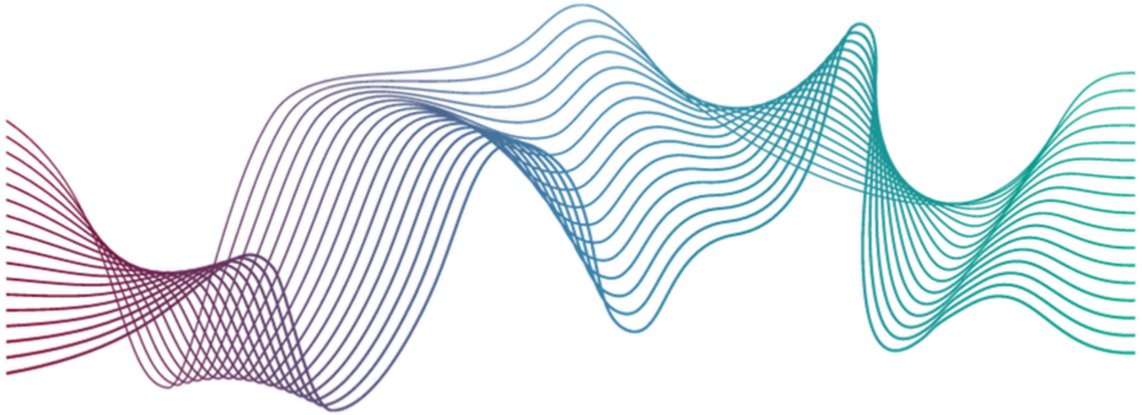

VR-TALKS

AN ERASMUS+ PROJECT

Funded by
the European Union

EAPC congress, Helsinki, May 2025

Jan Hrdlička

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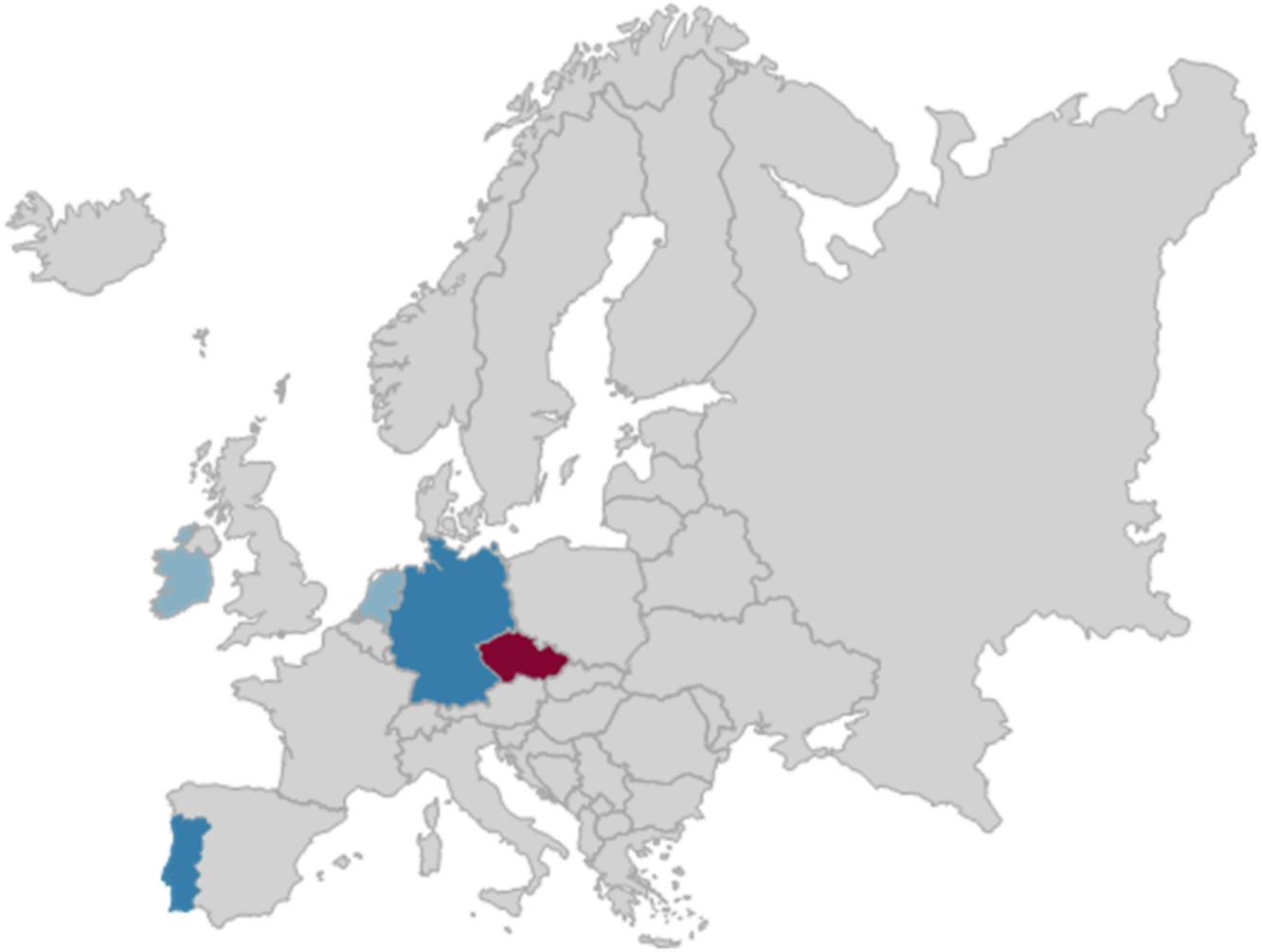

