

## ABSTRAK

Pratama, Dafian Ilham 2025. Perancangan Sistem Pakar Diagnosis Sindrom *Fear Of Missing Out* (FOMO) Pada Generasi Remaja Berbasis Website Menggunakan Metode *Forward Chaining* dan *Certainty Factor*. Skripsi. Program Studi Teknik Informatika, FT, Universitas PGRI Madiun. Pembimbing (I) Sri Anardani, S.Kom., M.T. (II) Yessi Yunitasari, S.Kom., M.Cs.

Perkembangan teknologi dan media sosial berdampak besar pada remaja, salah satunya adalah sindrom Fear of Missing Out (FOMO), yaitu rasa cemas berlebihan karena takut tertinggal dari tren atau informasi sosial. Kondisi ini dapat memengaruhi kesehatan mental remaja, seperti gangguan tidur, menurunnya konsentrasi, hingga kecanduan media sosial. Penelitian ini bertujuan merancang sistem pakar berbasis web untuk mendiagnosis FOMO pada remaja usia 13–21 tahun. Sistem ini menggabungkan metode *Forward Chaining* untuk menelusuri gejala secara logis dan metode *Certainty Factor* untuk menghitung tingkat kepastian diagnosis berdasarkan nilai keyakinan pengguna dan pakar. Pengembangan sistem menggunakan metode *Extreme Programming* dengan implementasi *Laravel* dan *MySQL*. Hasil pengujian menggunakan *Black Box Testing* menunjukkan seluruh fungsi sistem berjalan baik, mampu menampilkan hasil diagnosis FOMO beserta tingkat keyakinannya, serta memberikan rekomendasi sesuai kondisi pengguna. Kesimpulannya, sistem pakar ini efektif digunakan sebagai alat bantu diagnosis dini FOMO pada remaja dan dapat meningkatkan kesadaran terhadap pentingnya menjaga kesehatan mental di era digital.

**Kata Kunci:** Sistem Pakar, FOMO, *Forward Chaining*, *Certainty Factor*, Remaja, *Laravel*.

## **ABSTRAK**

Pratama, Dafian Ilham 2025. *Design of an Expert System for Diagnosing Fear Of Missing Out (FOMO) Syndrome in the Teenage Generation Based on a Website Using Forward Chaining and Certainty Factor Methods*. Thesis. Computer Engineering Study Program, Faculty of Technology, PGRI Madiun University. Supervisor (I) Sri Anardani, S.Kom., M.T. (II) Essi Yunitasari, S.Kom., M.Cs.

*The development of technology and social media has a significant impact on the lives of adolescents, including the emergence of Fear of Missing Out (FOMO) syndrome characterized by excessive anxiety for fear of being left behind from social trends or information. This research aims to design and build a web-based expert system to diagnose FOMO syndrome in adolescents aged 13-21 years. This system combines the Forward Chaining method to trace facts from the symptoms experienced by users, as well as the Certainty Factor method to calculate the level of certainty based on user and expert confidence values. The system development methodology uses Extreme Programming (XP), while the system design is done with UML modeling such as use case, activity, and sequence diagrams. The system is implemented using the Laravel framework and MySQL database. The results of black-box testing show that all system functions run as expected, both in detecting the level of FOMO automatically and in presenting recommendations to users. This system is expected to be an effective early detection tool to increase teenagers' awareness of their mental health.*

**Keywords:** *Expert System, FOMO, Forward Chaining, Certainty Factor, Teenagers, Laravel.*