Efectos de intercambios lingüísticos a través de videoconferencias en la comprensibilidad e inteligibilidad del inglés

The effects of language exchange via videoconferencing on English language comprehensibility and intelligibility

Sophia Cadoux*
scadoux@yachaytech.edu.ec
Hamilton Quezada*
hquezada@yachaytech.edu.ec
*Universidad Yachay Tech, Ecuador

Recibido: 28 de marzo de 2025
Aceptado: 19 de junio de 2025

DOI: https://doi.org/10.70141/mamakuna.25.1152

RESUMEN

Este artículo analiza el impacto de los intercambios lingüísticos virtuales en la comprensibilidad e inteligibilidad de estudiantes de inglés de nivel B1 en el contexto de Inglés como Lengua Extranjera (EFL) en una universidad en Ecuador. El estudio utiliza un enfoque experimental cuantitativo, que involucra a treinta y cinco estudiantes de inglés de nivel B1 distribuidos en cuatro clases y dos instructores. Los estudiantes del grupo experimental participaron en intercambios lingüísticos en línea a través de videoconferencias durante doce semanas, mientras que el grupo de control fue asignado a una actividad alternativa de expresión oral y comprensión auditiva. Se implementaron pruebas antes y después del experimento para recopilar datos sobre el desempeño de los estudiantes en cuanto a comprensibilidad e inteligibilidad, evaluado por angloparlantes nativos voluntarios. Los resultados revelaron un aumento del 5.5 % en la inteligibilidad del grupo experimental en comparación con un aumento del 3.8 % en el grupo de control, y una ligera ventaja en comprensibilidad del grupo experimental sobre el grupo control. Un hallazgo notable es que la comprensibilidad del grupo experimental no pareció verse tan afectada por las presiones externas como los resultados del grupo de control en esta área.

Palabras clave: intercambios lingüísticos, videoconferencia, pronunciación, comprensibilidad, inteligibilidad, inglés

ABSTRACT

This paper discusses the impact of videoconferencing language exchanges on the comprehensibility and intelligibility of B1-level English students learning in the context of English as a Foreign Language (EFL) at a university in Ecuador. The study utilizes a quantitative experimental approach, involving 35 B1-level English students across four classes and two instructors. Students of the experimental group experienced online language exchanges via videoconferencing for 12 weeks whereas the control group was assigned an alternative speaking and listening activity. A pre- and post-test were implemented to collect data about students' performance in comprehensibility and intelligibility, as evaluated by volunteer native speakers. The results revealed a 5.5% increase in intelligibility for the experimental group when compared to a 3.8% increase in the control group, and a slight advantage in comprehensibility in the experimental group over the control group. A notable takeaway is that the experimental group's comprehensibility didn't appear to be as affected by external pressures as the control group's results in this area.

Keywords: language exchanges, videoconferencing, comprehensibility, intelligibility, English as a Foreign Language

INTRODUCTION

Since the invention of the web in the 1980s, the use of virtual exchange has been studied in a language learning context. Virtual exchange (VE) involves an interchange of ideas between two people whether through email, messaging app, call, and/or video call. When related to language, VE's focus is on improving students' language abilities and/or intercultural competencies by matching them with someone whose L1 (first language or native language) is the same as their target language, or the language that they are learning, usually referred to as their L2 language. To improve student's speaking abilities, these VEs are often arranged via voice or videocall. This opportunity to practice speaking is especially important in areas where English as a Foreign Language (EFL) students have limited access to native speakers, and therefore, their language classroom is their only source of speaking practice. In these cases, it is important to note that not only do students need additional practice, but the classroom environment does not reflect an authentic interaction in the target language. Therefore, lack of exposure to native speakers limits not only their communicative competence, but also their pragmatic competence, or their ability to do various activities within the cultural bounds of the L2 environment (Kasper, 2001).

