

MODELLING SEVERITY FACTORS CAUSED VICTIMS OF TRAFFIC ACCIDENT USING MULTINOMIAL LOGISTIC REGRESSION (CASE STUDY : TRAFFIC ACCIDENT IN JAKARTA PROVINCE)

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ABSTRACT

Traffic accidents are the leading cause of injury in the whole world (Riyadina, Suhardi, & Permana, 2009). Amount of traffic accident that occur is increasing, not only in numbers but also more terrible than that which is due to accident (Adisasmita, 2011). Generally, traffic accidents that occur be caused by human factors, vehicle, road, and environment (Warpani, 2002). Jakarta Province is a province in Indonesia, which is in the first rank in the number of accidents that occur if it compare with other provinces in Indonesia (West Java Provincial Goverment, 2011). In this research, the severity of traffic victims in the province of Jakarta is a response variable consists of three categories: died, serious injuries, and light injuries. So in this study used multinomial logistic regression method. Based on the results of the multinomial logistic regression, showed that types of accidents, the age of the victim, the number of vehicles involved, and road function significantly affect the severity of traffic accident victims. Classification accuracy which is known from model is 72,3%.

Keywords : *Severity of Traffic Accident Victims, Log Linier Models, Multinomial Logistic Regression*

