

DAYANANDA SAGAR UNIVERSITY

KUDLU GATE, BANGALORE - 560068

Bachelor of Technology in COMPUTER SCIENCE AND ENGINEERING

Major Project Report

(PHONE A FRIEND)

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Under the supervision of

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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING, SCHOOL OF ENGINEERING DAYANANDA SAGAR UNIVERSITY,

(2021-2022)

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CERTIFICATE

This is to certify that the Major Project work titled "PHONE A FRIEND" is carried out by TRIDIB BHATTACHARJEE (ENG18CS0301) and SHUBHANGI BHATNAGAR (ENG18CS0272), bonafide students of Bachelor of Technology in Computer Science and Engineering at the School of Engineering, Dayananda Sagar University, Bangalore in partial fulfillment for the award of degree in Bachelor of Technology in Computer Science and Engineering, during theyear 2021-2022.

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DECLARATION

We, TRIDIB BHATACHARJEE (ENG18CS0301) and SHUBHANGI BHATNAGAR (ENG18CS0272), are students of 8th semester B. Tech in Computer Science and Engineering, at School of Engineering, Dayananda Sagar University, hereby declare that the phase-I project titled "Phone A Friend" has been carried out by us and submitted in partial fulfilment for the award of degree in Bachelor of Technology in Computer Science and Engineering during the academic year 2021-2022.

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We would like to thank **Dr. A Srinivas, Dean, School of Engineering & Technology, Dayananda Sagar University** for his constant encouragement and expert advice.

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We would like to thank our guide **Prof. Shivamma D, Assistant Professor, Dept. of Computer Science & Engineering, Dayananda Sagar University**, for sparing her valuable time to extend help in every step of our project work, which paved the way for smooth progressand fruitful culmination of the project.

We would like to thank our **Project Coordinator**, **Dr. Meenakshi Malhotra** and **Dr. Bharanidharan** and all the staff members of Computer Science and Engineering for their support.

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We would like to thank one and all who directly or indirectly helped us in the Project work.

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LIST OF ABBREVATIONS

ML	Machine Learning
SVM	Support Vector Machine
CGPA	Cumulative Grade point average
RF	Random Forest
DT	Decision Tree
KNN	K-Nearest Neighbors
FMI	Frieburg Mindfulness Inventory

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ABSTRACT

The world that we live in needs to know more about mental healthcare. With this project our objective is to reach out to as many people as possible and help them overcome their problems. We want to be their helping hand who will listen to their problems. Our users are anybody and everybody who is willing to reach out and talk to others about their feelings. After conducting a survey, we found out that people in different age groups want a service like this one. So, our targeted audience would likely be from the age group of 13–60- year-old. Here we are providing them with a safe space where they can get guidance. As this service is being provided free of cost it is more likely to reach a variety of age groups and demographic.

CHAPTER 1: INTRODUCTION

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Mental health is a taboo in India. It does not receive the right kind of attention and treatment by both patients and professionals. We as individuals understand the situation and relate to it. All of us have been in positions where we feel low, stressed and negative emotions in general and at that moment we do not know how to deal with it. And that is why we have come up with this idea where people can connect to professional listeners. We at Phone a friend believes to make the world a better and happier place.

1.1 PURPOSE

Mental health is a taboo in India. It does not receive the right kind of attention and treatment by both patients and professionals. This platform helps people understand the importance of mental health and how to respond to it.

1.2 PROJECT SCOPE

Creating an Interactable dynamic progressive website for all, where people can connect to the counselors and get the right guidance. This website helps spread mental health awareness with the help of technology and various different studies. You can get the guidance required without having to reveal your identity.

CHAPTER 2: PROBLEM DEFINITION

CHAPTER 2: PROBLEM DEFINITION

• Mental health is a taboo in India and we would like to change that through our website.

Mental health is an integral part of health; it is more than the absence of mental illnesses. It is the foundation for well-being and effective functioning of individuals. It includes mental well-being, prevention of mental disorders, treatment and rehabilitation. WHO estimates that the burden of mental health problems in India is 2443 disability-adjusted life years (DALYs) per 100 00 population; the age-adjusted suicide rate per 100 000 population is 21.1. The economic loss due to mental health conditions, between 2012-2030, is estimated at USD 1.03 trillion.

• Increase Healthy Life Expectancy.

The National Mental Health Programme and Health and Wellness Centers are efforts to provide quality care at the primary health care level. Deaddiction centers and rehabilitation services are also available.

• Increase Death, Suicidal, Untimely Death rates.

Determinants of mental health include individual attributes such as the ability to manage one's thoughts, emotions, behaviors and interactions with others. In addition, social, cultural, economic, political and environmental factors have a role to play as do specific psychological and personality, and genetic factors.

• Increase Medical Fundings.

Treatment of mental health disorders is of utmost importance. It calls for comprehensive strategies for promotion, prevention, treatment and recovery through a whole-of-government approach. Policy makers should be encouraged to promote availability of and access to cost-effective treatment of common mental disorders at the primary health care level.

