

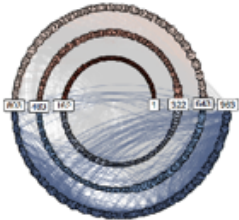
$$I_{\alpha,\beta} = \sum_{\kappa[\alpha]} \sum_{\kappa[\beta]} P \left(\kappa[\alpha], \kappa[\beta] \right) \log \frac{P \left(\kappa[\alpha], \kappa[\beta] \right)}{P \left(\kappa[\alpha] \right), P \left(\kappa[\beta] \right)}$$

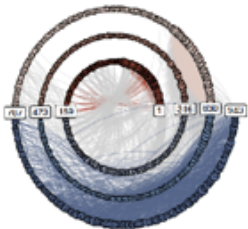
Interlayer Mutual Information

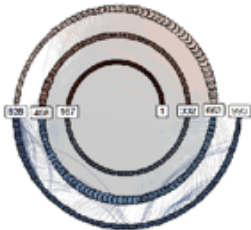
$$\mathcal{A} = \begin{bmatrix} \mathbf{A}^{[1]} & \mathbf{I}_N & \dots & \mathbf{I}_N \\ \mathbf{I}_N & \mathbf{A}^{[2]} & \ddots & \vdots \\ \vdots & \ddots & \ddots & \mathbf{I}_N \\ \mathbf{I}_N & \dots & \mathbf{I}_N & \mathbf{A}^{[m]} \end{bmatrix}$$

Attractive, Sport

Attorneys, Goodbye!







Interlayer Mutual Information

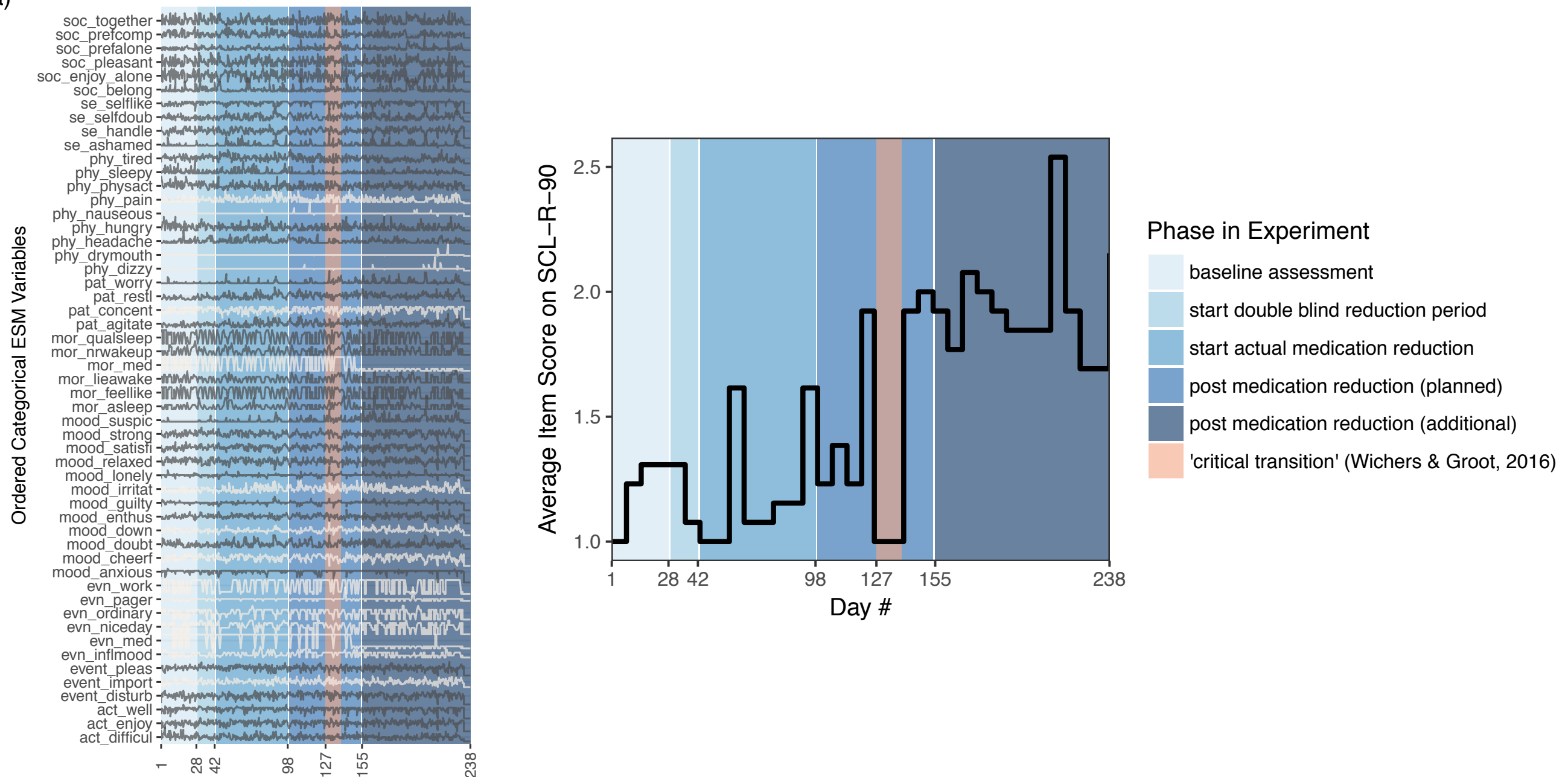
$$I_{\alpha,\beta} = \sum_{\kappa^{[\alpha]}} \sum_{\kappa^{[\beta]}} P(\kappa^{[\alpha]}, \kappa^{[\beta]}) \log \frac{P(\kappa^{[\alpha]}, \kappa^{[\beta]})}{P(\kappa^{[\alpha]}) P(\kappa^{[\beta]})}$$

