

***La influencia de la interferencia de la lengua materna en la adquisición de una segunda lengua***

*The Influence of Native Language Interference on the Second Language Acquisition*

*L'influenza dell'interferenza della lingua materna sull'acquisizione della seconda lingua*

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## Resumen

La adquisición de una segunda lengua no ocurre de manera independiente del conocimiento lingüístico previo: los aprendices recurren de forma continua a su lengua materna al procesar y producir la lengua meta. Aunque la influencia interlingüística cuenta con amplio desarrollo teórico, escasean los estudios empíricos que integren perspectivas generativas, cognitivas y sociopragmáticas en español-inglés, particularmente en la producción oral espontánea. Este estudio analizó la influencia del español en el desempeño oral en inglés de estudiantes universitarios. Mediante un diseño de métodos mixtos predominantemente cuantitativo, se combinó un esquema cuasiexperimental de grupo único (pretest-posttest) con una matriz de codificación de transferencias y entrevistas de recuerdo estimulado. Quince universitarios hispanohablantes (19-24 años, nivel A2-B1) de una institución ecuatoriana realizaron una tarea oral improvisada de tres minutos, evaluada por dos jueces mediante una rúbrica analítica fonológica y morfosintáctica (30 puntos totales), antes y después de ocho semanas de instrucción contrastiva. Tras la prueba de Shapiro-Wilk, se aplicaron pruebas *t* para muestras relacionadas. Las puntuaciones fonológicas aumentaron de 7,20 a 8,80; las morfosintácticas, de 7,93 a 9,80; y el puntaje total creció un 22,91 % (de 15,13 a 18,60). Todas las comparaciones resultaron estadísticamente significativas con efectos intra sujeto elevados (1,18 a 1,50). Cualitativamente se evidenciaron omisiones de sujeto, predicados calcados y epéntesis vocálica, junto con transferencias facilitadoras; el recuerdo estimulado asoció la interferencia a restricciones de procesamiento en tiempo real.

**Palabras clave:** influencia interlingüística, transferencia de la primera lengua, adquisición de segundas lenguas, producción oral en inglés, bilingüismo español-inglés

## Abstract

Second language acquisition does not proceed independently of prior linguistic knowledge: learners continuously draw on their first language when processing and producing a target language. Although cross-linguistic influence has been extensively theorized, empirical work integrating generative, cognitive, and socio-pragmatic perspectives on the Spanish–English pair remains scarce, particularly regarding spontaneous oral production. This study analyzed the influence of Spanish on English speaking performance among university learners. A dominantly quantitative mixed-methods design combined a single-group quasi-experimental pretest–posttest comparison with a transfer coding matrix and stimulated recall interviews. Fifteen Spanish-speaking undergraduates aged 19 to 24, at the A2–B1 range at an Ecuadorian university, completed an unprepared three-minute speaking task, double-rated with an analytic rubric comprising phonological and morphosyntactic subscales totaling thirty points, before and after eight weeks of contrastive instruction. Following Shapiro–Wilk testing, paired-samples *t*-tests were applied. Phonological scores increased from 7.20 to 8.80, morphosyntactic scores from 7.93 to 9.80, and total speaking scores from 15.13 to 18.60, a gain of 22.91 percent. All comparisons were statistically significant, with large within-participant effect sizes ranging from 1.18 to 1.50. Qualitative coding documented null-subject omission, structurally calqued predicates, and vowel epenthesis, together with instances of facilitative transfer; recall data indicated that part of the interference reflected real-time processing constraints rather than absent explicit knowledge.

*Keywords:* cross-linguistic influence, first language transfer, second language acquisition, English oral production, Spanish–English bilingualism

