

## ANÁLISE DE COMPONENTES PRINCIPAIS PARA CONSTRUÇÃO DE INDICADORES SOCIAIS

Dalson Britto FIGUEIREDO FILHO<sup>1</sup>  
Ranulfo PARANHOS<sup>2</sup>  
Enivaldo Carvalho da ROCHA<sup>1</sup>  
José Alexandre Da SILVA JR<sup>2</sup>  
Romero G. MAIA<sup>3</sup>

- **ABSTRACT:** *What is, which it does and how we do construct social indicators? The principal aim of this paper is to answer these questions. The focus relies on the intuitive comprehension of the main concepts, characteristics and measurement of social indicators. Our targeting audience is both undergraduate, graduate students and researchers in general with limited knowledge in calculus and algebra. On methodological grounds, we show how principal component analysis technique can be used to construct social indicators. In particular, we replicate data from the Human Development Atlas to estimate Household Quality Index (HQI) per state. The results suggest that: (1) São Paulo, Distrito Federal e Santa Catarina show the higher levels of household quality while Acre, Piauí and Maranhão have the lower levels; (2) there is a negative and statistically significant correlation (-0,703; p-value<0,000) between the HQI and mortality levels and (3) there is a positive and statistically significant correlation (0,804; p-value <0,000) between the Household Quality Index and income per capita.*
- **KEYWORDS:** *Social indicators, quantitative methods, principal component analysis; Household Quality Index; replicability.*

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<sup>1</sup> Universidade Federal de Pernambuco - UFPE, Departamento de Ciência Política, CEP: 50670-901, Recife, PE, Brasil. E-mail: dalsonbritto@yahoo.com.br / enivaldocrocha@gmail.com.

<sup>2</sup> Universidade Federal de Alagoas - UFAL, Instituto de Ciências Sociais, CEP: 57072-900, Alagoas, Brasil. E-mail: ranulfoparanhos@me.com / jasjunior2007@yahoo.com.br.

<sup>3</sup> Instituto Brasileiro de Geografia e Estatística - IBGE, Analista de Informações Estatísticas, CEP: 57072-900, Recife, PE, Brasil. E-mail: romeromaia@gmail.com.