Appendix C. Chi-square values from regular and mixture distributions.

Critical Values for Regular Chi-Square Distribution

Significance Level

df	0.10	0.05	0.025	0.01	0.005
1	2.706	3.842	5.024	6.635	7.879
2	4.605	5.992	7.378	9.210	10.597
3	6.251	7.815	9.348	11.345	12.838
4	7.779	9.488	11.143	13.277	14.860
5	9.236	11.071	12.833	15.086	16.750
6	10.645	12.592	14.449	16.812	18.548
7	12.017	14.067	16.013	18.475	20.278
8	13.362	15.507	17.535	20.090	21.955
9	14.684	16.919	19.023	21.666	23.589
10	15.987	18.307	20.483	23.209	25.188
11	17.275	19.675	21.920	24.725	26.757

A critical value of .05 is recommended when comparing models differing in fixed effects.
A critical value of .10 is recommended when comparing models differing in random intercepts.

Critical Values for 50:50 Mixture of Chi-Square Distributions

Significance Level

df (q)	0.10	0.05	0.025	0.01	0.005
0 vs. 1	1.64	2.71	3.84	5.41	6.63
1 vs. 2	3.81	5.14	6.48	8.27	9.63
2 vs. 3	5.53	7.05	8.54	10.50	11.97
3 vs. 4	7.09	8.76	10.38	12.48	14.04
4 vs. 5	8.57	10.37	12.10	14.32	15.97
5 vs. 6	10.00	11.91	13.74	16.07	17.79
6 vs. 7	11.38	13.40	15.32	17.76	19.54
7 vs. 8	12.74	14.85	16.86	19.38	21.23
8 vs. 9	14.07	16.27	18.35	20.97	22.88
9 vs. 10	15.38	17.67	19.82	22.52	24.49
10 vs. 11	16.67	19.04	21.27	24.05	26.07

Critical values such that the right-hand tail probability = $0.5 \times \Pr(\chi^2_q > c) + 0.5 \times \Pr(\chi^2_{q+1} > c)$
Source: Appendix C (p. 484) from:
Fitzmaurice, Laird, & Ware (2004). *Applied Longitudinal Analysis.* Hoboken, NJ: Wiley