ABSTRACT

In recent years, mobile health (M-Health) applications have become an important solution in providing remote healthcare. However, the adoption of this technology in Indonesia has not been optimal, mainly due to concerns over security factors and user privacy. This study aims to analyze the influence of security factors on the adoption of health apps in Indonesia using Deep Learning methods, specifically the Recurrent Neural Network (RNN) algorithm. Data was obtained through interviews with productive-age mothers in Bandung, who use various health applications such as Halodoc and Alodokter. The interview results were then analyzed using Natural Language Processing (NLP) to identify and classify security factors that influence user decisions. Model evaluation showed that perceived security and security factors have a significant influence on the adoption rate of health apps, with model accuracy reaching 71.04% using a batch size of 64. Although the attack aspect showed lower performance, the results of this study can provide important insights in the development of health apps that are more secure and trustworthy by users.

Keyword: Mobile Health, Security, Privasi, Deep Learning, Recurrent Neural Network, Natural Language Processing.