

TYPE=BASIC and the SAMPSTAT option of the OUTPUT command show the sample statistics used in model estimation and therefore use division by n instead of $n-1$ for the sample covariance matrix. This is because for the unrestricted H1 model, maximum likelihood estimates a covariance matrix that corresponds to division by n .

When a sample covariance matrix is the input for analysis, Mplus assumes that division by $n-1$ has been used. To prepare the matrix for ML analysis it is changed to division by n , that is, it is multiplied by $n-1$ and divided by n .

There are two different philosophies at play here when it comes to ML estimation. One is to assume normality for the outcomes resulting in using n for the sample statistics used in model estimation. The other is to assume a Wishart distribution for the sample covariance matrix using $n-1$. Mplus uses the former philosophy. This also impacts whether the ML fitting function at its optimum is multiplied by n or $n-1$ in obtaining the chi-square test of model fit. Mplus uses n . In large samples, there is no difference.

The Mplus Technical Appendices on the web site discuss the technical details of this in Appendix 5 of the technical appendices covering theory behind Mplus through Version 2.