

Using mobile language learning applications to practise speaking skills: learner experiences

Eva Vanhee
Lead Learning Designer

Agenda

- CALL and MALL
- Skills in MALL
- Research project
 - Language app: Busuu
 - Methodology
 - Data analysis
- Results
- Conclusion
- Looking at the future



Rise of Computer-assisted Language Learning (CALL)



Second half of 20th century

→ Initially: a tool which was very costly and mostly only available to institutions

Rise of CALL



Early 2000s:

→ the first complete web-based
language course

Rise of CALL



Now:

→ available and affordable to individuals all over the world.

Rise of MALL

21st century: emergence of MALL

- Portable, personal and informal (Kukulska-Hulme & Shield, 2008)
- Ubiquity of mobile learning



Mobile language learning applications

- In 2012, there were 20,000 educational apps available in the App store (Shing & Yuan, 2016)
- Pandemic
- iOS App Store: the keywords “language learning” give more than 150 search results.
 - Apps focusing on **one language**, others on **multiple languages**; 72% teach English (Heil et al, 2015)
 - Many apps focus on **one skill** only (reading, listening, writing or speaking).



Speaking skills in MALL

Kim & Kwon, 2012

- Vocabulary acquisition (41%)
- Speaking (8%)
- “the current mobile apps focus more on receptive language skills than productive, and present more form-focused short language information”

Kukulska & Shield, 2008

“few reported occurrences of speaking and listening activities employing mobile devices”

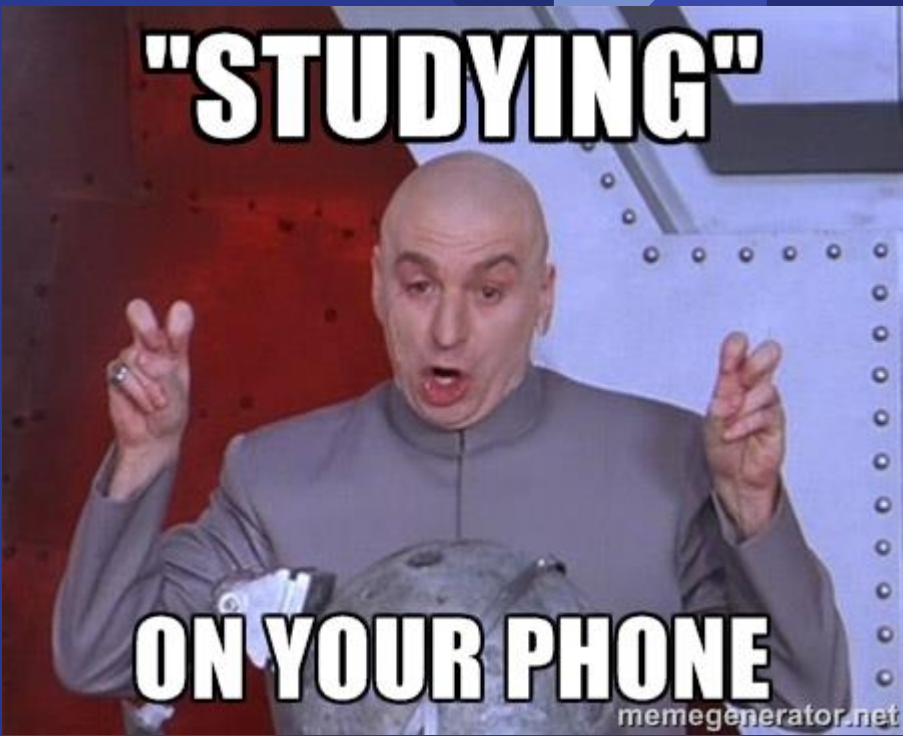




APPS, APPS

EVERYWHERE

makeameme.org



"STUDYING"

ON YOUR PHONE

memegenerator.net

Research objectives

How do language learners feel about learning through mobile language learning applications?

- (1) investigate the **learner's perception** of practising their speaking skills through mobile language learning applications
- (2) explore the **learner's motivation** to improve their speaking skills in mobile language learning applications.

