Willingness to communicate: can virtual reality help?
OUTLINE

- Context
- Literature review
- Material and methodology
- Preliminary results & discussion
Sociolinguistic portrait of the learning context:

- Montreal: bilingual metropolis
- McGill: anglophone university located in downtown Montreal
- An anxiety due to the Montreal switch (Geogrey-Smith, 2017)
- Low willingness to communicate (WTC) in L2 French outside the classroom

A regional variety of oral French

Social linguistic portrait of the learning context:
Question: How can we promote L2 communication outside of the classroom in the Montreal context?
The WTC pyramid (MacIntyre et al., 1998)
The variables of L2 WTC

High WTC, High anxiety, Positive Correlation, Negative Correlation, High motivation, High self-perceived communicative competence (SPCC)

The variables of L2 WTC
So, what about virtual reality (VR)?

Gap in the literature: Few studies have actually looked at how to develop material in order to increase WTc (MacIntyre et al. Gregersen, 2013)
Why use VR in the L2 classroom? 

- Authentic simulation: Immersive aspect, interaction.
- Helps lower anxiety (Grant et al., 2013) by providing "non threatening" environments for L2 practice.
- VR as the potential to develop communicative competence and SPCC while lowering anxiety (Rankin et al., 2006).
Research hypotheses

VR communicative tasks could impact WTC.

VR

WTC

SPCC

Anxiety
Description of the VR material:

- 360 videos shot in the real world
- Speech recognition (Google API)
- 3 scenarios
- 360 videos shot in the real world

ImmerseMe.co
ImmerseMe: How does it work?
Participants:

- N=19
- Undergraduate students taking an elective French course in Montreal
- Level: A2
- L1: Mandarin (n=6) and English (n=5), among others

N=19

Participants:
**Procedure**

**Intervention:** 3 simulation tasks mediated by VR

**Data collection tools**

- Reflective Journals
- Focus Groups: 4 x 3-6 students
- Pre-test/Posttest: WTC, anxiety; SpCC (α = .80 / α = .86 / α = .93)

Focus Groups: 4 x 3-6 students
Procedure:

Focus groups

Pre-test

Post-test

Journal 3

Journal 2

Journal 1

Pre-test
Paired t-tests: statistically significant difference for the 3 variables:

General evolution of WTC, L2 anxiety and SPCC:

Paired t-tests: statistically significant difference for the 3 variables:

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th>Post-test</th>
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<tbody>
<tr>
<td>SPCC</td>
<td>M=3.27, SD=.60</td>
<td>M=3.78, SD=.66</td>
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<tr>
<td>Anxiety</td>
<td>M=2.65, SD=.68</td>
<td>M=3.10, SD=.78</td>
</tr>
<tr>
<td>WTC</td>
<td>M=2.87, SD=.80</td>
<td>M=3.47, SD=.77</td>
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$t(18)=-3.93, p<0.05$
$t(18)=-2.38, p<0.05$
$t(18)=-3.14, p<0.05$
Initial reaction from the participants (Simulation 1)

• **Positive (88%)**: “it felt comfortable” ; “it mimicked an activity we all perform quite frequently” ; “it was helpful”

• **Neutral (12%)**: sometimes felt easier than in the real world (even “too easy”)

• **Negative (2%)**: it felt uncomfortable ; “it was helpful”

Activity well-received
Subsequent reactions (simulations 2 et 3)

- Quick familiarization as to how the online platform works
- Self-reported increase in L2 WTC (65% of the participants): "I think that if I practice with this simulation and a variety of others like it, my proficiency to order in French would increase with time".

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- Improvement later on. "I think that if I practice with this simulation and a variety of others like it, my proficiency to order in French would increase with time"

- Less negative perception of errors (for some) : "I think that if I practice with this simulation and a variety of others like it, my proficiency to order in French would increase with time"

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Perceived degree of realism of the VR simulations seem to match with the situations L2 learners can experience/have already experienced in the real world.

- Highly realistic (44.5%): “I think they are exactly like the real-life situations that I’ve been in. Now, I am just more prepared for them.”
- Realistic (22.25%): “I think they are good enough.”
- Rather realistic (22.25%): “There may be some changes in the conversation in the real situation.”
- n.a. (11%)
remaining obstacles to the practice of L2 French outside of the classroom

Fear of not being understood (lack of vocabulary and negative perception of one’s accent in L2 French)

Fear of not being able to understand (interlocutor may speak too quickly and ask unexpected questions)

• Potentially shameful situations: “My biggest fear is to say something inappropriate or misleading”

The Montreal switch: “Not very likely [to order in French] because the barista would speak English to me”
Back to our research hypothesis...
Discussion

• Desire vs. willingness to communicate (to be determined...)

WTC = a volitional process (Kang, 2005)

Wish to practice with a real person in between the VR simulation and the real-world interaction (e.g. giving directions to a tourist or a taxi driver)

Suggestions for other simulations based on past real-life experiences
Limitations / Future studies

• Group size
• Non-negligible contribution of other class activities to L2

Hard VR vs. Desktop VR

Need to replicate the study in other FSL/FFL contexts

"[the VR simulation] has helped me overcome a barrier. I felt more confident [during the second simulation]. I think it’s because we’ve been doing a lot of oral exercises in class;" If I do

Recurring difficulties related to speech recognition technology

"If I do the task more, I would feel more confident ordering in a bar in French. 5 minutes' practice is not enough."

Need for repeated practice (duration of the study): "If I do..."
Thank you!
Simulations and Gaming, 28, 149-163.


Achievement and Motivation in the Governmental Schools of Bethlehem District in Palestine.


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