• Focus and Promote Mental Health Solutions.

Mental health promotion involves creating an environment, which promotes healthy living and encourages people to adopt healthy lifestyle. Enabling environment through national mental health policies and legal frameworks are imperative for effective management of mental health disorders and providing overarching directions for ensuring mental health promotion. This calls for a multisectoral engagement and a life-course approach.

CHAPTER 3: LITERATURE REVIEW

CHAPTER 3: LITERATURE REVIEW

Sl. NO	TITLE	AUTHORS	DESCRIPTION	YEAR
1	Using Machine Learning Algorithms to Predict the Practice of Mindfulness	Sebastian Sauer, Ricardo Buettner, Thomas Heidenreich, Jana Lemke, Christoph Berg, and Christoph Kurz	Specifically, we employed 10 predictive algorithms to scrutinize the measurement quality of the FMI. Our criterion of measurement quality was the degree to which an algorithm separated mindfulness practitioner from nonpractitioners in a sample of N = 276. A high predictive accuracy of class membership can be taken as an indicator of the psychometric quality of the instrument. In sum, two findings are of interest. First, over and above some items of the FMI were able to reliably predict class membership. However, some items appeared to be uninformative. Second, from an applied methodological point of view, it appears that machine learning algorithms can outperform traditional predictive methods such as logistic regression. This finding may generalize to other branches of research.	2016
2	The Importance of Culture in Cognitive and Behavioral Practice	G.Hofmann	The contributions of this special series highlight the importance of culture in cognitive-behavioral therapies People who grow up in different cultures not only think about different things, but also seem to think differently. In other words, culture seems to shape and determine a person's way of perceiving and reasoning. Therefore, cognitive-behavioral therapies need to be adapted to the client's cultural background and beliefs. This maximizes the likelihood that treatment strategies that have been found to be effective in one culture are also effective in another culture.	
3	Case Studies of Clinician- Guided, Online Therapy: Towards a Fuller Understanding of How and Under What Conditions Such Therapy Works	Franz Casper	The specific format of Online, clinician- guided treatment has an impact on how the Online interventions work, and it also requires specific skills and prerequisites of patients such as motivation and intellectual abilities. As Ciuca et al. point out, Maria, the patient with a good outcome, was in an action- oriented stage according to the stages-of- change model (Prochaska, Norcross, & DiClemente, 2013), whereas Andrea, the patient with the poorer outcome seems to have been in an earlier stage of change at the beginning of treatment. In a related point, Schulz et al note that both patients presented in their paper. Daydreamer and Night Owl, were highly educated, capable of introspection, and motivated to take part in the study. Therefore, an open question is whether these treatments also work for less educated and less motivated patients. It would be important to conduct more case studies to identify whether there are ways to adapt Online, clinician-guided interventions with clients who are less educated and/or less motivated.	

CHAPTER 4: PROJECT DESCRIPTION

CHAPTER 4: PROJECT DESCRIPTION

We conducted a market survey and observed that only half the people would consider themselves as outgoing & socially confident. Even though a good 55-70% of people said that they were happy in life and easily made friends, 60% of the people also said that they do not have a lot of friends. This means that they like talking to people but are not comfortable sharing with a lot of people. Almost everyone agreed that they would be comfortable sharing with a family member or a friend when being stressed out. Different people had different ways of dealing with bad situations. Music is one thing that helps a lot of people in such times. Arijit Singh, BTS and Dua Lipa were the majority's favorites artists. Also, the research revealed that not all but quite a lot of people would like to talk toa stranger if they were going through something.

