

**ANALISIS SENTIMEN TENTANG PENGARUH STRES AKADEMIK
TERHADAP RISIKO *GASTRITIS* PADA MAHASISWA
MENGUNAKAN METODE *NAÏVE BAYES CLASSIFICATION*
(STUDI KASUS: UNIVERSITAS JENDERAL ACHMAD YANI
YOGYAKARTA)**

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INTISARI

Latar Belakang: Stres akademik merupakan salah satu kondisi psikologis yang umum dialami mahasiswa akibat tekanan tugas, ujian, dan ekspektasi akademik yang tinggi. Apabila tidak dikelola dengan baik, stres dapat berdampak pada kesehatan fisik, salah satunya *gastritis*. *Gastritis* yang disebabkan oleh stres dapat mengganggu aktivitas belajar dan menurunkan kualitas hidup mahasiswa.

Tujuan: Penelitian ini bertujuan untuk menganalisis hubungan antara tingkat stres akademik dengan risiko *gastritis* pada mahasiswa Universitas Jenderal Achmad Yani Yogyakarta, serta membangun model klasifikasi menggunakan algoritma *Naïve Bayes* untuk memprediksi risiko *gastritis* berdasarkan tingkat stres.

Metode Penelitian: Data dikumpulkan dari 108 mahasiswa melalui kuesioner *online* yang memuat skala stres berdasarkan DASS-42 dan gejala *gastritis*. Tahapan penelitian mencakup *preprocessing* data, pelabelan berdasarkan risiko, pemisahan data latih dan uji, pelatihan model, serta evaluasi menggunakan metrik akurasi, presisi, *recall*, dan *F1-score*.

Hasil: Hasil analisis menunjukkan bahwa sebagian besar mahasiswa mengalami stres pada kategori sedang hingga berat, dan memiliki kecenderungan tinggi terhadap gejala *gastritis*. Model *Naïve Bayes* menghasilkan akurasi sebesar 91%, serta presisi, *recall*, dan *F1-score* masing-masing sebesar 95%. Analisis juga menunjukkan bahwa tingkat stres yang lebih tinggi berkorelasi positif dengan peningkatan risiko *gastritis*.

Kesimpulan: Terdapat hubungan signifikan antara stres akademik dan risiko *gastritis* pada mahasiswa. Model *Naïve Bayes* efektif memprediksi risiko tersebut, sehingga dapat menjadi acuan pengembangan deteksi dini dan strategi manajemen stres di kampus.

Kata-kunci: Stres akademik, *gastritis*, *Naïve Bayes*, klasifikasi, analisis sentimen, mahasiswa, DASS-42, *data mining*.

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**SENTIMENT ANALYSIS OF THE INFLUENCE OF ACADEMIC STRESS
ON THE RISK OF GASTRITIS AMONG UNIVERSITY STUDENTS USING
THE NAÏVE BAYES CLASSIFICATION METHOD
(CASE STUDY: UNIVERSITAS JENDERAL ACHMAD YANI
YOGYAKARTA)**

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ABSTRACT

Background: Academic stress is a common psychological condition among university students, often resulting from academic workload, examinations, and high performance expectations. If not properly managed, stress can adversely affect physical health, including triggering gastritis. Stress-induced gastritis can disrupt learning activities and reduce students quality of life.

Objective: This research aims to analyze the relationship between academic stress levels and the risk of gastritis among students at Universitas Jenderal Achmad Yani Yogyakarta and to develop a classification model using the Naïve Bayes algorithm to predict gastritis risk based on stress levels.

Method: Data were collected from 108 students via an online questionnaire covering stress levels (DASS-42) and gastritis symptoms. The research stages included data preprocessing, risk labeling, training and testing data split, model training, and evaluation using accuracy, precision, recall, and F1-score. The results were visualized through an interactive dashboard built with Streamlit.

Result: The analysis showed that most students experienced moderate to severe academic stress and had a high tendency to exhibit gastritis symptoms. The Naïve Bayes model achieved an accuracy of 91%, and precision, recall, and F1-score of 95%. A positive correlation was found between higher stress levels and increased gastritis risk.

Conclusion: There is a significant relationship between academic stress and the risk of gastritis among students. The Naïve Bayes model effectively predicts this risk, serving as a reference for developing early detection systems and stress management strategies on campus.

Keywords: Academic stress, gastritis, Naïve Bayes, classification, sentiment analysis, university students, DASS-42, data mining.

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