

Configural Frequency Analysis (CFA) and other non-parametrical statistical methods: Introduction to Special Topic (Part II)

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We are happy to present the reader with the second and last part of the special topic on Configural Frequency Analysis (CFA). This part includes three articles which represent again further developments and sample applications of the statistical method of CFA. The first article is contributed by Eduardo Gutiérrez-Peña. Building on a paper by Gutiérrez-Peña and von Eye (2000), a new version of CFA, Bayesian Predictive CFA is introduced. Instead of analyzing individual cell frequencies of a contingency table, Bayesian CFA and Bayesian Predictive CFA are capable of assigning probabilities to patterns of types and antitypes, which allow for comparison of such patterns in terms of relative probabilities. This methodological paper is followed by two applications of CFA. Andreas Melcher, Erwin Lautsch and Stefan Schmutz used Prediction-CFA (P-CFA) in the search of natural habitats for the fish *Nase*, specifically spawning grounds in the Pielach River in Lower Austria. Evidently, the application and use of CFA is not restricted to the field of psychology or the social sciences. In the third article, Friedrich Lösel and Mark Stemmler used P-CFA to look at the stability of externalizing behavior problems in girls from childhood to adolescence. In addition, behavior patterns representing high versus low internalizing and/or externalizing behavior problems were investigated in their relationship to self-reported offending using data from the Erlangen-Nuremberg Development and Prevention Study (ENDPS).

Reference

Gutiérrez-Peña, E. & von Eye, A. (2000). A Bayesian approach to Configural Frequency Analysis. *Journal of Mathematical Sociology*, 24, 151-174.

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