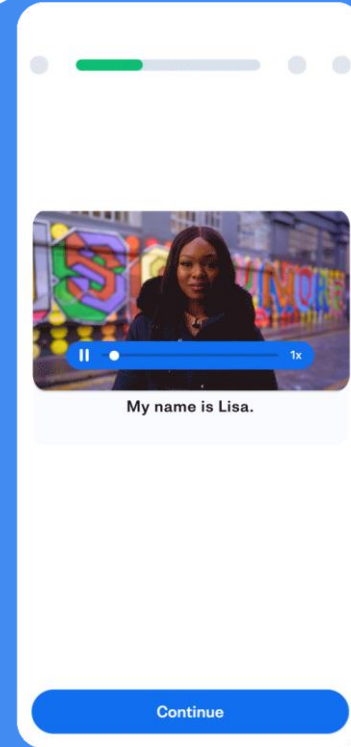


Research questions

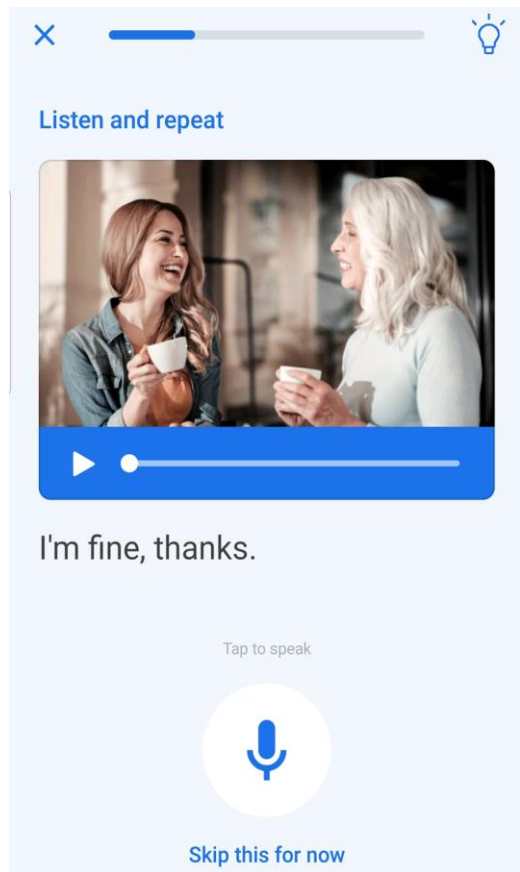
1. How **helpful** do learners find speaking activities in mobile apps?
2. How much do learners **enjoy** speaking activities in mobile apps?
3. Is there a **significant difference** between different types of speaking activities regarding their perceived effectiveness and fun?

Instrument: Busuu

- Language learning app
- 14 languages
- A1-B2 CEFR level



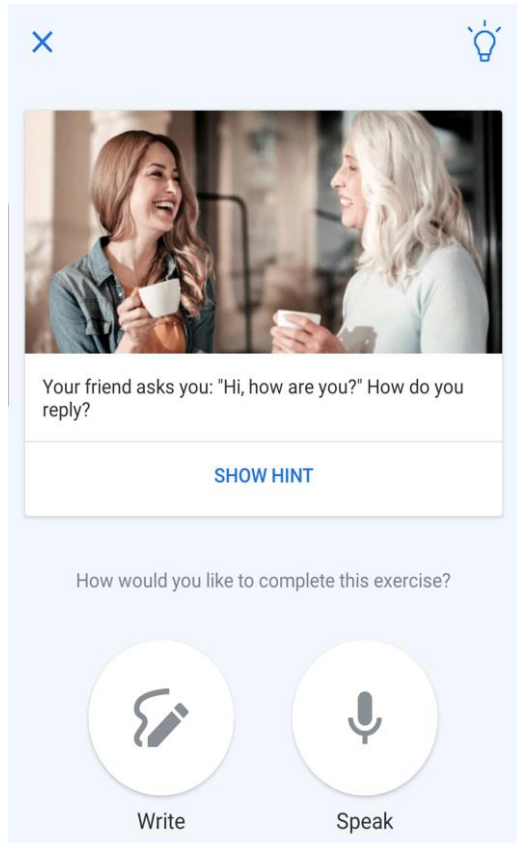
Speech recognition exercises



The screenshot shows a mobile app interface for a language learning exercise. At the top, there is a close button (X) and a progress indicator. Below that, the text "Listen and repeat" is displayed. A video player shows two women in a cafe; the woman on the left is speaking. Below the video is a blue play button and a progress bar. The text "I'm fine, thanks." is shown below the video. At the bottom, there is a "Tap to speak" prompt, a microphone icon, and a "Skip this for now" button.