Funding

ERASMUS + Programme

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from 01.09.2023 to 31.08.2025 (24 months)

Consortium Leadership

3dsense s.r.o.

Cooperation Partners

Univerzita Karlova

Universiteit Leiden

University College Cork

Hannover Medical School

Universidade Catolica Portuguesa

Ludwig Maximilian University Munich

European Association for Palliative Care

Why does communication in healthcare so often fail?

Most of the complaints are communication-related

R. Elias et al. "A Taxonomic Review of Patient Complaints in Adult Hospital Medicine." Journal of Patient Experience, 8 (2021).

S. O'Reilly et al. "OP36 The role of communication between health professionals and patients as a factor in patient complai
in obstetrics and gynaecology: a mixed methods review from an irish maternity hospital." Journal of Epidemiology &
Community Health, 69 (2015): A24 - A24.

Communication training

Communication training

Can AI/VR change the way we teach communication?

VR-TALKS

AN ERASMUS+ PROJECT

Funded by the European Union

HOW EDUCATORS PERCEIVE IMPLEMENTATION OF VIRTUAL REALITY INTO COMMUNICATION MODULES?

May 2025, Helsinki

Jan Hrdlička, Aleksandrina Skvortsova, Liesbeth van Vliet, Lara Groschel

What we wanted to know? Survey aim.

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What is the level of acceptance of VR among educators?

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- What is the level of acceptance of VR among educators?
- What they perceive as barriers and facilitators

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- What is the level of acceptance of VR among educators?
- What they perceive as barriers and facilitators
- What they perceive as advantages and disadvantages of VR
- What are the predictors of their intention to use VR

