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(57) Abstract:

Abstract The most important contributor to global disability and the cause of suicide is depression. It affects the use of the language in the written text. We use NLP techniques and machine-learning techniques to train the data and assess the efficiency of the method we propose. In depressed accounts, we identify a shared lexicon of terms. The results show that our approach can increase performance accuracy significantly. The best function is to detect depression with 80 percent exactness and 0.80 F1 values by bigram with the classification of the Support Vector Machine (SVM). The strength and efficiency of the combined (LIWC+LDA+bigram) functions have been shown most successfully by classifying the Multilayer Perceptron (MLP), leading to a high performance of depression detection at 91% and 0.93F1. Our study indicates the proper selections of features and multiple functional combinations can improve performance.

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