## **Riassunto**

L'acquisizione di una seconda lingua non procede indipendentemente dalle conoscenze linguistiche pregresse: gli apprendenti attingono continuamente alla propria lingua materna quando elaborano e producono la lingua obiettivo. Sebbene l'influenza interlinguistica sia stata ampiamente teorizzata, gli studi empirici che integrano le prospettive generativa, cognitiva e sociopragmatica sulla coppia spagnolo–inglese restano scarsi, in particolare per quanto riguarda la produzione orale spontanea. Il presente studio ha analizzato l'influenza dello spagnolo sulla produzione orale in inglese di studenti universitari. Un disegno a metodi misti a prevalenza quantitativa ha combinato un confronto quasi-sperimentale pretest–posttest a gruppo unico con una matrice di codifica del transfer e interviste di richiamo stimolato. Quindici studenti universitari ispanofoni, di età compresa tra 19 e 24 anni e di livello A2–B1, di un'università ecuadoriana hanno svolto un compito orale improvvisato di tre minuti, valutato da due giudici con una rubrica analitica composta da una sottoscala fonologica e una morfosintattica per un totale di trenta punti, prima e dopo otto settimane di istruzione contrastiva. Dopo il test di Shapiro–Wilk sono stati applicati test *t* per campioni appaiati. I punteggi fonologici sono aumentati da 7,20 a 8,80, quelli morfosintattici da 7,93 a 9,80 e il punteggio orale totale da 15,13 a 18,60, con un incremento del 22,91 %. Tutti i confronti sono risultati statisticamente significativi, con dimensioni dell'effetto intra-soggetto elevate, comprese tra 1,18 e 1,50. La codifica qualitativa ha documentato l'omissione del soggetto, predicati calcati sulla struttura spagnola ed epentesi vocalica, insieme a casi di transfer facilitante; i dati del richiamo stimolato hanno indicato che parte dell'interferenza rifletteva vincoli di elaborazione in tempo reale più che l'assenza di conoscenze esplicite.

*Parole chiave:* influenza interlinguistica, transfer dalla prima lingua, acquisizione della seconda lingua, produzione orale in inglese, bilinguismo spagnolo–inglese

## **Introduction**

Second language acquisition (SLA) does not start from scratch. Learners bring their first language (L1) knowledge, structures, and cognitive patterns to a new linguistic system, and this prior knowledge influences second language (L2) learning through a phenomenon called language transfer, more recently conceptualized as cross-linguistic influence (CLI) (Jarvis & Pavlenko, 2008). CLI is not a simple transfer of grammatical habits; it is the interaction between two linguistic systems within a bilingual mind, shaping how learners perceive, process, and produce language.

Early approaches, particularly Contrastive Analysis, viewed differences between the native and target languages as the main cause of learners' errors and saw the first language as an obstacle. Modern theories recognize that the native language is also a crucial cognitive resource that helps learners process language, form hypotheses, and communicate when they encounter gaps in their L2 knowledge. Within the generative framework, the first language is the learner's initial state, providing the structural blueprint upon which L2 knowledge is gradually built (Schwartz & Sprouse, 1996), and the Feature Reassembly Hypothesis holds that L2 acquisition requires reorganizing semantic, syntactic, and morphological features that are differently

encoded across languages, so that transfer is a process of cognitive restructuring rather than simple habit replacement (Lardiere, 2009).

In contrast, cognitive and connectionist approaches explain transfer as a result of general learning mechanisms rather than innate grammatical principles. According to this perspective, language acquisition relies on memory, pattern recognition, frequency of exposure, and processing efficiency (N. C. Ellis, 2005). Since the neural pathways associated with the native language are highly automatized, learners naturally rely on familiar linguistic structures when processing the L2, especially when time is limited or cognitive load is increased (MacWhinney, 1997). Moreover, conceptual transfer extends beyond grammar to encompass how individuals organize concepts like time, space, motion, and emotion through the lens of their first language (Jarvis & Pavlenko, 2008).

Socio-pragmatic perspectives broaden our understanding of cross-linguistic influence by highlighting the significance of social identity, cultural background, and communicative context. From this perspective, the transfer of discourse conventions, politeness strategies, or cultural conceptualizations is not necessarily due to linguistic deficiency but may reflect learners' efforts to maintain aspects of their identity while communicating in another language (Pavlenko, 2005).

Furthermore, learners' perceptions of the similarity between their native and target languages, known as psychotypology, can significantly impact the extent to which they consciously or unconsciously rely on their native language knowledge during second language production (Kellerman, 1983).

The Spanish–English pair offers a valuable context for examining these perspectives. Both languages share much vocabulary but differ in grammatical organization, phonology, and syntax. Spanish allows the omission of subject pronouns, leading learners to produce sentences like *Is late* instead of *It is late*, and phonological differences often result in the insertion of an initial vowel before consonant clusters, producing forms like *eschool* or *estudent*. These recurring patterns are evidence of the cognitive influence of the native language during L2 processing. They are particularly relevant in university settings, where students can formulate complex ideas in their L1 but often lack the English resources to express them, and therefore rely on internal translation and L1-based structures.

