A MIXED METHODS STUDY ON THE EFFECT OF EMOTIONAL AWARENESS EXERCISES ON ADAPTIVENESS IN COPING AND EMPATHY WITH PRESERVICE TEACHERS IN MIXED REALITY SIMULATIONS.

Ashley Brooksbank

Social Studies Teacher, Ridgefield, Connecticut

Dissertation Chairperson: Dr. Jody Piro

Dissertation Committee Members: Dr. Carrie Straub, Dr. Erik Gundel

RATIONALE

- Teachers with more developed emotional recognition and regulation abilities may better manage the emotional demands related to teaching.

  Brackett & Baron, 2018; Brackett et al., 2010; Castillo et al., 2013; Harvey et al., 2016; Tsouloupas et al., 2010; Valente et al., 2020; Valente et al., 2020.

- Research is primarily focused on the impact of SEL programs on students, with little known about the impact of such programs on educators.

  Brackett et al., 2011; Castillo et al., 2013

- Mixed Reality Simulator environments can act as an empathy inducing medium and provide preservice teachers with the opportunity to practice affective and cognitive skills, such as emotional regulation and recognition, which are integral to teaching.

  Gundel et al, 2019; Stavroulia & Lanitis, 2019

STATEMENT OF THE PROBLEM

- The cognitive skills of **appraisal, emotional recognition**, and **emotional regulation** are **emphasized in theories of coping, empathy, and emotional intelligence** but despite their importance socio-emotional competencies have played a **subordinate role in teacher education**

- Accounting for the interconnectedness of the cognitive skills emphasized, there may be **potential for exercises focusing on emotional awareness to impact preservice teachers' adaptiveness in coping as well as their cognitive and affective empathy** in preservice teachers participating in mixed-reality simulations.

Aspelin, 2019; Bertrand et al., 2018; Brackett et al., 2011; Chang 2013; Endler, 1997; Kohn et al., 1997; Kohn et al., 2003; Mayer et al., 2016; Mayer et al., 2004; Mayer et al., 2008; Mclean et al., 2007; Reniers et al., 2011; Schafer et al., 2020; Skinner et al., 2003; Spinella, 2005; Vreekea & van der Mark, 2003; Waajid et al., 2013)

SIGNIFICANCE

This study will add to the **lack of research** on the development of **adaptive coping and empathy** as preservice teachers practice clinical skills within mixed reality simulators; and **contribute to the research** on how **SEL impacts teacher education programs**.

Additionally, **emotional awareness exercises** have the **potential to impact emotional regulation, emotional recognition, and appraisal skills**, therefore having the potential to aid in the development of preservice teachers in the mixed reality simulator.

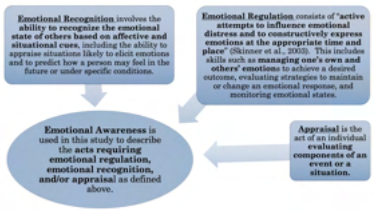
Aspelin, 2019; Castillo et al., 2013; Gundel et al., 2019; Stavroulia & Lanitis, 2019; Waajid et al., 2013

KEY TERMS

Mursion® is a **virtual reality training platform** that can be used in high-stakes career fields to **practice and master essential skills** to become more effective. For educators, Mursion® offers an opportunity to **rehearse instructional techniques including classroom management**.

Mursion, 2016]

KEY TERMS



Bertrand et al., 2018; Chang, 2013; Mayer et al., 2016; Mayer et al. 2004; Mayer et al., 2008; Skinner et al. 2003

THEORETICAL FRAMEWORK

Emotional Intelligence

- **Four branch model** states that EI is comprised of the cognitive abilities to **perceive emotion, facilitate thought using emotion, understand emotions, and manage emotions**
  - Cognitive skills of **appraisal, emotional recognition, and emotional regulation** integral to these abilities
- Considered a **hot intelligence** due to the impact on reasoning
- Has been shown to have a positive relationship with **academic performance**, to predict **better social outcomes**, to help people to **cope more effectively with unpleasant emotions**, and to better predict and **cope with the actions of themselves and others**

