

**The Life History Model of Psychopathology Explains the Structure
of Psychiatric Disorders and the Emergence of the p Factor**

Supplementary Figures

Weaker clustering of disorders (smaller cluster-specific variance)

$$\sigma^2(V_{Ci}) = 0.1 \sigma^2(LH); \quad \sigma^2(V_{Di}) = 4 \sigma^2(\text{cluster} + BD); \quad r_{LH,BD} = 0$$

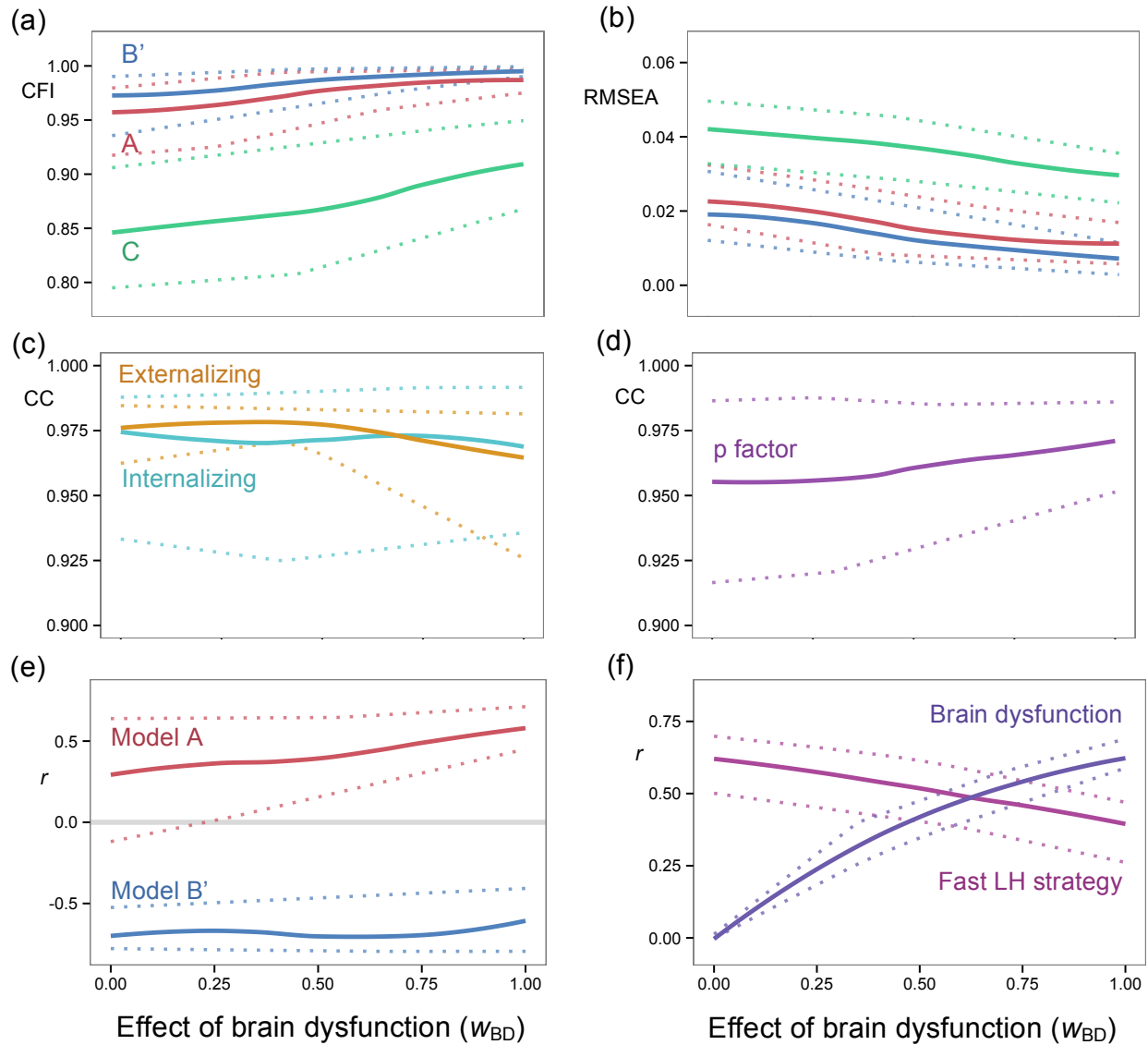


Figure S1. Simulation results with cluster-specific variance equal to 10% the variance associated with life history strategy and $r_{LH,BD} = 0$. (a,b) Fit indices of the three factor models in the simulated datasets. (c,d) Factor congruence for the hierarchical/bifactor model (B') in the simulated and empirical data. (e) Correlation between the externalizing and internalizing factor in the simulated datasets for the correlated factors model (model A) and the hierarchical/bifactor model (model B'). (f) Correlations between p factor scores, life history strategy, and brain dysfunction in the simulated datasets for the hierarchical/bifactor model. Solid lines show average values; dotted lines show the 5th and 95th percentile. LH = life history.

