Latent Curve Class Assignment

Examine the following data for latent curve modeling. Participants were given a task to read a paragraph while hooked up to a biopac that measured heart rate. Each heart rate was subtracted from baseline. Here’s the covariance table for five time points.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | T1 | T2 | T3 | T4 | T5 |
| T1 | 3.59 |  |  |  |  |
| T2 | 3.11 | 3.10 |  |  |  |
| T3 | 2.91 | 2.80 | 2.82 |  |  |
| T4 | 3.22 | 3.05 | 2.86 | 3.30 |  |
| T5 | 2.88 | 2.63 | 2.62 | 2.82 | 2.71 |
| Time Mean | 11.97 | 11.72 | 12.03 | 11.96 | 12.10 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
| X2(df) |  |  |  |  |  |
| RMSEA |  |  |  |  |  |
| SRMR |  |  |  |  |  |
| CFI |  |  |  |  |  |
| Change | n/a |  |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
| Residuals |  |  |  |  |  |
| Intercept Mean |  |  |  |  |  |
| Intercept Variance |  |  |  |  |  |
| Slope Mean |  |  |  |  |  |
| Slope Variance |  |  |  |  |  |

*Note*. Not all spots will be filled.

Interpret your findings:

* Where do people start?
* What is the change over time?
* Which model is the best?
* What does that imply?