e-CONFIGURATION ANALYSIS CHECK-LIST FOR OBSERVED CONFIGURATIONS OF UNITS (observation value %); expecting value; chi-square; STANDARD α - ERROR PROBABILIY ~SPLIT-HALF VALIDITY

elaborierte Konfigurations-Frequenz-Analyse Strichliste der Anzahl beobachteter Konfigurationen (Beobachtungswert %); Erwartungswert; Chi-Quadrat; Standard-Fehlerwahrscheinlichkeit ~ Halbierungscheck ob gültig

analyse fréquentielle des configurations élaborée no. aux observations (o) en pourcent % ; expectation e ; chi carré ; *(degr. of.freedom; Freiheitsgrade ; df ~ 4 -1 ; 2-1)*

Distribution gleich/equal/égale (4-configurations) (2-configurations); BIP

(df 3); (df3); (df1); (df1) row-validity

nr.	F dimensions of 4 configurations: *patterns of classified categories* (Gf)	(Au)	(Aw)	(Amb)	*stripe for each unit according to observed categories* (no. RUN; RUN %)	Σ (o %)	e% = 6,25%	$\chi^2 = \Sigma$ (o-6,25)² : 6,25	α < 5%;	α < 1%	α < 5%	α < 1%	α; $1^{st/2} \sim 2^{nd/2}$
01.	+	+	+	+					*7,81	**13,3	~	~	
02.	+	+	+	-					*7,81	**13,3	~	~	
03.	+	+	-	+					*7,81	**13,3	~	~	
04.	+	+	-	-					*7,81	**13,3	~	~	
05.	+	-	+	+					*7,81	**13,3	~	~	
06.	+	-	+	-					*7,81	**13,3	~	~	
07.	+	-	-	+					*7,81	**13,3	~	~	
08.	+	-	-	-					*7,81	**13,3	~	~	
09.	-	+	+	+					*7,81	**13,3	~	~	
10.	-	+	+	-					*7,81	**13,3	~	~	
11.	-	+	-	+					*7,81	**13,3	~	~	
12.	-	+	-	-					*7,81	**13,3	~	~	
13.	-	-	+	+					*7,81	**13,3	~	~	
14.	-	-	+	-					*7,81	**13,3	~	~	
15.	-	-	-	+					*7,81	**13,3	~	~	
16.	-	-	-	-					*7,81	**13,3	~	~	
SPLIT-HALF CHECK; 2x Halbierungs-Iteration (BIP):					percentage configuration patterns 1st & 2nd half première moitié (1e m.) deuxième moitié (2e m.)	Σ (o%)	e % = 25%	(o-25)² : 25	*5%; 3 df	**1%; 3 df	*5%; 1df	**1%; 1df	1. Hälfte ~ 2. Hälf. 1e m. ~ 2e m.
SHC 01.	+	+							~	~	*3,84	**6,64	
SHC 02.	+	-							~	~	*3,84	**6,64	
SHC 03.	-	+							~	~	*3,84	**6,64	
SHC 04.	-	-							~	~	*3,84	**6,64	

0 *Kurt-W. Laufs, 1975, 2007-06-13 ©, rev.© 2008-01-18*

Attachment to: A-S-T; Between Individual and Mass (I, II,) III; Komplex-Analyse. (On author's WEB-site).

Elaborated configuration-frequency-analysis

e-KFA

Algorythm after a hectographed contribution in a seminary lesson on social cognitions and behaviour at psychological institute, university of the Saar, Saarbrücken, summer-semester, 1975
by Kurt-Wilhelm Laufs, ©,
updated an English version 2014-11-02

At a first glance, e-KFA could remind Cochran's Q-sort, yet is not.
KFA had been formulated by Krauth & Lienert about 1971 to typologize and to analyse by chi-square and binominal distribution different LSD syndromes (Lysergsäure-Diäthylamid-Syndrom, Leuner Syndrom).
Citics on KFA (Konfiguration-Frequenz-Analyse) had followed lexically (Clauss, G. & al., 1976: Wörterbuch der Psychologie. VEB Verlag Enzyklopädie, Leipzig. Pahl-Rugenstein, Köln, 1976), and describe the problem to smaller and/or larger number of checked persons than about N = 40.
This numerical methodical KFA inherent problem really can be avoided, when instead of absolute numeri one got over to percentages, so one could also analyse rather appropriatly, both, smaller samples than N = 40, or larger samples than N = 40.
Author's KFA elaboration shows examples, how to apply e-KFA in psychology, and psychological field research, and also as a practitioner's method, without any electrical computer, just by hand calculations to combinations of hypotheses in any social and psychological field.
Do it yourself !

1st you define your most possible observationally categories or terms, according to valid theories or objective items.
2nd you take the amount (number) of categories to form plus-minus (yes/no answers or signatures as plus/minus) combinatoric configuration-matrices. A two configuration-matrix (KF) makes four possible configurative combinations: (++; +-; -+; --), a three KF shows eight configurative combinations (+++; ++-; +-+; +--; -++; -+-; --+; ---) etc. Above algorythm sheed shows four configurations with sixteen possible yes or no signations, combinatorically, etc.
Why now KFA elaborated, behalf to calculate in percentages? When 4-configurations were by split half (bi-partation) analysed after chi-square, only significant values in row after split half iteration were valid, thus a four-configuration must be equally significant after chi-square in it's both parts divided in two configurations. The lowest significance in row determines here the significance of all a four-configuration row.
Percentage calculation as appropriate to social and psychological data (always in mind that "nasty" scaling problem and of objectivity), claims percentages for numbers of observed data and to expecting values of a distribution as inference model.
When social data or psychological data in practice or social fields occur, that phantasm of normal or binominal distributions can even more appropriate and more rapidly be calculated by inference of equal distribution. Thus: 100% of postulated expecting inference (e) be to two-configurational percentage number observed (o) data, as 100% by 4 (number of possible combinations) = 25 % expectation value (e); for 3-configuration's observed percentages (o) and it's possible combinations 100% by 8 = 12,5% (e); four configuration's e = 6,25 %; (100% : 16).
When one will look for α errors of significancy in one's statistical tabellas on chi square, degrees of freedom (df; FG) depend here on number of configurations: two-configurations make 2 – 1 = 1 df; three-config. show 3-1 = 2 df; and four-configurative calculations make subtract one from four and show three degrees of freedom at it's tabella value for significance.

This appropriate and rather quick method to calculate shows very satisfying approximations to much more complicated factor analyses and also can be applied to control rapidly factor analyses by hand calculation without electronic computers, and also efficiently can be applied in social fields, on park banches, and in practice, to bundle data and test it's significance, without scaling and interpretation problems those problems typical to factor analysis of communality and rotation. Nevertheless one could bundle e-KFA results again by a factor analysis.

To rapid e-KFA percentages can be done inter-correlations to it's results in rows (types/factors) and columns (factorial categories/items), and an arithmetical (or geometrical) mean coefficient can describe consistency (also as a communality) coefficient.

No e-mails, rather picture postcards, please!