Multigroup Models

Clinical Sample/Ethnicity

Use race\_test

1 = Black

3 = White

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | X2 (df) | Change X2 (df) | RMSEA | CFI | Change CFI |
| Partial Invariance |  |  |  |  |  |
| Latent Means Step |  |  |  |  |  |

What are the means estimated at?

White:

Black:

Do they appear to be the same?

Calculate the latent means with excel.

White:

Black:

Use a t-test to determine if they are different:

DASS Model

You can use gender:

1 = female

2 = male

Or ethnicity:

1 = white

2 = black

Don’t forget you would normally start with the whole group, then each group separately – they are left off here to go a bit faster.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | X2 (df) | Change X2 (df) | RMSEA | CFI | Change CFI |
| Equal Form  Configural  Invariance |  |  |  |  |  |
| Metric Invariance |  |  |  |  |  |
| Scalar Invariance |  |  |  |  |  |
| Strict Invariance |  |  |  |  |  |
| Partial Invariance (if necessary) |  |  |  |  |  |
| Latent Means |  |  |  |  |  |

Interpret your findings – are the groups invariant? Did you see a break down between groups anywhere?

What is the CFI you are trying to get to?

How many points do you need to get there?

Partial Invariance

|  |  |  |  |
| --- | --- | --- | --- |
| Indicator | Change CFI | Indicator | Change CFI |
| 1 |  | 12 |  |
| 2 |  | 13 |  |
| 3 |  | 14 |  |
| 4 |  | 15 |  |
| 5 |  | 16 |  |
| 6 |  | 17 |  |
| 7 |  | 18 |  |
| 8 |  | 19 |  |
| 9 |  | 20 |  |
| 10 |  | 21 |  |
| 11 |  |  |  |

What questions are you going to “free up” to be able to see if you can get partial invariance?

Did you get partial invariance?

What are the means estimated at?

Group 1:

Group 2:

Do they appear to be the same?

Calculate the latent means with excel.

Group 1:

Group 2:

Use a t-test to determine if they are different: