

PEARSON'S CORRELATION COEFFICIENT r (Critical Values)

		Level of Significance for a One-Tailed Test										
		.05	.025	.01	.005	.0005	.05	.025	.01	.005	.0005	
		Level of Significance for a Two-Tailed Test										
$df=(N-2)$.10	.05	.02	.01	.001	$df=(N-2)$.10	.05	.02	.01	.001
1		0.988	0.997	0.9995	0.9999	0.99999	21	0.352	0.413	0.482	0.526	0.640
2		0.900	0.950	0.980	0.990	0.999	22	0.344	0.404	0.472	0.515	0.629
3		0.805	0.878	0.934	0.959	0.991	23	0.337	0.396	0.462	0.505	0.618
4		0.729	0.811	0.882	0.971	0.974	24	0.330	0.388	0.453	0.496	0.607
5		0.669	0.755	0.833	0.875	0.951	25	0.323	0.381	0.445	0.487	0.597
6		0.621	0.707	0.789	0.834	0.928	26	0.317	0.374	0.437	0.479	0.588
7		0.582	0.666	0.750	0.798	0.898	27	0.311	0.367	0.430	0.471	0.579
8		0.549	0.632	0.715	0.765	0.872	28	0.306	0.361	0.423	0.463	0.570
9		0.521	0.602	0.685	0.735	0.847	29	0.301	0.355	0.416	0.456	0.562
10		0.497	0.576	0.658	0.708	0.823	30	0.296	0.349	0.409	0.449	0.554
11		0.476	0.553	0.634	0.684	0.801	40	0.257	0.304	0.358	0.393	0.490
12		0.457	0.532	0.612	0.661	0.780	60	0.211	0.250	0.295	0.325	0.408
13		0.441	0.514	0.592	0.641	0.760	120	0.150	0.178	0.210	0.232	0.294
14		0.426	0.497	0.574	0.623	0.742	∞	0.073	0.087	0.103	0.114	0.146
15		0.412	0.482	0.558	0.606	0.725						
16		0.400	0.468	0.542	0.590	0.708						
17		0.389	0.456	0.529	0.575	0.693						
18		0.378	0.444	0.515	0.561	0.679						
19		0.369	0.433	0.503	0.549	0.665						
20		0.360	0.423	0.492	0.537	0.652						

- 1) Decide if you should use a One-Tailed or Two-Tailed Test:
 - a. One-Tail: if you have an *a priori* hypothesis as to the sign (- or +) of the correlation.
 - b. Two-Tail: if you have no *a priori* hypothesis as to the sign of the correlation.
- 2) Calculate df (degrees of freedom) = N (sample size) - 2).
- 3) Locate this df in the table.
- 4) Use this row of threshold values.
- 5) Read across this row from left to right until you find a value greater than your calculated r statistic.
- 6) The P -value for your observation is the P -value at the top of the first column to the left of your value.

e.g. if r for $df = 15$ is 0.523, then $P < 0.025$ for a One-Tailed Test; if r is 0.599, then $P < 0.01$.
- 7) A $P < 0.05$ (or smaller) value indicates that you can reject the null hypothesis that the two variables are correlated. In other words, you have evidence the variables are significantly related. If your r statistic value lies to the left of the 0.05 column, then your results are not significant (n.s. $P > 0.05$). You cannot reject the null hypothesis that the variables are unrelated.