

Table 14.14 One-way ANOVA for N subjects rated by different sets of k raters (Case 1), and two-way ANOVA for N subjects, all measured by the same k raters (Case 2).

Source	Degrees of freedom	Mean square	Expected mean square
Case 1			
Between subjects	$N - 1$	MSB	$\sigma_W^2 + k\sigma_B^2$
Residual	$N(k - 1)$	MSW	σ_W^2
Case 2			
Between subjects	$N - 1$	MSB	$\sigma_E^2 + k\sigma_B^2$
Between raters	$k - 1$	MSC	$\sigma_E^2 + N\sigma_C^2$
Residual	$(N - 1)(k - 1)$	MSE	σ_E^2