Stronger clustering of disorders (larger cluster-specific variance)

$$\sigma^2(V_{Ci}) = \sigma^2(LH); \quad \sigma^2(V_{Di}) = 2.5 \sigma^2(\text{cluster} + BD); \quad r_{LH,BD} = 0$$

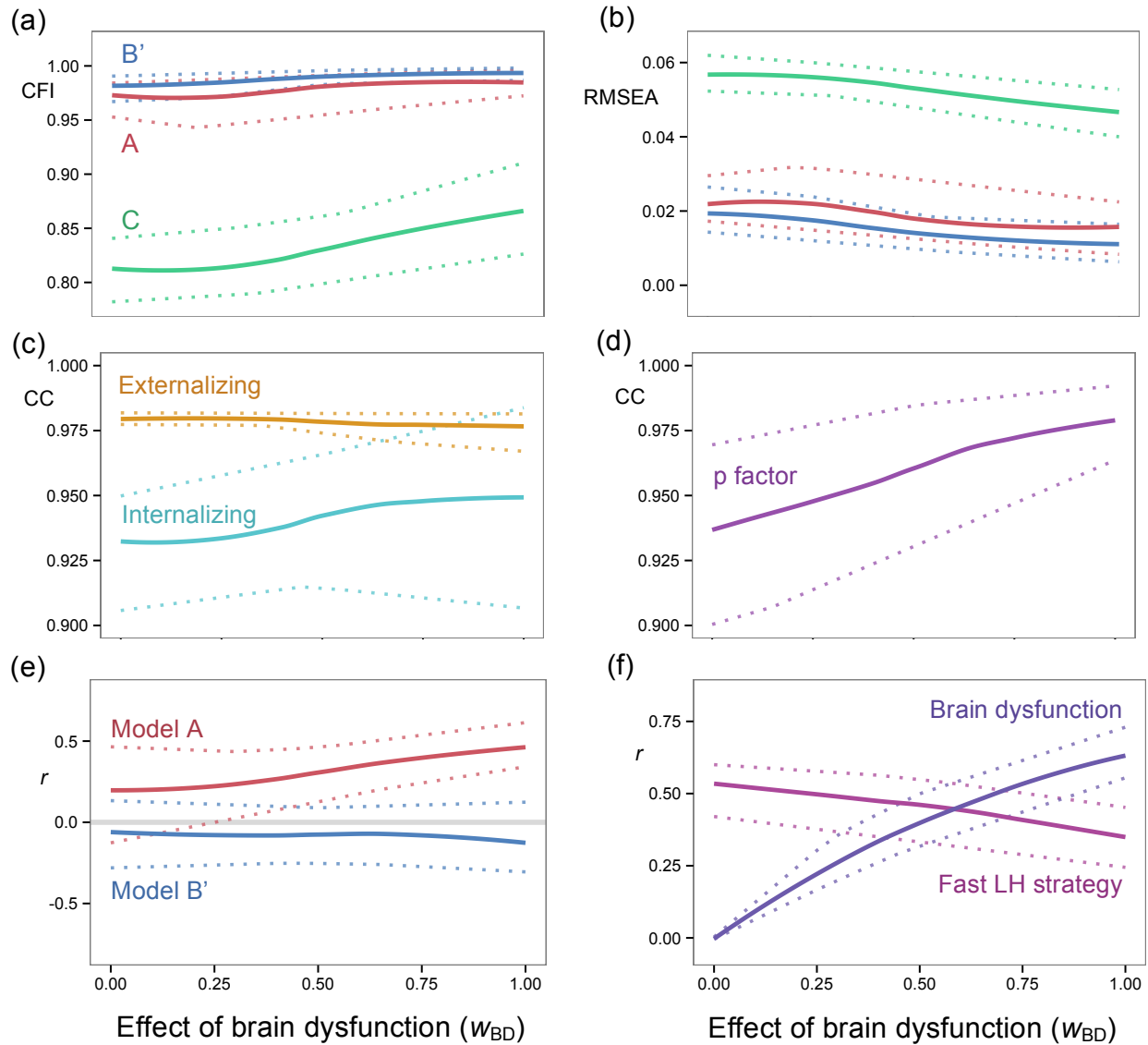


Figure S2. Simulation results with cluster-specific variance equal to the variance associated with life history strategy and $r_{LH,BD} = 0$. (a,b) Fit indices of the three factor models in the simulated datasets. (c,d) Factor congruence for the hierarchical/bifactor model (B') in the simulated and empirical data. (e) Correlation between the externalizing and internalizing factor in the simulated datasets for the correlated factors model (model A) and the hierarchical/bifactor model (model B'). (f) Correlations between p factor scores, life history strategy, and brain dysfunction in the simulated datasets for the hierarchical/bifactor model. Solid lines show average values; dotted lines show the 5th and 95th percentile. LH = life history.