Videoconferencing is a well-established means of increasing language learners' communicative competence, with the added benefit of learners being able to express meaning and understand meaning via a variety of different tools: body language, pictures, videos, etc. (Hampel & Stickler, 2012). Xiao (2007) found that "using Internet based desktop videoconferencing to talk with native speakers resulted in a better performance by the participants in the experimental group than those in the control group in terms of fluency, accuracy, and complexity" (p. 4). In addition to these findings, her study also established that students using videoconferencing saw a significant increase in their fluency and a slightly significant increase in their accuracy. Some research outcomes show that video-based conversation exchanges with native speakers lead to significant gains in comprehensibility, fluency, and lexicogrammar for second language learners (Saito & Akiyama, 2017). Although there are many more studies that determine a significant improvement in all areas of speaking due to videoconferencing language exchange, many rely on official exam speaking rubrics that are subjective, graded by the researchers themselves, leaving room for the establishment of more quantified improvements in communicative competency.

In a notable study, Ko (2012) comes to a more nuanced conclusion about vocabulary retention, a key part of communicative competence: task preparation and individual learning strategies were the largest factors in language acquisition, not increased exposure to L2. In other words, whether students used their L1 or L2 to define words was not what determined their learning; in groups where the task was less effective or the learning strategies were less effective, so was language learning. Although the study wasn't specifically about speaking, its implications for overall proficiency are clear: the way an assignment was structured and how students studied were the determining factors. This demonstrates a slightly different perspective in a sea of positive research about exposure to L1 vs L2. Since skillful task creation and student study strategies were the most important factors in increased proficiency, when researchers desire a more authentic exchange with no tasks, as in this study, according to the above findings, this would leave students' study skills or motivation as important factors when considering the effects of exposure to the target language.

Overall, the use of online language exchanges to practice English with native speakers is an effective tool to address the need for greater improvement in speaking. Although there have been few recent studies on the topic, interestingly enough, another study was published using virtual language exchange in an Ecuadorian EFL environment in 2019. Sevy-Biloon and Chroman (2019) highlighting the need for solutions

regarding English speaking levels in remote Ecuadorian universities, also found videoconferencing to be an excellent option to increase their student's exposure to native speakers. This study's results show that students felt motivated to improve their English after the language exchanges and lost some of their initial language anxiety.

This leads directly into the problem that was encountered in the university were the study was conducted as well as the potential solution, as they are nearly identical to those of the aforementioned study: EFL Ecuadorian university students who live in an area with no native English speakers, while needing to improve their communicative competency. EFL learners in Ecuador have limited opportunities to practice speaking in real-life situations. Most of their learning is restricted to their classrooms with instructors and peers. As a result, their speaking improves the least compared to other skills as it is tied exclusively to class interactions. This is especially problematic in technology and science universities such as the school where the study took place. In the short term, English proficiency can lead to prestigious international scholarships for master's or Ph.D. programs. In the long term, to become successful academics and/or professionals, students will need to be able to present findings in English-medium conferences and communicate with colleagues in English.

Another layer of complexity is the pronunciation of students with limited exposure to English. In some cases, students have enough grammar and vocabulary to express themselves, but due to the intelligibility or comprehensibility of their speaking, they are not understood as well as they are in written form. As pronunciation apps are costly, AI is just developing in this field, and teachers have limited time to provide tutoring, a virtual language exchange via videoconferencing was a compelling option, exposing students to an intercultural experience while improving their pronunciation and general speaking ability.

Many of the considerations when designing the study were drawn from Robert O'Dowd's article "Online Foreign Language Interaction: Moving Away from Periphery to the Core of Foreign Language Education" (2011). The main argument of the article is that virtual language exchange should be a normal activity at the center of an English language course. By including all level B1.2 students, two classes of which participated in language exchanges, and using a language exchange website The Mixxer, the study sought to demonstrate a model in which the activity would be normalized and fully integrated into the class while not causing excessive work for teachers. This study did not rely on class-to-class matchings but rather a call for participants and random matching of native English volunteers who were learning Spanish with the university's English language students.