- Pronunciation practice
- The app provides users with words or phrases to repeat, using voice recognition technology to compare the user's pronunciation with the correct version.

Conversation exercises

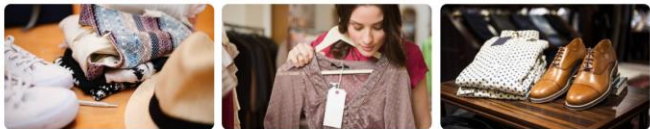





The screenshot shows a user interface for a conversation exercise. At the top left is a close button (X) and at the top right is a lightbulb icon. Below this is a photograph of two women smiling and talking in a cafe. Under the photo, the text reads: "Your friend asks you: 'Hi, how are you?' How do you reply?". Below the text is a button labeled "SHOW HINT". At the bottom, the question "How would you like to complete this exercise?" is followed by two circular icons: one with a pencil and paper labeled "Write", and one with a microphone labeled "Speak".

- Learners see a question
- Submit a written or spoken contribution
- Submission is sent to Busuu Community

Community corrections


Imagine you've just walked into a shop. Ask the shop assistant for help with finding something.



 Cem
Speaks  Turkish · Learns  English · 1

[Add friend](#)

03 May 2021 - 12:38



Click to record your answer in English



Well done, Cem!

How did Cem do?



- Learners receive written or spoken feedback from the Busuu Community on their submissions
- Busuu Community = advanced speakers of target language

Questionnaire

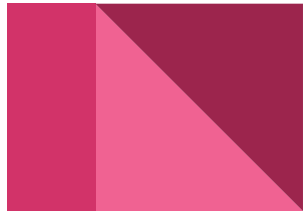
- 9 questions in total
- 3 sections
- Per section:
 - 2 closed-ended and 1 open-ended question

1. Speech recognition exercises help to improve my English speaking skills.

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

2. I enjoy speech recognition exercises.

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree



Data collection

- Survey Monkey, exported in excel file
- Intercom message
- Cross-sectional: two days
- 1698 questionnaires



Data analysis

- User ID was attributed to all participants
- Quantitative data (Q1, Q2, Q4, Q5, Q7, Q8)
 - Descriptive statistic methods
- Qualitative data (Q3, Q6, Q9)
 - Answers were translated into English
 - Qualitative analysis in two phases
 - Phase 1: Each answer was coded to cluster information and discover patterns
 - Phase 2: Broader categories were formed. Frequency of responses were analysed to draw conclusions



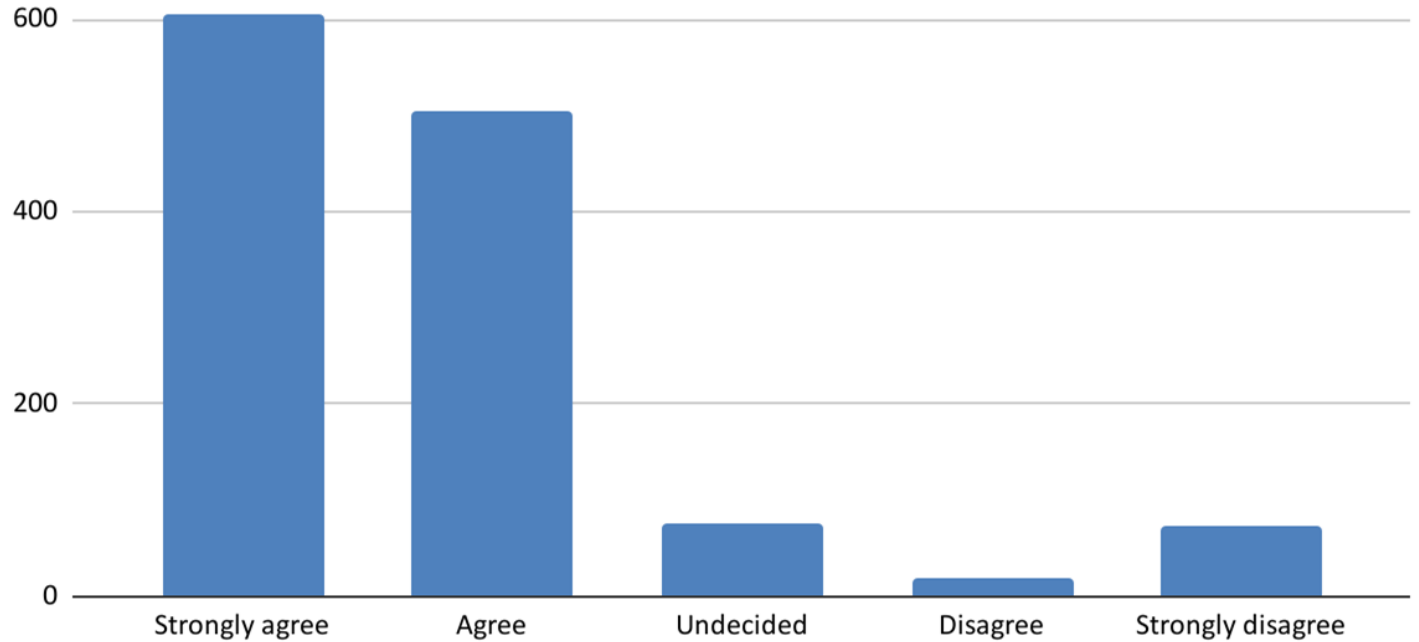
Results:

