

**Project Thesis  
(Outline)**

**Mindfulness Meditation  
Research & Promotion**

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500C

## **Thesis Statement**

The purpose of the thesis is to establish an App and software program in relation to mindfulness meditation methodology by utilizing design experience theory. The goal of this research is to find effective solutions for treating mental and physical problems amongst college students.

## **Justification Statement**

The purpose of this project is to examine mindfulness meditation methodology, and develop a delivery system in the form of an app to effectively improve the mental and physical problems caused by stress amongst college students. Many students feel they cannot get effective treatment and help when they experience problems. Therefore, a health management app, that is convenient, and uses the latest techniques and methodology in recording and analyzing daily physical activity, mindfulness meditation, and psychological changes can help manage daily life and well-being.

## **Delimitations**

- This project will not cover or contain any medical illness research other than the mental and physical problems such as stress, undersleep, inattention and etc.
- This project will not cover or contain any target audience other than traditional college students (18-25 years of age).
- This project will not cover or contain any fields of stress relief research, other than meditation methodology.
- This project will not cover or contain any types of meditation other than mindfulness meditation.
- This project will not cover or contain any types of religious beliefs, thinking, practice, and worshiping.
- This project will not cover or contain any medical professional treatment.
- This project will not cover or contain the following functions: online classes, health courses, sleep tracking, alarm, one-on-one chat support, and emergency assistance.
- This project will not cover or develop a website, operating system, hardware, electronics, and wearable devices.

## Precedents

- “Mindfulness meditation is an essential component of Buddhism. In one common form of mindfulness meditation, the meditator is taught to bring attention to the sensation of the flow of the breath in and out of the body.”

NCCAM, National Institutes of Health, U.S. Department of Health and Human Services.

*Meditation: An Introduction*. 2010.

<https://www.smchealth.org/sites/main/files/fileattachments/introtomeditation.pdf>

- “... emotions that motivate us individually are almost always sadness and happiness. Sadness results from loss and serves the biological purpose of motivating a person to recover that loss,”

Charlei Evans. “*The Science of Emotions*”. *Inside Your Brain*. Future PLC, 2019. pp22-27.

- “... the way the meditative state is achieved, and the desired mental state. Most prior studies have compared a particular kind of meditation with a nonmeditative control state...”

Robert W. Levenson, Paul Ekman. *Meditation and the Startle Response: A Case Study*. *Emotion*. 2012, Vol. 12, No. 3, pp. 650–658.

- “Students may also avoid using resources on campus because some colleges may expel students who have suicidal ideation or force them to go on medical leave, to avoid liability related to student suicides, she added.”

Saumya Joseph. *Depression, Anxiety Rising Among U.S. College Students*. Reuters Health News, 2019.

<https://www.reuters.com/article/us-health-mental-undergrads/depression-anxiety-rising-among-us-college-students-idUSKCN1VJ25Z>

- “Mindfulness is defined as purposeful, nonjudgmental, present-moment awareness, and is the psychological state brought on by meditation.”

Young Chin Park, Tom Pyszczynski. *Reducing Defensive Responses to Thoughts of Death: Meditation, Mindfulness, and Buddhism*. *Journal of Personality and Social Psychology*, 2019, Vol. 116, No. 1, pp. 101–118.

- “...mindfulness can be a way of being in the word or a state of individual consciousness... paying attention in a particular way: on purpose, in the present moment, and non-judgmentally.”

Kevin Page. *College Mindfulness Training: Reducing Student Life Stress and Improving Academic Performance*. Routledge, 2019. pp 1-2.

- “Stress is an adaptive response. It’s the body’s reaction to an event that is seen as emotionally disturbing, disquieting, or threatening. When we perceive such an event, we experience what one stress researcher called the “fight or flight” response.”

Tanushree Podder. *Chapter 01: What is Stress, and What can cause it? Fit & Fine in Body & Mind*. V& S Publishers. 2012. P.155.

- “Because college students experience levels of stress that could lead to potentially adverse health conditions, participating in mindfulness meditation could help to alleviate stress and facilitate other positive outcomes.”

Carol Ann Rizer, Mary Helen Fagan, Carol Kilmon & Linda Rat. *The Role of Perceived Stress and Health Beliefs on College Students' Intentions to Practice Mindfulness Meditation*. AMERICAN JOURNAL OF HEALTH EDUCATION. 2016, VOL. 47, NO. 1, pp. 24–31

- “It’s a way of people getting access to treatment that’s flexible and fits in with their lifestyle and also deals with the issues around stigma — if people are not quite ready to maybe go and see their doctor, then it might be a first step to seeking help,”

Emily Anthes. *Pocket Psychiatry*. NATURE. VOL 532. Macmillan Publishers. 2016. pp. 20-23.

