



연구논문/작품 중간보고서

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SKKU GRADUATION PROJECT

INTERIM REPORT

P A C E: The Mental Health App For Everyone

"Live At Your Own Pace."

By Sara Zaki & Allan Tazhenov

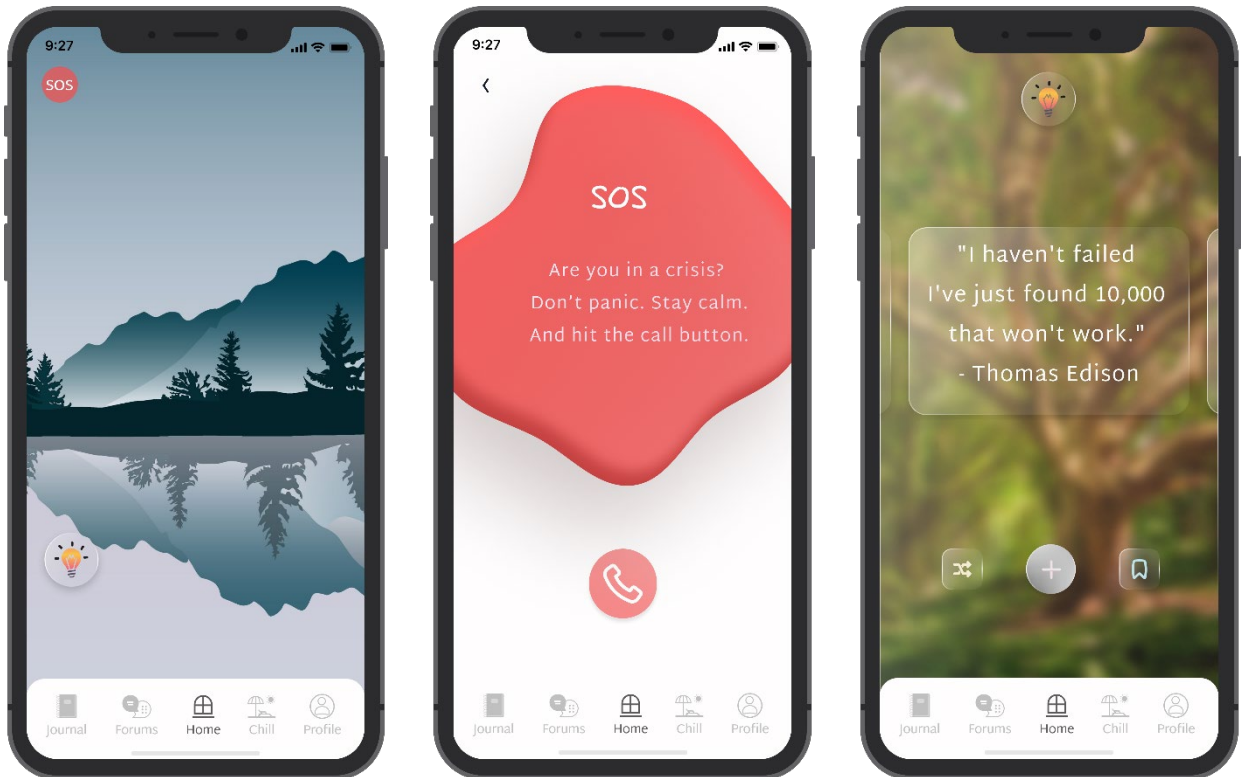


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SUMMARY

Initially, we started out to create a safe and nurturing space, online, for everyone (kids, teenagers, students, and adults) dealing with mental health issues; most especially, those dealing with ASD (Autism Spectrum Disorder), ADHD (Attention-deficit Hyperactivity Disorder), OCD (Obsessive-Compulsive Disorder), Depression, Anxiety, ASPD

(Antisocial Personality Disorder) and learning disabilities. However, as we did more research and conducted a survey, we realized that more people now than ever are dealing with some sort of mental health conflict, diagnosed or undiagnosed. This led us to developing our idea better, being more inclusive and slightly shifting the focus from only those who have recognized and accepted their condition, to everyone who seeks some sort of help. Our vision for Pace is to build a little village full of support, memories, acceptance and ultimately, peace.

INTRODUCTION

BACKGROUND

What is Pace? Who needs it? And Why?

