿Por qué? ¿No viviste en México por varios años?

Saín: Sí, pero soy nativo de Honduras, y la comida mexicana _____ para mí.

Appendix G (Continued)

5. *Bárnabe* 和 *Saulo* 正在旅行。。

choices:	emocionado	tarde	temprano	anotado
-----------------	------------	-------	----------	---------

Bárnabe: ¿Qué hora es, hermano?

Saulo: Son las nueve y cuarto. ¿Por qué preguntas?

Bárnabe: Creo que el tren _____ porque el horario dice que debe llegar a las nueve en punto.

Saulo: Tranquilo, hermano. Nosotros llegamos a tiempo. No creo que lo hayamos perdido.

Bárnabe: Tienes razón.

6. 今天是 *Elias* 的婚礼，但他在过去 5 年中这是第一次看到前女友，他把这次相遇告诉了 *Samuel*。。

choices:	fea	inteligente	desesperada	envejecida
-----------------	-----	-------------	-------------	------------

Elías: ¡He visto un fantasma!

Samuel: ¿Qué te pasa, primo?

Elías: Mi ex-girlfriend, Cindy, vino a la boda. Esta es la primera vez que la veo en cinco años.

Samuel: ¿En serio? ¿Ya hablaste con ella?

Elías: Sí, y casi me vomito.

Samuel: No digas eso. Estás bien. Amas a Melinda y ella también te ama. ¿Por qué te pones tan nervioso?

Elías: No, no. Nada que ver. Es que Cindy siempre me parecía muy bella. Pero ahora _____.

Samuel: Qué bárbaro eres. Concéntrate en Melinda, primo.

Appendix G (Continued)

7. *Rudolfo* 和他新的英语指导老师 *Rebecca* 见面。。

choices:	listo	ingenuo	negligente	alto
-----------------	-------	---------	------------	------

Rebecca: Hola, ¿eres *Rudolfo*? Yo me llamo *Rebecca*.

Rudolfo: Encantado de conocerla.

Rebecca: Igual. ¿Así que necesitas ayuda con tu tarea de inglés?

Rudolfo: Así es. Es que no soy muy bueno para el inglés.

Rebecca: ¡No digas eso! No tengo duda de que _____, y pronto vas a hablar muy bien el inglés.

8. *Gloria* 和 *Roberto* 在音乐上没有相同的品味。。

choices:	fabulosa	sorda	movida	fuerte
-----------------	----------	-------	--------	--------

Gloria: *Roberto*, sube el volumen, por favor. Me encanta esta canción.

Roberto: ¿Te gusta esta canción? Yo no la soporto.

Gloria: ¿Cómo así? El ritmo es muy bueno para bailar.

Roberto: Exacto. La canción _____ y no sé bailar.

9. *Dino* 正在学习他最喜爱的一本书，而且他还一边告诉朋友 *Aarón* 书里写了些什么。。

choices:	cercanos	igualitarios	equivocados	mundanos
-----------------	----------	--------------	-------------	----------

Aarón: Hola, *Dino*. ¿Qué lees?

Dino: Ah, este es mi libro favorito.

Aarón: Sí, ¿de que se trata?

Dino: Bueno, dice que las personas afortunadas deben ayudar a los que no tienen muchas ventajas o muchos privilegios en la vida. Sí no hacemos esto, _____.

Aarón: ¡Muy interesante tu libro!

Appendix G (Continued)

10. *Pedro* 和 *Juan* 正在和一个生病的, 名叫 *Tobía* 的男人说话。。。

choices:	dado	comprado	sanado	indicado
-----------------	------	----------	--------	----------

Tobías: Señores, ¿me pueden ayudar a comprar vino? Quiero olvidarme del dolor que siento en mis riñones (kidneys).

Pedro: Amigo, no tenemos dinero.

Juan: Mi hermano, Pedro, tiene razón. No tenemos dinero, pero sí tenemos algo que darte.

Tobías: ¿Sí? ¿Qué es?

Juan: Te damos un buen consejo. En tu caso, beber vino no _____ para los enfermos. En vez de comprar vino, debes comprar medicina.

Appendix H: List of Acronyms

ANOVA – Analysis of Variance

CALL – Computer-Assisted Language
Learning

CMS – Course Management System

DG – Dictogloss Instruction

EI – Explicit Information

IP – Input Processing

IRB – Institutional Review Board

KTSC – Knowledge Test of Spanish

Copulae

L1 – First Language

L2 – Second or Subsequent Language

LMS – Learning Management System

MANOVA – Multiple Analyses of

Variance

MOBI – Meaningful Output-Based

Instruction

MOI – Meaning-Based Output

Instruction

OVS – Object, Verb, Subject word order

PI – Processing Instruction

PRC – People’s Republic of China

SCORM - Shared Content Object

Reference Model

SI – Structured Input

SLA – Second Language Acquisition

SVO – Subject, Verb, Object word order

TI – Traditional Instruction

TL – Target Language

Appendix I: Images Appearing in Research Materials

Note: Images cited below are listed in order of appearance in the research materials reproduced in Appendices C – G. The page number on which they appear in this dissertation is enclosed in brackets at the end of each citation. All images are either (a) reproduced with permission, (b) fall under public domain, or (c), fall under the Fair Use protections for limited use of copyrighted materials used in research; Copyright Act of 1976, 17 U.S.C. § 107.

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Appendix I (Continued)

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