4.1 PROPOSED DESIGN

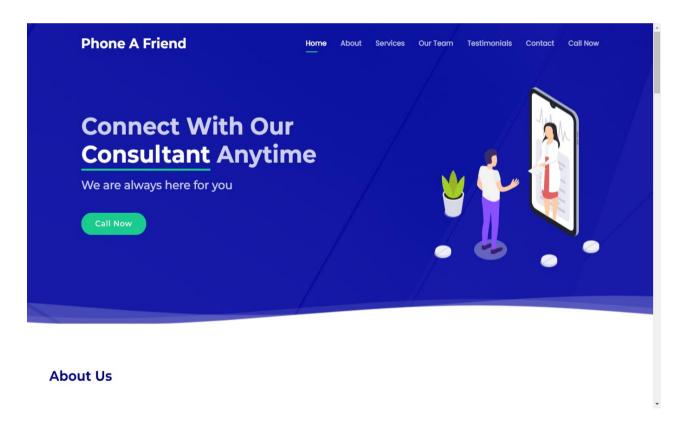


Fig. 4.1.1. Home Page

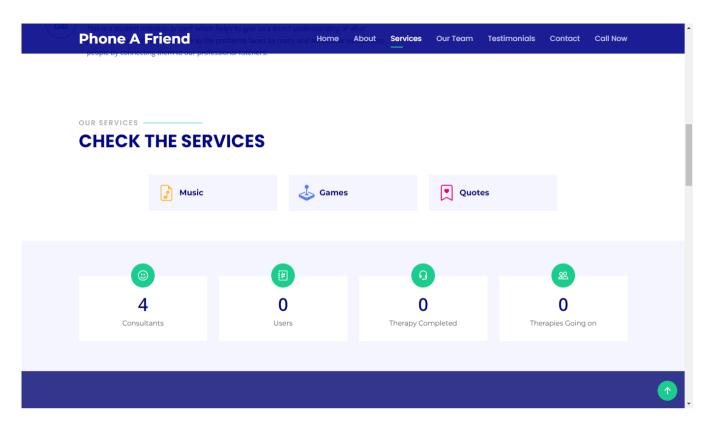


Fig. 4.1.2. Services

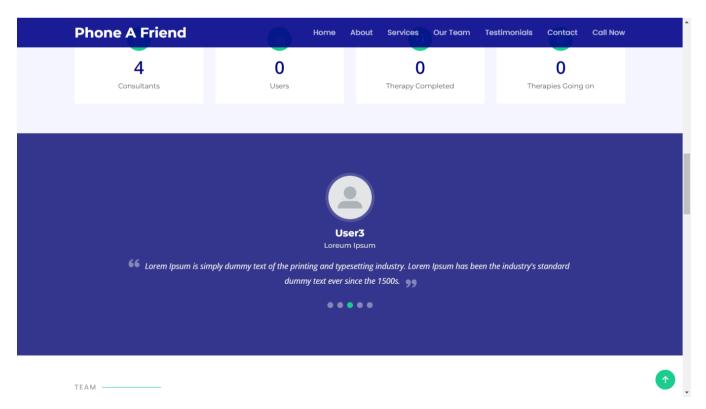


Fig. 4.1.3. User Quotes

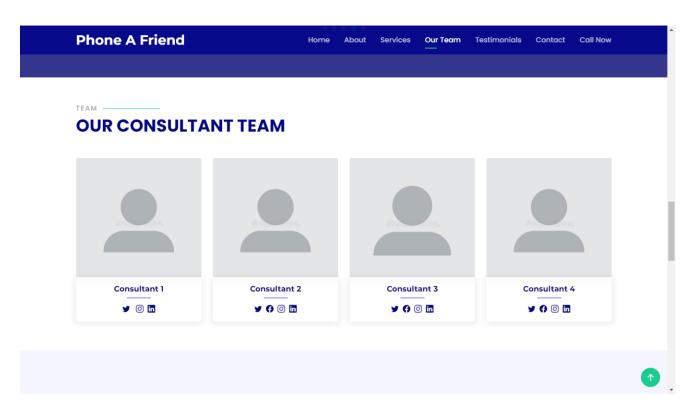


Fig. 4.1.4. Consultancy Members

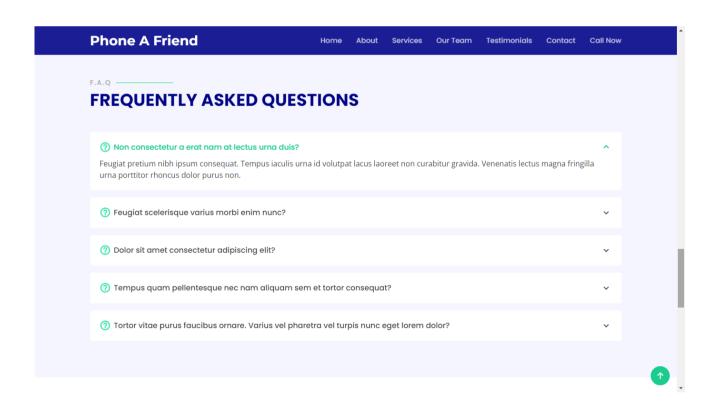


Fig. 4.1.5. Frequently Asked Questions and Answers

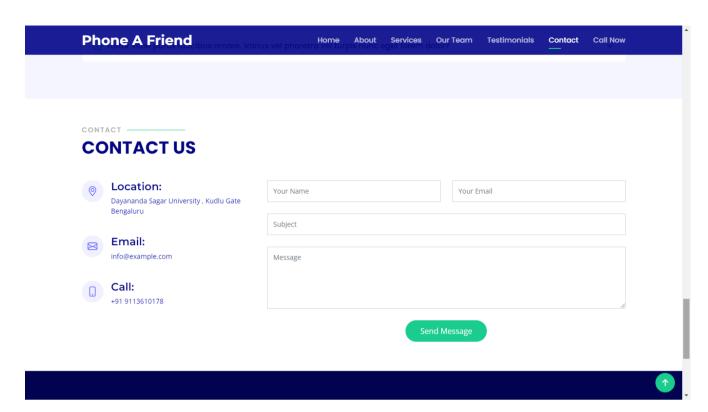


Fig. 4.1.6. Contact Page

4.2 PREDICTION ALGORITHM

Over the past two decades, automatic facial emotion recognition has received enormous attention. This isdue to the increase in the need for behavioral biometric systems and human—machine interaction where the intensity of emotion plays vital roles. The existing works usually do not encode the intensity of the observed facial emotion and even less involve modeling the multi-class facial behavior data jointly. Our work involves recognizing the emotion along with the respective intensities of those emotions. The algorithms used in this comparative study are Gabor filters, a Histogram of Oriented Gradients (HOG), and Local Binary Pattern (LBP) for feature extraction. For classification, we have used Support Vector Machine (SVM), Random Forest (RF), and Nearest Neighbor Algorithm (KNN). This attains emotion recognition and intensity estimation of each recognized emotion. This is a comparative study of classifiers used for facial emotion recognition along with the intensity estimation of those emotions for databases. The results verified that the comparative study could be further used in real-time behavioral facial emotion and intensity of emotion recognition. There are 3 best algorithms that can be used for this Mood Prediction Purpose:

• Support Vector Machine (SVM): It is a supervised machine learning algorithm that can be used for both classification or regression challenges. In the SVM algorithm, we plot each data item as a point in n-dimensional space with the value of each feature being the value of a particular coordinate. We perform classification by finding the hyper-plane that differentiates the two classes very well.

• Random Forest: Random Forest is a Supervised Machine Learning Algorithm that is used widely in Classification and Regression problems. It builds decision trees on different samples and takes their majority vote for classification and average in case of regression. One of the most important features of the Random Forest Algorithm is that it can handle the data set containing continuous variables as in the case of regression and categorical variables as in the case of classification. It performs better results for classification problems. Before understanding the working of the random forest, we must look into the ensemble technique. Ensemble simply means combining multiple models. Thus, acollection of models is used to make predictions rather than an individual model.

