Survey of Detecting Mental Disorder in Social Media through Emotional Patterns- The Case of Anorexia and Depression

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Abstract: *Mental health disorders such as depression and anorexia nervosa have significantly increased in recent years, particularly among adolescents and young adults. With the widespread use of social media platforms such as Twitter and Reddit, users increasingly express their emotional states online, creating opportunities for early mental health detection. This survey reviews existing research on emotion-based detection of depression and anorexia using natural language processing (NLP), machine learning (ML), and deep learning (DL) techniques. Various approaches including sentiment analysis, lexicon-based methods, Support Vector Machines (SVM), Long Short-Term Memory (LSTM), and transformer-based models such as BERT are examined. Publicly available datasets, evaluation metrics, challenges, ethical concerns, and research gaps are discussed. The study highlights limitations in dataset imbalance, privacy issues, and generalization capability, and outlines future directions for developing robust and ethical mental health detection systems.*

Keywords: Mental Health Detection, Depression, Anorexia Nervosa, Emotional Pattern Analysis, Social Media Mining, Natural Language Processing, Deep Learning, Emotion Classification