Pace is a humanitarian, non-profit mobile application for self-management mental health awareness and positive peer support conceived with the best interest of every potential user in mind. Our project was an idea formerly considered by our team, on a surface level, and later strongly suggested during the initial stages by team member, Allan. Soon after, team member, Sara developed the idea and named the application now known as 'Pace.' Nowadays, not so many software engineers care enough to create apps that directly provide value to the user without monetary incentive, which isn't really surprising seeing as nearly everyone in the industry hopes to become the next Bill Gates, Steve Jobs, Elon Musk – the list goes on.

OUR GOALS

The goal is to create apps that support a range of users, including those with serious mental illnesses. We aspire to provide quality self-care access to those who aren't able to afford paid apps, subscriptions, or sessions with a therapist, in the hopes of encouraging them to pay more attention to their mental health and others' as well. This sort of open, non-manipulative or profit-driven approach - we believe - might allow the user to think more for themselves, remind them of how much control they have over their lives, inspire creativity and independence.

Unlike many other mental health-related applications, Pace solicits no commitment, makes no beguiling promises, does not offer any unrealistic magical transformations, nor has any intention to replace health care providers (therapists, psychiatrists, etc.). It's just the user's choices, Pace, and plenty of opportunity for self-improvement. As the famous saying goes, 'You can lead a horse to water, but you can't make him drink.' That said, our primary goal remains making a positive impact on mental health awareness in the 21st century. We'd like to think that this project goes beyond the prospects of our college graduation and hope to release the app sometime next year, once we have perfected our strategy followed by proper consultation with mental health care professionals.

RESEARCH

FACTS

Mental health has been recognized as an important global issue; according to the World Health Organization (WHO) mental illness is a significant rising burden of disease in most developed countries, with a socioeconomic burden that might exceed that of cancer and cardiovascular disorders in future. In Korea, three out of 10 adults experience mental disorders more than once during their lifetime and records have shown that the country has the highest suicide rates among Organization for Economic Cooperation and Development (OECD) nations for 10 consecutive years, with 29.1 people out of every 100,000 having committed suicide.

A study on the burden of non-communicable diseases revealed that the economic cost of mental diseases is USD16.3 trillion across the globe, total medical expenses related to mental diseases accounted for about 3.4 % of total medical expenses within the same year. Significant interest in mental health has been on the rise not only in Korea but also worldwide. Major depression is thought to be the second leading cause of disability worldwide and a major contributor to the burden of suicide and ischemic heart disease. It is estimated that 1 in 6 people in the past week experienced a common mental health problem.

About 1 in 6 (17%) children aged 3–17 years were diagnosed with a developmental disability, as reported by parents, during a study period of 2009–2017. These included autism, attention-deficit/hyperactivity disorder, learning disabilities and others. Directly quoting the WHO, “Determinants of mental health and mental disorders include not only individual attributes such as the ability to

manage one's thoughts, emotions, behaviors and interactions with others, but also social, cultural, economic, political and environmental factors such as national policies, social protection, standards of living, working conditions, and community support.”

OUR SURVEY

During the summer vacation, our team conducted a small survey consisting of 44 participants from various walks of life (in Korea), with the hopes of researching better, the needs and struggles of potential users. Participants include people considered “normal” with no prior diagnoses, some with doubts about their mental health status most who are afraid of being stigmatized by seeing a therapist, and a few people with a formal diagnosis of at least one of the aforementioned mental disorders.

The survey was conducted in the most discreet and anonymous manner, so as not to put any pressure on the participants and respect their privacy. Anonymous survey methods appear to promote greater disclosure of sensitive or stigmatizing information compared to non-anonymous methods.[4] The questions asked were very personal, however, the responses exceeded our expectations. Most of the participants’ answers were very honest and detailed.

Of the 44 random participants, we found that 79% of them were aged between 18 – 35, approximately 70% of which are students. Identity-wise, about 20% of the participants identified as queer, with 53.5% of them being male, 37.2% female and 9.3% non-binary. The point of this survey was to find out who the people are, what they think and want out of life. When asked about their values, the top 4 responses were

Family, Mental Health, Religion, and Love. And although they valued family above all else, it came as no surprise that most of the participants didn't feel comfortable sharing their personal or mental health-related struggles with their loved ones (family and friends) due to the fear of stigmatization.

