6COSC006W – Final Year Project Report

POZITIF – Predictive Tool to Overcome Negative Thinking of Employees with Anxiety

Student: Kalana Ananda (2017114)

Supervisor: Gayashini Ratnayake

This report is submitted in partial fulfillment of the requirements for the
BSc (Hons) in Business Information Systems degree
at the University of Westminster.

School of Computing & Engineering
University of Westminster

Date : 05/05/2022

Abstract

Mental health is becoming an increasingly relevant topic among employees. For a significant portion of the population, an anxiety disorder can be considered the most prominent psychological condition. In Sri Lanka, most employees have a high risk of anxiety and depressive symptoms. Anxiety may limit many people's activities and make it difficult for them to enjoy their lives. The amount of time spent working, caring for others, or living in an unstable economic situation has a significant impact on stress and anxiety levels.

An increase in negative thoughts would raise people's fear and worry, which potentially leads to anxiety disorder. The number of remote workers has risen as a result of the pandemic situation. A considerable number of employees are faced with anxious thoughts because of workplace isolation. This was proved by a pilot study done among 102 employees in Sri Lanka. There is a lack of applications available to diagnose and provide therapies for both anxiety disorder and negative thoughts.

The proposed solution is a mobile application that employees can use to diagnose their anxiety level using machine learning and support to overcome their negative thinking behavior, through cognitive behavioral therapy exercises by allowing them to do self-improvement activities. The visually represented dashboard can monitor the positive thinking improvement of the user.

Keywords— anxiety disorders, negative thoughts, remote working employees, diagnose the anxiety level, machine learning