Ensemble uses two types of methods:

- 1. **Bagging** It creates a different training subset from sample training data with replacement & the final output is based on majority voting. For example, Random Forest.
- 2. **Boosting**—It combines weak learners into strong learners by creating sequential models such that the final model has the highest accuracy. For example, ADA BOOST, XG BOOST
 - KNN Algorithm: The k-nearest neighbors (KNN) algorithm is a simple, supervised machine learning algorithm that can be used to solve both classification and regression problems. It's easy to implement and understand, but has a major drawback of becoming significantly slows as the size of that data in use grows.

4.3 ASSUMPTIONS AND DEPENDENCIES

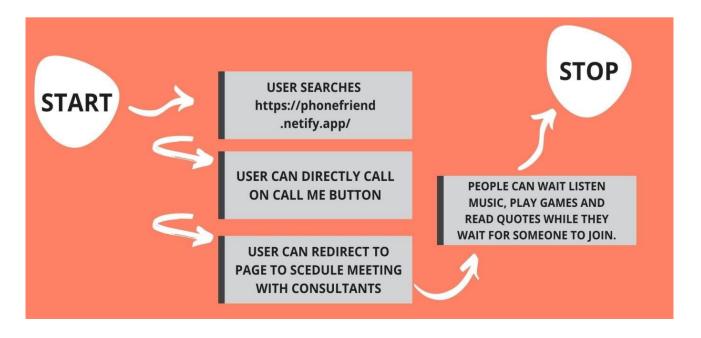


Fig. 4.3.1. Flow Chart Design

CHAPTER 5: REQUIREMENTS

CHAPTER 5: REQUIREMENTS

5.1 FUNCTIONAL REQUIREMENTS

5.1.1 REGISTRATION PROCESS

- Adding Patients: The system enables the patients to register themselves aspatient.
- Adding Doctors: The system enables the doctors to register and sign up with their specialty as doctors. Prediction of Diseases
- Symptoms of Diseases: Every patient has to enter the symptoms they are feeling and system will predict the results and help the patient to contact the doctor according to disease.

5.2 NON-FUNCTIONAL REQUIREMENTS

5.2.1 SOFTWARE REQUIREMENTS

- Technology: Python Django
- IDE: VS Code/Atom
- Client-Side Technologies: HTML, CSS, JavaScript, Bootstrap
- Server-Side Technologies: Python
- Data Base Server: SQLite Operating System: Microsoft Windows/Linux

5.2.2 HARDWARE REQUIREMENTS

- Windows 8 or above
- Processor: Core i3 (or) Higher
- Ram: 2GB (or) Higher
- Hard disk: 80GB (or) Higher

5.2.3 SOFTWARE QUALITY ATTRIBUTES

The built project must provide availability, flexibility, usability, and a straightforward end product to the user with high efficiency, effectiveness, and satisfaction. Maintenance of the website should be lucid and alterations done in the back end must quickly reflect on the website.

Security:

- Logon ID: Any users who make use of the system need to hold a LogonID and password.
- Modifications: Any modifications like insert, delete, update, etc. for the database can be synchronized quickly and executed only by the site administrator.
- Response Time: The system provides acknowledgment in very fast once the patient's symptoms are checked.
- Capacity: The system needs to support many users. Reliability: The system needs to available all the time.