O'Dowd (2011) also mentions the need for improvement in terms of the authenticity of language exchanges. As such, the language exchanges did not involve projects or tasks that had to be completed before, during or after the video call; students met with their partners and engaged in natural discourse about the topic of their choosing, as they might with someone they meet on the street or on a Facebook page. Through having a semi-authentic experience in which partners were not chosen through a class-to-class matching, and students were able to converse about whatever they wanted with their partner, the thought was that the authenticity of the experience would make the class language relevant more than a manufactured experience. O'Dowd's advice about the necessary weight of these activities was also followed, and therefore the videoconferencing virtual exchanges were worth 5% of each student's grade. This was a completion grade, so any student who completed all 12 videoconferencing meetings automatically got all 5%.

Having applied a similar framework to a set of volunteer students the semester before, proving themselves to be reliable and motivated, it seemed that an independent task such as this study could be widely applied to all students, especially when students were provided a grade for the assignment. Thus, two research questions were identified:

- Is virtual language exchange via videoconferencing generalizable? In other words, is there a way to assign it to all students every semester in a semi-authentic way that does not involve excessive work for teachers?
- Can unstructured VE videoconferencing significantly improve students' pronunciation (intelligibility and comprehensibility) and speaking level?

This study's main objective was to test our hypotheses that both questions would have an affirmative answer. For this study, there is one independent variable and two dependent variables. The independent variable is students' participation in virtual language exchanges via videoconferencing with volunteer native English speakers. The two dependent variables include intelligibility and comprehensibility as perceived by native English speakers.

Intelligibility and Comprehensibility

Intelligibility and comprehensibility were chosen to be tested in pre- and post-tests in this study, but what are they and why were they selected? Intelligibility can be defined as our ability to understand individual spoken words, whereas comprehensibility can be defined as our ability to understand the utterance's meaning. In other words, if I pronounce "I cat black" correctly, it is intelligible as you can understand the words, but it may not be comprehensible; am I saying that I am a black cat or I have a black cat? Comprehensibility is a much more complex and holistic measure, as whether we can understand someone is influenced by their fluency, intonation, accent, vocabulary, and even the organization of their ideas. As such, comprehension is a more complete but also more subjective speaking measurement, while intelligibility is objective as the grader can simply count the number of words, they have understood vs. the number of words spoken. Using both an objective and a subjective measurement was appealing to establish reliable quantitative results.

In addition, there is also no doubt that comprehensibility is an extremely important marker of communicative and pragmatic competence. Derwing and Munro (2009) established comprehensibility as a main factor in native speakers' willingness to attempt communication in a workplace setting with L2 speakers. Isaacs and Trofimovich (2012) and Saito et al. (2015; 2016) found that the keys to comprehensibility lie in vocabulary and fluency, both of which naturally increase with proficiency. Or as Thomson (2018) states, "In many cases, these concerns may not require pronunciation-specific pedagogical intervention, since vocabulary and oral fluency can be expected to automatically improve in tandem with increases in proficiency" (p. 12). It would therefore appear to be a logical conclusion that an increase in proficiency through the participation in a videoconferencing VE would also signify an increase in pronunciation skills, reflected in intelligibility and comprehensibility.

Apart from students being "consciously motivated to make an effort to improve their fossilized pronunciation in Spanish" (Lee, 2007, p. 641), though the use of VE via videoconferencing could an improvement in pronunciation be proven in objective quantitative data? And if so, could unstructured virtual language exchange have the added benefit of potentially being used as a pronunciation intervention for EFL students?

METHODOLOGY

The sample size of this study was thirty-five college students who were taking an intermediate (B1.2) English course. This experimental study included two control groups and two experimental groups. In the experimental group, students were assigned to do virtual language exchanges weekly for twelve weeks. Each student from this group was paired up with a volunteer English native speaker. Students were given instructions to do video conferencing meetings with their language partner for at least one hour per week. For this purpose, the instructors previously

found volunteers in a language exchange platform called The Mixxer. Students were asked to contact their language partner via email during class using a template. On the other hand, the control groups were asked to record themselves for 4-5 minutes every week answering prompts targeted towards the class's content. For example, during the weeks that we were talking about the future and the environment, students answered the questions: What is an environmental issue that you care about? How does the environmental issue affect Ecuador? What should the Ecuadorian government do about this issue? What have other countries done to improve their environment? Could this model apply to Ecuador?

