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Paper Title:	Machine Learning-Based Classification of Mental Health State Using the DASS-21 Profile
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Abstract

This study aimed to determine the most effective machine learning model for classifying emotional states of depression, anxiety, and stress based on the DASS-21 profile. Six machine learning models were developed and tested using 2,602 records from the University of Phayao Counselling Center, collected between 23 July and 16 August 2020. The results demonstrate that the deep learning model provided the highest accuracy and precision, exceeding 90% for all three emotional categories, with an AUC greater than 99%. These findings introduce an innovative approach for classifying emotional states of depression, anxiety, and stress using the DASS-21 profile as a benchmark. Incorporating additional features into the model could further enhance its utility in clinical decision-making, improving the accuracy of mental health screening and diagnosis.