Furthermore, when asked about their frustrations and challenges, the most common answers were Lack of confidence, concentration, or motivation. And as for bad habits, the top 3 were Procrastination, SNS Obsession and Sedentary lifestyle. A response we found particularly interesting was of the 'Biggest fears' question, where 90% of the participant's answers were 'Failure' or 'Rejection.' Digging a little deeper into these responses, we found that most participants were afraid of being unaccepted the way they are and unable to achieve their goals due to a presumed inability to break bad habits and overcome certain challenges alone, as many depend on external sources for validation, stimulation, and motivation.

Moving on to medical history, 55.6% of the participants have been formally diagnosed with depression, 33.6% with anxiety, and 16.7% with OCD or Bipolar Disorder. Aside the participants with actual diagnoses, about 30% stated in a follow-up question that they might have an undiagnosed mental disorder, some of which the symptoms included paranoia, ADHD, and irrational phobias.

At the end of the survey, the participants were asked to leave an optional comment and most of them did leave the most heart-warming messages. About 70% of the comments were thank you notes, some of which read, and I quote, "Thank you, I didn't know how much I needed this today", "Lovely survey to express myself anonymously". Others were more about the participant's feelings,

like, “Sometimes I need help but I'm afraid to ask the people around me”, “I know what I want, but I am easily distracted from it. It hurt me a lot. I am tired.”

This survey proved extremely insightful as it truly opened our eyes to many realities, the most fascinating one being the fact that a great number of people put their happiness in the hands of others who may or may not be willing (or even able) to provide it. These results have motivated our team to do an even better job at creating this app to help people overcome these daily issues.

has searched far and wide, researched, observed, and finally acknowledged the hard fact that there are not enough mobile applications, in the world, dedicated to helping people struggling with mental health issues. And the very few that exist, are mostly unhelpful, expensive and/or profit-driven mobile apps. It is our belief that everyone should have access to important resources related to mental health. And this is the problem that we have sought out to resolve.

SIMILAR APPS

Features	Calm	What's Up	Happify	Super Better	Pace
Free	X	✓	X	✓	✓
CBT	✓	✓	✓	X	✓
Journaling	✓	✓	✓	X	✓
Mood Tracking	✓	✓	✓	X	✓
Meditation	✓	X	✓	X	✓
Activity Suggestions	X	X	X	✓	✓

Motivational Quotes	X	✓	✓	X	✓
Schedules	X	X	X	X	✓
Medication Tracking	X	X	X	X	✓
Peer Support	X	✓	✓	X	✓
Focus Timer	X	X	X	X	✓
Positive Challenges	X	✓	✓	✓	✓
Therapy sessions	✓	X	✓	X	X
No TMI	X	✓	X	✓	✓
Ease of use	✓	✓	✓	✓	✓
No Medical Advice	X	✓	X	✓	✓
User Interface	✓	X	✓	X	✓

RESULT ANALYSIS

EXPECTED OUTCOME

We expected to be nearly done with our project by now, but things usually don't turn out according to expectations based on a myriad of factors. Even so, we have made much progress with the development of our project. The application continues to evolve as we make changes are further build on our idea. Our back-end developer has run into a few issues in an attempt to implement some of the functions and designs but I like to view this as a learning experience while we continue to tackle the problems together, as a team.

ACTUAL OUTCOME

As someone struggling with mental health issues myself, I have to admit that it can be extraordinarily difficult to create something like this. The intention, of course, is to help people like me by giving them something I wish I had. But it gets harder and harder with every step I take toward improving the application. The best part is that, unlike many people who make similar apps for money, I actually have the experience in dealing with this and being around people who have the same issues, so it is easy for me to say that I know what works and what doesn't.

CONCLUSION & THOUGHTS

Working on this project has been life-changing for both of us. We learned more about people through research and helped them learn even more about themselves. The goal of the project is to make an impact in the world and honestly, after these few months, I have found that helping others become better is one of the greatest rewards in life. Not only has this project made us better people, it has also made Allan a better and more organized programmer, Sara a more creative and insightful designer/developer. Having this application to show off on our portfolio after graduation is an amazing thing for both of us and we are glad to have been provided this opportunity to grow and improve our skills. Pace has made us both ready for work in the real world. Thank you.

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