

Workshop on Logistic Regression for Research in Social Science and Education

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ABSTRACT

Research in the social sciences and education often involves a response variable with categorical type. For example, research to investigate whether students will graduate on time or not, whether students will be able to complete assignments or not, whether the individual is happy or not, whether the individual is healthy or not, whether the individual has health insurance or not. The statistical method that can be used to examine the relationship of one or more categorical / continuous independent variables to a binary response variable is logistic regression analysis. Logistic regression analysis is more complex than general linear regression analysis. So how to do and interpret the results of logistic regression analysis is important. Reporting or presenting the results of logistic regression analysis must also be done carefully, given the variations in reporting in educational journals.

Workshop on logistic regression analysis workshop for research in the field of social science and education was held online on Friday and Saturday, November 6-7 2020. This training was attended by around 25 participants consisting of practitioners with undergraduate degrees and postgraduate students at the Universitas Negeri Yogyakarta. The speakers in this training were all "PPM Teams". Students as members were involved in the technical implementation of activities. The method used in the workshop was the provision of materials and demonstrations of the R program directly. This workshop began with visualization of categorical data and then continued with binary logistic regression material with continuous predictors on the first day. On the second day, the materials presented were binary logistic regression with categorical predictors and logistic regression with categorical and continuous predictors. The data used as an example were data in social science research and education. Based on the results of questionnaires, observations and questions and answers with the workshop participants, it appeared that the participants were enthusiastic about participating in this workshop activities. Participants can use logistic regression analysis commands for social science and education research data and can provide interpretations of the outputs obtained from the R program.

Kata Kunci: workshop, logistic regression, social science and education fields