Psychological Wellbeing Assessment Platform

S.Yoga, M.Sc(CS&IT).,M.Sc.,(Maths).,M.Phil(CS).,M.Phil.,(Maths)[1] , K. Kanimozhi[2]

Department of Computer Science, Sakthi College of Arts and Science for Women, Oddanchatram, Tamilnadu, India[1]

M. Sc (Computer Science), Department of Computer Science, Sakthi College of Arts and Science for Women,

Oddanchatram, Tamilnadu, India[2]

ABSTRACT: Mental health has become a critical concern for students, employees, and the general public, as stress, anxiety, depression, and emotional imbalance continue to rise. However, many individuals hesitate to seek professional help due to social stigma, lack of access to counselors, or limited awareness. This project proposes a **Psychological Wellbeing Assessment Platform**, an intelligent digital solution designed to evaluate a user's mental health condition using standardized psychological questionnaires, AI-based scoring models, and personalized recommendations. The system assesses wellbeing in multiple dimensions—stress level, emotional state, cognitive behavior, lifestyle factors, and social wellbeing. It provides instant insights, mood tracking, mental wellness reports, and suggestions such as breathing exercises, meditation, and professional contact options. By integrating psychology with technology, the platform promotes early identification of mental health issues, encourages self-awareness, and facilitates timely support, making mental wellbeing more accessible and stigma-free.

KEYWORDS: Psychological Wellbeing, Mental Health Assessment, Depression Screening, Anxiety Detection, Stress Analysis, AI-Based Health Systems, Mood Tracking, Digital Health Platform, Cognitive Behavioral Analysis

I. INTRODUCTION

With the rapid increase in workloads, lifestyle changes, academic pressure, and emotional challenges, psychological wellbeing has become an essential aspect of a healthy life. Many people experience anxiety or stress but fail to acknowledge or address it due to fear of social judgment or a lack of professional guidance. Digital mental health systems have emerged as a powerful alternative by offering privacy, accessibility, and personalized support. The Psychological Wellbeing Assessment Platform is designed to help users evaluate their mental state through scientifically validated assessment tools such as DASS-21, PHQ-9, GAD-7, and wellbeing indices. The platform applies data analysis and AI-based scoring to classify user psychology levels and provide tailored recommendations. Users can continuously track their emotional progress and receive supportive guidance to improve their mental health. This system creates a safe, user-friendly environment for mental health awareness and provides valuable insights for early intervention.

II. LITERATURE SURVAY

Psychological well-being is a broad and multifaceted construct that refers to an individual's overall experience of positive emotions, satisfaction with life, and sense of purpose. The study of psychological well-being has been an active area of research in psychology for several decades, with the goal of gaining a deeper understanding of the factors that contribute to its development and maintenance.

One of the earliest and most influential models of psychological well-being was proposed by Seligman and Csikszentmihalyi (2000), who defined it as the result of two dimensions: positive emotion and engagement in meaningful activities. According to this model, individuals who experience frequent positive emotions and are actively engaged in activities that are meaningful to them are likely to have higher levels of psychological well-being. Other researchers have expanded on this model by including additional dimensions of psychological well-being, such as positive relationships (Diener et al., 2010), personal growth (Linley & Joseph, 2004), and a sense of purpose (Ryff, 1989). These dimensions are considered to be critical to the development and maintenance of psychological well-being and are often taken into account in studies on this topic.

Studies have found that both individual and environmental factors can impact psychological well-being. For example, research has shown that personality traits, such as openness and conscientiousness, are associated with higher levels of well-being (Costa & McCrae, 1980). Additionally, environmental factors, such as access to green space and social support, have been found to have a positive impact on well-being (Oishi & Diener, 2001).

A growing body of research has explored the effects of mindfulness-based practices, such as meditation and yoga, on psychological well-being. These studies have demonstrated that these practices can have positive effects on mood, stress levels, and overall well-being (Brown & Ryan, 2003). Cognitive-behavioural therapies, such as cognitive-behavioural therapy (CBT), have also been found to be effective in promoting well-being, particularly for individuals with depression and anxiety (Cuijpers et al., 2013).

Research has also shown that physical activity is positively associated with psychological well-being (Babyak et al., 2000). Physical activity has been shown to reduce stress, improve mood, and increase feelings of self-esteem and confidence (Lancaster & Strath, 2013). Exercise has also been found to be a effective in the treatment of depression, with studies demonstrating its efficacy comparable to that of medication and psychotherapy (Babyak et al., 2000). In summary, the literature on psychological well-being is extensive and growing. It is clear that psychological well-being is a complex construct that is influenced by a variety of individual and environmental factors, and that intervention such as mindfulness-based practices, cognitive-behavioural therapies, and physical activity can have positive effects on well-being. Nevertheless, much more research is needed to gain a full understanding of the nature of psychological well-being and the most effective strategies for promoting it

III. THEORETICAL BACKGROUND

3.1 PROBLEM IDENTIFICATION

- In the existing system, psychological wellbeing assessments primarily rely on manual questionnaires handled during counseling sessions or medical consultations. These methods require physical presence, are time-consuming, and depend largely on the availability of professionals. Many individuals avoid consulting psychologists due to stigma or inconvenience, resulting in late diagnosis and worsening mental conditions. Online alternatives exist but often lack standardized scoring, personalization, tracking features, or professional recommendations. There is no unified digital platform that securely manages user assessments, provides instant scoring, and enables continuous wellbeing monitoring.