- “While there is clear potential for digital tools like mobile phone apps to increase access to care and services for mental health... Interest in mental health apps is linked to increasing mobile phone access, with over 225 million people in the United States and over 2 billion people around the globe using these devices today.”

Gunther Eysenbach. *Mental Health Mobile Phone App Usage, Concerns, and Benefits Among Psychiatric Outpatients: Comparative Survey Study*. JMIR Ment Health. JMIR Publications Inc. 2018.

## Antecedents

- Suicide rate in the college students.

“According to the American College Health Association (ACHA), the suicide rate among young adults ages 15-24 has tripled since the 1950s, and suicide is currently the second most common cause of death among college students.”

Jackie Burrell. *College and Teen Suicide Statistics*. 2019.

<https://www.verywellmind.com/college-and-teen-suicide-statistics-3570768>

- Emotion and feeling Mapping by Giorgia Lupi.

“I have never practiced meditation... I felt very focused on the “here and now” this week: by trying to notice ... I have been much more connected with the present moment.”

Giorgia Lupi. *Dear Data Week 11: A Week of Emotions*.

<http://www.dear-data.com/week-11-a-week-of-emotions>

- Headspace App explain how to practice meditation in a proper way.

“Most meditations begin by sitting in a quiet place, closing the eyes, calming the mind, and focusing on the breath ... When we meditate, we are essentially cultivating awareness and compassion; ... be more focused in the present moment.

HEADSPACE INC. *Headspace: How to meditate*.

<https://www.headspace.com/meditation/how-to-meditate>

- The usage of smartphone in communication way.

“Within only a decade, mobile communication technologies such as smartphones have facilitated a transformative increase in availability and diversification of mobile communication, including social networking ...”

Bradford Owen, Brian Heisterkamp, Annabell Halfmann, and Peter Vorderer. *Trait Mindfulness and Problematic Smartphone Use*. Empirical Studies of Contemplative Practices, Publisher: Nova Science, 2018. pp.181–206.

- The interview regarding social stress, and inside problems.

“Many people in the society have pressure, psychological situation. Although not necessarily academic or work, perhaps the concept of society, ... a phenomenon of self, not as good as their own, the mood will change, more about self-center...your self-development wisdom and take care of your own thoughts instead of transforming yourself into meditation.”

Venerable Hui Dong. *The interview about Mindfulness Meditation and technology development*. Interview by Chen. 2019.

- The existence and affection of stress and health.

“Stress is a component of life and a number of mechanisms exist to cope with its effects on the health and well-being of individuals and society. The stresses that challenge human ... may result in failure of these coping mechanisms, with resultant stress-induced illness.”

John Wiley & Sons. *Stress and Health*. Journal of the International Society for the Investigation of Stress is the property of John Wiley & Sons, Inc. Volume 34, Number 4. 2018. pp. 475 – 588.

- The research of serious mental illness among adults.

“In 2014, an estimated 9.8 million U.S. adults aged 18 years or older had a mental, behavioral, or emotional disorder that substantially interfered with or limited one or more major life activities, referred to as a serious mental illness (SMI).”

Natasha E. Latzman, Heather Ringeisen, Valerie L. Forman Hoffman, Breda Munoz, Shari Miller, and Sarra L. Hedden. *Trends in mental health service use by age among adults with serious mental illness*. Annals of Epidemiology. Elsevier Inc. 2018. pp 71-73.

## Methodology

### Context:

Mindfulness Meditation Definition: (will be using the method of taxonomy)

1. Historical influence:  
A comparison between eastern countries and western countries, including the knowledge of Mindfulness Meditation, the characteristics, thoughts and spirit, the relationship between different regions, and the practical application.
2. Growing trend:  
Define the role of Mindfulness Meditation in people’s daily life, the propagation mode, the influence in the field of science and technology, and Mindfulness Meditation is integrated into people’s life style.
3. Future prospect:  
The popularization of Mindfulness Meditation practice as a service application, health reminder, people’s behavior awareness, and life improving.

