

Tec & UT Austin aim to “return voice” to Spanish speakers with aphasia



Researchers are working on an intervention using personalized therapies and technology to help Spanish speakers with aphasia regain their ability to communicate

05/08/2026

Shutterstock

Pexels

Imagine perfectly recognizing the face of a family member, knowing exactly what you want to say to them, and yet **being unable to find the words**.

That is what happens with **aphasia**, a disorder that **impairs people's ability to communicate** due to neurological conditions affecting the brain.

While millions are living with this condition, the vast majority of available treatments were developed and tested exclusively on **English speakers**.

That gap prompted researchers from [Tec de Monterrey](#) and the [University of Texas at Austin \(UT Austin\)](#) to develop a project adapting those therapies into Spanish and testing their efficacy among Spanish-speaking populations.

Aphasia is typically caused by neurological conditions such as certain types of dementia or brain injuries and impairs people's ability to communicate. Photo: Pexels



A problem affecting millions

Aphasia is typically caused by **neurological conditions** such as certain types of dementia or brain injuries and impairs people's ability to communicate.

*“**Aphasia** is knowing exactly what you want to say, understanding words, and yet being unable to express them fluently,”* explains **Said Enrique Jiménez**, a professor in the Department of Psychology at [Tecnológico de Monterrey's](#) Mexico City campus.

According to the [National Aphasia Association](#) in the United States, around **2 million people** are living with this condition, with nearly **180,000 new cases** recorded each year.

Although there is no consolidated official data in **Mexico**, the researcher estimates that **the number of people affected likely reaches into the millions.**

While therapies exist to treat this disorder, most of the scientific evidence comes from studies conducted with **English speakers.**

This is precisely one of the **gaps the project seeks to bridge.**

*“Global research on aphasia has primarily focused on English speakers and individuals with relatively high levels of education and resources. When we try to generalize those treatments to **Spanish speakers, the literature falls short.**”*

Why study aphasia in Spanish speakers?

Jiménez explains that most aphasia **research** has been conducted **in English** with highly educated populations, making it difficult to apply those **results** to **Spanish speakers.**

“Speaking English is definitely not the same as speaking Spanish. The grammatical rules and linguistic richness are different,” he explained.

The goal is to determine whether interventions that have already proven effective in English are also effective in Spanish or if they require specific adaptations.

Most aphasia research is in English; more documentation on Spanish speakers is needed. Photo: Pexels



A tailored therapy

Another unique aspect of the project is that each participant will receive a **personalized intervention**.

First, researchers will conduct an extensive assessment to determine **each patient's cognitive and linguistic capabilities**. Then, they will design **specific exercises** based on the difficulties identified.

For example, if a patient cannot recall the word “**automobile**,” the therapist won’t give them the answer right away.

Instead, they will ask the patient to describe its characteristics, its purpose, what it looks like, or where it’s used, with the aim of activating other language pathways until **they retrieve the word**.

If the problem lies in speech fluency, the strategy changes.

*“Not everyone will receive the same treatment, because not everyone has the **same deficit or manifests language difficulties** in the same way. What we’re looking to do is create a tailor-made solution,”* explains the professor from Mexico City campus.

In such instances, **patients use scripts** for everyday situations, such as making a purchase or asking for help, and practice these interactions until they improve their communication in activities essential to their independence.

The entire intervention will be conducted **remotely** via **platforms like Zoom**, thereby facilitating access for patients who are unable to travel to specialized centers.

Beyond traditional assessments

The study also incorporates a different **language assessment** method.

Instead of relying solely on standardized tests, such as recalling lists of words or naming animals, researchers will analyze what is known as **“connected speech.”**

The procedure involves asking patients to **spontaneously describe an image** while being recorded.

Subsequently, computational tools will analyze variables such as the number of pauses, verb and noun usage, sentence structure, and other metrics to provide a more precise understanding of **how each person communicates.**

*“That information allows us to provide **more specific treatments** for each individual,”* says Jiménez.

Alejandra Platas de la Mora, Director of the **Psychology Program at the Tec’s Mexico City Campus**, will play a central role in the project.

She will oversee the coordination of the **neuropsychological assessment** using standardized clinical tests, while leading patient recruitment across public and private hospitals involved in the ongoing collaboration.

What’s more, she will help train those administering **the study’s assessments.**

The intervention will be conducted remotely via platforms like Zoom, thereby facilitating access for patients who are unable to travel to specialized centers. Photo: Pexels



What does the collaboration between Tec and UT Austin bring?

Specialists from **UT Austin** will provide their expertise in **speech therapy**, clinical assessment, and training for the professionals implementing the interventions.

The **Tec** will handle **recruiting Spanish-speaking patients** and developing **statistical and computational models** to analyze language evolution throughout the treatment.

*“They handle **language and intervention training**; we provide access to the Spanish-speaking population and the statistical and computational modeling to analyze language development,”* says the professor.

Fifteen Spanish speakers will participate in this initial stage, a number that, while apparently small, represents one of the largest samples for this type of research

among the Hispanic population, given that many previous studies have been limited to tracking just one or two cases.

This project is part of the academic collaboration between researchers from **Tec de Monterrey and the University of Texas at Austin**.

As part of that partnership, the project was selected for funding through the **Spring 2026 Faculty Research Seed Grant** call for proposals, a program that fosters **collaborative research** with high potential for generating knowledge and social impact.

“We (the Tec) provide access to the Spanish-speaking population and the statistical and computational modeling to analyze language development.”

What they hope to change

In addition to evaluating the efficacy of a **therapy adapted for Spanish speakers**, researchers aim to develop tools that enable more accurate diagnoses and personalized treatments for future generations of patients.

For Jiménez, the project addresses an urgent need:

*“People with this condition suffer, and the **language dysfunction** itself justifies the need for this type of work and intervention,”* he concluded.

ALSO READ ABOUT THESE PROJECTS WITH UT AUSTIN:

