A virtual audience for public speaking: A pilot study

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Background

is one of the most feared activities[1] and its quality can influence a speaker's career success[2]

has consequences on communication performances[3], particularly on speech fluency[4]

its training has benefits on communication performance **but** its implementation is complex[4]

Virtual reality (VR) seems to be a relevant and innovative tool

Aims of this pilot study

Validate the use of virtual audience for public speaking by assessing its capacity to elicit emotional (i.e. anxiety) and behavorial responses (i.e. disfluencies) to confirm its ecological validity.

Methodology

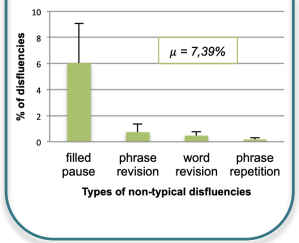
8 participants made an oral presentation in front of a virtual audience

	Measures	Tools
Speech	Speech disfluencies	Computerized Language Analysis (CLAN)
Emotions	Anxiety level	Subjective Units of Distress Scale (SUDS)
Quality of virtual audience	Feeling of presence	Questionnaire de Présence (QP-UQO)
	Side effects (i.e. cybersickness)	

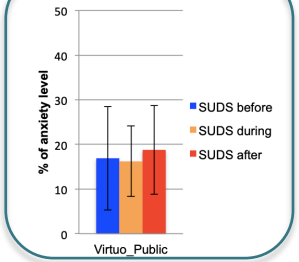
Results

Quality of VR ✔
- sufficient feeling of presence (μ = 57,03%)
- absence of cybersickness (μ =2,5%)

Speech disfluencies



Emotions



Conclusions

First step into a long-term project

Highlighting positive points of this virtual audience

Improving some aspects of this virtual audience

Need to statistically confirm the ecological validity of this virtual audience

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