CHAPTER 6: METHODOLOGY

CHAPTER 6: METHODOLOGY

• TRAINING MACHINES TO TRACK FEELINGS

Eichstaedt and Weidman began by having human research assistants annotate public Facebook postings of nearly 3,000 volunteers from an earlier study. The research assistants rated each post on its "valence" — how much it expressed positive or negative emotions — and on "arousal"— or the intensity of those feelings.

Once those ratings were complete, the posts were used to train a machine-learning model that would predict which kinds of language conveyed which kinds of feelings. Eichstaedt and Weidman then tested their model on an entirely different set of posts from 640 heavy Facebook users. People in this second group posted an average of 17 times a week over 28 weeks. This produced a (now public) dataset tracking emotional dynamics across 18,000 person-weeks — the largest dataset on weekly emotional dynamics ever compiled, which is available for mining by the research community.

• EVALUATING THE MODEL

To get some sense of whether the machine-learning model was reading people right, Eichstaedt and Weidman looked at how well the patterns it revealed matched up with the predictions based on classical in-person psychological studies.

The results lined up with predictions based on a list of what psychology researchers call the "Big Five" personality traits — openness, agreeableness, extroversion, conscientiousness, and neuroticism. All the Facebook users in the study had volunteered to participate in a "My Personality" study, which measured the Big Five traits through a questionnaire. Consistent with the earlier predictions, people whom the machine-learning model rated higher on extroversion, agreeableness, and conscientiousness tended to feel both more upbeat and morearoused.

As it happened, the machine-learning results also neatly dovetailed with earlier studies about the relationship between how good people feel and how aroused they are at any given moment. Just as the earlier studies had theorized, the machine-learning results showed a lop- sided "V-shaped" relationship: Arousal goes up both as people feel more up and more down, but the relationship was stronger for the upbeat emotions; it's hard to feel something very positive without also feeling upbeat.

GENDER DISCREPANCIES

The researchers also found that men and women showed somewhat different emotional patterns.

The women tended to be somewhat more upbeat than men and to have a wider emotional "resting point," or typical level of pleasant and/or aroused feelings. Put another way, says Eichstaedt, men tend to be grumpier and less emotionally responsive to their environment than women. That's consistent, says Eichstaedt, with the idea that women have higher "emotional flexibility." Eichstaedt cautions that it's too early to know whether machine learning could eventually provide the equivalent of an accurate MRI image for mood. But given all the data available on social media, he says, it could well open new opportunities for understanding human emotional dynamics at much larger scale.

CHAPTER 7: EXPERIMENTATION

CHAPTER 7: EXPERIMENTATION

• EXAMPLES OF SPECIFIC MENTAL HEALTH CHALLENGES

There are many types of mental health challenges. Here is a list of some: anxiety, depression, attention deficit hyperactivity disorder (ADHD), autism, post-traumatic stress disorder (PTSD), schizophrenia, and bi-polar disorder. Some mental health challenges can lead people to do things that hurt their bodies, such as cutting or eating disorders like anorexia or bulimia.

Only a mental health professional can say if someone has a mental illness. Everyone has good days and bad days. Just because someone has a bad day does not mean he or she have a mental illness.

If you think someone you know is going through a mental health challenge, it's important to speak up. Talk to a trusted adult. This is the first step to helping someone get better.

If you think you're going through a mental health challenge, it's important to ask for help so you don't have to be scared. Remember - you can get better.

• ADHD (ATTENTION DEFICIT HYPERACTIVITY DISORDER)

ADHD is pretty common and can make it hard to focus and sit still. ADHD makes it hard to finish things, and makes thoughts jump around. Kids who have ADHD can learn to control their thoughts and bodies by figuring out what helps them focus, or by talking to a doctor or mental health professional. Some kids with ADHD do better in school if they can do their work in a quiet room. Sometimes medicine can help too. Even though having ADHD can make some things harder, people who have ADHD are just as smart as other people. They can still do well inschool and in life.

• ANXIETY (PANIC DISORDER)

Have you ever been really nervous? Maybe from a test, a speech, or a big game? When you're nervous, your heart starts pounding, you breathe fast, or your stomach might feel funny. Feeling anxious and nervous is common. But a person diagnosed with an anxiety disorder will have these feelings suddenly and often. These strong, sudden feelings of stress or fear are called "panic attacks." A panic attack can make your chest or stomach hurt, your heart speed up, make you feel afraid, dizzy, or feel like you can't breathe. Even kids can have panic attacks. People who have panic

attacks sometimes feel scared to go places because they are afraid of having an attack. Their daily life can be scary, but they can get help, get better and be okay.