Each student was given weekly partners to listen to their 4 or 5-minute answers and grade them. Two statements were graded on a scale of strongly agree (5) to strongly disagree (0): 1) I can understand the ideas in my classmate's speech, and 2) I can understand my classmate's pronunciation. Although students didn't talk in and listen to English as much per week as their counterparts in the experimental group, this intervention was much more targeted to improving intelligibility and comprehensibility while still requiring listening as well.

Both pre- and post-tests were implemented at the beginning and end of the semester. In the pre-tests and post-tests, students were asked to answer four speaking prompts; three of the prompts were questions to be answered in one pre-planned sentence each, measuring intelligibility. The last question was a one-minute spontaneous speech reply, measuring comprehensibility. The pre- and post-tests had the same format, but the questions to be replied to were different while maintaining the same level of complexity.

To provide validity of the tests, each student was given a pin number so that the grader would not see the name of the student, and the pre- and post-tests were randomized through the usage of pseudonyms: "blueberry" for pre-test and "strawberry" for post-test. Volunteer native English speakers (N=5) who live in Ecuador and feel positively about their experience living in the country listened to the pre- and post-test in a randomized order so as not to be biased. The native English speaker graders listened to a pre- or post-test, and for the three intelligibility prompts, they transcribed what they heard from a voice recorded audio file. They were allowed to listen to each response two times. This allowed for the measurement of how many of the words the students said vs. the number of words understood by the listener, and by comparing the percentage of correctly spoken words in the pre- and post-test, a percentage increase or decrease in intelligibility could be established. Similarly, for the one-minute comprehensibility question, each native English speaker grader was provided a comprehensibility rubric (Isaacs et al., 2017) to measure how understandable the student was. By comparing pre- and post-test results, a percentage increase or decrease could also be established for comprehensibility. Each student's pre- and post- test were graded by the same volunteer native English speaker so that subjectivity in the grader would not greatly affect results. Each volunteer native English speaker grader was limited to one hour per session of grading to limit the effect of fatigue on the results.

Since, in addition to fatigue, acceptability of a foreign accent or attitudes towards foreign L2 speech might affect intelligibility and comprehensibility scores (Lindemann & Subiterelu, 2013; Szpyra-Kozłowska, 2014), native English graders were all North American citizens living in Ecuador for a period of more than one year. All graders expressed having a positive experience in Ecuador and with Ecuadorians, and all plan on staying in Ecuador for the foreseeable future.

Limitations

There were several factors that influenced the scope of the study, one of which being the mortality rate. A total of 16.5% of students from the original sample dropped out from school (Table 1) and therefore from the research study. Students with a lack of motivation and/or time stopped attending their virtual language exchanges, and

in turn dropped out of the study as well, despite it being a graded exercise.

Table 1. Semester I 2024 level 4 student outcomes

	Students Enrolled	Passed	Failed	Dropped Out
Total number	91	47	29	15
Percentage of total number	100%	51.6%	31.9%	16.5%

Source: *First Semester 2024 Level 4 Coordinator Report*

In the pre- and/or post-tests, other students did not record correctly, or they spoke so quietly as to not be understood, making it impossible to include them in our findings. Between these factors, the study went from a pool of 91 students to 35 students between the control and experimental groups. The resulting number of students was 14 in the experimental group, participating in virtual language exchange, and 21 in the control group.

In addition to these challenges, there was also an evident motivational factor in students. As perceived by the instructors, students showed an overall negative attitude towards learning. There were many students who barely completed their most basic course assignments such as doing asynchronous activities. Lack of attendance was a considerable flaw shown in this group of students. A significant number of students even missed class when major assignments were due or on testing days. This lack of interest affected their overall performance. As a result, 31.9% of them ended up failing their English course, on top of the 16.5% who dropped out. In the end, the online language exchanges were affected by this motivational factor as there was a lack of commitment to the activity. In addition, many students were repeating this course as they had failed during the previous semester. This indicated not only a low level of English mastery, but a potential for lower self-esteem. In class, these students are not as participative, and their academic performance is low. This further limited their participation in the online language sessions.