## **User Research:**

Problems and target audience define: (will be using the method of interview, and questionnaire survey)

### 1. Listing problems:

- Stress caused by studying, family issues, social relationships, lack of sleep, and etc.
- Anxiety, depression, and autism disorders.
- Self-injury, suicidal thoughts, and suicide.
- Mental disorder, energy dissipated, and unable to concentrate.

### 2. User needs to define:

The applicability Mindfulness Meditation methodology and practice, time and environment, habits and lifestyle, tracking and management, the function of the App.

## **App and Promotion:**

App development and promotion design: (will be using the method of UI Design, Poster Design and Social Awareness Design)

APP Function:

Data Record and Analysis: (Function of establishing health awareness)

1. Mood tracker, and record daily mood change.
2. Study time and sleep time record.
3. Diet and nutrition intake record.
4. Analyzing data and generating daily report of health condition.

Treatment and Practice:(Function of improving health conditions)

1. Mindfulness meditation will be the primary methodology for treating the problems after the analyzation of every aspect of data record.

2. Practice will include sitting meditation, walking meditation, food meditation, and other specified meditating methodology would be considered.
3. Create a sense of health recognition through notifications and reminders, and initiative seeking treatment and help.

## **Process**

### **Research (Context Development)**

#### Definition (background)

- Define what is mindfulness meditation? (both in spiritual and physical perspective)
- Collect and list the history progress of mindfulness meditation (including representative personage, time, location and event)
- Discover how eastern mindfulness meditation culture interacts with western technology, and growing and propagate.
- Define the practical methodology of mindfulness meditation.
- Define the usefulness and unusefulness of mindfulness meditation in today's society.

#### Identification (Problems)

- Collecting data from the target audience on campus college students regarding the problem of stressfulness and mental awareness through interviews, and surveys.
- Identify the specific problem and user's needs related to college student's daily living.
- Identify what types of methods current college students are using for stress release and analyze the advantages and shortages.
- Identify the interaction and effects of mindfulness meditation in stress release, and how to apply to college student's daily living.
- Set up control group and compare the results of people who practice mindfulness meditation with people who practice other methodologies.



## **UX Design** (User investigation and App Development)

### Persona

- Selecting typical users and build up profile regarding stress problems, and stress release methodology. (Including both practicing and non-practicing mindfulness meditation)

### User Journey

- Show how one specific user utilizes mindfulness meditation to his/her daily living, and different individual methods of practicing.

### Develop analytical study of other similar Apps.

- List of related apps and comparing their functions of advantages and disadvantages.
- Research and list other effective and noneffective methods.

### Site Map establishment and User flow.

- Develop the features for the App, and the entire structure of the navigation system.
- Develop the user actions, paths, and individual interactions in the App.  
Wireframe (Lo-fi)
- Develop the entire App with gray scale, and with full functions applied.
- User testing and refinement.

## **UI Design** (App Interface design and extend promotion design)

### Branding Identity

- Branding system, logo design, and establish branding standard.

### Font selection for graphic expression including hierarchy and function

### Color Palette Set up

- Primary color, secondary color, highlighted color, and text color.

### Icon Creation

- Feature icons, and navigation icons.

### Wireframe (high-fi)

- All branding system applied to the wireframe with color, font, and icon.
- User test and refinement.

### Prototype

- App prototyping both in XD interaction and video demonstration.

### Extend Promotion Design\*

- Social Awareness Campaign Poster Design.
- Tracking Monitor Band product prototype.
- Stress release product prototype.
- Pocket Booklet Design for Meditation Methodology Promotion.
- Postcard, bookmark, pin, and sticker design.

## Further Direction

The whole thesis is about exploring the historical development of mindfulness meditation, studying the effectiveness of the mindfulness meditation methodology, and combining the design experience theory in order to improve the mental and physical health among college students. After this thesis has been accomplished, I will continue my research in mindful meditation and app development in the future with the following strategies:

1. Inform my future teaching on the academic research of UX and Service design, and the development of health management system.
2. I will apply the mindfulness meditation methodology to help guide the inspiration of students on design process and idea generation.
3. I will producing a Mindfulness meditation standard book that includes the principles of mindfulness meditation methodology specification, and will establish an evaluation system for defining the mental and physical health problems.
4. For the standard book production, it will be designed to complement design issues of the health management app development, and it will address the details of the standard practical application of mindfulness meditation according to the data, facts, and test result that have been proved throughout the entire thesis.
5. I will publishing an academic article in order to raise awareness from college students to participate in the research of mental and physical health problems, and establishing the App community which perform the methodology of the mindfulness meditation.