• AUTISM SPECTRUM DISORDER

Autism Spectrum Disorder changes the way the brain understands the world. People diagnosed with autism can have a hard time talking about their feelings, understanding people's actions, and being social. They can also be very sensitive about being touched. To a person diagnosed with autism, being hugged can be scary and uncomfortable. Kids who have autism are just as smart as other kids. They can be very good at things like math or music. Just because some things are hard for kids with autism, they are not acting mean or weird. Their brains just work in a different way. They still make friends and learn how to work and play with others.

• BI-POLAR DISORDER

Everybody has feelings that change. When something good happens, you feel happy. If something bad happens, you feel sad. Bi-polar disorder changes the way people feel emotions. If people have bi-polar disorder, their emotions can go from happy to sad very quickly. They can be very cheerful one moment, and very angry, sad and tired the next moment. When people with bi-polar disorder experience intense feelings of happiness it is called "mania." They can't think clearly or sleep well, and they might do things without thinking about them first. When people with bi-polar disorder feel intense sadness and tiredness, it is called "depression." Having bi-polar disorder can be very tiring and stressful. Medication can help. Talking to a mental health professional, friends and family can also help someone with bi-polar disorder learn how to manage feelings and live a healthy life.

DEPRESSION

Depression is a mental health challenge that makes people feel very sad all the time. It can change how you think, feel, and act. It can even make your body feel sick too. A person diagnosed with depression can feel so sad that it makes it hard to think clearly. Someone diagnosed with depression might feel very sad every day, or feel that nobody loves them. They might not want to do things they used to think were fun. People diagnosed with depression may not know why they feel so sad. Even if you have a good life, you can struggle with depression. It is good to have family and close friends to talk to and help when things are bad, and talking to a mental health professional about these strong feelings can help. Depression can be very hard, but people with depression can get better too, and learn how to enjoy life.

• EATING DISORDER

An eating disorder exists when a person's thoughts and behaviors are focused too much on food and body weight. The person may worry about being "too fat." The person may have a big fear of becoming obese. Yet, the person's weight may be quite healthy. Three of the most common types of eating disorders are anorexia, bulimia, and extreme overeating.

Anorexia refers to weight loss that occurs from not eating. Bulimia refers to eating large amounts of food over a short period of time followed by an attempt to get rid of the food. This getting rid of food is called "purging." Extreme overeating is marked by eating, and eating, and eating and then having feelings of guilt and shame.

The important thing to remember is that having an eating disorder is about more than body weight and food. Behind the problem we see is something bigger – a person's sense of self-esteem, relationships, feelings, and how the person handles the stresses of life. A medical doctor, a mental health professional and a nutritionist are important helpers for this type of problem.

• POST-TRAUMATIC STRESS DISORDER (PTSD)

Sometimes if you see or live through something very scary, you can keep feeling afraid even after the scary part is over. It is normal to feel afraid sometimes, but people with Post-Traumatic Stress Disorder (PTSD) feel scared even if they are safe and there is nothing to be afraid of. Kids with PTSD might have very bad dreams that seem real, or think something bad is going to happen again. Even when they are safe, the feelings of fear are very real. Talking to a mental health professional or friends and family can help. It takes time and hard work, but kids who are diagnosed with PTSD can learn ways to handle their fears and can live healthy, happy lives.

• SCHIZOPHRENIA

Schizophrenia makes it hard for people to know what is real and what is not real. Schizophrenia can make the brain think it sees or hears things that aren't really there. A person diagnosed with schizophrenia can also start to think that people are trying to control them or read their minds. Even though the things they see, hear, believe or feel might not be true, their brains think they are real and true, and that can be very scary. Having schizophrenia does not mean a person is violent or bad. Usually, people do not get this illness until their late teens or early adulthood, and there are ways to make their lives better, like therapy and medication.

