

# SUPPLEMENTARY MATERIAL

## **Cerebellar contributions to sequence prediction in verbal working memory**

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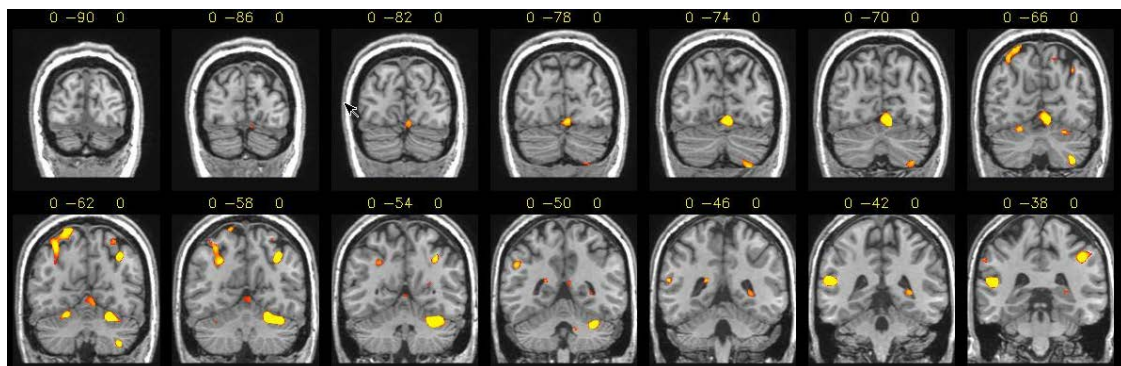
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### **ONLINE RESOURCE 1: Individual-level load effect**

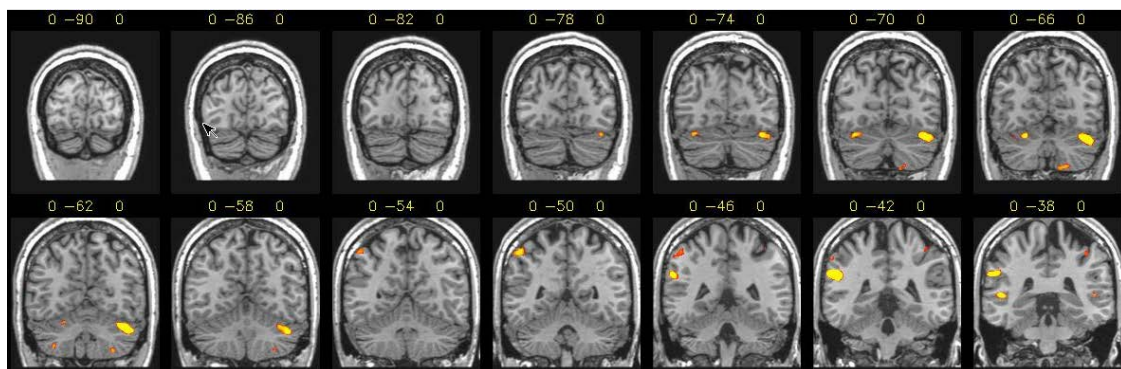
In order to ascertain that the activation found in the superior cerebellum in the group-level analysis was not due to "bleed-over" from inferior temporal lobe sources due to the proximity of these structures, or an artifact of the averaging process, we generated images of the posterior activations in each individual subject (S1-S19), mapping the activations onto their individual brains. These images (see below) provided convincing evidence that the superior cerebellar activation is not an artifact of the averaging process, but rather is derived from activation originating in the superior cerebellum on a subject by subject basis.

Please note that for illustration purposes, the images are thresholded at  $p < .001$  for most subjects (and at  $p < .01$  or  $p < .05$  for a few, depending on the strength of the effect). In general, there was rather good consistency between subjects and high overlap with load-modulated cerebellar regions identified in previous studies (e.g., Awh et al., 1996; Desmond et al., 1997; Chen & Desmond, 2005; Durisko & Fiez, 2010; Jonides et al., 1997; Fiez et al., 1996; Grasby et al., 1994; Paulesu et al., 1993, 1995).

