

# Mobile Application for Mental Health Using Machine Learning

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## Abstract

In present era, mental health has become one of the most neglected, yet critically important, factors of our overall well-being. A large number of people are affected by various types of mental illnesses and mental health disorders. Stress, anxiety, and depression are the most common disorders among children and adolescents in Sri Lanka, and their prevalence has increased over the years, likely to require immediate medical attention. In today's world, mobile phones and applications play an important role in everyone's life. With the rapid growth of mental illness, mental health-focused apps and websites have gradually increased globally in recent years. This study aims to develop a mobile application that will primarily serve Sri Lankans with mental health problems, helping them identify their levels of stress, anxiety, and depression (ADS) and receiving advice on how to deal with them. This app's main objective is to support those who are dealing with mental illnesses and raise awareness of them locally using machine learning and image processing techniques. It does this by serving as a constant reminder of how crucial mental health is and how much of an impact it has on daily life. The GSE Scale, DASS 21 scale has been used to find the users mental health illness and the severity of each mental health illness such and Anxiety depression and stress. These methods are put to our mobile application using machine learning techniques such as Decision tree and Random Forest classifiers and uses image processing technologies, CNN machine learning algorithm to offer a variety of activities for reliving stress, depression, and anxiety,

## Keywords

Anxiety, Depression, Stress, Sri Lanka, Mental Health, Mobile Application, Recommendation, Mental Illness