CHAPTER 8: TESTING AND RESULTS

CHAPTER 8: TESTING AND RESULTS

imestamp	NAME	Contact Number		E-MAIL ID	On a scale of 0 to 5 how happy are you in life?
8/8/2021 1:04:00	Shylesh Suresh		9380120293	shylesh.suresh@gmail.com	
8/8/2021 1:21:47	Swaroop	08431998292		swaroop8212@gmail.com	
8/8/2021 1:48:47	Vaishnavi Punagin		9148224505	dumdumwantsagumgum@gmail.com	
8/8/2021 2:08:17		08296275029		shreyujina@gmail.com	
	SHUBHA SHREE.N		8762400666	shubhashree.n.8752@gmail.com	
8/8/2021 7:24:38	Charita		6281256539	charita.bunny@gmail.com	
8/8/2021 7:34:14	Amruta			ammuchilaka@gmail.com	
8/8/2021 7:35:55	Kamala			Kamalaanala@gmail.com	
	SHREESHA K M			2000shreesha@gmail.com	
8/8/2021 7:52:50				eng18cs0248.sathvikng@gmail.com	
8/8/2021 7:56:43				shravani.monica@gmail.com	
8/8/2021 8:14:58		07899691204		eng18cs0261.shivang@gmail.com	
8/8/2021 8:17:29		100000000000000000000000000000000000000	7996589532	shakthidsu@gmail.com	
8/8/2021 9:13:30	18 1013 TV 0.34 400 CV CV CV - 0 24 40 24			sjatin1308@gmail.com	
8/8/2021 9:46:42				sahithi.pyde2018@gmail.com	
8/8/2021 9:47:44				srishtiranjan2910@gmail.com	
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	Suman Chandrashekar			suman29poojary@gmail.com	
8/8/2021 13:16:35				shreyaz1995@gmail.co	
8/8/2021 13:10:33	M. M			Pavithra Yogeesha @gmail.com	
8/8/2021 13:55:10				nitnik.22@gmail.com	
8/8/2021 13:56:38					
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				namanmathur957@gmail.com	
8/8/2021 13:58:36				chiragbsanil07@gmail.com	
8/8/2021 14:00:49				sumakaup@gmail.com	
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8/8/2021 16:12:29		+385 97 702 4939		I don't betray him	
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8/8/2021 17:04:23				Nishasp91@yahoo.com	
8/8/2021 17:23:36				sathwikjr6@gmail.com	
8/8/2021 17:49:39			9330895483	blossomdas18@gmail.com	
8/8/2021 18:23:04		N/A		ankitoffical24124@gmail.com	
8/8/2021 19:48:23	Miconorelleon City			Pradhanshradhya@gmail.com	
8/8/2021 20:59:19				bokettoeunoia@gmail.com	
8/8/2021 22:32:14				ksprem222@gmail.com	
8/8/2021 23:55:23				shailendrabilar92@gmail.com	
8/9/2021 0:47:03				zuwainaayub123@gmail.com	
8/9/2021 1:07:47	Dev Shah			devshah1609@gmail.com	
8/9/2021 6:28:28	Piyali		7483229726	piyaliniyogi@gmail.com	

Fig. 8.1. Research Data 1

On a scale of 0 to 5 how easily do you make friends?	Would you call yourself an outgoing person?	Does talking to friends or family help release your stress
5	Yes	Yes
	No	Yes
	No	Yes
	Yes	No
	No	Yes
	No	Yes
	Yes	Yes
	No	Yes
	No	Yes
	No	No
	No	No
	Yes	Yes
	No	Yes
	Yes	Yes
	Yes	Yes
	Yes	Yes
	No	No
	Yes	Yes
	No	No
	No	Yes
	Yes	Yes
	No	Yes
	No	Yes
	Yes	Yes
	No	No
	No	Yes
	No	Yes
	Yes	Yes
	Yes	No
	Yes	Yes
5	Yes	Yes
	No	Yes
	No	No
	Yes	Yes
	No	Yes
	Yes	Yes
	Yes	Yes
	No	Yes
	Yes	Yes
	No	Yes

Fig. 8.2. Research Data 2

Does listening to music freshen up your mood? If yes who is your favorite artist?	How many friends do you have?
Yes, I listen to music all the time. Favorite artist would probably be Dua Lipa.	I have a lot of friends.
Yes Arijit Singh	I have a lot of friends.
Right now, Mystery of Love typa vibes.	I have few friends.
Yes, Eden	I have few friends.
No	I have few friends.
Arijith singh	I have few friends.
A R Rahman	I have a lot of friends.
Yes	I have few friends.
Yes, all ok	I have few friends.
Negative, i play valorant	I have few friends.
Coldplay	I have few friends.
NO .	I have a lot of friends.
Yes, A R Rehaman	I have few friends.
Yes, Arjith singh	I have few friends.
Yes, Don't have a particular artist who is my fav	I have a lot of friends.
Avicii	I have a lot of friends.
Yes, Joji	I have few friends.
the band Camino	I have few friends.
Yes! BTS	I have few friends.
Depends on the mood	I have few friends.
A R Rahman	I have a lot of friends.
Yes. Shah Rukh Khan	I have few friends.
Yes, Gorillaz	I have few friends.
Bts, txt, iu, blackpink, Selena Gomez, Arijit Singh, Ayushmann Khurrana	I have a lot of friends.
YesBTS	I have few friends.
Ed sheeran	I have few friends.
SP Balasubramanya	I have few friends.
BTS , Billie Elish , Halsey ,Selena Gomez etc .	I have a lot of friends.
Bollywood music	I have few friends.
BTS	I have a lot of friends.
BTS	I have few friends.
My fav artist is probably Ariana Grande or BTS or Blackpink	I have a lot of friends.
Shreya ghoshal	I have few friends.
Dua Lipa	I have a lot of friends.
Yes, Arijit Singh	I have a lot of friends.
No	I have a lot of friends.
Yes , BTS	I have few friends.
Yes . BTS, Shawn Mendes ,TXT and old hindi songs (ek pyar ka nagma hai) .	I have few friends.
Yes- Anirudh	I have a lot of friends.
Arijit Singh,Sonu Nigam	I have a lot of friends.
Yes. BTS, Kim feel, Yoon mirae, IU, Kim Woosung, Doyoung, Harry styles, Tori kelly	y, T I have few friends.
Dua Lipa	I have a lot of friends.
Kumar shannu	I have a lot of friends