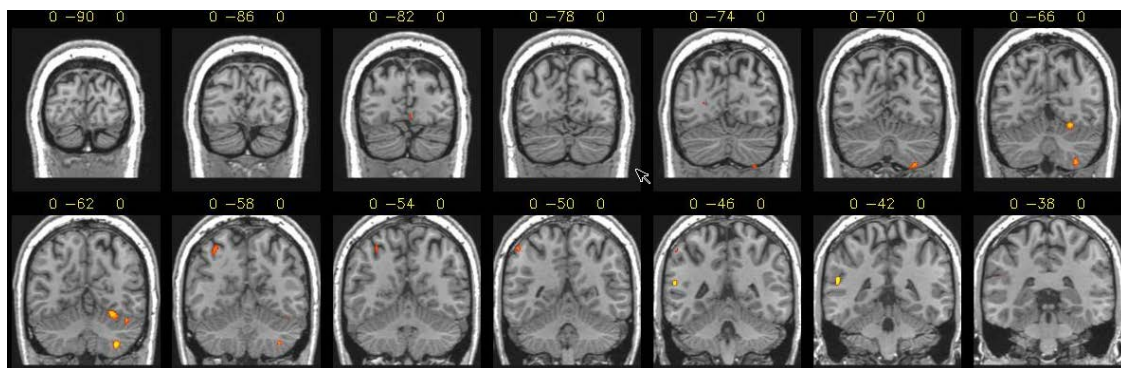
S01  
 $p < .001$



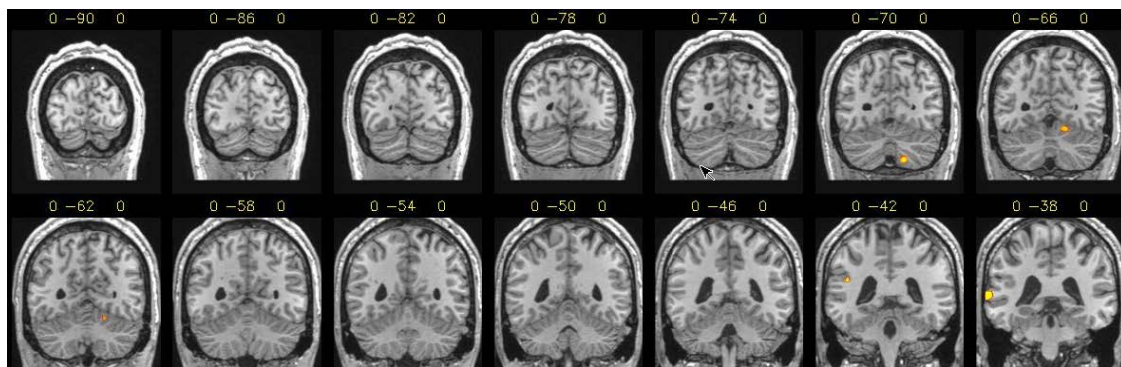
S02  
 $p < .001$



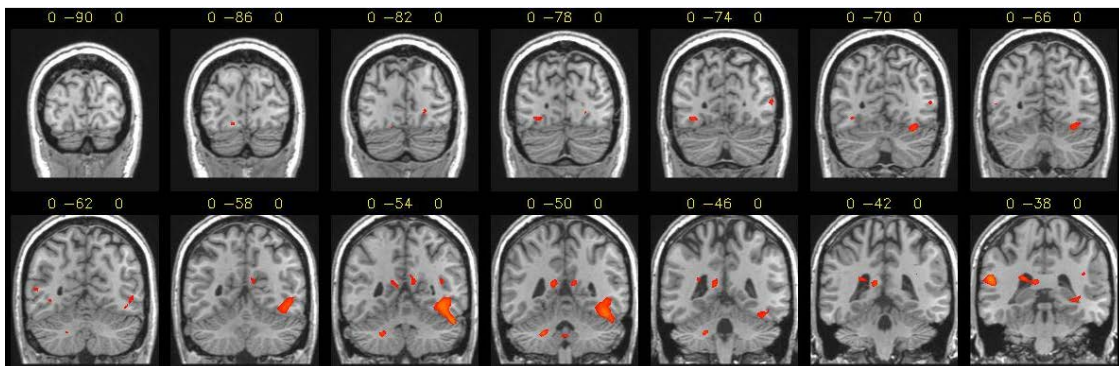
S03  
 $p < .001$



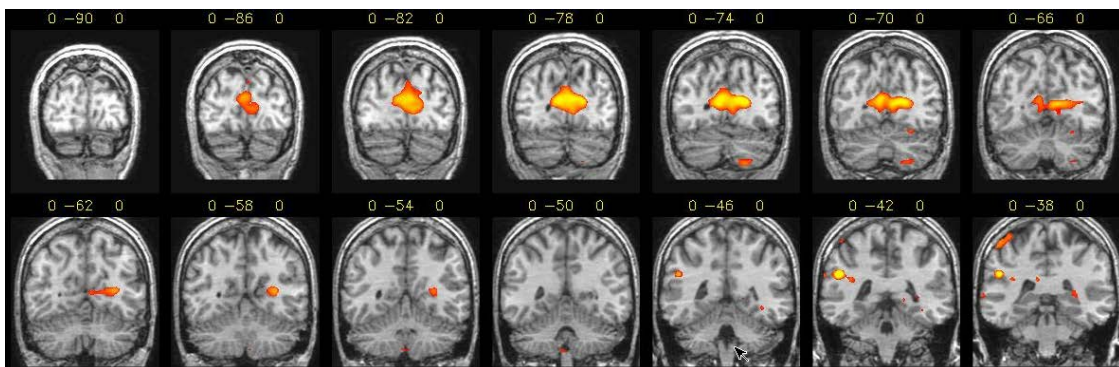