Sample

75 Educators

11 European Countries

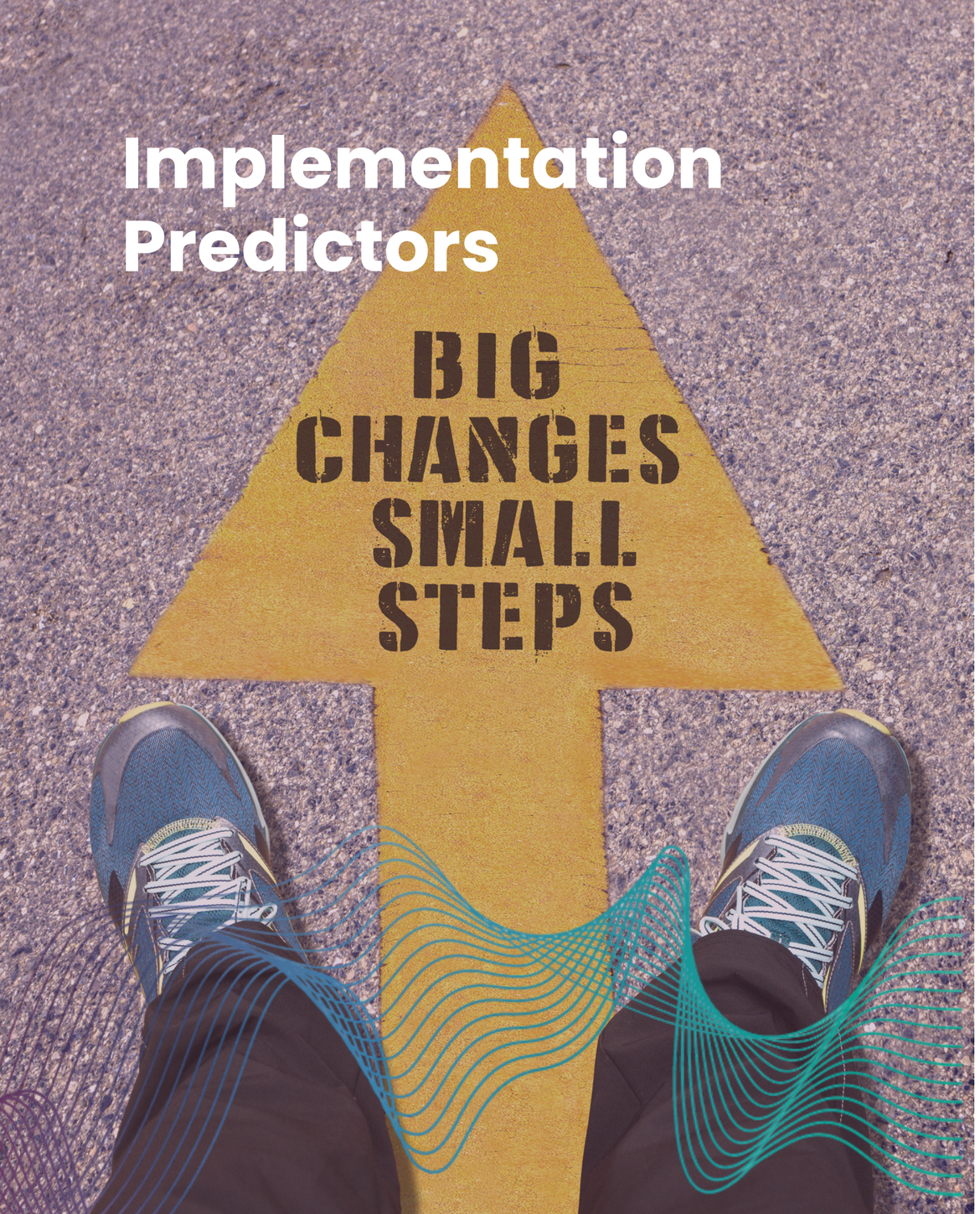
Key Findings

- Moderate intention to use VR in practice

Key Findings

