

**SUPPORTING SOLDIER MENTAL HEALTH ON DEPLOYMENT**

*A System of Designed Interventions*

**INTERVIEWING EXPERTS**

*From November 2018 to February 2019, I conducted interviews with four individuals who have experience with military mental health care, service in military combat roles, and deployment living conditions.*

Davon Goodwin is a veteran and a mental health care advocate. In speaking with Davon, I learned that soldiers often face mental health care on their own and not with their team. He noted that soldiers are not yet being taught how to manage their mental health care experiences.

Elizabeth Sabin is a veteran and a mental health care researcher. Elizabeth emphasized that soldiers are not yet being taught how to manage their mental health care experiences.

Kooy Akemi is a military spouse and a mental health care researcher. In speaking with Kooy, I learned that she is currently working with soldiers to encourage them to talk about mental health care and emotional wellbeing.

Kevin M. Wolfe is a veteran and a mental health care advocate. I learned that soldiers often face mental health care on their own and not with their team. He noted that soldiers are not yet being taught how to manage their mental health care experiences.

**SITUATING THE DESIGNS**

*In design and consultation efforts we worked to envision targeted technologies to meet the needs of soldiers when they deploy.*

**RESEARCH QUESTION**

*How can the design of mobile applications and wearable technologies serve as an alerting and managing symptom of army soldiers on deployment?*

**PROBLEM SCOPE**

- **Impact**
  - 350,000 soldiers from Operation Iraqi Freedom and Operation Enduring Freedom are likely to have PTSD (Join & Solberg, 2009).
  - Veterans account for 18-20% of deaths in the U.S. (Join & Solberg, 2009).
  - Post-deployment anxiety and suicide are on the rise as symptoms are observed.
  - Soldiers and their families require technology. Soldiers in treatment care express symptoms (Stenerson et al., 2010).
  - Depression in military marriages is on the rise as symptoms are observed.
  - Soldiers and their families require technology.

**STUDY FRAMEWORK**

**Receptivity Gradient**

David Rehbein: Receptivity Gradient is important for Behavioral Therapy. Most soldiers are aware that mental health care is important, but are unsure or uncertain of how they can best address their concerns.

**Behavioral Objectives**

Expression: Participating in creative mediums, education: Learning about their experiences, knowledge: Learning about structured behaviors, escape: Participating easily in social activities.

**Types of Therapy**

- Cognitive Behavioral Therapy
- Biofeedback Therapy
- Integrative Therapy
- Sandplay Therapy
- Group Analysis
- Cognitive Behavioral Therapy
- Existential Therapy
- Humanistic Therapy
- Family Therapy

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**Scoreboard: Gamification, Competition and Reward**

Scoreboard paradigms helpfully engage habit through gamification and virtual challenges. Gamification acts as an anthropomorphic digital avatar or granddaddy to engage soldiers’ attachment to the design research and explorations.

**Stenographer: Tone Analysis and Compoundialization**

Stenographers build communicative analysis through their own analysis and self-reflection. Users can create their own virtual ecologies, in which they identify and communicate their own patterns and how they can be used.

**VISUAL EXPLORATIONS**

**FUTURE POSSIBILITIES**

**WHAT’S NEXT**

- **Research**
  - Receptivity Gradient
  - Behavioral Objectives
  - Types of Therapy
  - Healthy Behaviors
  - Scoreboard: Gamification, Competition and Reward

- **Designs**
  - Stenographer: Tone Analysis and Compoundialization

- **Implementation**
  - Deployment Cycle: Setting for this Study

- **Sharing with Users**
  - Taking the design for soldiers on deployment?
  - How can a mobile application and wearable technology assist in identifying and managing symptoms of stress and anxiety, anger, and addiction following deployment setting?

**Quote**

"I would use this everyday. Personally, my wife doesn’t like to talk about issues and it would be an incentive to complete things."