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

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„Called to rest from a hobby called science" is the epitaph of Gustav A. Lienert (GAL). He was called to rest more than ten years ago. However, the Configural Frequency Analysis (CFA) community did <u>not</u> rest. Since 2001 they have met several times to keep the ideas of GAL alive. For instance, the members of this community performed simulation studies on the behavior of CFA statistical tests, they undertook studies concerning the dependency structure of CFA tests, they worked on the reformulation of existing models of CFA, they developed new models for CFA, and they improved computer programs of CFA (a CFA-package is now also available in R).

The CFA community met first in 2003 at the University of Kassel organized by Erwin Lautsch, a symposium funded by the German Research Council (i.e., Deutsche Forschungsgemeinschaft (DFG)). Two years later, a second conference was organized also by Erwin Lautsch, again in Kassel. This symposium was financially supported by the Lienert Foundation (i.e., Lienert-Stiftung). The works presented at these two conferences were published in Special Issues in the journal *Psychology Science* under title of "Charting the future of Configural Frequency Analysis I + II: Developments and applications". The guest editors were *Erwin Lautsch* and *Alexander von Eye*. The Editor-in-Chief of the journal, an outlet of *Wolfgang Pabst Publishers*, was *Klaus Kubinger*.

In 2006, *Mark Stemmler* organized a "Gustav A. Lienert Memorial Symposium" at the 45th Congress of the German Psychological Association (i.e., Deutsche Gesellschaft für Psychologie (DGPs)) in Nuremberg. The organizer of this congress was *Friedrich Lösel*. Again, the presented works were published by Pabst Science Publishers, thanks to *Petra Netter* and her support through the Lienert Foundation. Guest editors were *Erwin Lautsch, Dirk Martinke* and *Mark Stemmler*.

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In December of 2011, the ten-year Gustav A. Lienert Memorial Symposium took place. *Mark Stemmler*, the organizer, was able to draw the attention of a renowned international group, from the US, Mexico, Sweden, Luxembourg and Austria, to take part in this meeting. This effort was honored by the DFG, which supported this meeting financially (GZ: STE 126-1). This Special Topic presents the first set of papers which are based on the papers presented during this symposium. The first article is by *Alexander von Eye* and *Eun-Young Mun*. The authors present a new methodological approach within Configural Frequency Analysis (CFA) to assess interindividual differences in intraindividual change. They propose new models of CFA to explore and test hypotheses concerning person-specific local associations in longitudinal data. The article by *Clemens B. Fell, Alexander von Eye, Gabriel Schui* and *Günther Krampen* examines the relationship between membership in the German Psychological Association and number of citations in English journal articles, excluding self-citations. The authors found out that membership in several subsections of the DGPs is preferable over membership in one or no subsection, with regard to international visibility. The third manuscript by *Matthias J. Müller* and *Petra Netter* uses CFA in order to show different specific physiological reaction patterns in response to stressful events. With the help of a two-sample CFA the authors showed that cortical increase (C+) and testosterone decrease (T-) characterizes uncontrollable stressful situations and the opposite pattern in controllable stress. Finally, *Mark Stemmler* and *Friedrich Lösel*, apply Prediction-Configural Frequency Analysis (P-CFA) to demonstrate the stability of a proactive pattern of aggressiveness (i.e., high externalizing and low internalizing problems) in boys from kindergarten to secondary school. In addition, this behavior pattern was related to self-reported delinquent behavior in mid-adolescence.