



	A	B	C	D
A	1.00			
B	0.25	1.00		
C	0.70		1.00	
D		0.70	0.25	1.00

Consider a very simple example:

You have two factors, F1 and F2, and four indicators, A, B, C and D.

A and B are associated with F1, and correlate 0.25.

C and D are associated with F2, and also correlate 0.25.

A and C correlate 0.7, and B and D correlate 0.7.

You fit the factor model, and it tries to find a solution to satisfy all of the correlations.

It sets the loadings for the factors to 0.5 and gets the predicted correlations between items within the factor correct.

But even if it makes the factor correlation 1.00, the predicted correlation between A and C is only 0.25 - it's much too low.

It can make the loadings higher, and get the within factor predicted correlations slightly wrong, or it can set the correlation between factors to greater than 1, and this will make the between factor predicted correlations closer to the correct value. But then you have a correlation greater than 1.

So what's happening?

The factor structure is wrong. Correlated errors will fix this (between A and C, and B and D), but that won't solve the problem that the model is wrong.