

**Problem "df" at Practitioner's Rapid Check for Chi-Square ( $\chi^2$ ) Significances in Psychology, when equal distribution and percentages at expecting and observed values**

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observation, o%	expectation, e%	[e%]	25% 1 df	12,5% 2 df	6,25% 3 df	degree of freedom
100%	225	***	612,5	***	1406,25	***
90%	169	***	480,5	***	1122,25	***
85%	144	***	420,5	***	992,25	***
...						
60%	49	***	180,5	***	462,25	***
...						
50%	25	***	112,5	***	306,25	***
...						
45%	16	***	84,5	***	240,25	***
44%	14,44	***	79,83	***	228,01	***
43%	12,96	***	74,72	***	216,09	***
42%	11,56	***	69,62	***	204,49	***
41%	10,24	**	64,98	***	193,21	***
40%	9	**	60,5	***	182,25	***
39%	7,84	**	56,18	***	171,61	***
38%	6,76	**	52,02	***	161,29	***
37%	5,76	*	48,02	***	151,27	***
36%	4,84	*	44,18	***	141,61	***
35%	4	*	40,5	***	132,25	***
34%	3,24	2 s	36,98	***	123,21	***
33%	2,56	2 s	33,62	***	114,49	***
32%	1,96	2 s	30,42	***	106,09	***
31%	1,44	2 s	27,38	***	98,01	***
30%	1	2 s	24,5	***	90,25	***
29%	0,64	2 s	21,78	***	82,81	***
28%	0,36	2 s	19,22	***	75,69	***
27%	0,16	2 s	16,82	***	68,89	***
26%	0,04	2 s	14,58	***	62,41	***
25%	(1)	not significant range (+)	12,5	**	56,25	***
24%	0,04	2 s	10,58	**	50,41	***
23%	0,16	2 s	8,82	*	44,89	***
22%	0,36	2 s	7,22	*	39,69	***
21%	0,64	2 s	5,78	*	34,81	***
20%	1	2 s	4,5	*	30,25	***
19%	1,44	2 s	3,38	*	26,01	***
18%	1,96	2 s	2,42	*	22,09	***
17%	2,56	2 s	1,62	*	18,49	***
16%	3,24	(2 s)	0,98	*	15,21	**
15%	4	(*)	0,44	*	12,25	**
14%	4,84	(*)	0,18	*	9,61	*
13%	5,76	(*)	0,02	not significant range	7,29	*
12%	6,76	(**)	0,02	not significant range	5,29	*
11%	7,84	(**)	0,18	not significant range	3,61	*
10%	9	(**)	0,44	not significant range	2,25	*
9%	10,24	(**)	0,98	not significant range	1,21	*
8%	11,56	(***)	1,62	not significant range	0,49	*
7%	12,96	(***)	2,42	not significant range	0,09	*
6%	14,44	(***)	3,38	not significant range	0,09	*
5%	16	(***)	4,5	not significant range	0,25	*
4%	17,64	(***)	5,78	(2 s.)	0,81	*
3%	19,36	(***)	7,22	(*)	1,69	*
2%	21,16	(***)	8,82	(*)	2,89	*
1%	23,04	(***)	10,58	(**)	4,41	*
0%	25	(***)	12,5	(**)	6,25	*

[rather "soft" data]

{Error probabilities; ( $\alpha < 0,001^{***} < 0,01^{**} < 0,05^*$ )}

(+) Not significant range followed by statistical question of two sides (2 s).

To discuss the problem of “df” (“degree of freedom”, after Pearson, in German known as “FG”, Freiheitsgrad), there were no need to arguments of 2 df, 3 df,... or more, as considering the stability of research, and as the higher those df, the less heuristics. Experimentally the author had proposed a different interpretation of df at percent distributions, when he had doubled chi square values at 1 df in twice chi-square number to 2 df, and 2df doubled at 3 df, for strengthening

results at e-KFA, which keep strong enough, when higher amounts than 4-field matrices or 2-configurations occur with 8- or 16-field matrices at 3- or 4-configurations. Just to subtract 1 from the amount of number of dimensions (categories) in columns won't do, when stable data interpretation be issue! That's also why to keep on analyzing control by 4-field 2-configurations at 1 df, that will prepare stronger and fairer results, also in possible permutations of column dimensions.