Fig. 8.3. Research Data 3

Does talking to people online make you anxious?	Would you be willing to talk to people online if and when you are going through something?
No No	Yes
No	Yes
No. Talking to people online- strangers even- is way more easier and fun than in mal life.	Yes
No	No
No	Yes
Yes	Yes
No	No
No	No
Yes	No
Negative	No
Yeah	No
NO	No
Yes random unknown people makes me feel so.	No
Not really	Yes
No	Yes
No	Yes
No	Yes
nope	No
No	Yes
Yes	Yes
No	Yes
No	No
Yes	No
No, but when they are sad for me it's like if i would be with him/her then atleast i could hug them and support them.	Yes
Yes	Yes
No	Yes
Yes	Yes
Not At All , it is Actually Better As We Can Choose Who We Can Talk Talk To.	Yes
Yes	Yes
No	Yes
Yea	No
Not much	Yes
Yes	No
No	No
No	Yes
Yes	No
No	No
Yes! Sometime but now it's changing	Yes
No	Yes
	Yes
Yes, sometimes. Actually, it gets easier when there is a common topic to talk about. It gets easier to break the ice when we	
No	Yes
S	Yes

Fig. 8.4. Research Data 4

This is a survey we conducted to analyze our potential market and get their point of view. We created a Google form and asked a few questions such as, how happy were they on a rate of zero to five? How easily do they make friends? Would they call themselves an outgoing person? Does talking to family and friends about their problems help them? Does music help them through their tough times? In general, how many friends do they have? Would talking to someone online make them feel anxious? And would they be willing to talk to someone online regarding their mental health? And by getting the responses to these answers we could analyze our potential market base and also have a better understanding of what people want. We got this survey filled by a variety of age groups from thirteen years old to sixty-seven years old. This gave a wide range of understanding as well.

CONCLUSION

The aims of this study were to identify and evaluate the types of mental health self-care support used by, and available to, CYP and their parents, and to establish how such support interfaces with statutory and non-statutory service provision. Through two inter-related systematic reviews, a mapping exercise and a case study, we are confident that we have achieved these aims. Moreover, in doing so, we have developed a model of self-care support that can help policy-makers and practitioners make decisions about the organization and delivery of mental health self-care support for CYP and their families, and help researchers identify gaps in the knowledge base that might be resolved with future research in this area.

REFERENCES

- C. Bockting, A. Schene, P. Spinhoven, M. Koeter, L. Wouters, J. Huyser, et al., "Preventing relapse/recurrence in recurrent depression with cognitive therapy: a randomized controlled trial", *J Consult Clin Psychol*, vol. 73, no. 4, pp. 647-57, 2005.
- F. Both, P. Cuijpers, M. Hoogendoorn and M. C. A. Klein, "Towards fully automated psychotherapy for adults bas behavioral activation scheduling via web and mobile phone" in HEALTH-INF, INSTICC Press, pp. 375-380, 2010.
- F. Both and M. Hoogendoorn, "Utilization of a virtual patient model to enable tailored therapy for depressed patients", *ICONIP*(3)'11, pp. 700-710, 2011.
- F. Both, M. Hoogendoorn, M. Klein and J. Treur, "Modeling the dynamics of mood and depression", *Proceedings of the 2008 conference on ECAI2008: 18th European Conference on Artificial Intelligence*, pp. 266-270, 2008.
- F. Both, M. Hoogendoorn, M. C. A. Klein and J. Treur, "Computational modeling and analysis of the role of physical activity in mood regulation and depression", *Proceedings of the 17th international conference on Neural information processing: theory and algorithms Vol. Part I ICONIP' 10*, pp. 270-281, 2010.
- F. Both, M. Hoogendoorn, M. C. A. Klein and J. Treur, "Computational modeling and analysis of therapeutical interventions for depression", *Proceedings of the 2010 international conference on Brain informatics BI' 10*, pp. 274-287, 2010.
- P. Cuijpers, J. Dekker, S. Hollon and G. Andersson, "Addingg psychotherapy to pharmacotherapy in the treatment of depressive disorders in adults: a meta-analysis", *J Clin Psychiatry*, vol. 70, no. 9, pp. 1219-1229, 2009.
- P. Cuijpers, A. van Straten, S. Hollon and G. Andersson, "The contribution of active medication to combined treatments of psychotherapy and pharmacotherapy for adult depression: a meta-analysis", *Acta Psychiatr Scand*, 2009.
- P. Cuijpers, A. van Straten, A. van Schaik and G. Andersson, "Psychological treatment of depression in primary care: a meta-analysis", *Br J Gen Pract*, vol. 59, no. 559, pp. 51-60, 2009.
- Here are a few websites that provide similar services as ours,
- 1. https://www.manastha.com/
- 2. https://www.healthhosts.com/website-design-therapists/counselling/
- 3. https://www.wedgwood.org/services/counseling-services/