Research Question 1

How **helpful** do learners believe speaking activities in mobile learning apps are?

How helpful do learners believe speaking activities are?

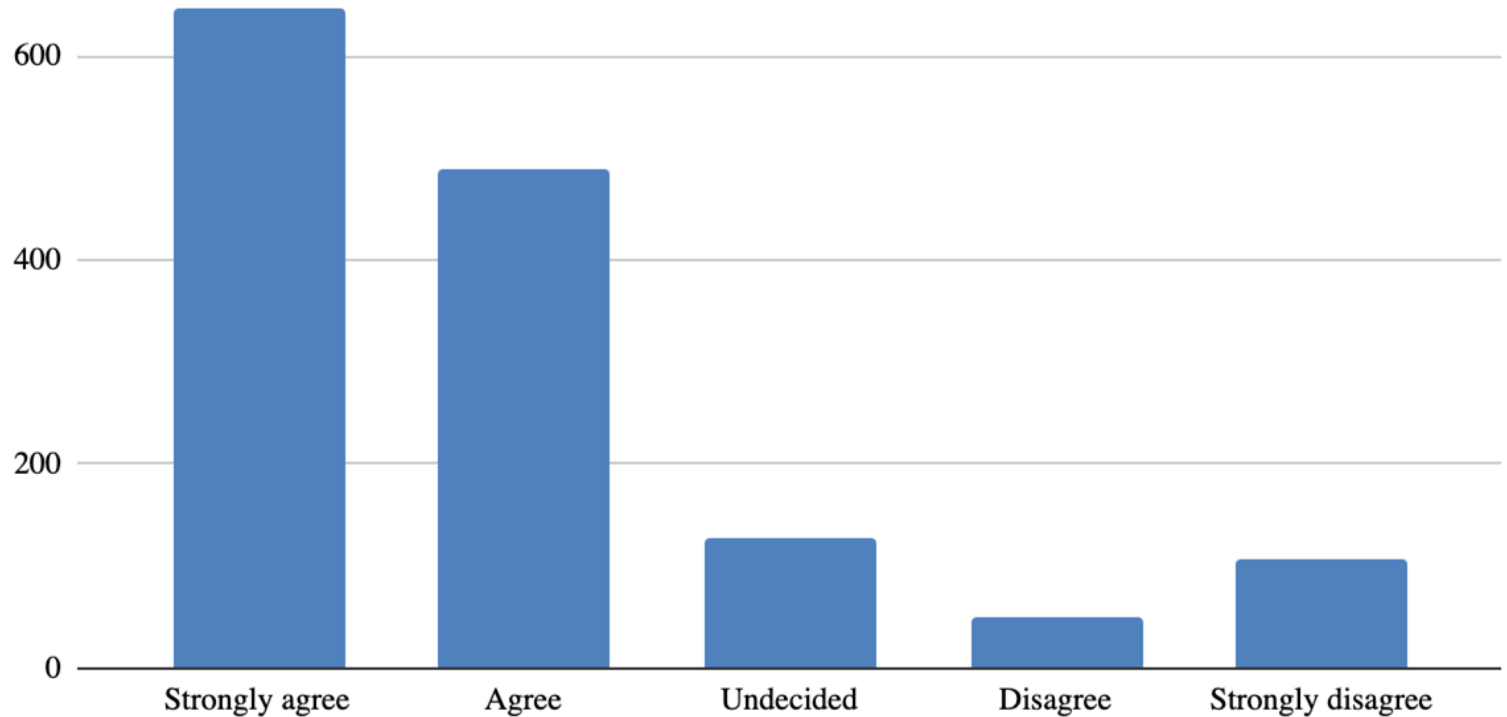