Lower skewness of symptom scores (smaller k)

$k = 1$; $r_{LH,BD} = 0$

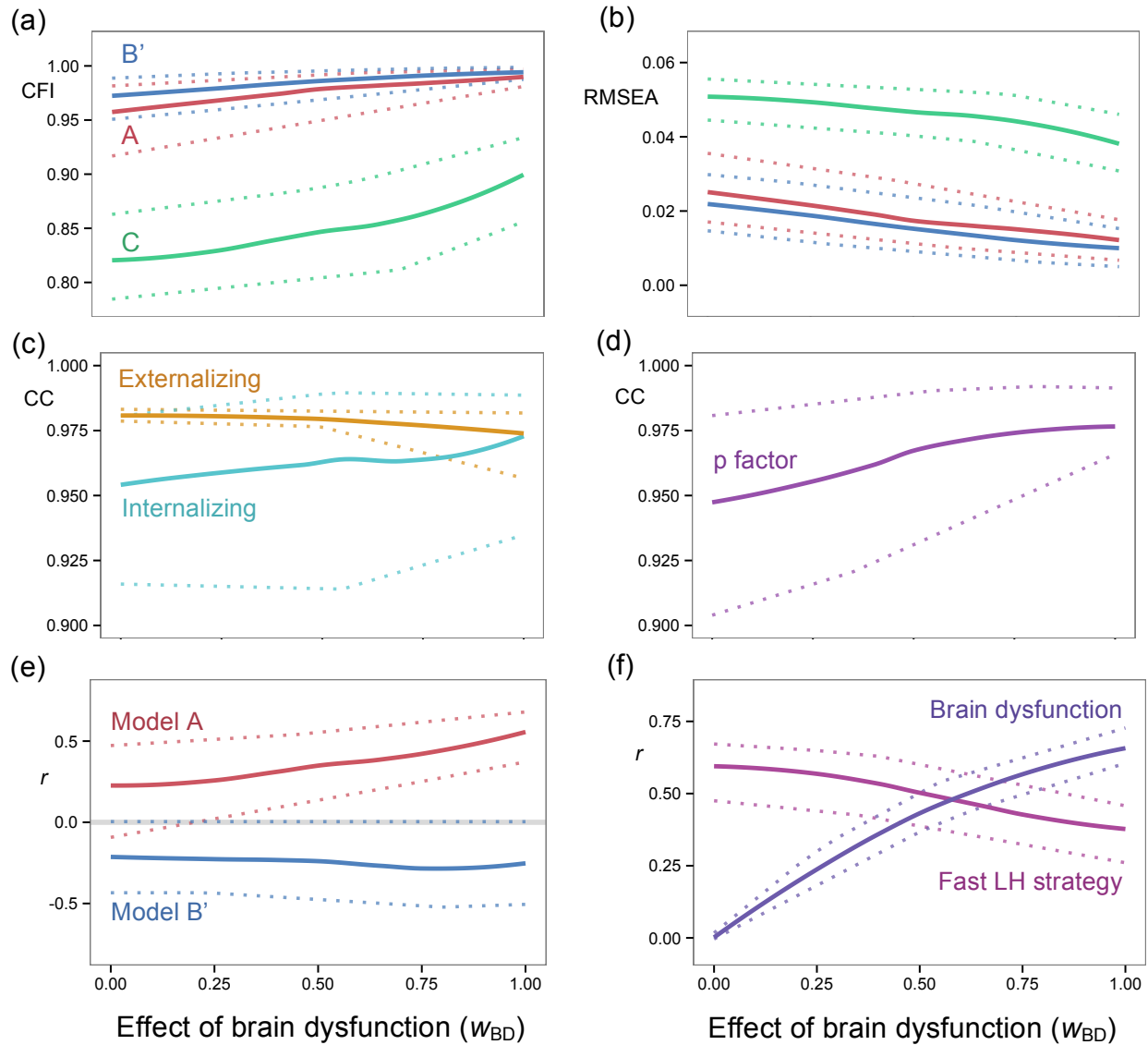


Figure S3. Simulation results with $k = 1$ and $r_{LH,BD} = 0$. (a,b) Fit indices of the three factor models in the simulated datasets. (c,d) Factor congruence for the hierarchical/bifactor model (B') in the simulated and empirical data. (e) Correlation between the externalizing and internalizing factor in the simulated datasets for the correlated factors model (model A) and the hierarchical/bifactor model (model B'). (f) Correlations between p factor scores, life history strategy, and brain dysfunction in the simulated datasets for the hierarchical/bifactor model. Solid lines show average values; dotted lines show the 5th and 95th percentile. LH = life history.

