**Appendices**

**Appendix 1.** Example syntax: PTSD GMM M2 MPLUS syntax of unconditional model.

 **TITLE:**

A 2-Class (C2) latent basis MEANS (M2) model for the PTSD health indicator.

 The slope term variance [eta\_2] was constrained to ‘0’ to avoid convergence issues.

 Includes BLRT command and output.

 **DATA:**

 FILE IS MSF\_GMM\_180320.dat;

 **VARIABLE:**

 NAMES ARE

 ID PCL5\_1 PCL5\_2 PCL5\_3;

 AUXILIARY = ID;

 USEVARIABLES ARE

 ID PCL5\_1 PCL5\_2 PCL5\_3;

 MISSING ARE ALL (-999);

 CLASS = c(2);

 **ANALYSIS:**

TYPE = MIXTURE;

 STARTS = 1000 100;

 STITERATIONS IS 50;

 LRTBOOTSTRAP IS 500;

 LRTSTARTS IS 50 20 50 20;

 **MODEL:**

 %OVERALL%

eta\_1 BY PCL5\_1@1 PCL5\_2@1 PCL5\_3@1;

eta\_2 BY PCL5\_1@0 PCL5\_2\* PCL5\_3@1;

eta\_1 (psi\_11);

eta\_2@0 (psi\_22);

eta\_1 WITH eta\_2@0 (psi\_21);

[eta\_1];

[eta\_2];

PCL5\_1 PCL5\_2 PCL5\_3 (theta);

[PCL5\_1@0 PCL5\_2@0 PCL5\_3@0];

 %c#1%

 [eta\_1\*6 eta\_2\*1];

 %c#2%

 [eta\_1\*14 eta\_2\*12 ];

 **OUTPUT:**

 SAMPSTAT;

 TECH4;

 TECH14;

 **PLOT:**

 TYPE = PLOT3;

 SERIES = PCL5\_1 PCL5\_2 PCL5\_3 (eta\_2);

**Appendix 2**

**Figure 2a.** PTSD trajectories latent basis class models.

*2-Class Solution 3-Class Solution*

*4-Class Solution 5-Class Solution*

The PTSD time basis coefficient for the (optimal) 4-class solution model at time T1=0.00, T2=.81, T3=1.00.

**Figure 2b.** Emotional Exhaustion trajectories latent basis class models.

*2-Class Solution 3-Class Solution*

*4-Class Solution 5-Class Solution*

The emotional exhaustion time basis coefficient for the (optimal) 3-class solution model at time T1=0.00, T2=1.792, T3=1.00

**Figure 2c.** Work Engagement trajectories linear class models.

*2-Class Solution 3-Class Solution*

*4-Class Solution 5-Class Solution*

**Figure 2d.** Anxiety trajectories latent basis class models.

*2-Class Solution 3-Class Solution*

*4-Class Solution 5-Class Solution*

The anxiety time basis coefficient for the (optimal) 3-class solution model at time T1=0.00, T2=1.387, T3=1.00