Finally, another important factor that may have impacted results was stress when doing the post-tests. When students took their post-tests, it was during their finals' week. Not only did they have to pass English, but also other major subjects. Their attention was on far more important aspects of their academic life. In the case of students who were taking the same course again, this sentiment was exponential as there was more at stake for them. The activity of recording their voices for research purposes was perceived as unnecessary because it did not provide them with any benefit.

RESULTS

According to the data collected, there are advantages to virtual language exchanges in terms of intelligibility and comprehensibility. Table 2 reveals rates of change in intelligibility and comprehensibility for all students in the control group and the experimental group, as well as the mean or average in each category, and the standard deviation in each category. Since each student result in the pre-test was compared to their own result in the post-test, this created a rate of change for intelligibility and comprehensibility for each student. Therefore, an increase or decrease percentage was measured (rate of change) independent of the student's level. Along with the rate of change in each category for each student, the standard deviation was calculated using a pre-determined formula in order to define how much each data set varies. A high standard deviation indicates that the data is highly varied and inconsistent and therefore may not be reliable or replicable. A low standard deviation indicates that there is low variability in the data, and as such, the mean or average is a reliable reflection of the sample.

Table 2. Rates of change in intelligibility and comprehensibility

Experimental Group		
Participant Number	**Intelligibility: Rate of Change**	**Comprehensibility: Rate of Change**
1	9.8%	20%
2	9.3%	0%
3	-4.7%	20%
4	14.1%	20%
5	-6.4%	0%
6	-1.8%	0%
7	41.9%	0%
8	2.4%	30%
9	8%	10%
10	2%	10%
11	4%	20%
12	0%	10%
13	-6.9%	20%
14	5.8%	20%
Mean	5.5%	13%
Standard Deviation	11.8	9.6

Control Group		
Participant Number	**Intelligibility: Rate of Change**	**Comprehensibility: Rate of Change**
1	38%	20%
2	0%	40%
3	-24%	60%
4	2%	20%
5	1%	40%
6	3%	20%
7	8%	20%
8	5%	20%
9	-22%	60%
10	2%	0%
11	1%	0%
12	36%	20%
13	35%	30%
14	6.9%	-40%
15	1.9%	20%
16	0.7%	-40%
17	-3.6%	0%
18	-1.8%	0%
19	-12.5%	-10%
20	5.4%	0%
21	-2.4%	-20%
Mean	3.8%	12.4%
Standard Deviation	15.6	26.4

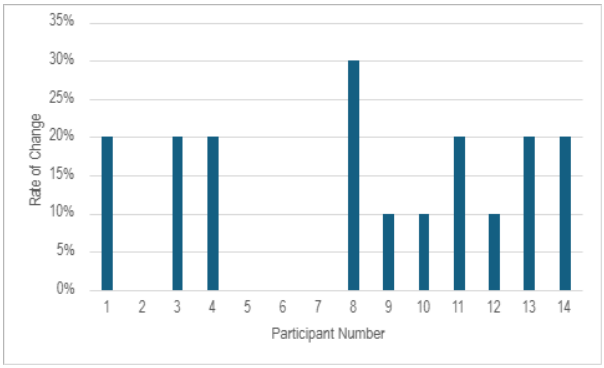
Source: *prepared by authors*

The test for intelligibility, in which students said three sentences in the pre- and then the post-test, produced a very wide set of results. This could have been because of the low number of sentences tested. If a student spoke slowly and carefully in the pre-test but was rushed in the post-test, making one of their sentences less intelligible, this greatly affected their intelligibility score. According to our measure, one student's intelligibility in the control group dropped 24%, while another student's intelligibility in the experimental group went up 41.9%. This was evidenced by the relatively high standard deviations of the intelligibility data when considering the high number of words tested (Table 2). The large amount of data (number of words) should have resulted in little variation in the rate of change when comparing pre-and post-tests as students scored should not change so significantly from the beginning of the semester to the end. On average, the control group's intelligibility increased 3.8% while the experimental group's intelligibility increased 5.5%. This means that virtual language exchange appears to have improved intelligibility. However, intelligibility increases or decreases may depend more on another factor like motivation or errors in research design. For future study, researchers may consider testing more sentences or picking lower-stress times to test for intelligibility.