The impact of L1 transfer is notably pronounced in the development of speaking skills, a highly cognitively demanding aspect of language acquisition. Speaking necessitates rapid information processing, simultaneous vocabulary retrieval, grammatical rule application, idea organization, and real-time intelligible pronunciation. Unlike writing, which permits planning and revision, oral communication operates under immediate processing constraints, offering limited opportunities for language production monitoring (Levelt, 1989). Consequently, learners often depend on the linguistic structures and phonological patterns of their first language when communicating in a target language. This dependency frequently results in pronunciation challenges, syntactic transfer, inappropriate lexical choices, and pragmatic deviations, potentially diminishing communicative effectiveness (R. Ellis, 2015).

From a cognitive standpoint, L1 transfer is intricately linked to the limitations of working memory during spontaneous speech. Kormos (2006) posits that speaking encompasses several interconnected processes, including conceptualization, formulation, articulation, and self-monitoring. When learners face cognitive overload due to restricted linguistic resources or communicative pressure, they instinctively activate the most automated linguistic system

available—their native language. Therefore, transfer-related errors should not be solely interpreted as indicators of inadequate language proficiency but also as reflections of the cognitive strategies learners employ to sustain communication. This perspective shifts the focus from error correction to understanding the underlying cognitive mechanisms that influence oral language production.

Phonological transfer is one of the most apparent manifestations of L1 influence on speaking performance. Learners frequently apply the sound system, stress patterns, rhythm, and intonation of their native language when producing speech in a target language, leading to foreign-accented pronunciation and reduced intelligibility (Major, 2008). Similarly, morphosyntactic transfer impacts spoken fluency when learners unconsciously replicate sentence structures or word order from their L1. Lexical transfer may also occur through the use of cognates, false cognates, or direct translations, which can facilitate communication in certain contexts but cause misunderstandings in others. These forms of transfer illustrate that oral production is shaped not only by linguistic knowledge but also by the interaction between cognitive processing and prior language experience.

Despite the challenges associated with negative transfer, contemporary second language acquisition (SLA) research emphasizes that the first language should not be perceived solely as a source of interference. Instead, it serves as a valuable cognitive resource that supports language learning by facilitating conceptual understanding, vocabulary acquisition, and strategic communication (Jarvis & Pavlenko, 2008). Recognizing both the facilitative and inhibitory effects of L1 transfer enables educators to adopt more balanced pedagogical approaches that help learners identify transferable linguistic knowledge while addressing areas where interference is likely to occur. Such approaches encourage language awareness, reduce learners' anxiety during oral communication, and promote the gradual development of automaticity in speaking.

Despite this theoretical foundation, empirical research integrating generative, cognitive, and socio-pragmatic perspectives on the Spanish–English pair remains scarce. Most studies examine L1 transfer through isolated error analyses or written and controlled tasks, leaving a gap in the understanding of how transfer manifests under the real-time demands of spontaneous speech among Spanish-speaking university students. Therefore, this study aims to analyze the influence of Spanish as a first language on the English oral production of university students, examining language transfer from generative, cognitive, and socio-pragmatic perspectives, in order to support more effective and linguistically informed teaching strategies that recognize the native language not as an obstacle but as a foundation for bilingual development.

## **Theoretical Framework**

### **Native Language Interference and Second Language Acquisition**

SLA is a multifaceted process influenced by linguistic, cognitive, social, and environmental factors, among which the learner's L1 is one of the most significant. Odlin (2003) explains that cross-linguistic influence pertains to the ways in which knowledge of one language affects the learning and use of another; consequently, L2 acquisition does not occur independently of prior linguistic knowledge.

Historically, early language learning frameworks, particularly Contrastive Analysis, viewed native language transfer through a deficit-oriented lens. In these traditional models, structural disparities between the L1 and L2 were considered the primary source of systematic

learner errors. This perspective framed the native language as an obstacle or source of interference that hindered L2 mastery. However, advancements in cognitive linguistics and Second Language Acquisition (SLA) have transformed this paradigm. Modern frameworks recognize that the native language functions not merely as a source of interference but as a critical cognitive resource. It enables learners to construct hypotheses, process unfamiliar input, and navigate communicative gaps when L2 linguistic resources are limited. Consequently, language transfer is now understood as a dynamic, multifaceted cognitive process that can simultaneously facilitate and constrain L2 development. The contrast between both views is summarized in Table 1.