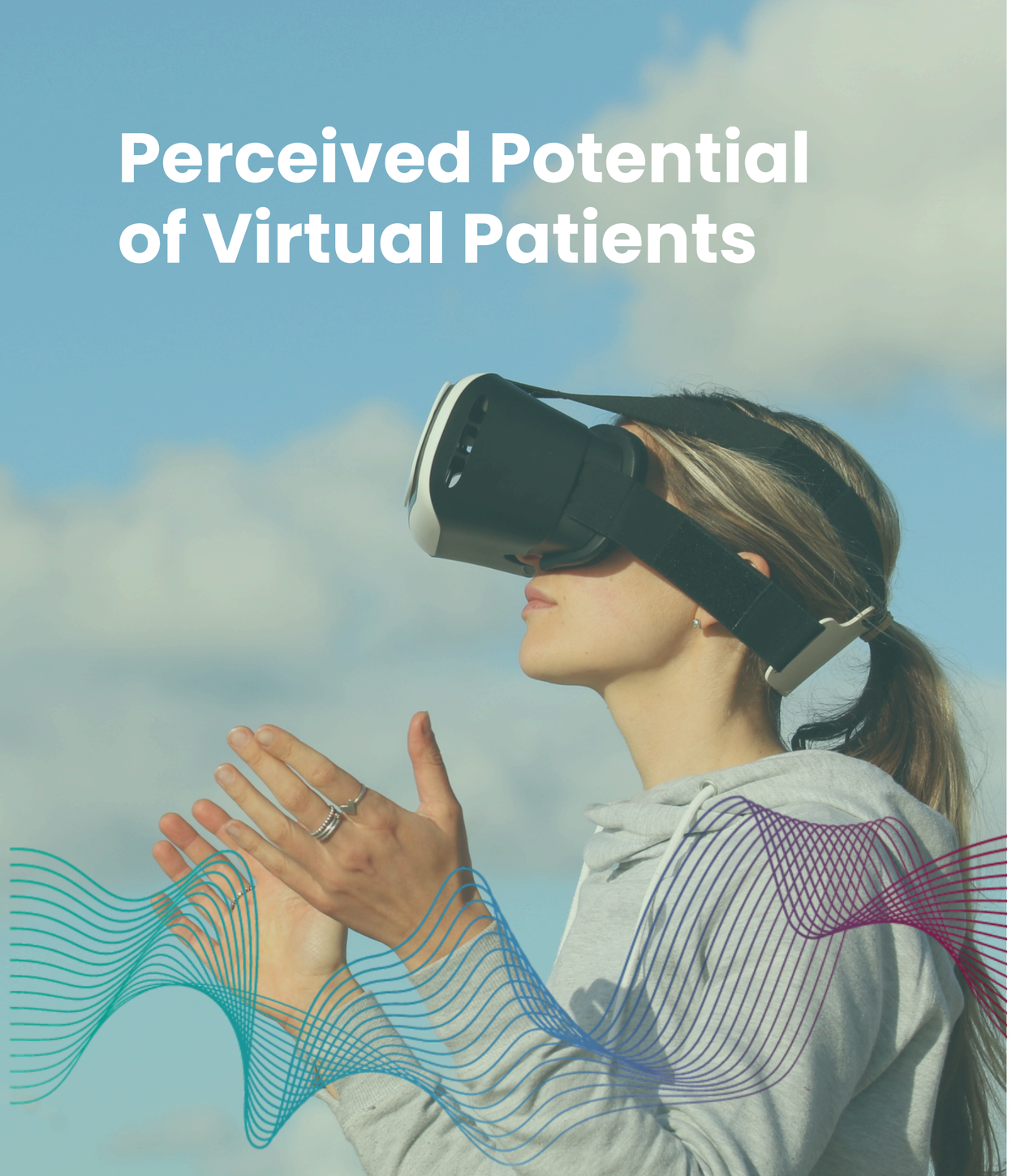
- Moderate intention to use VR in practice
- Educators need support to use VR in communication modules

