Conditional and syllogistic deductive tasks

dissociate functionally during premise integration

- Supplementary Online Material -

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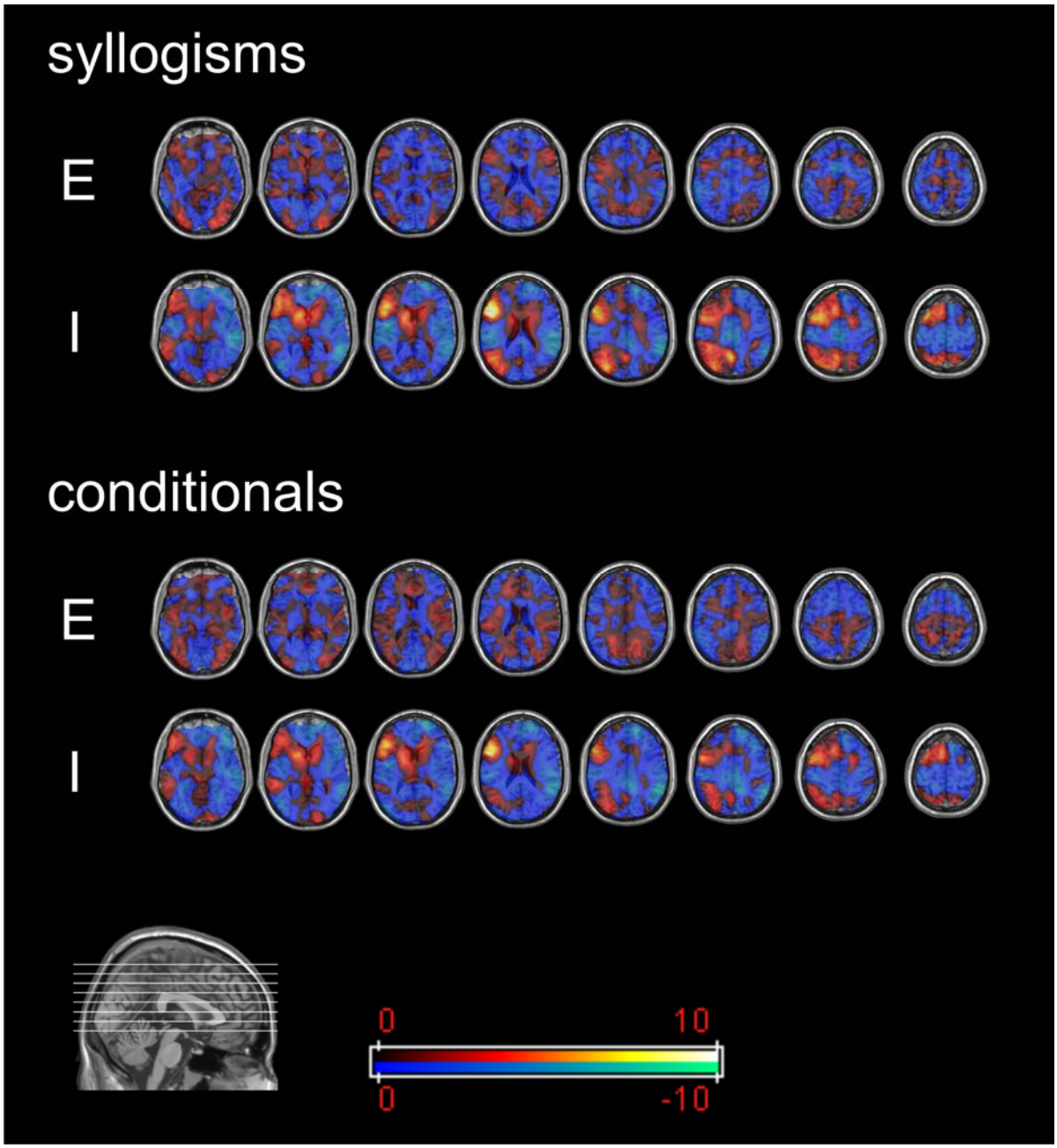

Figure 1 : Unthresholded t-maps for the reasoning effect during encoding (E, P_1reasoning > P_1memory) and for the integration effect (I, P_2 integrable > P_2 non-integrable). The maps are overlaid onto T1 axial slices. The effects are reported for both syllogistic and conditional problems. Bottom left: the location of the axial slices considered is illustrated onto a mid-sagittal cut of the skull. Bottom-right: colour scale (*t*-values).

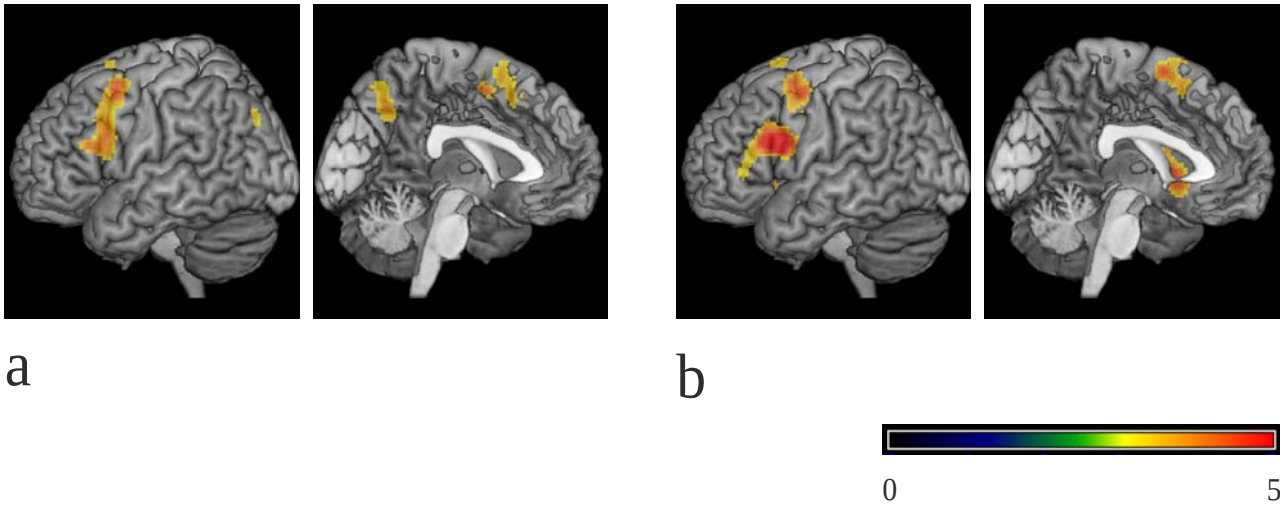

Figure 2: Areas activated during integration of deductive premises (P2) in the first fMRI run only. A. Integration effect on syllogistic problems. B. Integration effect on conditional problems. Color scale (*t*-values) on the bottom-right. The statistical maps for this first phase of the experiment are consistent with the maps obtained using all fMRI runs, and suggest that our critical effects do not merely relate to intensive task practice.