Speech recognition



How helpful do learners believe speaking activities are?

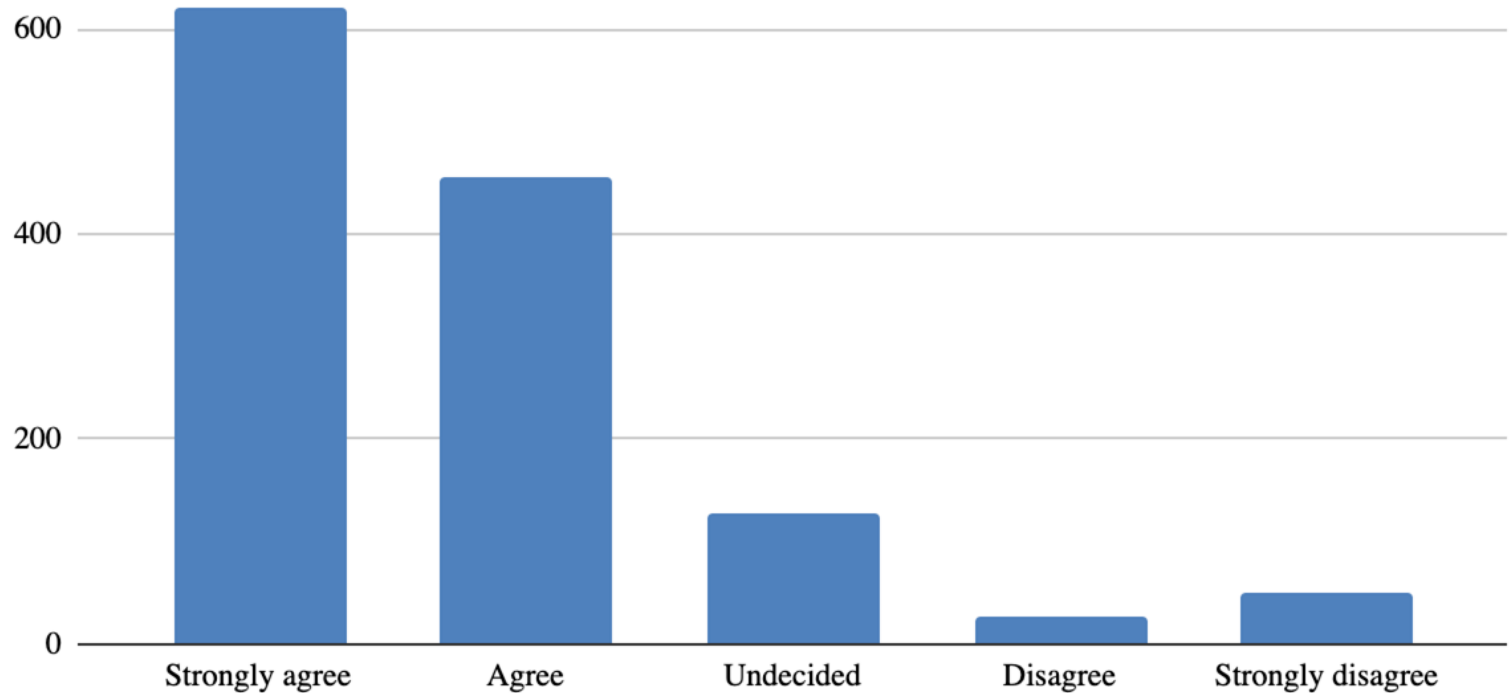
Conversatio

n



How helpful do learners believe speaking activities are?