**Figure 2e.** Depression trajectories linear class models.

*2-Class Solution 3-Class Solution*

*4-Class Solution 5-Class Solution*

**Appendix 3.**

**Table 6.** Latent trajectory class membership descriptive.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Healthy/Normative** | **Worsening** | **Ill health** | **Improving**  |
|  | ***M*** | ***SD*** | ***M*** | ***SD*** | ***M*** | ***SD*** | ***M*** | ***SD*** |
| ***PTSD*** |  |  |  |  |  |  |  |  |
| Sense of Coherence | 68.5469.8169.37 | 9.2210.0110.07 | 64.8562.1758.87 | 8.9010.7110.87 | 56.0057.1556.80 | 8.1211.498.67 | 57.1262.8662.13 | 10.147.808.68 |
| Coping self-efficacy | 42.8544.2543.98 | 5.855.845.91 | 43.3839.4736.23 | 5.086.997.82 | 36.1436.3536.17 | 6.037.427.26 | 35.8842.3644.93 | 7.375.613.79 |
| Social support | 5.665.605.51 | 1.02.891.05 | 5.635.525.56 | .771.07.99 | 5.154.884.78 | 1.011.091.26 | 5.565.615.45 | .81.77.85 |
| Female sex (N, %) | *273 (55.9%)* |  | *23 (69.7%)* |  | *19 (54.3%)* |  | *15 (62.5%)* |  |
| Assignment Duration (Months) | 6.47 | 3.86 | 5.47 | 2.99 | 5.44 | 3.97 | 7.93 | 3.96 |
| Number of prior assignments | 3.70 | 5.73 | 3.43 | 3.82 | 3.59 | 3.72 | 3.64 | 3.20 |
| ***Emotional Exhaustion*** |  |  |  |  |  |  |  |  |
| Sense of Coherence | 68.3170.3969.42 | 9.689.749.89 | 65.4159.5360.12 | 8.279.7410.57 | 60.8659.3759.39 | 9.2110.4311.00 |  |  |
| Coping self-efficacy | 42.6144.1443.91 | 5.995.996.00 | 42.2540.4339.00 | 5.636.277.86 | 39.2739.8139.07 | 7.317.327.57 |  |  |
| Social support | 5.675.645.52 | 1.02.931.02 | 5.425.334.84 | .98.981.63 | 5.425.385.34 | .90.84.92 |  |  |
| Female sex (N, %) | *267 (55.5%)* |  | *20 (62.5%)* |  | *49 (62.0%)* |  |  |  |
| Assignment Duration (Months) | 6.59 | 3.92 | 5.97 | 3.02 | 5.50 | 3.68 |  |  |
| Number of prior assignments | 3.69 | 4.36 | 2.57 | 3.13 | 4.12 | 9.99 |  |  |
| ***Work Engagement*** |  |  |  |  |  |  |  |  |
| Sense of Coherence | 67.7969.0868.45 | 9.7810.3010.40 | 63.0661.2455.93 | 10.3110.448.78 | 60.7760.8262.80 | 8.4411.9010.88 |  |  |
| Coping self-efficacy | 42.4543.7243.57 | 5.946.126.03 | 43.0041.6535.33 | 5.445.728.78 | 39.7739.3640.46 | 8.398.428.83 |  |  |
| Social support | 5.655.635.54 | 1.02.921.05 | 5.675.504.88 | .96.981.23 | 5.365.194.82 | .85.93.88 |  |  |
| Female sex (N, %) | *285 (55.9%)* |  | *14 (82.4%)* |  | *27 (61.4%)* |  |  |  |
| Assignment Duration (Months) | 6.41 | 3.85 | 6.94 | 3.67 | 5.57 | 3.62 |  |  |
| Number of prior assignments | 3.71 | 5.60 | 2.82 | 2.92 | 3.55 | 4.43 |  |  |
| ***Anxiety*** |  |  |  |  |  |  |  |  |
| Sense of Coherence | 68.6770.4369.87 | 9.409.789.81 | 64.1361.1760.37 | 9.9210.6310.58 |  |  | 59.8960.5959.58 | 8.9710.219.97 |
| Coping self-efficacy | 42.9544.1643.84 | 5.836.156.18 | 42.3741.1241.39 | 5.946.316.26 |  |  | 37.3440.2239.10 | 6.756.717.96 |
| Social support | 5.655.655.54 | 1.02.931.06 | 5.505.385.22 | 1.14.961.17 |  |  | 5.565.415.19 | .79.83.97 |
| Female sex (N, %) | *244 (54.2%)* |  | *39 (73.6%)* |  |  |  | *46 (60.5%)* |  |
| Assignment Duration (Months) | 6.19 | 3.68 | 7.12 | 4.12 |  |  | 7.12 | 4.44 |
| Number of prior assignments | 3.88 | 5.91 | 2.72 | 3.01 |  |  | 3.25 | 3.55 |
| ***Depression*** |  |  |  |  |  |  |  |  |
| Sense of Coherence | 68.9770.6671.03 | 9.319.618.97 | 64.6862.8357.85 | 8.6810.199.38 | 56.8958.6958.04 | 7.9110.396.39 |  |  |
| Coping self-efficacy | 42.8844.4444.70 | 5.915.845.54 | 42.1841.6337.96 | 5.686.536.86 | 37.2938.4838.86 | 6.966.957.30 |  |  |
| Social support | 5.715.705.61 | .99.871.01 | 5.415.365.06 | 1.12.981.14 | 5.285.165.06 | .931.041.10 |  |  |
| Female sex (N, %) | *233 (56.8%)* |  | *51 (73.9%)* |  | *45 (69.2%)* |  |  |  |
| Assignment Duration (Months) | 6.23 | 3.85 | 7.87 | 3.93 | 5.95 | 3.42 |  |  |
| Number of prior assignments | 3.86 | 5.90 | 3.05 | 3.57 | 3.24 | 3.64 |  |  |

**Note**. In each cell the scores represent: T1 upper scores, T2 middle score, T3 lower score. All descriptive scores were calculated using most likely class (profile) membership.