Sentiment Analysis of Indonesian Society Towards Domestic Violence News Based on Opinions from Twitter Social Media Using Naïve Bayes Classifier (NBC) Algorithm

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ABSTRACT

The Covid-19 pandemic has led to a significant increase in domestic violence cases in Indonesia. Based on data from KemenPPPA until October 2022, there were 18,261 cases of domestic violence with 79.5% or 16,745 victims being women. Pandemic conditions that force people to stay at home for a long time have also worsened the domestic violence situation. This issue often becomes a public concern and is widely discussed on social media such as Twitter. Therefore, sentiment analysis of tweets containing keywords related to domestic violence can provide an understanding of public opinion. This research uses the Naïve Bayes Classifier (NBC) method to analyze text sentiment on Twitter. NBC utilizes the distribution of words in the document to calculate the probability of each class, aiming to categorize tweets into positive, negative, or neutral labels. Data is taken from relevant tweets, then goes through pre-processing stages which include case folding, data cleaning, stopword removal, word normalization, stemming, and tokenization. Relevant features are extracted using the Term Frequency-Inverse Document Frequency (TF-IDF) method. Classification results using NBC show 70% accuracy, 57% precision, 66% recall, and 60% f1-score.

Keywords: Sentiment Analysis, Twitter, Naïve Bayes Classifier, KDRT