**Table 1**

*Native Language Interference and Second Language Acquisition*

| Theoretical Dimension   | Contrastive Analysis Era (Legacy View)      | Modern SLA / CLI Framework (Contemporary View)     |
|-------------------------|---------------------------------------------|----------------------------------------------------|
| <b>Primary Concept</b>  | Direct L1 Interference / Habit Interference | Cross-Linguistic Influence (CLI)                   |
| <b>Role of the L1</b>   | Structural obstacle and source of errors    | Essential cognitive resource and foundation        |
| <b>Cognitive Nature</b> | Passive transmission of behavioral habits   | Dynamic interaction between linguistic systems     |
| <b>Pedagogical Goal</b> | Eradication of surface-level errors         | Development of language awareness and automaticity |

### Cross-Linguistic Influence in Language Learning

The concept of cross-linguistic influence offers a comprehensive perspective for comprehending the role of the L1 in Second Language Acquisition (SLA). Jarvis and Pavlenko (2008) characterize cross-linguistic influence as a multifaceted phenomenon that can impact both language production and comprehension. Their approach demonstrates that L1 influence is not confined to grammatical errors but can also encompass lexical, semantic, conceptual, and pragmatic aspects of language use. Consequently, learners may utilize their knowledge of the native language as a cognitive resource when interpreting or producing L2 forms.

Research on English as an L2 elucidates how disparities between learners' native languages and English can influence acquisition. Their findings revealed that learners' L1 backgrounds influenced their interpretation and utilization of English articles. Spanish-speaking learners, whose L1 includes articles, transferred aspects of the semantic system of Spanish into English, whereas learners whose L1 lacked articles exhibited distinct patterns of interpretation. These findings suggest that learners do not merely memorize isolated L2 forms; instead, they interpret novel linguistic information through preexisting linguistic and conceptual representations.

L1 influence can also interact with the learner's developing interlanguage system. Jarvis (2000) contends that identifying transfer necessitates systematic evidence rather than assuming that every L2 error originates in the learner's first language. Similarities between learners who share the same L1, differences between learners with distinct L1 backgrounds, and similarities between L1 and interlanguage performance can provide evidence of cross-linguistic influence. This perspective is particularly pertinent because L2 errors may have multiple causes, including developmental processes, limited exposure, insufficient knowledge, and processing difficulties. Consequently, the identification of native language interference necessitates meticulous analysis of learners' linguistic production.

## **Effects of Native Language Interference on L2 Acquisition**

Native language interference can significantly impact the development of communicative competence in the target language. At the phonological level, learners may transfer sounds, stress patterns, rhythm, or intonation from their first language (L1) into the second language (L2). At the grammatical level, differences in word order, verb conjugation, articles, prepositions, and sentence formation may lead learners to produce structures that reflect their native language. At the lexical level, learners may translate words and expressions directly from the L1, resulting in inappropriate collocations or false cognates. These forms of interference can affect the accuracy and, in some cases, the comprehensibility of L2 communication.

However, L1 influence is not necessarily permanent or equally strong throughout the learning process. N. C. Ellis (2005) argues that second language development emerges through dynamic interactions among language use, perception, learning, and the linguistic environment. From this perspective, learners gradually develop new associations and representations as they receive and process L2 input. Increased exposure, meaningful interaction, feedback, and attention to linguistic form can therefore contribute to the development of L2 patterns that differ from those established in the L1.

Furthermore, the influence of the L1 may persist even among relatively proficient bilinguals. Odlin (2003) notes that cross-linguistic influence can extend beyond basic linguistic structures and may involve conceptual aspects of language. This suggests that learners may continue to rely on patterns associated with their native language when interpreting or expressing meanings in the L2. Consequently, understanding L1 interference requires consideration not only of observable grammatical or pronunciation errors but also of the cognitive processes underlying language production and comprehension.

## **Implications for Second Language Teaching**

Teachers who acknowledge the differences between students' L1 and the target language can anticipate areas of difficulty and design focused pronunciation practice, perceptual activities, and contextualized contrasts of L1 and L2 structures. Instruction should not, however, perceive the L1 exclusively as an obstacle. Ortega (2013) emphasizes understanding SLA within a multilingual perspective rather than in terms of deficiencies relative to native-speaker norms; teachers can therefore use students' L1 knowledge to promote metalinguistic awareness and to explain why specific L2 forms deviate from familiar L1 patterns.

Consequently, native language interference constitutes an important dimension of second language acquisition because learners' previous linguistic knowledge inevitably interacts with the development of their second language system. While negative transfer may contribute to errors in pronunciation, grammar, vocabulary, and meaning, L1 influence can also facilitate learning when similarities between languages are advantageous. Therefore, the influence of the native language should be understood as a dynamic process of cross-linguistic interaction rather than merely as a source of linguistic errors. Examining this relationship can provide valuable insights into learners' difficulties and assist teachers in developing more effective instructional practices that acknowledge both the challenges and the resources associated with learners' linguistic backgrounds.