3.2 PROBLEM SOLVING

- The proposed **Psychological Wellbeing Assessment Platform** offers an automated, accessible, and confidential solution for evaluating mental wellbeing. Users complete digital assessments, and the system analyzes responses using scientific scoring models. The platform categorizes mental states (Normal, Mild, Moderate, Severe) and offers personalized recommendations such as breathing techniques, lifestyle improvements, and professional counseling suggestions. Users can monitor their emotional health over time through mood logs and progress charts. The system also supports counselor access (optional), allowing professionals to review user reports. By combining psychological science with digital technology, the platform enhances mental health awareness, supports self-care, and facilitates early intervention.

3.3 SYSTEM ARCHITECTURE
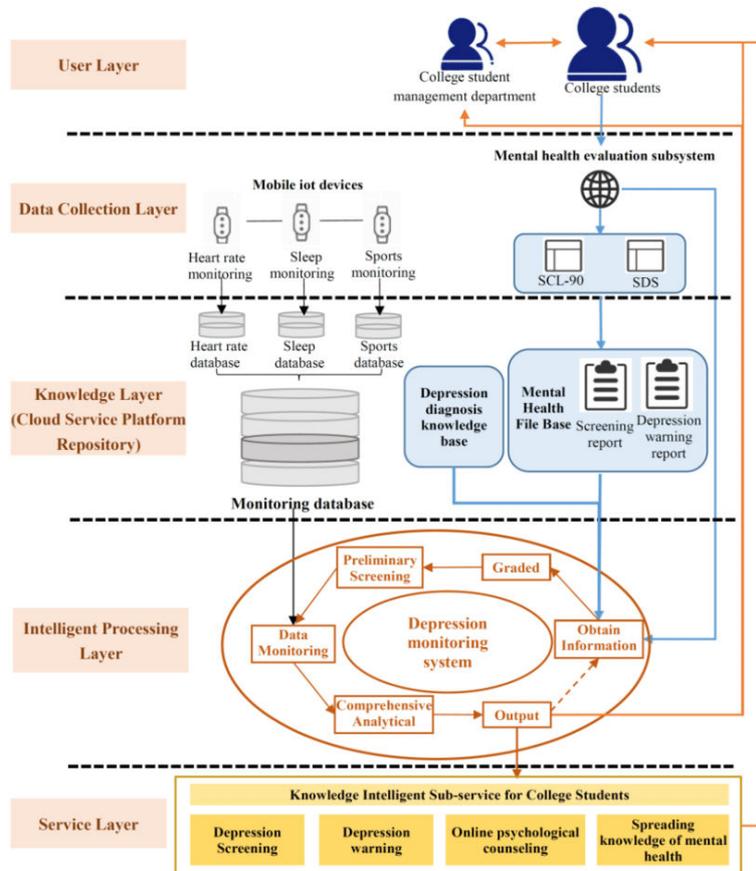
IV. SYSTEM IMPLEMETATION

4.1. MODULE:
1. User Registration & Login Module
2. Assessment Questionnaire Module
3. AI-Based Scoring & Analysis Module
4. Mood Tracking Module
5. Recommendation & Guidance Module
6. Counselor / Admin Module
7. Report Generation Module
8. Database Management Module

4.2 MODULE DESCRIPTION:
1. User Registration & Login Module
Allows users to create accounts, securely log in, and manage personal profiles while protecting privacy and sensitive data.

2. Assessment Questionnaire Module
Presents standardized psychological tests such as:
- Stress assessment
- Depression scale
- Anxiety measurement
- Cognitive/emotional wellbeing index

Collects user responses for analysis.

3. AI-Based Scoring & Analysis Module
Uses scoring algorithms and ML models to classify psychological states:

- Normal
- Mild
- Moderate
- Severe

Generates wellbeing score and mental health category.

4. Mood Tracking Module
Allows users to record daily mood, sleep patterns, emotions, and energy levels.
Generates visual graphs for progress tracking.

5. Recommendation & Guidance Module
Offers personalized:
- Breathing exercises
- Meditation videos
- Self-care tips
- Mental health articles
- Counselor contact options

6. Counselor / Admin Module
Authorized counselors can review assessments, monitor high-risk users, send alerts, and update wellbeing content.

7. Report Generation Module
Generates weekly/monthly reports:
- Wellbeing score
- Stress/anxiety levels
- Recommendations summary
- Mood tracking charts

8. Database Management Module
Securely stores user data, assessment responses, scores, and recommendation results with encryption.

V. CONCLUSION

5.1 CONCLUSION

The **Psychological Wellbeing Assessment Platform** provides a complete digital ecosystem to assess, track, and improve mental health. By using standardized psychological tools and AI-driven scoring, users receive immediate insights into their mental state. The platform ensures privacy, accessibility, and continuous support, making it a valuable tool for students, employees, and individuals seeking emotional wellbeing. It helps in early detection of psychological issues and encourages mental wellness in a structured and user-friendly environment.

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