The scoring of comprehensibility seemed to be more reliable as it was a global grade vs. a word-by-word intelligibility grade, as the comprehensibility rubric (Isaacs et al., 2017) considered factors such as pronunciation, fluency, vocabulary and grammar. On the other hand, as with all tests, the score appeared to be influenced by external factors such as, but not limited to, the student's stress level, mental health, and hours of sleep. The comprehensibility audio was one minute long, allowing the listener to focus on global speaking ability, but that ability may have been influenced by the above factors.

It is worth noting that the rate of change in comprehensibility did also vary, but that can in part be explained by the scoring system being out of five; an increase from a four to a five would be an increase of 20%. Although the average increase in comprehensibility was very similar between the control group and the experimental group, 12.4% and 13% respectively, there was one notable finding in this area: there were no decreases in comprehensibility among students in the experimental group.

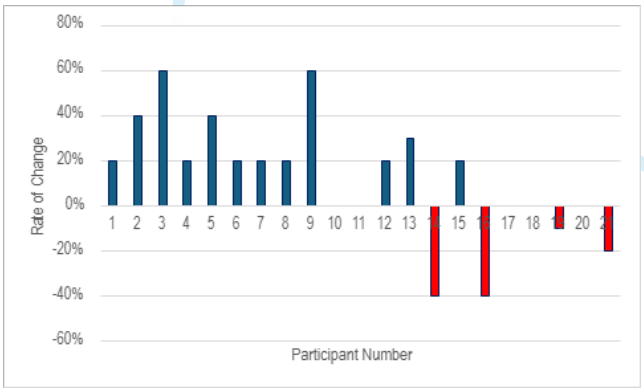
Figure 1. Experimental group: rate of change in comprehensibility



Note. Percentage difference between comprehensibility scores in the pre-test and post-test for the experimental group. When there was no change in the score, or 0% rate of change, no bar was included.

Source: *prepared by authors*

Figure 2. Control group: rate of change in comprehensibility



Note. Percentage difference between comprehensibility scores in the pre-test and post-test for the control group. Red bars indicate a decrease in comprehensibility. When there was no change in the score, or 0% rate of change, no bar was included.

Source: *prepared by authors*

In the control group, the percentage increase in comprehensibility varied from 60% to a decrease of -40%. In contrast, in the experimental group, the increase in comprehensibility varied from 0% to 30%. This is evidenced when comparing comprehensibility standard deviation data for the control group vs. the experimental group. The experimental group had little standard deviation considering the grading method was using a scale of 0-5 with possible.5 marks, making the lowest possible increase or decrease.5 or 10%. The experimental group's standard deviation was 9.8, less than 10, which was the lowest possible rate of change, indicating that the data followed a predictable pattern. The standard deviation for the control group's comprehensibility data was 26.4, indicating a very high variation in the rate of change between pre- and post-test scores. This demonstrates that the control group data did not follow a particular pattern and are either not reliable or not replicable in another set of students.

In other words, even though the gains were more modest in some cases, there were also no decreases in comprehensibility in the experimental group. Since the groups were equal in all other aspects, it can be preliminarily concluded that comprehensibility gains through virtual language exchange videoconferencing are more stable and predictable. Gains may not be as influenced by external factors, perhaps due to a decrease in language anxiety through routine practice via language exchange.

CONCLUSIONS

Based on the results of this study, we can draw several conclusions. Conducting research on this topic is extremely challenging for teacher researchers as online language exchanges are inherently exposed to many external factors that can severely affect their results. This was exacerbated by the fact that the study was meant to expose students to authentic interactions, and therefore there were no tasks and no inherent structure to the language exchange besides meeting weekly for an hour and speaking half an hour in Spanish and half an hour in English. As with any activity outside of normal class times, the organization was posed a challenge as it was the discretion of the student and their online peers to decide when to do the sessions. This freedom ended up making the scheduling of the sessions more difficult than expected since online peers had other obligations that took priority over the language exchanges, and students would cancel frequently due to other academic needs. This led to a high percentage of mortality of participants, both amongst the students and their partners. Unfortunately, there were also many students who happened to leave the university, and many more who lacked motivation or were experiencing mental health issues. These uncontrollable factors diminished the scope of the research.

