Critical Values d_α for Multiple Comparisons based on the Kruskal-Wallis Test

k = the number of groups (treatments)

n = the common sample size of each group

		Nominal Family Type I Error Rate α (more accurate significance levels are in brackets)			
k	b	0.10	0.05	0.03	0.01
3	2	- -	8 (.067)	8 (.067)	8 (.067)
3	3	14 (.111)	15 (.064)	16 (.029)	17 (.011)
3	4	21 (.106)	24 (.045)	25 (.031)	27 (.011)
3	5	29 (.106)	33 (.048)	35 (.031)	39 (.009)
3	6	38 (.103)	43 (.049)	46 (.030)	51 (.011)
4	2	11 (.086)	12 (.029)	12 (.029)	12 (.029)
4	3	20 (.108)	22 (.043)	23 (.023)	24 (.012)
4	4	31 (.097)	34 (.049)	36 (.026)	38 (.012)
5	2	14 (.121)	15 (.048)	16 (.016)	16 (.016)
5	3	27 (.084)	28 (.060)	30 (.023)	32 (.007)
5	4	- -	44 (.056)	46 (.033)	50 (.010)
6	2	- -	19 (.030)	19 (.030)	20 (.010)
6	3	- -	35 (.055)	37 (.024)	39 (.009)
7	2	- -	22 (.056)	23 (.021)	24 (.007)
7	3	- -	42 (.054)	44 (.026)	46 (.012)
8	2	- -	26 (.041)	26 (.041)	28 (.005)
8	3	- -	49 (.055)	51 (.029)	54 (.010)
9	2	- -	29 (.063)	30 (.031)	31 (.012)
10	2	- -	33 (.050)	34 (.025)	35 (.009)
11	2	- -	37 (.040)	38 (.020)	39 (.008)
12	2	- -	40 (.062)	41 (.033)	43 (.006)
13	2	- -	44 (.052)	45 (.028)	46 (.014)
14	2	- -	48 (.044)	49 (.024)	50 (.012)
15	2	- -	52 (.038)	52 (.038)	54 (.010)