Mental Wellness App For Ages 12-16 to Reduce Depressive Symptoms and Thoughts in Cody, WY

Olivia Rogers, RUOP iii-3, University of Washington School of Medicine

Hypothesis: Using a phone app to access stress reducing activities will decrease depressive symptoms, suicidal thoughts, and destructive behaviors, while promoting mental wellness in the 12-16 year old age group.

Background

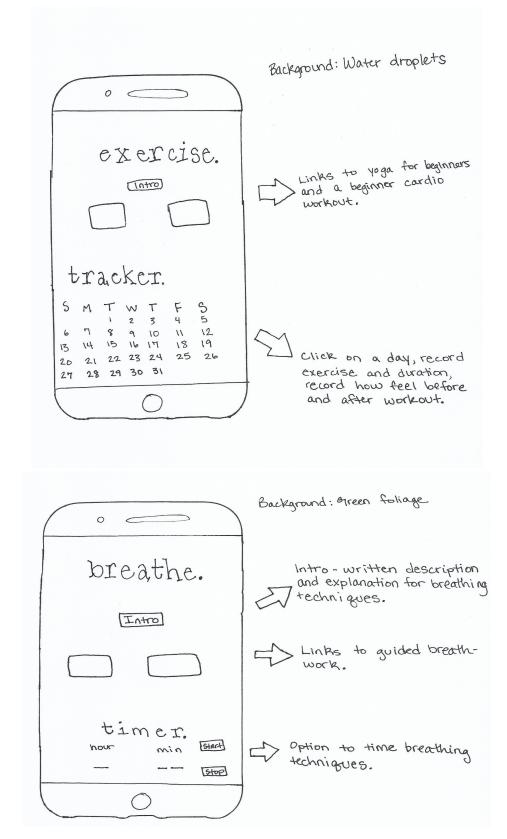
- Cody, Wyoming is a tourist town near
 Yellowstone National Park that is home to
 9,000 residents.
- Park County has better health outcomes than the average for the state of Wyoming, but has higher rates of violent crime deaths.
 Many of these are gun related suicides.
- There is currently an efficient system in place once someone has verbalized that they want to harm themselves.
- Preventive measures and mental healthcare are not abundant in the area.

Literature Review

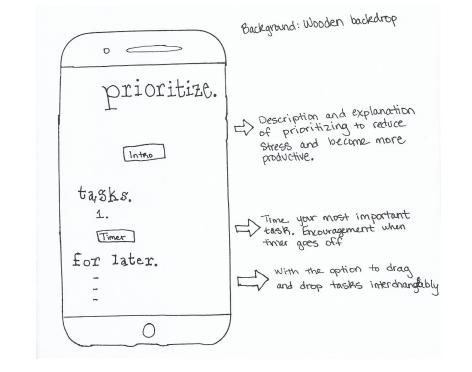
- Those with above average coping skills had a decrease in suicidal behavior, and those with a below average coping skill score had an increase in suicidal behavior
- Motivations for suicidal behaviors could include a sense of being a burden on others and a low sense of belonging
- Breathing techniques and meditation has been shown to reduce salivary cortisol, decrease heart rate, and decrease total mood disturbances
- Higher cardiorespiratory fitness in those 11-15
 years old have a lower risk for depression
- Access to nurses via an online portal between counseling in 13-17 year olds with depressive symptoms reported a better sense of support



Design of app introductory screen







Sketches of different sections of the app above



Photo of Buffalo Bill Reservoir right outside of Cody

Community Health Project Plan:

- Design a simple app for ages 12-16 that includes:
 - Breathing techniques
 - Exercise log with links to sample exercises
 - A journal section
 - Resources to contact if they need help
 - A section to express gratitude to themselves or to others
 - Partnership with Park County Public Health in Cody, WY

Deliverables:

- A detailed literature review proving efficacy of stress reducing techniques in this population
- Detailed sketches and instructions for app content including links to guided exercise, meditation, and breathing techniques

Next Steps:

- Submit the app sketches and content to an app builder
- Test run its features with those at Park County Public Health
- Advertise to local schools, public health, and Yellowstone Behavioral Health