Implementation Predictors

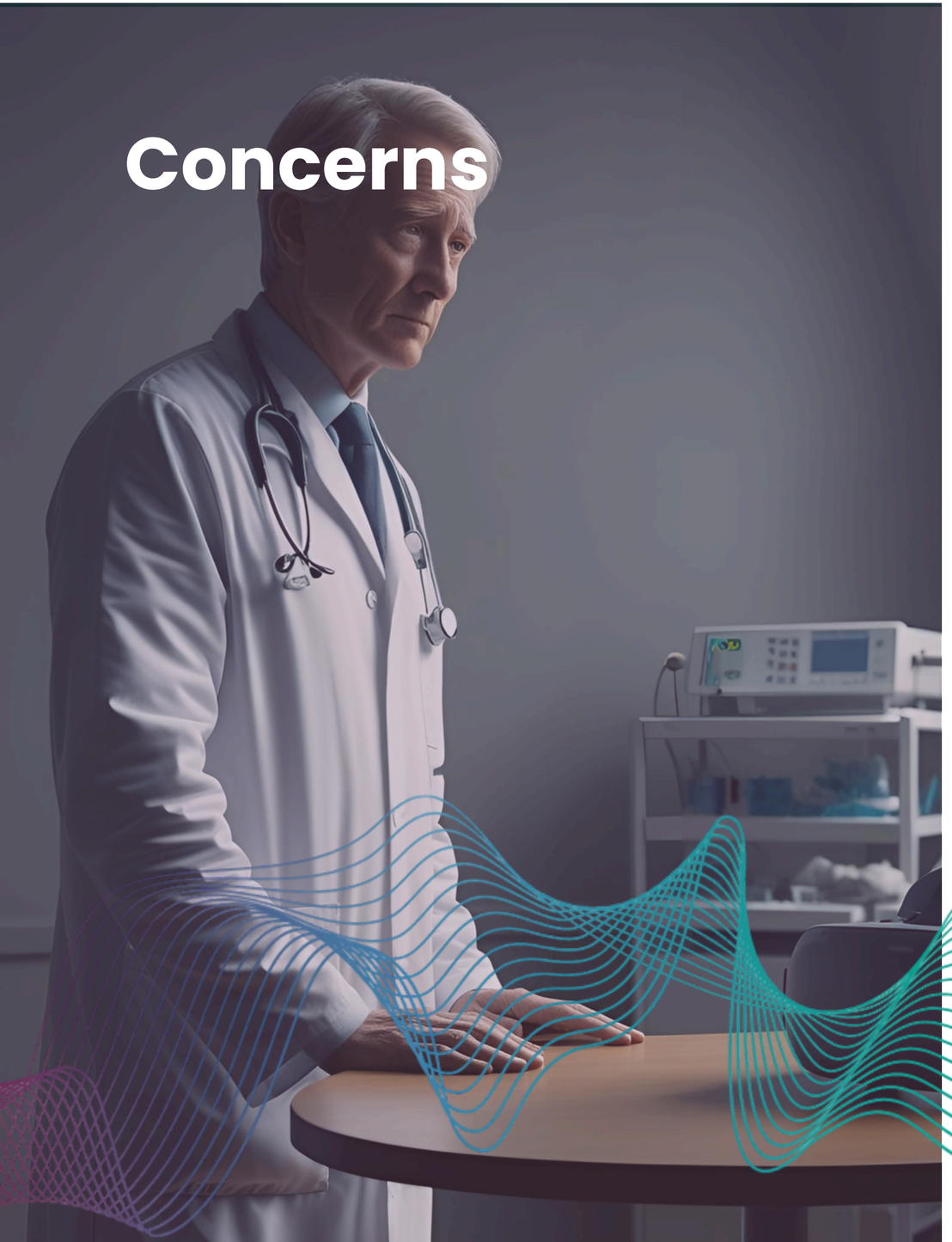


- Compatibility
- Social norms

Perceived Potential of Virtual Patients



- Immersion
- Resource efficiency
- Repetition & Practice
- Safe environment

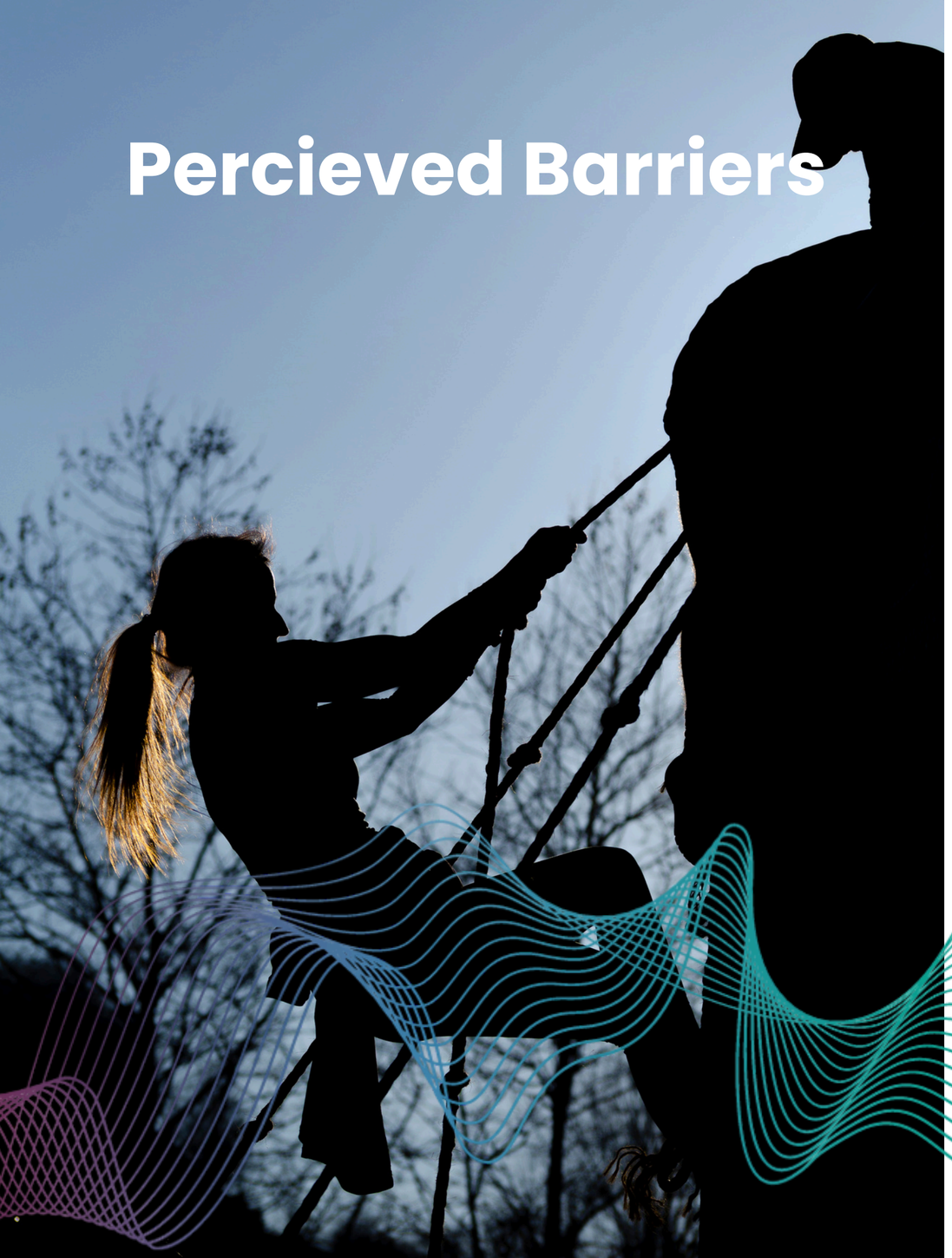


Concerns

- Lack of human interaction

Perceived Facilitators

- Ability of training VR



Percieved Barriers

- Lack of VR training
- Financial support
- Teaching space issues
- Lack of evidence on VR’s effectivness

Conclusion

- To use VR in communication teaching, educators will need our help

Backup slides

Acceptability

Concept	Definition	Mean ± SD	Scale (α)
Attitude	Educators' general feelings about using VR technologies in their courses	20.4±5.5	3-27 (.93)
Perceived usefulne	Educators' beliefs that VR is a valuable education tool that will enhance the teaching process and will result in improved learning outcomes	21±4.7	3-27 (.87)
Perceived ease of u	Educators' beliefs that using VR in their teaching practice will be simple	14±5.7	3-27 (.83)
Compatibility	The extent to which educators believe that the use of VR fits with their current teaching approaches and meets their students' needs	10.4±4.3	2-18 (.80)
Social norms	Educators' beliefs about whether or not others think they should be using VR	20.3±8.5	5-45 (.84)
Behavioural contro	Educators' perceptions of internal (e.g., knowledge and skills) and external factors (e.g., resources and supports) affecting their ability to use VR in their practice	7.8±4.8	2-18 (.86)
Self-efficacy	Educators' beliefs that they have the personal ability to use VR as an education tool with their students	4.9±2.5	1-9 (-)