$$\mathcal{A} = \begin{bmatrix} \begin{array}{c} \text{Attractive, Global} \\ \text{Attractive, Sport} \end{array} & \begin{array}{c} \text{Attractive, Global} \\ \text{Attractive, Sport} \end{array} \\ \begin{array}{c} \text{Attractive, Global} \\ \text{Attractive, Sport} \end{array} & \begin{array}{c} \text{Attractive, Global} \\ \text{Attractive, Sport} \end{array} \\ \begin{array}{c} \text{Attractive, Global} \\ \text{Attractive, Sport} \end{array} & \begin{array}{c} \text{Attractive, Global} \\ \text{Attractive, Sport} \end{array} \\ \begin{array}{c} \text{Attractive, Global} \\ \text{Attractive, Sport} \end{array} & \begin{array}{c} \text{Attractive, Global} \\ \text{Attractive, Sport} \end{array} \\ \begin{array}{c} \text{Attractive, Global} \\ \text{Attractive, Sport} \end{array} & \begin{array}{c} \text{Attractive, Global} \\ \text{Attractive, Sport} \end{array} \end{bmatrix}$$

The matrix \mathcal{A} is a 4x4 block matrix where each block is an $N \times N$ matrix \mathbf{I}_N . The blocks are arranged in a 2x2 grid, with the top-left and bottom-right blocks being \mathbf{I}_N and the top-right and bottom-left blocks being \mathbf{I}_N . The matrix is symmetric and positive semi-definite. The labels "Attractive, Global" and "Attractive, Sport" are placed above the top-left and top-right blocks, respectively, and below the bottom-left and bottom-right blocks, respectively.

Critical Slowing Down as a Personalized Early Warning Signal for Depression

(a)



Wichers, M., Groot, P. C., Psychosystems, ESM Grp, & EWS Grp (2016). Critical Slowing Down as a Personalized Early Warning Signal for Depression. *Psychotherapy and psychosomatics*, 85(2), 114-116. DOI: 10.1159/000441458

Kossakowski, J., Groot, P., Haslbeck, J., Borsboom, D., and Wichers, M. (2017). Data from 'critical slowing down as a personalized early warning signal for depression'. *Journal of Open Psychology Data*, 5(1).