

Evaluating an Asynchronous Online Mental Health Curriculum for Teenagers

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Purpose

The purpose of this project is to:

- Create an interactive, asynchronous online mental health curriculum for high school students
- Evaluate whether high school students' knowledge and attitudes towards the topic of mental health have changed once completing the course
- Evaluate if using visual storytelling as a teaching method compared to the standard online curriculum affects changes in knowledge and attitudes towards the topic of mental health



Background & Significance

Mental Health Statistics

- In March, 2022, the CDC reported data stating that over one third of high schoolers disclosed a decline in their mental health during the pandemic⁸
- In March, 2022, the CDC also reported data stating that almost half of high schoolers disclosed experiencing intense feelings of sadness over the last year⁸
- In March, 2021, the CDC reported that childhood mental illness was on the rise, with specific increases in depression and anxiety³



Background & Significance

Mental Health Curricula in U.S. Schools

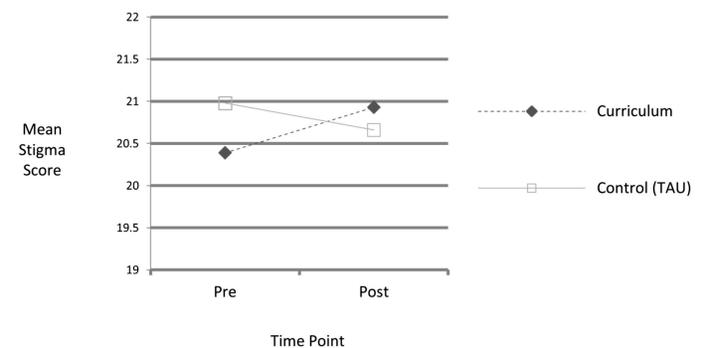
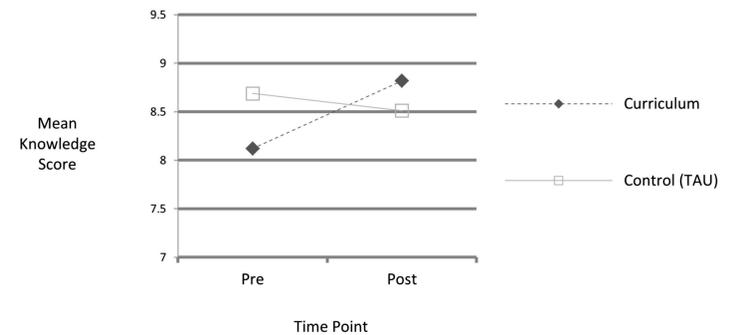
- As of September 2019, only nine U.S. states had mandated mental health education in public schools, with CT being one of them⁵
- Recent studies have shown that schools can have an impact on students' mental health and have tasked schools with the responsibility of fostering positive mental health in their students⁹



Background & Significance

Mental Health Curricula in U.S. Schools (cont.)

- A recent study:
 - Milin et al. examined mental health curricula created for adolescents by comparing it to their current health education curriculum and found that those who took the mental health curriculum gained an overall greater knowledge of mental health and significantly reduced attitude of stigma towards those with mental health disorders⁷



Background & Significance

- Mental Health Curricula in U.S. Schools (cont.)
 - Another recent study:
 - Fenwick-Smith et al. performed a systematic review that found that when coping mechanisms and the concept of resilience are taught in mental health curricula, students are better equipped to handle obstacles that arise in daily life⁴



Background & Significance

Online Mental Health Curricula

- In 2014, researchers investigated the use of an online dissemination method for a mental health curriculum and concluded that more research needs to be done to determine the efficacy of online mental health curricula²
- In 2018, researchers found that very few mental health curricula used digital media to present their information and stated they believe an online or digital mode of dissemination could be more popular to children and adolescents and could therefore increase the adolescents' interests in the information being relayed⁹