Community corrections



How helpful do learners believe speaking activities are?

- **Speech recognition**

- Technological issues could undermine the extent to which these were considered helpful

- **Conversations and community corrections**

- Students request more of these as they believe these in-app interactions are the most effective





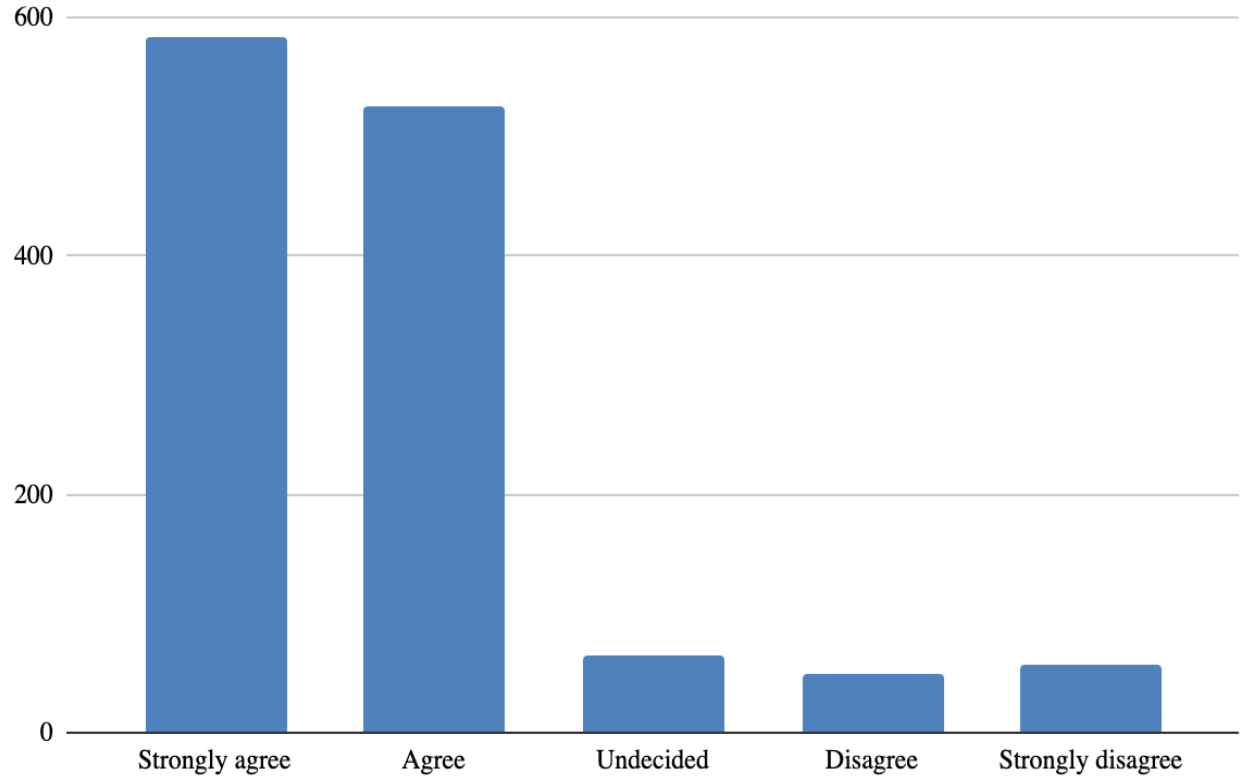
Results:

Research Question 2

How much do learners **enjoy** speaking activities in mobile learning apps?