Time	Educators' belief that they have enough time to integrate VR in their teaching practice	4.9±2.2	1-9 (-)
Technical support	Educators' belief that they have enough technical support available to integrate VR in their teaching practice	3.6±2.4	1-9 (-)
Intention to use	Educators' intentions to use VR with their students in future	13.6±5.4	3-27 (.84)

Barriers

Barrier	Mentioned as a barrier n (%)	Mentioned as the most significant barrier n (%)
Resource constraints		
Lack of financial support**	47 (62.7%)	16 (17.2%)
Lack of equipment***	-	12 (12.9%)
Teaching space issues**	40 (53.3%)	4 (4.3%)
Lack of technical support***	-	6 (6.5%)
Lack of software (VR communication trainings) ***	-	3 (3.2%)
Knowledge and training constraints		
Lack of VR knowledge/ training to use VR**	41 (54.7%)	21 (22.6%)
Poor evidence to support the use of virtual reality**	19 (25.3%)	10 (10.8%)
Lack of access to evidence on virtual reality's effectiveness**	31 (41.3%)	0
Organisational constraints		
Lack of support from the management**	26 (34.7%)	1 (1%)
Lack of acceptance from other educators***	-	1 (1%)
Long implementation time of new technology in the institutio	-	1 (1%)
Time constraints		
Lack of time to learn how to use the virtual reality system`	30 (40%)	11 (11.8%)
The time required to use virtual reality in a class**	20 (26.7%)	
Student-related constraints		
Poor motivation of students to participate**	4 (5.3%)	2 (2.2%)
Lack of appropriate students with which to use VR	3 (4%)	0
Other		
Absence of personal connection in VR necessary for teaching	-	2 (2.2%)
Data privacy concerns***	-	1 (1%)
Lack of motivation	-	1 (1%)