Higher skewness of symptom scores (larger k)

$k = 3$; $r_{LH,BD} = 0$

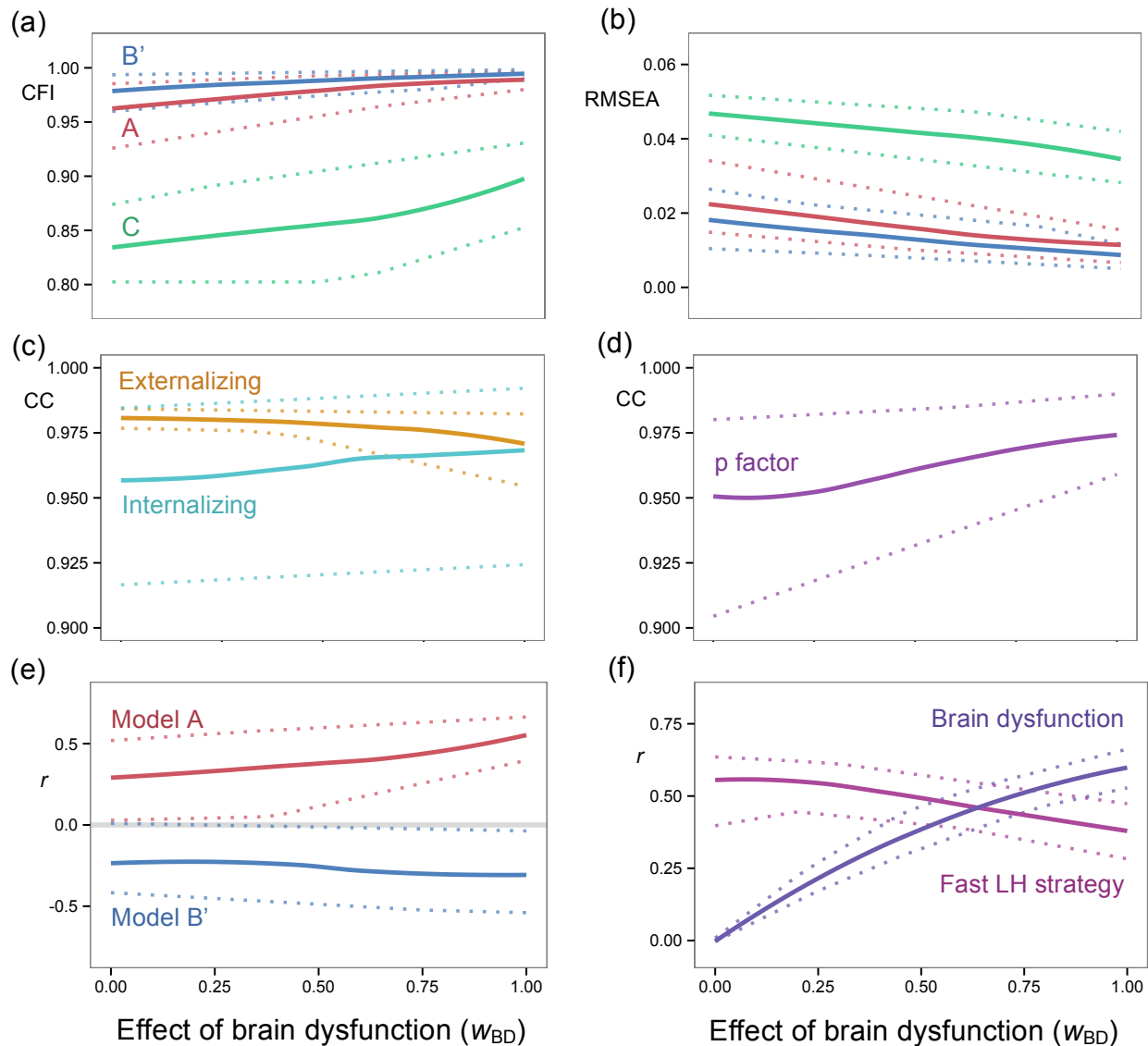


Figure S4. Simulation results with $k = 3$ and $r_{LH,BD} = 0$. (a,b) Fit indices of the three factor models in the simulated datasets. (c,d) Factor congruence for the hierarchical/bifactor model (B') in the simulated and empirical data. (e) Correlation between the externalizing and internalizing factor in the simulated datasets for the correlated factors model (model A) and the hierarchical/bifactor model (model B'). (f) Correlations between p factor scores, life history strategy, and brain dysfunction in the simulated datasets for the hierarchical/bifactor model. Solid lines show average values; dotted lines show the 5th and 95th percentile. LH = life history.