## **Methodology**

### **Research Approach and Design**

This study adopted a mixed-methods approach with a dominant quantitative component and an embedded qualitative component (QUAN → qual). The quantitative strand followed a quasi-experimental, single-group pretest–posttest design, in which the same participants were assessed before and after a period of contrastive instruction targeting native language transfer in oral production. The qualitative strand consisted of a transfer coding matrix applied to the recorded speech samples and stimulated recall interviews with a subset of focal participants. A purely quantitative measurement would document whether oral performance improved, but not the structural origin of the transferred forms or the processing conditions under which learners resort to L1 patterns. A single-group design was selected because the participants constituted an intact class, which precluded random assignment to a control condition and constrains the causal claims derived from the results.

### **Participants and Sampling**

Fifteen university students ( $N = 15$ ) enrolled in an undergraduate English course at an Ecuadorian higher education institution participated in the study, selected through non-probabilistic purposive sampling; the intact group was retained in order to preserve the ecological conditions of the classroom. All participants shared Spanish as their first language, were placed at the A2–B1 range of the Common European Framework of Reference, and were between 19 and 24 years of age. Inclusion required regular attendance and completion of both assessment sessions; no attrition occurred. This linguistic homogeneity allows recurrent deviations to be examined against the structural properties of Spanish, one of the evidential conditions identified by Jarvis (2000), while the A2–B1 range ensures sufficient resources to sustain spontaneous speech that is not yet automatized, the condition under which reliance on the L1 becomes most visible (Kormos, 2006).

### **Data Collection Instrument**

Oral performance was assessed through a semi-structured speaking task: each participant spoke for approximately three minutes on a familiar topic presented at the moment of administration, followed by two follow-up questions. The absence of preparation time was deliberate, since planning reduces the processing pressure under which transfer is most likely to surface (Levelt, 1989). An analytic rubric with six criteria distributed across two subscales was designed for this study; each criterion is scored from 1 (transfer-conditioned features consistently disrupt the message) to 5 (such features are largely absent or do not affect comprehension), yielding 15 points per subscale and 30 points overall (Table 2).

**Table 2**  
*Structure and Scoring of the Speaking Assessment Rubric*

| Subscale               | Criterion                                           | Range | Maximum |
|------------------------|-----------------------------------------------------|-------|---------|
| <b>Phonological</b>    | Segmental accuracy in L1-conditioned contrasts      | 1–5   | 5       |
| <b>Phonological</b>    | Syllable structure and consonant cluster production | 1–5   | 5       |
| <b>Phonological</b>    | Word stress, rhythm, and intonation                 | 1–5   | 5       |
| <b>Morphosyntactic</b> | Explicit subject expression                         | 1–5   | 5       |
| <b>Morphosyntactic</b> | Word order and modifier placement                   | 1–5   | 5       |
| <b>Morphosyntactic</b> | Predicate construction and structural equivalence   | 1–5   | 5       |
| <b>Total</b>           |                                                     |       | 30      |

The phonological subscale addresses English contrasts that are not phonemic in Spanish, vowel epenthesis before initial clusters, final clusters, and stress and rhythm, corresponding to the forms of phonological transfer described by Major (2008). The morphosyntactic subscale addresses the omission of overt subjects, modifier placement, and predicates built through direct correspondence with Spanish, as in age expressions formed with a possession verb. Each recording was rated independently by two experienced raters; discrepancies exceeding one scale point were resolved by consensus. In addition, a transfer coding matrix classified each deviation attributable to Spanish by linguistic level (phonological, morphosyntactic, or lexical) and direction (negative or positive transfer), the latter coded when a Spanish-based resource produced a target-appropriate English form.

### Intervention and Procedure

Between the two assessments, participants received eight weeks of contrastive instruction in two sixty-minute sessions per week (sixteen sessions), derived from the transfer patterns identified in the pretest. Sessions addressed the perception and articulation of segments and syllable structures conditioned by Spanish phonology, suprasegmental features such as stress and rhythm, and consciousness-raising activities in which learners compared Spanish and English structures and reformulated their own recorded utterances. Every session concluded with an unprepared communicative task, and activities also identified correspondences that support English production, so that learners recognized their L1 knowledge as a resource (Ortega, 2013). The study followed nine stages:

1. Participants were identified within the intact group and informed consent was obtained.
2. Institutional placement data were reviewed to confirm the A2–B1 proficiency range.
3. The pretest speaking task was administered individually and audio-recorded.
4. Recordings were transcribed and scored independently by two raters using the analytic rubric.
5. The transfer coding matrix was applied to the transcripts, and recurrent patterns of first language influence were identified across the group.
6. The eight-week contrastive intervention was implemented on the basis of those patterns.
7. Stimulated recall interviews were conducted with four focal participants, who listened to selected segments of their own recordings and commented on what they had been attempting to express.

