Modeling the resilience in elderly workers

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The general linear model is a tool that quantifies the relation between the response variable and the covariates (quantitative or qualitative). This model is considered more restrict once it is assumed that the random component has normal distribution, constant variance (homoscedastic) and is independent. This study aimed to model the senior workers’ resilience through some observed measures, using a general linear model. For such it was held a cross-sectional study with employees with more than 60 years of age at Maringa’s State University who answered questionnaires and were identified with their resilience’s score, it is important to model the resilience in order to identify a possible pattern between elderly and as consequence of this comprehension, discussions may be held and early interventions that favor the health promotion may be promoted, as well as a healthy aging. The steps of modeling involved covariates selection through type 1 and 3 squares summing, evaluation and adequacy of the model and residual analysis. It was identified that the self-evaluation variable, that is and indicative of self-esteem, is the most significant covariate to resilience. Through the analysis it is perceived that the residual follow the model’s suppositions. However, the model presented low explanatory performance, not being recommendable as a predictive model.

Keywords: General linear model, residual analysis.