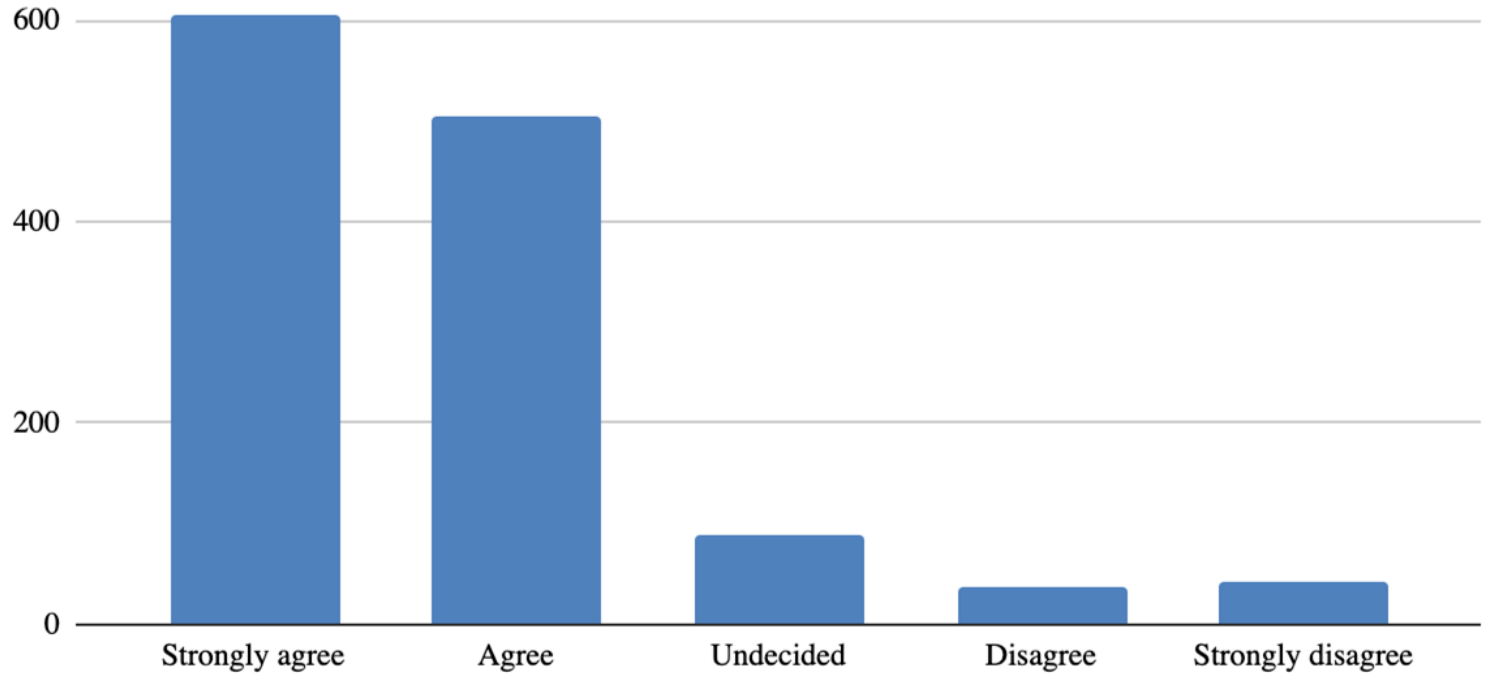
How much do learners **enjoy** speaking activities?

