Identification of Two Clusters of Psychopathology

Computed by FAMD, the strongest loadings were observed for PANSS on the first dimension and for IDS on the second dimension. By k-means clustering, two clusters of longitudinal trajectories were identified in these dimensions:

Dimension 1 (4.12% of variance)
- (A) individuals with continuously low scores on PANSS (70.7%)
- (B) individuals with consistently high scores on PANSS (29.3%)

Dimension 2 (2.62% of variance)
- (A) individuals with consistently high scores on IDS (70.7%)
- (B) individuals with consistently low scores on IDS (29.3%)

Factors influencing Clustering

Clustering was not significantly influenced by:
- Diagnosis (Fig. A)
- Age or age of onset
- Duration of illness or treatment at baseline
- Sex
- Center

Clusters differed significantly with regard to:
- Global Assessment of Functioning (GAF) (average & all 4 time points; higher in cluster (A); Pr(adjusted) = 2.23x10^-3) (Fig. B)
- Work status (higher in cluster (A); Pr(adjusted) = 0.022)

No Association between SZ-PRS and Cluster Membership

SZ-PRS loading did not differ between clusters. Cluster membership was not significantly associated with the SZ-PRS in either cluster.

Discussion

- Longitudinal clustering to identify cross-diagnostic homogeneous subgroups of individuals appears to be feasible
- Reason why more severe psychopathological features were not associated with increased genetic risk burden needs to be explored further
- CAVEATS: Small, heterogenous sample over short time frame
- no replication in independent sample
- clinical relevance?