

**THE RESULTS OF COMPARISON BETWEEN NAÏVE BAYES  
CLASSIFIER AND SUPPORT VECTOR MACHINE METHODS WITH  
KERNEL RBF IN CLASSIFICATION OF PARTICIPATION FAMILY  
PLANNING**

(Case Study: Participation in Family Planning in Sleman Regency from Pendataan  
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**ABSTRACT**

*Indonesia is a country with a large population with a relatively high growth rate. To control the rate of population growth, the government conducts a family planning program. Family participation in family planning programs is one of the important aspects in implementing family planning programs. Sleman is one of the districts with the best achievement of KKP determined by BKKBN. The NBC and SVM methods are part of the classification method, which can be used to predict family participation in family planning programs. This research was conducted using the 2015 Family Data Collection census in Sleman. The percentage of combination of data used is 80% training data and 20% testing data. The results showed that for the NBC method training data obtained an accuracy of 70.21%, the SVM method with kernel RBF  $C = 0.1$  and  $\text{Gamma} = 1$  obtained an accuracy of 74.929%. Therefore a better comparison of the value of accuracy on the NBC and SVM method is the SVM method in classifying family participation in family planning programs in Sleman.*

**Key Word :** KB, NBC, SVM, Sleman