8. The posttest speaking task was administered under the same conditions as the pretest, using an equivalent but non-identical prompt in order to limit content familiarity effects.
9. Pretest and posttest scores were compared through descriptive and inferential analysis.

### Data Analysis and Ethical Considerations

Descriptive statistics (mean, standard deviation, minimum, and maximum), mean differences, and percentage improvement were computed for each subscale and the total score. Because observations were paired, normality of the scores and difference scores was examined with the Shapiro–Wilk test; the paired-samples *t*-test would be applied if normality was reasonably satisfied, and the Wilcoxon signed-rank test otherwise, with  $\alpha = .05$ . Effect sizes were computed as Cohen's *d* for paired samples ( $d_z$ ) with 95% confidence intervals, and all statistics were calculated from the individual score matrix (Table 3). Qualitative data were used to distinguish deviations arising from gaps in explicit knowledge from those arising from processing constraints. Participation was voluntary and based on written informed consent; recordings were anonymized, no scores were used for course grading, and institutional authorization was obtained.

### Results

The study was conducted in a setting in which English functions as a foreign language, with limited opportunities for spontaneous oral interaction, so that the articulatory and syntactic routines of Spanish remain the most automatized system available to learners (MacWhinney, 1997). The individual scores of the fifteen participants are presented in Table 3.

**Table 3**  
*Individual Speaking Scores at Pretest and Posttest (N = 15)*

| Participant | Phonological Pretest | Phonological Posttest | Morphosyntactic Pretest | Morphosyntactic Posttest | Total Pretest | Total Posttest |
|-------------|----------------------|-----------------------|-------------------------|--------------------------|---------------|----------------|
| 1           | 6                    | 9                     | 7                       | 9                        | 13            | 18             |
| 2           | 8                    | 10                    | 9                       | 12                       | 17            | 22             |
| 3           | 7                    | 8                     | 6                       | 7                        | 13            | 15             |
| 4           | 5                    | 9                     | 6                       | 9                        | 11            | 18             |
| 5           | 9                    | 9                     | 10                      | 11                       | 19            | 20             |
| 6           | 7                    | 6                     | 8                       | 7                        | 15            | 13             |
| 7           | 6                    | 8                     | 7                       | 9                        | 13            | 17             |
| 8           | 8                    | 11                    | 9                       | 13                       | 17            | 24             |
| 9           | 10                   | 11                    | 11                      | 12                       | 21            | 23             |
| 10          | 6                    | 8                     | 7                       | 9                        | 13            | 17             |
| 11          | 7                    | 7                     | 8                       | 9                        | 15            | 16             |
| 12          | 9                    | 10                    | 9                       | 11                       | 18            | 21             |
| 13          | 5                    | 8                     | 6                       | 9                        | 11            | 17             |
| 14          | 8                    | 10                    | 8                       | 11                       | 16            | 21             |
| 15          | 7                    | 8                     | 8                       | 9                        | 15            | 17             |

*Note.* Phonological and morphosyntactic subscales range from 3 to 15; total scores range from 6 to 30.

### Phonological, Morphosyntactic, and Overall Results

At the pretest, phonological scores ranged from 5 to 10 and, at the posttest, from 6 to 11; dispersion remained essentially stable. Twelve participants improved, two showed no change, and one decreased by one point. Morphosyntactic performance ranged from 6 to 11 at the pretest and from 7 to 13 at the posttest; fourteen participants improved and one decreased by one point, with a slight increase in variability. The total speaking score rose from a pretest mean of 15.13 to a posttest mean of 18.60 (Table 4).

**Table 4**

*Descriptive Statistics for Speaking Performance at Pretest and Posttest*

| Measure         | Assessment | N  | Mean  | SD   | Minimum | Maximum |
|-----------------|------------|----|-------|------|---------|---------|
| Phonological    | Pretest    | 15 | 7.20  | 1.47 | 5       | 10      |
| Phonological    | Posttest   | 15 | 8.80  | 1.42 | 6       | 11      |
| Morphosyntactic | Pretest    | 15 | 7.93  | 1.49 | 6       | 11      |
| Morphosyntactic | Posttest   | 15 | 9.80  | 1.78 | 7       | 13      |
| Total speaking  | Pretest    | 15 | 15.13 | 2.90 | 11      | 21      |
| Total speaking  | Posttest   | 15 | 18.60 | 3.11 | 13      | 24      |