After the application of this study, it is evident that virtual exchange via videoconferencing in the semi-authentic nature proposed in this study is not generalizable. It is unclear if including tasks or doing a class-to-class virtual exchange would have yielded different results, but assigning language exchange partners to all students via a language exchange platform only resulted in unmotivated or busy students dropping out. It seems that virtual language exchange should only be assigned to motivated students, or that teachers need to find better ways of motivating their students to complete these types of activities apart from providing grades. Although any strategy works well with motivated students, according to our results, unmotivated students cannot be motivated by the excitement of the activity or grades alone.

In terms of intelligibility, it is possible that online language exchanges improve student skills in this area. The experimental group's mean rate of change scores was 1.7% higher than the control group's mean rate. However, virtual exchange does not necessarily guarantee major improvements. The high standard deviations for these data sets reveal either a faulty testing system, or data that may not be reproducible. Although these types of exchanges apparently provide students with a unique and more

meaningful experience, they may not greatly influence pronunciation of individual words for the better. It seems that the dynamics of interacting with native speakers through video conferencing does not mean the sessions include pronunciation correction but rather more freely practicing students' speaking and therefore addressing other aspects of speech such as intonation and fluency. In more general terms, hearing the correct pronunciation of words may not result in a significant increase in intelligibility. Further research is necessary to determine the test's reliability and whether or not our intelligibility results are reproducible.

Another conclusion is that virtual exchanges via videoconferencing can cause real gains in students' comprehensibility that are less influenced by external factors such as stress and hours of sleep. This positive impact is logical as the video conferencing sessions encourage students to experience language learning through practicing getting a message across so as to be understood. This communicative outcome is therefore the result of that purpose. As our limitations likely had an impact on this result, further study will be necessary to establish a correlation between VE via videoconferencing and an increase in comprehensibility. But the stabilizing effect of videoconferencing VE on comprehensibility is an interesting take away, potentially caused by a loss of language anxiety through consistent practice with a native speaker.

Areas for Future Research

There are many paths to take based on the results of this study. However, in order to find more compelling results, it will be advisable to address the issues mentioned in the limitations of this study. Therefore, two possible further research can be suggested: how to balance authenticity and feasibility continues to be an area for research. It appears that a more authentic experience is not generalizable, so then what model is?

There is still a lack of research into a potential framework for videoconferencing that could be implemented every semester with every new group of students. Although in no way authentic, an interesting area of future research is to do it on class-to-class in-class language exchanges. In other words, pairing up an entire class of native English-speaking Spanish learners with a class of native Spanish speaking English learners. This would ensure that the participants of the study complete language exchanges through in-class sessions. Mortality rates can therefore be addressed and, as a result, this framework could provide more compelling results. This strategy does not balance authenticity well but may be better at motivating unmotivated students. To be truly generalizable, the measure of teacher workload could be an important factor to quantify as well.

Another area for research would be the study of how comprehensibility behaves under different stressors. Since our conclusion is that Virtual Exchange via videoconferencing potentially stabilizes comprehensibility, making it less prone to affective factors, this type of study would be necessary to truly confirm our findings.

PRACTICAL RECOMMENDATIONS

Based on the results of this study, the authors suggest the following recommendations: something clearly useful for researchers is to address the technical issues that took place in the implementation of the study, more specifically in the research instruments to collect data. For example, providing participants with technological tools as well as a proper location such as a quiet room to record their pre- and post-tests can significantly improve the quality of data, therefore resulting in a more polished research methodology.

Although the process of pairing up English-speaking Spanish learners with students was completely arbitrary, it would be worth taking into consideration time zone differences. This mismatch can result in postponing or canceling sessions due to misunderstandings among the pairs. It is simply better to include participants who share similar time zones as they are more

likely to have more spare time at non-class or non-work hours.

