Appendix Tables

Appendix Table A   Truncated normal distribution – large sample. p = proportion of population with values exceeding the truncation point T. x = deviation of T from the mean, in standard-deviation units. i = mean deviation of individuals with values exceeding T, in standard-deviation units from the population mean. For values of p greater than 50 per cent: take x and i tabulated for $(1 - p)$; give x a negative sign; multiply i by $(1 - p)/p$, retaining the positive sign. Errors from linear interpolation of p are positive, the largest in both x and i being approximately +0.001 when $p > 0.10$ per cent. (Abridged from Falconer, 1965a).

p%	x	i	p%	x	i	p%	x	i
0.01	3.719	3.960	0.75	2.432	2.761	10	1.282	1.755
0.02	3.540	3.790	0.80	2.409	2.740	11	1.227	1.709
0.03	3.432	3.687	0.85	2.387	2.720	12	1.175	1.667
0.04	3.353	3.613	0.90	2.366	2.701	13	1.126	1.627
0.05	3.291	3.554	0.95	2.346	2.683	14	1.080	1.590
0.06	3.239	3.507	1.00	2.326	2.665	15	1.036	1.554
0.07	3.195	3.464				16	0.994	1.521
0.08	3.156	3.429	1.0	2.326	2.665	17	0.954	1.489
0.09	3.121	3.397	1.2	2.257	2.603	18	0.915	1.458
0.10	3.090	3.367	1.4	2.197	2.549	19	0.878	1.428
			1.6	2.144	2.502	20	0.842	1.400
			1.8	2.097	2.459	21	0.806	1.372
0.10	3.090	3.367	2.0	2.054	2.421	22	0.772	1.346
0.12	3.036	3.317	2.2	2.014	2.386	23	0.739	1.320
0.14	2.989	3.273	2.4	1.977	2.353	24	0.706	1.295
0.16	2.948	3.234	2.6	1.943	2.323	25	0.674	1.271
0.18	2.911	3.201	2.8	1.911	2.295	26	0.643	1.248
0.20	2.878	3.170	3.0	1.881	2.268	27	0.613	1.225
0.22	2.848	3.142	3.2	1.852	2.243	28	0.583	1.202
0.24	2.820	3.117	3.4	1.825	2.219	29	0.553	1.180
0.26	2.794	3.093	3.6	1.799	2.197	30	0.524	1.159
0.28	2.770	3.070	3.8	1.774	2.175	31	0.496	1.138
0.30	2.748	3.050	4.0	1.751	2.154	32	0.468	1.118
0.32	2.727	3.030	4.2	1.728	2.135	33	0.440	1.097
0.34	2.706	3.012	4.4	1.706	2.116	34	0.412	1.078
0.36	2.687	2.994	4.6	1.685	2.097	35	0.385	1.058
0.38	2.669	2.978	4.8	1.665	2.080	36	0.358	1.039
0.40	2.652	2.962	5.0	1.645	2.063	37	0.332	1.020
0.42	2.636	2.947				38	0.305	1.002
0.44	2.620	2.932				39	0.279	0.984
0.46	2.605	2.918	5.0	1.645	2.063	40	0.253	0.966
0.48	2.590	2.905	5.5	1.598	2.023	41	0.228	0.948
0.50	2.576	2.892	6.0	1.555	1.985	42	0.202	0.931
			6.5	1.514	1.951	43	0.176	0.913
			7.0	1.476	1.918	44	0.151	0.896
0.50	2.576	2.892	7.5	1.440	1.887	45	0.126	0.880
0.55	2.543	2.862	8.0	1.405	1.858	46	0.100	0.863
0.60	2.512	2.834	8.5	1.372	1.831	47	0.075	0.846
0.65	2.484	2.808	9.0	1.341	1.804	48	0.050	0.830
0.70	2.457	2.784	9.5	1.311	1.779	49	0.025	0.814
0.75	2.432	2.761	10.0	1.282	1.755	50	0.000	0.798

From Falconer, 1989

For p=10%, x=1.282
For p=5%,   x=1.645
For p=2.5%, x=1.96
For p=1%,   x=2.326

Normal distribution, large sample

Appendix Table B   Truncated normal distribution – small sample. The tabulated values are the intensity of selection, i, when n individuals are selected from a total of N. Errors from linear interpolation of N are negative, the largest being approximately -0.0075; interpolation of n gives positive errors, maximum about $+0.006$. (Abridged from Becker, 1984, where much more extensive tables may be found.)

n	2	3	4	5	6	7	8	10	12	n
1	0.564	0.846	1.029	1.163	1.267	1.352	1.424	1.539	1.629	1
2	—	0.423	0.663	0.829	0.954	1.055	1.138	1.270	1.372	2
3	—	—.	0.343	0.553	0.704	0.821	0.916	1.065	1.179	3
4	—	—	—	0.291	0.477	0.616	0.725	0.893	1.019	4
5	—	—	—	—	0.253	0.422	0.550	0.739	0.877	5
6	—	—	—	—	—	0.225	0.379	0.595	0.748	6
7	—	—	—	—	—	—	0.203	0.457	0.627	7
8	—	—	—	—	—	—	—	0.318	0.509	8
9	—	—	—	—	—	—	—	0.171	0.393	9
10	—	—	—	—	—	—	—	—	0.274	10

n	14	16	18	20	25	30	40	50	60	n
1	1.703	1.766	1.820	1.867	1.965	2.043	2.161	2.249	2.319	1
2	1.456	1.525	1.585	1.638	1.745	1.829	1.957	2.052	2.127	2
3	1.271	1.347	1.412	1.469	1.584	1.674	1.810	1.911	1.990	3
4	1.119	1.201	1.271	1.332	1.455	1.550	1.694	1.799	1.882	4
5	0.986	1.075	1.150	1.214	1.345	1.446	1.596	1.705	1.792	5
6	0.866	0.962	1.042	1.110	1.248	1.354	1.510	1.624	1.713	6
7	0.755	0.858	0.943	1.016	1.161	1.271	1.434	1.552	1.644	7
8	0.650	0.760	0.851	0.928	1.081	1.196	1.365	1.487	1.582	8
10	0.447	0.577	0.681	0.767	0.936	1.061	1.242	1.372	1.472	10
15	—	0.118	0.282	0.405	0.624	0.777	0.991	1.139	1.252	15
20	—	—	—	—	0.336	0.530	0.782	0.951	1.076	20

n	70	80	100	150	200	250	300	350	400	n
1	2.377	2.427	2.508	2.649	2.746	2.819	2.878	2.927	2.968	1
2	2.189	2.242	2.328	2.478	2.580	2.657	2.718	2.769	2.813	2
3	2.055	2.111	2.201	2.357	2.463	2.543	2.607	2.660	2.705	3
4	1.950	2.008	2.101	2.263	2.372	2.455	2.520	2.574	2.621	4
5	1.862	1.922	2.018	2.185	2.297	2.382	2.449	2.504	2.552	5
6	1.786	1.848	1.947	2.118	2.233	2.320	2.388	2.445	2.493	6
8	1.659	1.724	1.828	2.007	2.127	2.217	2.288	2.346	2.396	8
10	1.553	1.621	1.730	1.916	2.040	2.132	2.206	2.266	2.317	10
15	1.342	1.417	1.536	1.738	1.871	1.970	2.048	2.112	2.166	15
20	1.175	1.257	1.386	1.601	1.742	1.846	1.928	1.995	2.051	20
25	1.032	1.121	1.259	1.488	1.636	1.745	1.830	1.900	1.958	25

Normal distribution, small sample