### Qualitative Results

The transfer coding matrix identified recurrent patterns across the group at the pretest, illustrated below through the focal participants; frequencies correspond to the transfer-conditioned deviations recorded in each three-minute sample. Participant 1 produced *I have twenty years*, a predicate built through direct correspondence with the Spanish age expression (ten deviations). Participant 3 produced *Is raining today*, omitting the expletive subject in accordance with the null-subject property of Spanish (thirteen deviations). Both cases are consistent with the generative account, in which the L1 supplies the initial structural configuration (Schwartz & Sprouse, 1996). Participant 4 produced *I go to the eschool*, inserting a prothetic vowel before an initial cluster (six deviations, four phonological), a case classified at the phonological rather than the syntactic level. Participant 5 produced the target-appropriate *The system is complex*, drawing on the correspondence with *sistema complejo* (eight deviations), which illustrates positive transfer.

The number of coded deviations was only moderately related to rubric performance, since the criteria weight the communicative consequence of each feature rather than its frequency. The stimulated recall data showed that several participants could state the relevant English rule when the recording was paused, yet had not applied it during production, which suggests that part of the interference reflects processing constraints during real-time speech rather than an absence of explicit knowledge, consistent with Kormos (2006).

### Performance in the Pretest and Posttest

Both subscales showed higher mean scores at the posttest (Table 5).

**Table 5***Comparison of Speaking Performance Between Pretest and Posttest*

| Measure         | Pretest Mean | Posttest Mean | Mean Difference | % Improvement |
|-----------------|--------------|---------------|-----------------|---------------|
| Phonological    | 7.20         | 8.80          | 1.60            | 22.22         |
| Morphosyntactic | 7.93         | 9.80          | 1.87            | 23.53         |
| Total speaking  | 15.13        | 18.60         | 3.47            | 22.91         |

The two subscales improved by comparable proportions, but the pattern of individual change differed. On the morphosyntactic subscale, fourteen of the fifteen participants improved, and the gains were distributed relatively evenly across the group. On the phonological subscale, twelve participants improved, two remained unchanged, and one declined, indicating a less uniform response to instruction.

Interpreted in relation to native language interference, the morphosyntactic gains suggest an increased capacity to construct English predicates and to express subjects overtly in contexts where Spanish licenses their omission. The phonological gains suggest greater accuracy in the production of segments and syllable structures conditioned by the Spanish sound system, including the reduction of vowel epenthesis before initial clusters.

The less uniform phonological pattern is consistent with the theoretical position established in the theoretical framework. Phonological routines are among the most highly automatized components of the first language system (MacWhinney, 1997), and their modification requires a restructuring of articulatory habits that operates on a different timescale from the acquisition of a structural rule. The finding should not be read as evidence that phonological interference is unresponsive to instruction, but as an indication that the two dimensions do not change at the same rate, and that improvement on one cannot be assumed to imply equivalent improvement on the other.

### Verification of the Assumption of Normality

**Table 6***Shapiro–Wilk Test of Normality (N = 15)*

| Variable                   | Shapiro–Wilk Statistic | <i>p</i> | Interpretation                            |
|----------------------------|------------------------|----------|-------------------------------------------|
| Phonological pretest       | .952                   | .560     | Insufficient evidence to reject normality |
| Phonological posttest      | .943                   | .421     | Insufficient evidence to reject normality |
| Morphosyntactic pretest    | .936                   | .333     | Insufficient evidence to reject normality |
| Morphosyntactic posttest   | .898                   | .089     | Insufficient evidence to reject normality |
| Total pretest              | .954                   | .595     | Insufficient evidence to reject normality |
| Total posttest             | .960                   | .686     | Insufficient evidence to reject normality |
| Phonological difference    | .960                   | .692     | Insufficient evidence to reject normality |
| Morphosyntactic difference | .919                   | .187     | Insufficient evidence to reject normality |
| Total difference           | .953                   | .570     | Insufficient evidence to reject normality |

All *p* values exceeded .05, so normality was not rejected in any case. With fifteen participants the test has limited power, so the data provide insufficient evidence against the assumption rather than proof of normality; the paired-samples *t*-test was therefore applied, with caution regarding the morphosyntactic posttest (*p* = .089).