Background & Significance

Storytelling for Online Learning

- A 2018 study investigated the content retention and engagement of students in an online course using digital storytelling and found that students were more engaged and were able to retain the content when taught using the method of storytelling¹
- In 2018, an article suggested that students can elicit different emotions based on the content of stories and those emotions can aid in retention of that content later on¹⁰



Methods

- A four-course online mental health curriculum, named **Sharing Matters: Mental Health Education for Teenagers**, was created using the learning management system, TalentLMS
 - There are two versions to the curriculum:
 - Storytelling version: Four courses that contain mental health education content + stories relevant to the content in the courses
 - Content Only version: Four courses that contain mental health education content alone
 - The four courses are split into one general mental health education course + 3 courses on common mental health disorders in teenagers/adolescents:
 - Eating Disorders
 - Suicidal Ideation + Depression
 - Anxiety Disorders
 - Each course goes into risk factors, common signs and symptoms, getting help, and treatment for that specific mental health disorder



Methods

- In the storytelling version of the curriculum, there is a story associated with the Eating Disorders, Suicidal Ideation + Depression, and Anxiety Disorders courses
 - The central theme to each story revolves around a teenager developing a mental health disorder that becomes apparent to someone the teenager is close to, who then encourages and convinces the teenager to seek help via appropriate resources



Methods

- In the storytelling version of the curriculum, the curriculum alternates between content pages, teaching the mental health education, and story pages, telling the story as it relates to the content.
 - Each story is accompanied by photographs of actors/models telling the story as a method of visual storytelling, such as depicted to the right



Methods

- Watch a brief screenshare of a portion of the curriculum below:

The screenshot shows a user interface for a course titled "Sharing Matters: Mental Health Education for Teenagers". At the top, the user is identified as "M. PIETRANDREA | LEARNER" with a "1650 POINTS" badge. Navigation links for "MESSAGES" and "HELP" are visible, along with a search bar. The main dashboard area is titled "Home" and features a search bar for courses. A summary row displays: 8 courses in progress, 0 completed courses, 0h 0m training time, 4 badges, and 1650 points. Below this, three course cards are shown: "Read This First!" (0/1), "Pre-Survey" (0/2), and "Mental Health Overview" (0/4), each with a 0% progress indicator. A right-hand sidebar contains links to "COURSE CATALOG", "PROGRESS", "JOIN GROUP", "DISCUSSIONS", and "CALENDAR".



Methods

- The following section of the methods is in progress: A group of 38 students from a CT high school agreed to take part in the project
 - The students were randomly divided into two groups:
 - One group taking the storytelling version of the curriculum
 - One group taking the content only version of the curriculum
 - Each student takes:
 - Pre-test on content of curriculum
 - Pre-survey adapted from the Peer Mental Health Stigmatization Scale-Revised (PMHSS-R)
 - Four content courses
 - Post-test on content of the curriculum
 - Post-survey adapted from the PMHSS-R



Methods

- Below is an example of a question from the pre-/post-test:

All of the following statements on mental health and physical health are true **EXCEPT**:

- Symptoms of mental illness can manifest into physical symptoms
- People with mental illness are more likely to develop chronic illnesses
- Mental health and physical health are two separate things that should be treated separately
- People with chronic illnesses are more likely to suffer from depression

[Submit answer](#)

58m 37s remaining



Methods

- Below is an example of a question from the pre-/post-survey adapted from the PMHSS-R:

Answer based on how much you agree/disagree with the statement below.

I believe that teenagers with emotional or behavioral problems are not as trustworthy as other teenagers.

Strongly disagree Disagree Neutral Agree Strongly agree



Methods

- The goal is to:
 - Determine from the pre-test and post-test scores if there was any change in knowledge among the students after taking either version of the curriculum
 - Determine from the pre-survey and post-survey answers if there was any change in attitudes towards those with mental illness among the students after taking either version of the curriculum



Anticipated Findings

- The findings will reflect:
 - Any changes in knowledge of mental health among students after taking the curriculum
 - Any changes in attitudes towards those with mental illness among students after taking the curriculum
 - Any differences in findings between the two groups taking the different versions of the curriculum



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