Peer Testing 1 – Dawson Psychological Services A

Michael Crouse, Meredith Lister, Lucas Pozza

COSC 499

2 December 2020

Description of System

The Health Circles mobile app encourages users to have a holistic view of their own mental health. Users answer questions to quantifiably describe their well-being in several different domains (physical, mental, emotional, social, spiritual) which are represented visually as concentric circles of varying sizes. Based on their results, users are recommended activities to add to their calendar to improve their well-being.

Current Features

- Users answer the initial health questionnaire, preferably doing all 5 domains (social, emotional, mental, physical, and spiritual).
- Users can choose which domains to do the questionnaire for
- Users answer questions to rank aspects of each domain (eg sleep for the physical domain) on a scale of 1 7
- Users can view circle visualizations
- The visualizations consist of concentric circles representing each health domain
- The size of each circle correlates with their wellbeing in each domain
- The visualizations are static design elements at this phase, not generated from user data
- Users can access a calendar within the app which shows the dates of scheduled activities and when domains were updated.
- They can view the calendar populated with test activity data, but cannot add, edit, or remove items
- Users navigate the app with a bottom navigation menu
- They can tap buttons to jump directly to the calendar, questionnaires, stats/visualizations, and account/settings
- Swiping right on iOS or Android system back button to return to previous screen
- Users can view colour schemes for each health domain, but cannot switch them at this stage

Participants

Name	Status	Туре	Video	Session Ran By
Jennifer McLean	Completed	remote	<u>link</u>	Meredith
Taha Ilyas	Completed	thinkaloud	<u>link</u>	Meredith
Brandon Gaucher	Completed	remote	<u>link</u>	Michael
Adam Collins	completed; technical	thinkaloud	<u>link</u>	Michael
	difficulties with			
	recording			
Jinyang Yao	Completed	remote	<u>link</u>	Lucas
Sam Finnigan	Completed	thinkaloud	<u>link</u>	Lucas

User Group

People who do not work with our client, Dr Dawson, but are interested in improving their mental health.

List of Tasks

- 1. Explore the Circles visualization page.
- 2. Fill out a questionnaire.
- 3. Edit a completed questionnaire.
- 4. View the activity calendar.
- 5. Find the page to edit your colour theme.

Issues Discovered

High Priority

- Users do not interact with the circle visualizations and/or their labels
- The circle visualization screen was confusing as a starting page without a tutorial
- No way to quickly exit survey
- The "X" button for theme selection is unintuitive
- The ability to move back a page by swiping right (eg from Themes to Settings) is not visually indicated

Medium Priority

- Users are confused the "begin" button for surveys with the survey selection options
- The default highlighted survey options are confusing to users
- Survey questions are confusing and need additional explanation

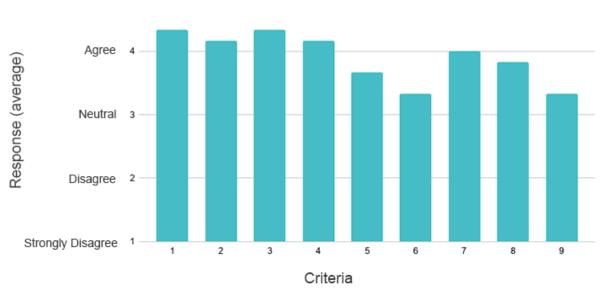
Low Priority

- The Circle and Settings icons on the navigation bar don't highlight when selected
- The navigation bar is low contrast and icons are not self-explanatory
- Slider icons (happy/sad faces) don't always make sense with survey questions
- User did not understand why they would want to edit a survey that is already completed
- Edit buttons for mock data surveys do not do anything (although they correctly bring up survey edit page for surveys completed by the user)
- On Android, features at the bottom of the screen are cut off, including the "next" and "previous" buttons in surveys
- On Android, the datetime format is longer

Quantitative Scores

Average User Responses





Criteria	Description	Average Response
1	The system design affords good visibility of system functionality.	4.33
2	The presentation of information and objects in the system resemble things are in the real world.	4.16
3	The system allows the user to maintain control and provides the user with freedom to do what is needed.	4.33
4	The system's design is consistent with how other software is designed.	4.16
5	The system has mechanisms in place to helps me not make mistakes when using it.	3.66
6	I can figure out what needs to be done in the system even if I can't remember exactly what the commands are.	3.16
7	To complete a task in the system, I have a choice in the commands I use.	4
8	The design of the system is simple, clear, and aesthetically pleasing.	3.83
9	When I get stuck, the system has help and documentation to help me figure out what I need to do.	3.33

Analysis of Results

There are 54 data points used in the graph, with 9 data points from each of the 6 user testing sessions. The low scores for criteria 4, 5, and 9 (error prevention; recognition rather than recall; help and documentation) suggest that we can make improvements to our UI design to make system functionality clearer and add better help/error messages to guide the user in case the confusion.

The other notably low score for criterion 8 (design is simple, clear, aesthetically pleasing) likely stems from issues that the majority of users experienced with the circle visualization page and the theme selection page. Although this style of visualization is required by the client, it often fails in clearly conveying user's survey scores and being simple to interact with. One user stated, "I feel like I don't know what I'm looking at," and other users expressed similar confusion. Although some users searched for help from the app to understand the visualization, some also demonstrated a lack of interest or curiosity in the visualization and quickly moved on from it. As a major feature and namesake of the Health Circles app, the data visualizations need an overhaul to better communicate to users; failing approval of that by the client, additional help and documentation must be added to try to bridge the gap between users' intuitive understanding and the intended meaning.

In addition to the circle visualizations, users expressed confusion with the theme selection page. Some users interpreted the button to select a theme to mean "delete this theme" or as a colour indicator that would be filled after selecting one option from each row. Users suggested replacing this button with radio buttons in order to better match other apps and websites.