Brackett et al., 2011; Mayer et al., 2016; Mayer et al. 2004; Mayer et al., 2008

Adaptiveness in Coping

- **Adaptiveness in coping** is the quality of "coping consistently so as to **reduce distress, or, at worst, not aggravate it**" (Kohn, 2003, p. 112)
  - Adaptiveness in coping is dependent upon the individual as well as the context of the situation, and requires flexibility in responding
- The **appraisal process** is integral to the **interpretation of a situation** as stressful, the **selection and use of coping strategies,** and the ability to **recognize the emotional state** of oneself and others
- **Emotional regulation** plays a dual role
  - The **skill of emotional regulation** aids in **selecting coping strategies** that are adaptive
  - **Coping strategies** may be considered to in the **family of emotional regulation** strategies, because those strategies **share the quality of aiding in or activating emotional regulation abilities**

Chang 2013; Endler, 1997; Kohn et al., 1997; Kohn et al., 2003; Mclean et al., 2007; Schafer et al., 2020; Skinner et al., 2003

Cognitive and Affective Empathy

- **Emotional regulation** and **emotional recognition** are thought to play a **crucial role** in both **cognitive and affective empathy**
- **Cognitive empathy** is focused on the **comprehension of the feelings and experiences of others**, and is interested in the **appraisal of the emotional state of others**
  - Perspective taking and online simulation considered to be components
- Affective empathy involves the **recognition of other people's feelings** and the **eliciting of a corresponding emotional state** that allows for vicarious experience and sympathetic experience
  - Emotional contagion, proximal responsivity, and peripheral responsivity considered to be components

Bertrand et al., 2018; Reniers et al., 2011; Spinella, 2005; Vreekea & van der Mark, 2003

REVIEW OF THE LITERATURE

RESEARCH QUESTIONS

1. What is the effect of emotional awareness exercises on empathy and adaptiveness in coping for pre-service teachers who participate in mixed reality simulation experiences?
2. How do preservice teachers participating in a mixed reality simulator perceive the importance of emotional intelligence and more specifically emotional awareness?
3. To what extent do the quantitative and qualitative data converge? How and why?

RESEARCH DESIGN

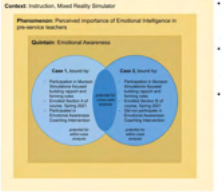
MIXED METHODS DESIGN

Creswell & Plano Clark, 2018

QUANTITATIVE DESIGN

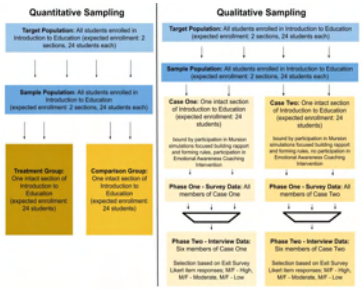
Groups	PFI & QCAE	Treatment Package 1	Treatment Package 2	Treatment Package 3	PFI & QCAE
Treatment	O	X	X	X	O
Comparison	O				O

QUALITATIVE DESIGN: MULTIPLE CASE STUDY

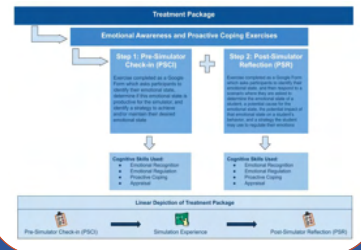


- Context: Environmental bounds for the study
- Phenomenon: Construct of interest for the study
- Quintain: A specific condition which ties the cases within the study together
  - EXPERIENCE with Emotional Awareness within the simulator

SAMPLING



TREATMENT



INSTRUMENTATION

Instrument	Time to Administer	Format for Administration	When Administered
Demographic Questionnaire	10 minutes	Google Forms	After gaining consent, prior to PFI and QCAE
Personal Functioning Inventory	10 minutes	Google Forms	Prior to first simulation and after final simulation
Questionnaire of Cognitive and Affective Empathy	10 minutes	Google Forms	Prior to first simulation and after final simulation
Exit Survey	10 minutes	Google Forms	After final simulation
Conclusion Interview	30-45 minutes	In person or Video call	After coursework completed

DATA ANALYSIS

Research Question 1: Quantitative

A **MANOVA** will be used to analyze impact of the **independent variable, participation in emotional awareness exercises,** on the **dependent variables, mean PFI and QCAE scores** (Meyers, Gamst, & Guarino, 2013).

Research Question 2: Qualitative

Thematic analysis will be used with all data sets, focused on the semantic level, allowing data to be categorized and examined for relationships and points of comparison. (Braun & Clark, 2006).

Research Question 3: Mixed Methods

Integration of qualitative and quantitative data strands will be accomplished through **typology development and data consolidation** to determine to what extent the findings of the data sets converge (Creswell & Plano Clark, 2018).

TIMELINE

REFERENCES