

Supplementary Material

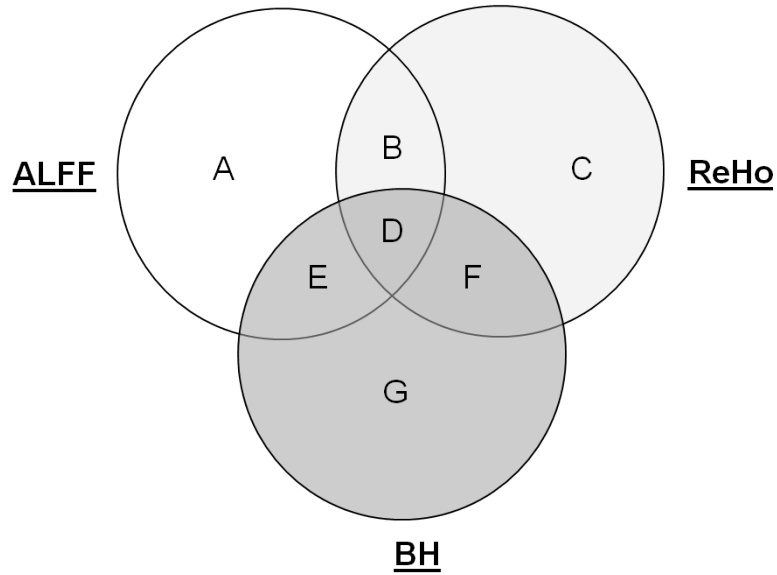


Figure S1. A) unique contribution of amplitude of low frequency fluctuations (ALFF), B) ALFF and regional homogeneity (ReHo), C) unique contribution of ReHo, D) ALFF, ReHo and breath hold (BH) responses, E) ALFF and BH, F) ReHo and BH, G) unique contribution of BH.

Equations: The equations used to compute the unique and overlapping contributions of ALFF, ReHo and BH responses to the variance of task activations are shown below. Model_i represents the linear regression model used to obtain the r^2 values.

$$r_{ALFF}^2 = r_{ALFF}^2 - (r_{ALFF,ReHo}^2 + r_{ALFF,BH}^2 + r_{ReHo,BH}^2 - r_{ALFF,ReHo,BH}^2 - r_{ALFF,ReHo}^2 - r_{ALFF,BH}^2 - r_{ReHo,BH}^2)$$

$$r_{ReHo}^2 = r_{ReHo}^2 + r_{ALFF,ReHo}^2 - r_{ALFF,ReHo}^2 - r_{ALFF,ReHo,BH}^2$$

$$r_{BH}^2 = r_{BH}^2 + r_{ALFF,BH}^2 + r_{ReHo,BH}^2 - r_{ALFF,BH}^2 - r_{ReHo,BH}^2 - r_{ALFF,ReHo,BH}^2$$

$$r_{ALFF,ReHo}^2 = r_{ALFF,ReHo}^2 + r_{ALFF,ReHo,BH}^2 - r_{ALFF,ReHo,BH}^2 - r_{ALFF,ReHo}^2 - r_{ALFF,BH}^2 - r_{ReHo,BH}^2$$

$$r_{ALFF,BH}^2 = r_{ALFF,BH}^2 - r_{ALFF,ReHo,BH}^2 - r_{ALFF,ReHo}^2 - r_{ALFF,BH}^2$$

$$r_{ReHo,BH}^2 = r_{ReHo,BH}^2 - r_{ALFF,ReHo,BH}^2 - r_{ALFF,ReHo}^2 - r_{ReHo,BH}^2$$

$$r_{ALFF,ReHo,BH}^2 = r_{ALFF,ReHo,BH}^2 - r_{ALFF,ReHo}^2 - r_{ALFF,BH}^2 - r_{ReHo,BH}^2$$