SRMR

Let p be the number of variables in the model. Let s_{jk} and σ_{jk} be the sample and the model-estimated covariance between the $j-$th and $k-$th variables. The sample covariance matrix is obtained by dividing by N rather than $N-1$. Let m_j and μ_j be the sample and the model-estimated mean of the $j-$th variable. The SRMR fit index is defined as follows.

1. Information=Observed (default)

$$SRMR = \sqrt{S/(p(p+1)/2+p)}$$

where S is defined as follows

$$S = \sum_{j=1}^{p}\sum_{k=1}^{j-1}\left(\frac{s_{jk}}{\sqrt{s_{jj}s_{kk}}} - \frac{\sigma_{jk}}{\sqrt{\sigma_{jj}\sigma_{kk}}}\right)^2 +$$

$$\sum_{j=1}^{p}\left(\frac{m_j}{\sqrt{s_{jj}}} - \frac{\mu_j}{\sqrt{\sigma_{jj}}}\right)^2 +$$

$$\sum_{j=1}^{p}\left(\frac{s_{jj}-\sigma_{jj}}{s_{jj}}\right)^2$$

2. Information=Expected with Meanstructure (default)

$$SRMR = \sqrt{S/(p(p+1)/2 + p)}$$

where S is defined as follows

$$S = \sum_{j=1}^{p} \sum_{k=1}^{j} \left(\frac{s_{jk}}{\sqrt{s_{jj}s_{kk}}} - \frac{\sigma_{jk}}{\sqrt{s_{jj}s_{kk}}} \right)^2 +$$

$$\sum_{j=1}^{p} \left(\frac{m_j}{\sqrt{s_{jj}}} - \frac{\mu_j}{\sqrt{s_{jj}}} \right)^2$$

3. Information=Expected without Meanstructure

$$SRMR = \sqrt{S/(p(p+1)/2)}$$

where S is defined as follows

$$S = \sum_{j=1}^{p} \sum_{k=1}^{j} \left(\frac{s_{jk}}{\sqrt{s_{jj}s_{kk}}} - \frac{\sigma_{jk}}{\sqrt{s_{jj}s_{kk}}} \right)^2$$