ABSTRACT

The Human Development Index (HDI) is one of the main indicators for assessing the success of human development in a country. This research aims to evaluate the latent variables affecting the Human Development Index (HDI) of Central Java in 2023 using the Generalized Structured Component Analysis (GSCA) method equipped with the R Graphical User Interface (GUI). The GSCA method is part of the Structural Equation Modeling (SEM) based on variance, which does not require the assumption of multinormal and is equipped with overall goodness of fit to assess the overall model fit to the data. This research uses population data from the Central Bureau of Statistics (BPS) of Central Java Province and includes the indicators that make up the Human Development Index (HDI). The analysis results show that all indicators are significant for each latent variable. The education variable and the health variable have a significant influence on the economic variable. The HDI variable is significantly influenced by the economic, health, and education variables. Model evaluation shows a Fit Index (FIT) value of 62.3%, indicating the model's ability to explain the data, and a Goodness of Fit Index (GFI) value of 96.9%, indicating a very good model fit. The results of this study provide a clearer understanding of the factors influencing the Human Development Index (HDI) in Central Java Province. This research is expected to serve as a reference for designing effective policies to improve the welfare of the people of Central Java.

Keywords: Human Development Index, Generalized Structured Component Analysis (GSCA), Graphical User Interface (GUI) R, Structural Equation Modelling (SEM), Overall goodness of fit.