## Inferential Comparison Between the Pretest and Posttest

**Table 7**

*Paired-Samples t-Test Results for Pretest–Posttest Comparisons (N = 15)*

| Measure         | Test                  | <i>t</i> | <i>df</i> | <i>p</i> | Mean Difference | 95% CI       | <i>d<sub>z</sub></i> |
|-----------------|-----------------------|----------|-----------|----------|-----------------|--------------|----------------------|
| Phonological    | Paired <i>t</i> -test | 4.583    | 14        | < .001   | 1.60            | [0.85, 2.35] | 1.18                 |
| Morphosyntactic | Paired <i>t</i> -test | 5.802    | 14        | < .001   | 1.87            | [1.18, 2.56] | 1.50                 |
| Total speaking  | Paired <i>t</i> -test | 5.363    | 14        | < .001   | 3.47            | [2.08, 4.85] | 1.38                 |

Statistically significant differences were found on both subscales and on the total score at  $\alpha = .05$ . All confidence intervals excluded zero, and the lower bounds indicate an increase of approximately one scale point on each subscale even under the most conservative estimate. Effect sizes were large, with the morphosyntactic subscale ( $d_z = 1.50$ ) exceeding the phonological subscale ( $d_z = 1.18$ ), a difference that reflects the greater uniformity of the morphosyntactic gains as much as their magnitude. In the absence of a control group, maturation, familiarity with the assessment format, and general exposure to English remain plausible alternative explanations, so the results are consistent with, but do not demonstrate, an effect of instruction. The persistence of transfer-conditioned features at the posttest, together with the recall data, indicates that the L1 operates as an automatized system activated under communicative pressure, and not merely as a set of incorrect habits (Jarvis & Pavlenko, 2008).

## Discussion

The present study investigated the influence of Spanish as L1 on English oral production among university learners, with attention to phonological and morphosyntactic manifestations of cross-linguistic influence. Grounded in generative, cognitive, and contemporary cross-linguistic frameworks, the analysis conceptualizes L1 influence as a dynamic interaction between established linguistic representations and the developing L2 system, extending beyond grammatical interference to production, comprehension, lexical processing, and conceptual representation (Jarvis & Pavlenko, 2008).

Descriptive findings indicate a measurable improvement after the eight-week contrastive period: the phonological mean increased from 7.20 ( $SD = 1.47$ ) to 8.80 ( $SD = 1.42$ ), the morphosyntactic mean from 7.93 ( $SD = 1.49$ ) to 9.80 ( $SD = 1.78$ ), and the overall score from 15.13 ( $SD = 2.90$ ) to 18.60 ( $SD = 3.11$ ), a 22.91% increase, with a large within-participant effect ( $d_z = 1.38$ ). These results suggest that explicit attention to L1-conditioned features may be associated with observable changes in oral performance; however, given the single-group design, the gains cannot be attributed exclusively to the intervention, since maturation, additional exposure, familiarity with the assessment, or other classroom experiences may have contributed.

The study also distinguished negative from positive transfer rather than treating every influence of Spanish as problematic, consistent with research showing that similarities between languages can facilitate learning while differences create processing or production difficulties (Jarvis & Pavlenko, 2008). The example *The system is complex* shows that lexical and structural correspondence can support appropriate L2 production, which supports interpreting the L1 as a linguistic and cognitive resource. Similarity, however, does not guarantee positive transfer: Sun (2016) found that the relationship between L1 and L2 article systems is more complex than a

similarity-equals-easier-acquisition assumption. Pedagogical comparisons between Spanish and English should therefore examine how particular features are represented and used in context.

## **Conclusions**

L1 influence cannot be adequately understood as a simple collection of errors; it represents an interaction between established linguistic representations, developing L2 knowledge, and the cognitive demands of real-time speech. Phonological performance increased by 22.22%, morphosyntactic performance by 23.53%, and overall speaking performance by 22.91%, with statistically significant differences and large within-participant effect sizes, which indicates that the proposed contrastive model is capable of detecting meaningful changes in L1-conditioned aspects of oral performance. Pedagogically, Spanish should not be treated exclusively as an obstacle: it provides linguistic knowledge, conceptual resources, and processing routines that may be facilitative or inhibitory depending on the relationship between the languages and the communicative context, in line with contemporary views of cross-linguistic influence (Jarvis & Pavlenko, 2008) and multilingual approaches to SLA (Ortega, 2013).

Future research should address the principal limitation of this study through larger samples and randomized or quasi-experimental designs with a comparison group, which would permit stronger conclusions about whether changes are attributable to contrastive instruction and reduce the possibility that maturation or general exposure explains the improvement. It should also incorporate acoustic measures of vowel quality, voice onset time, consonant-cluster production, stress, rhythm, and intonation to complement analytic rubrics and capture subtle phonological changes.

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