ABSTRACT

Comparing the result of Generalized Structured Component Analysis analysis with Covariance Based Structural Equation Modeling (Multi indicator assessment of population and family planning program in Southwest region of East Java 2015)

Covariance Based Structural Equation Modelling (CB-SEM) has power and flexibility, however it needs a couple of assumption that should be filled. These are multivariate normality, outliner, singularity and minimum sample size. SEM with base variant; that is Generalized Structured Component Analysis (GSCA) can be done without a concrete base theory, sample can be decreased, and there is no requirement about multivariate normality assumption. The aim of this research was comparing the result of GSCA analysis with CB-SEM (Multi indicator assessment of population and family planning program in Southwest region of East Java 2015). This research was using Crossectional Study. The population of this research was subdistrict in Southwest region of East Java (145 Subdistrict) with ammount 106 subdistricts and using simple random sampling for sampling technique. The result of this analysis shown that 89% GSCA loading factor result was bigger than CB-SEM. Over all (100%), the result of Average Variance Extracted (AVE) and Contruct Reliability (C-R) at GSCA was higher than CB-SEM. It shown that there were effects both of input latent variable toward the process and latent variabel process toward the output (t-statistik > 1.96, α=5%). These methods resulted Goodness OF Fit criteria GSCA (0,982) was higher than CB-SEM (0,891) for which means that the model with GSCA method could be accepted. These method resulted could be happened when iteracy process, GSCA used bootstrapping methode while CB-SEM did not use bootstrapping. We recommend for furthure research can developed the concept of a comparison between the GSCA and CB-SEM thoroughly involving complex variables.

Keywords : CB-SEM, GSCA, Multiindicator, Family Planning