Speech recognition



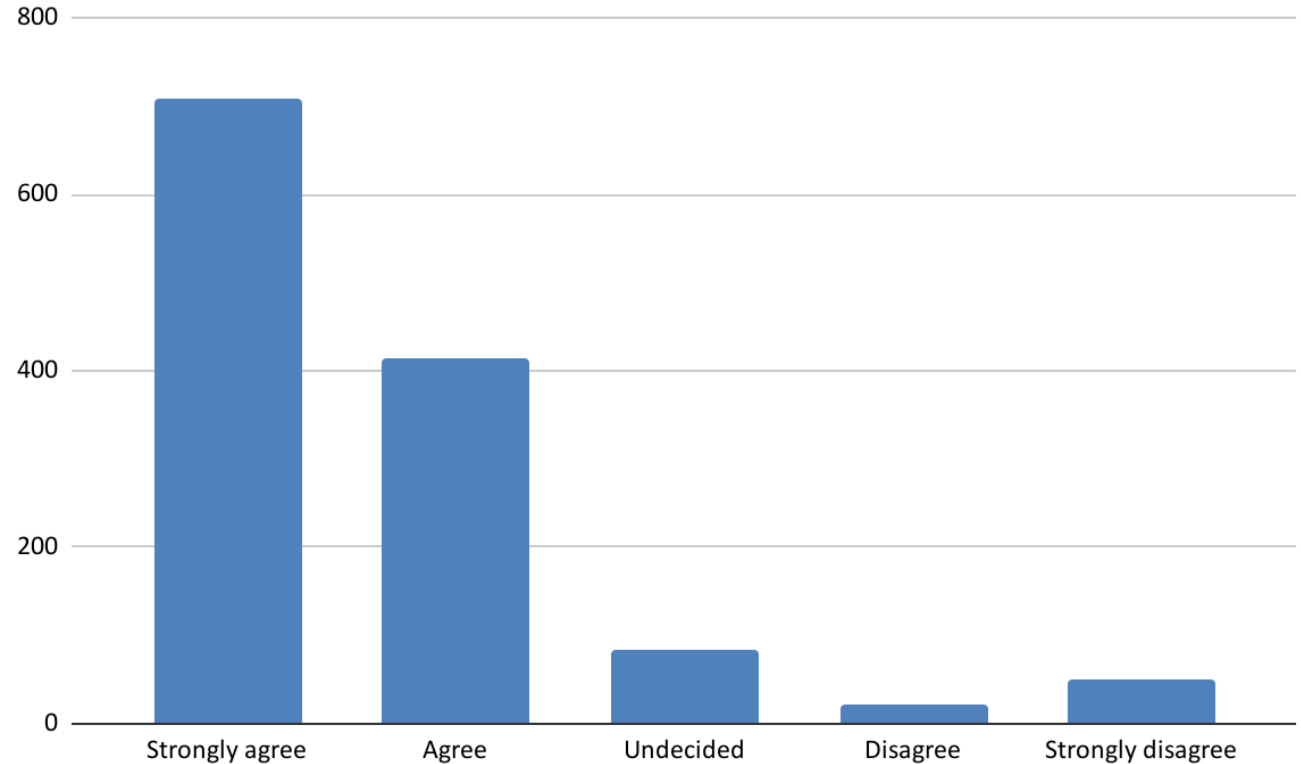
How much do learners **enjoy** speaking activities?

Conversation



How much do learners **enjoy** speaking activities?

Community corrections



How much do learners **enjoy** speaking activities?

- Speech recognition
 - Lack of accuracy and technical shortcomings in the speech recognition exercises can lead to **frustration**
- Conversations and community corrections
 - Most find it very motivating to receive feedback from other users
 - Some find it scary to receive feedback from strangers
 - Lack of feedback can sometimes also be demotivating





Results:

Research Question 3

Is there a significant difference between different types of speaking activities regarding their perceived effectiveness and fun?

Difference in perceived effectiveness

Exercise type	Mean (1-5)	SD
Speech Recognition	4.20	1.03
Conversation	4.29	0.94
User feedback	4.23	0.97

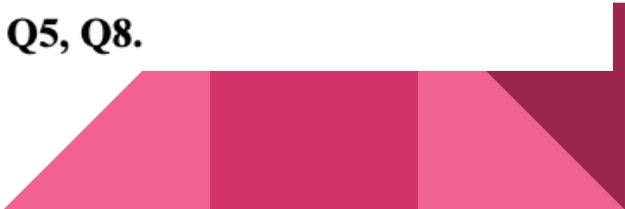
Table 1. Quantitative analysis of results Q1, Q4, Q7



Difference in perceived fun

Exercise type	Mean	Standard Deviation
Speech Recognition	4.19	1.01
Conversation	4.24	0.94
User feedback	4.33	0.96

Table 2: Quantitative analysis of results Q2, Q5, Q8.



The background is a solid pink color. In the top right corner, there is a decorative graphic consisting of several overlapping geometric shapes: a dark pink square, a medium pink square, and a light pink square, all partially cut off by the edge of the frame.

Looking at the future

Looking at the future (1)

- AI Correction Bot if a learner doesn't receive a response from the community
- Many **learners engage with the Bot** by giving thumbs up, giving Best Correction Award or writing a comment.



Looking at the future (2)

Improved Speaking Recognition with AI

- Receive clear, useful, and actionable feedback on pronunciation generated by AI technology
- Have the ability to listen to their recording and the native speaker's recording side by side to compare and contrast



Conclusion

- Language learners consider speaking activities both **helpful** and **motivating**
- Some adjustments and improvements should be considered to maximise its impact
- Limitations of the study
- Future lines of research