Choosing either to implement a less structured language exchange with more authenticity for participants or a more organized VE ensuring better research outcomes would be recommended. Each approach has distinct advantages, and it's challenging if not impossible to cover the two spectrums simultaneously or at the same level of intensity. Researchers must consider what is more relevant: validity of results or the authenticity of the experience for participants.

REFERENCES

Derwing, T. M., & Munro, M. J. (2009). Putting Accent in its Place: Rethinking Obstacles to Communication. *Language Teaching*, *42*(4), 476-490. https://doi.org/10.1017/S026144480800551X

Hampel, R., & Stickler, U. (2012). The Use of Videoconferencing to Support Multimodal Interaction in an Online Language Classroom. *ReCALL*, *24*(2), 116-137. https://doi.org/10.1017/S095834401200002X

Isaacs, T., Trofimovich, P., & Foote, J. A. (2017). Developing a User-oriented Second Language Comprehensibility scale for English-medium Universities. *Language Testing*, *34*(4), 1-20. https://doi.org/10.1177/0265532217703433

Kasper, G. (2001). Four Perspectives on L2 Pragmatic Development. *Applied Linguistics*, *22*(4), 502-530. https://doi.org/10.1093/applin/22.4.502

Ko, M. H. (2012). Glossing and Second Language Vocabulary Learning. *TESOL Quarterly*, *46*(1), 56-79. https://doi.org/10.1002/tesq.6

Lee, L. (2007). Fostering Second Language Oral Communication Through Constructivist Interaction in Desktop Videoconferencing. *Foreign Language Annals*, *40*(3), 635-649. https://doi.org/10.1111/j.1944-9720.2007.tb02882.x

Lindemann, S., & Subtirelu, N. (2013). Reliably Biased: The Role of Listener Expectation in the Perception of Second Language Speech. *Language Learning*, *63*(3), 567-594. https://doi.org/10.1111/lang.12014

O'Dowd, R. (2011). Online Foreign Language Interaction: Moving from the Periphery to the Core of Foreign Language Education? *Language Teaching*, *44*(3), 368-380. https://doi.org/10.1017/S0261444810000194

Saito, K., Trofimovich, P., & Isaacs, T. (2015). Second Language Speech Production: Investigating Linguistic Correlates of Comprehensibility and Accentedness for Learners at Different Ability Levels. *Applied Psycholinguistics*, *36*(4), 847-873. https://doi.org/10.1017/S0142716414000502

Saito, K., Webb, S., Trofimovich, P., & Isaacs, T. (2016). Lexical Profiles of Comprehensible Second Language Speech: The Role of Appropriateness, Fluency, Variation, Sophistication, Abstractness, and Sense Relations. *Studies in Second Language Acquisition*, *38*(4), 677-701. https://doi.org/10.1017/S0272263115000297

Saito, K., & Akiyama, Y. (2017). Video-based Interaction, Negotiation for Comprehensibility, and Second Language Speech Learning: A Longitudinal Study. *Language Learning*, *67*(1), 43-74. https://doi.org/10.1111/lang.12184

Sevy-Biloon, J., & Chroman, T. (2019). Authentic Use of Technology to Improve EFL Communication and Motivation Through International Language Exchange Video Chat. *Teaching English with Technology*, *19*(2), 44-58. https://files.eric.ed.gov/fulltext/EJ1215376.pdf

Szpyra-Kozłowska, J. (2014). *Pronunciation in EFL Instruction: A Research-based Approach*. Multilingual Matters. https://doi.org/10.21832/9781783092628

Thomson, R. I. (2018). Measurement of Accentedness, Intelligibility and Comprehensibility. In O. Kang & A. Ginther (Eds.), *Assessment in Second Language Pronunciation* (pp. 11-29). Routledge. https://doi.org/10.4324/9781315170756-2

Trofimovich, P., & Isaacs, T. (2012). Disentangling Accent from Comprehensibility. *Bilingualism: Language and Cognition*, *15*(4), 905-916. https://doi.org/10.1017/S1366728912000168

Xiao, M. (2007). *An empirical study of using internet-based desktop videoconferencing in an EFL setting* [Doctoral dissertation, Ohio University]. Ohio University. http://rave.ohiolink.edu/etdc/view?acc_num=ohiou1194703859