ABSTRACT

Depression is a mental health disorder that is widely experienced by the public. With the increasing use of social media, one of which is X (Twitter), people often use it to share stories or simply express their feelings online. Post patterns on X can indicate whether someone is depressed or not, so, modeling text classification in X is very important to determine how many users experience depression. The algorithms used for comparison in this study are the Naïve Bayes algorithm and Support Vector Machine (SVM). Based on previous research, these two methods are efficient techniques for text classification problems. This study analyzes a person's post patterns on X to classify their depression. Data labeling is done based on the results of the DASS-42 questionnaire. This study successfully contributes to understanding the classification of depression based on post patterns on social media by testing several scenarios. Testing the Naïve Bayes algorithm using scenario 2 which goes through the data pre-processing stage in the form of case folding, cleaning, and tokenization and using TF-IDF feature extraction and an alpha parameter of 0.1 produces the most optimal results of 74% accuracy with 73% precision, 74% recall, and 71% f1-score.

Keywords: Depression, Classification, Naïve Bayes, Support Vector Machine, Machine Learning, DASS-42