Facilitators

Facilitators	Frequency n (%*)
Resource availability	
Availability of technical support	11 (11%)
Availability of financial support	9 (9%)
Availability of equipment	9 (9%)
Availability of software (VR communication trainir	9 (9%)
Knowledge and training availability	
Availability of training to use VR	22 (22%)
Acquiring personal experience with VR	5 (5%)
Evidence on virtual reality's effectiveness	9 (9%)
Help from colleagues	5 (5%)
Better understanding of the technology	1 (1%)
Organisational support	
Support from the management	5 (5%)
Availability of an implementation strategy	1 (1%)
Support from national bodies	1 (1%)
Support from course developers	1 (1%)
Student-related facilitators	
Interest of students	2 (2%)
Time availability	
Availability of time	5 (5%)
Other	
Lower costs	2 (2%)
Availability of ways to share materials	1 (1%)
Addition to the traditional methods	1 (1%)
Nothing	1 (1%)

Advantages

Advantages	Frequency n (%)	Example of a response
Learning experience		
Immersion	17 (17.5%)	"Greater immersion, which makes the situation more life-like"
Safe practice environment	10 (10.3%)	"Safe to practice because there is not a real person that they can harm with their communication"
Engagement and motivation	7 (7.2%)	"It could be a new refreshing way for students to put theory into practice, which could enhance their enthusiasm for learning new skills"
Improved learning outcomes	4 (4.1%)	*"VR may result in improved learning outcomes for my students"*
Feedback and assessment	1 (1%)	"Variation, training in specific techniques and feedback mechanisms"
Flexibility and Standardisation		
Repetition and practice	12 (12.4%)	"Students can have more practice time"
Flexibility	8 (8.2%)	"Students can do this in their own time"
Variety of scenarios	8 (8.2%)	"The variety in patients. Right now we use simulated patients to train skills. It would be amazing to have a more diverse pool in backgrounds"
Supplement to traditional metho	6 (6.2%)	"I think VR should only be seen as an addition but not as a replacement of face-to-face encounters"
Standardization	4 (4.1%)	"I think it could be a standardised approach allowing the individuality of the situation unfold as per the students
Technical and logistical benefits		
Accessibility	4 (4.1%)	"The advantage is easier access, thus the easier planning and scheduling, reaching more students in case of lack of
Technological advancement	4 (4.1%)	*"New exciting method"*
Cost and resource efficiency		
Cost and resource efficiency	12 (12.4%)	"Not as time- and resource-consuming as a role play"

Disadvantages

Disadvantages	Frequency n (%)	Example of a response
Limitations in realistic learning experience		
Lack of human interaction	31 (35.6%)	“I fear it disconnects students more and more from real life interaction with physical human beings (the essence of life and the medical field)”
Limited realism	11 (12.6%)	“Real acting patients can seem more real to many students. They might confuse training with a video game. “
Other learning experience concerns	11 (12.6%)	“Getting the level of the experience right for the student”
Flexibility		
Content and flexibility issues	8 (9.2%)	“I think that at this moment the VR is limited in terms of the content, variability and flexibility of the script”
Technical and logistical challenges		
Practical and logistical challenges	9 (10.3%)	“Not all students will have the equal opportunity to engage - with 350 students in some cohorts this is not a practical approach”
Cost and resources		
Costs	9 (10.3%)	“It is expensive and has to be maintained and regularly updated”
Technical issues	8 (9.2%)	“The disadvantages seem to me to be mainly the practical matters, i.e. technology that is difficult or does not work”

Founder’s perspective

- Educator training (“train the trainers”)
- Helping schools integrate VR into curricula
- More adaptability (tablet-based, e-learning options)