

# **A New Avenue for Teacher Education: Virtual Reality Intervention as a Path Towards Reducing Public Speaking Anxiety and Supporting Growth Mindsets**



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## Outline

Public Speaking Anxiety

Pre-Service Teacher Anxiety

Pre-Service Teacher Mindsets

Integrating Virtual Reality into Pre-Service Teacher Education

Current Study

Educational Significance

## Public Speaking Anxiety

Fear or anxiety about speaking in public.

- Fear being judged negatively by other people leading to humiliation or embarrassment

Repercussions for social and occupational functioning



## Pre-service Teacher Anxiety

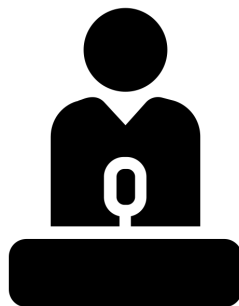
Pre-service teachers may experience public speaking anxiety during their professional training (Augustiana, 2014; Aydin, 2016).

Opportunities to practice public speaking are time limited, resource intensive and lack feasibility.



# Pre-service Teacher Mindsets

Dweck, 2006



## Fixed Mindset

Can't change one's public speaking skills

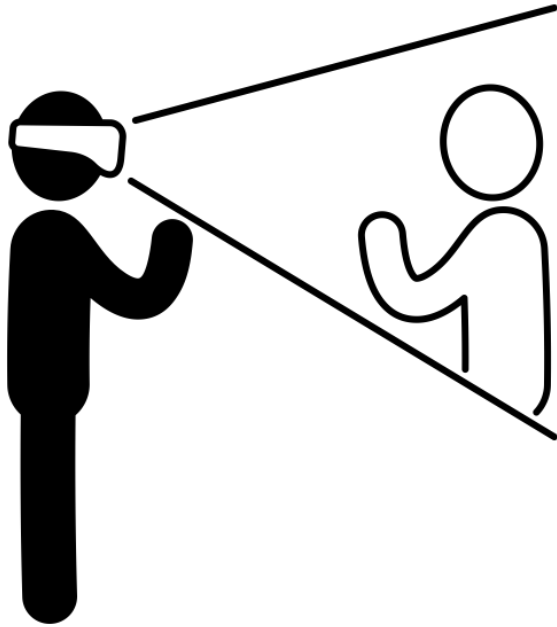
Positively correlated with anxiety

## Growth Mindset

Can change one's public speaking skills

Negatively correlated with anxiety

# Integrating Virtual Reality into Pre-Service Teacher Education



Effective at reducing public speaking anxiety in highschool and university student samples (Hinojo-Lucena et al., 2020).

Benefits include:

Feasible and cost effective

Avoids public embarrassment

Maintains client confidentiality

## Current Study

RQ 1. Is a brief VR intervention capable of reducing pre-service teachers' public speaking anxiety?

RQ 2. Do pre-service teachers' mindsets change over the course of a brief VR intervention?

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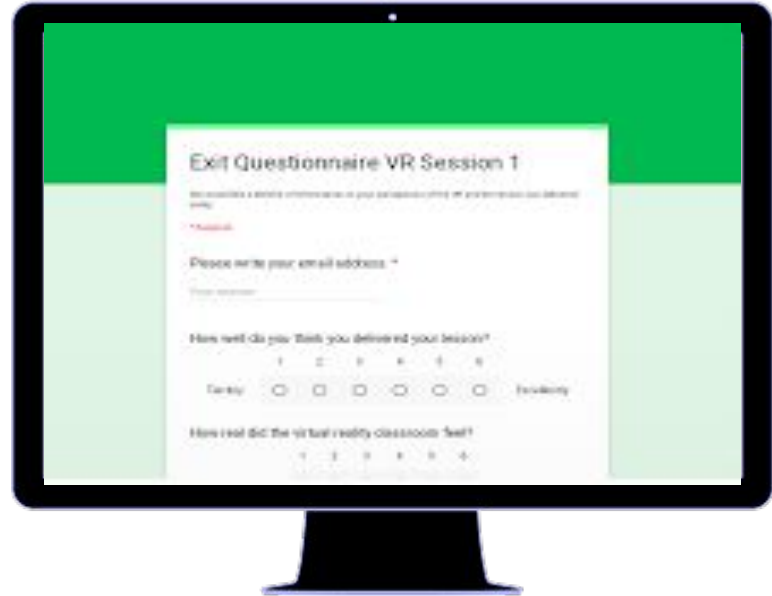
## Methods and Measures

Participants

$n = 7$ , 71% female

Age 19-24,  $M = 20.86$

The participants completed an online survey with various public speaking anxiety and a mindset measure.





## Procedure

Pre VR: participants completed the public speaking anxiety and mindset measures

VR Sessions: participants delivered 3 lessons in VR

Post VR: participants completed the public speaking anxiety and mindset measures



## Results

*Mean differences of mindsets and public speaking anxiety at pre-test and post-test*

	<i>Pre-test</i>		<i>Post-test</i>			
<i>Variable Scores</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>t(df)</i>	<i>p</i>
Mindset (higher score more fixed)	2.71	1.18	1.81	.72	2.45(6)	.05
Public Speaking Anxiety	3.60	.31	3.13	.27	3.01(6)	.024*

*Note.* \*Significant at the  $p < .05$  level.

## Discussion and Educational Significance



VR provides pre-service teachers the opportunity to reduce their public speaking anxiety in a feasible and cost-effective measure.

Growth mindsets with respect to public speaking skills has implications for pre-service teachers' self-confidence and teaching efficacy.

## Educational Significance Cont.

Integrating VR into teacher education programs

- Behaviour management
- Skill development

Extending VR to other professions that require routine public speaking

- Business
- Law

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Pictures taken from Noun Project.

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