S04  
 $p < .001$



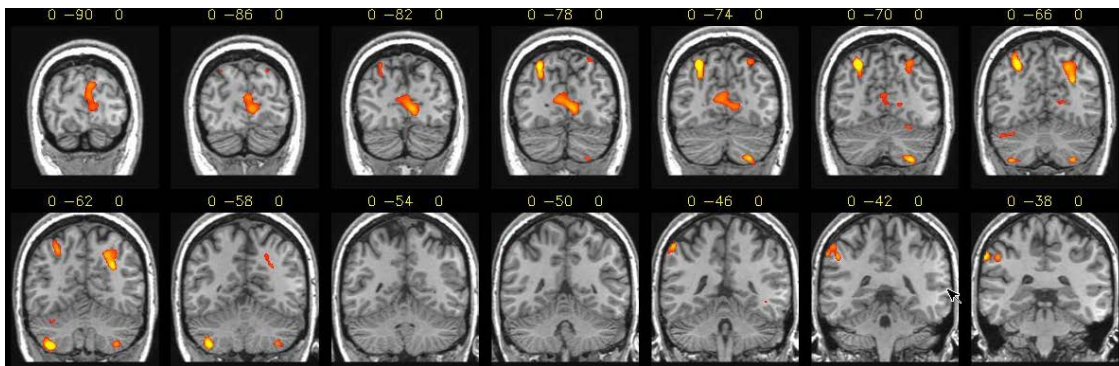
S05  
 $p < .05$



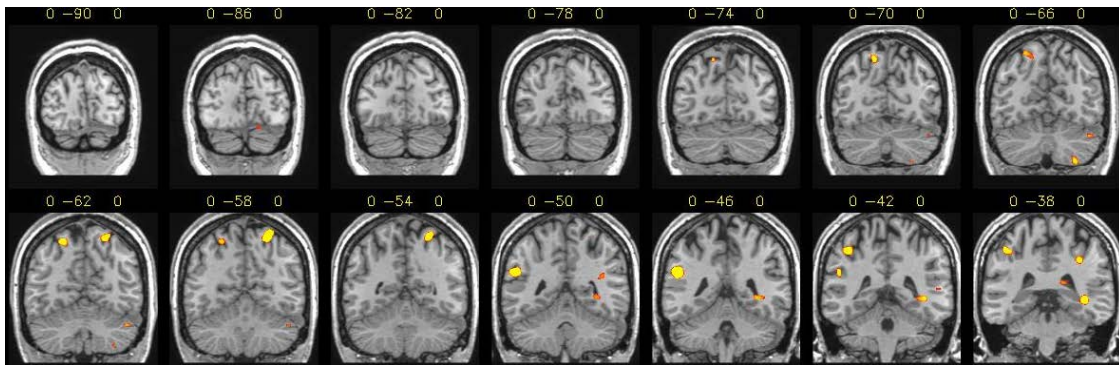
S06  
 $p < .01$



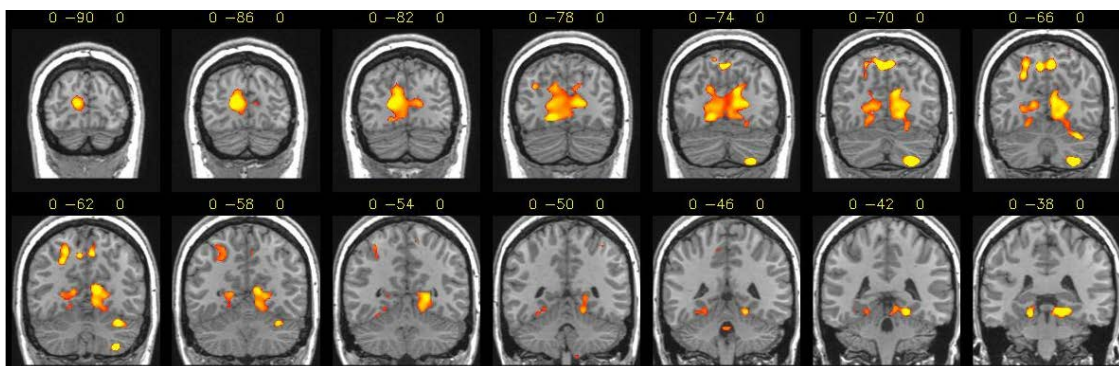
S07  
 $p < .01$



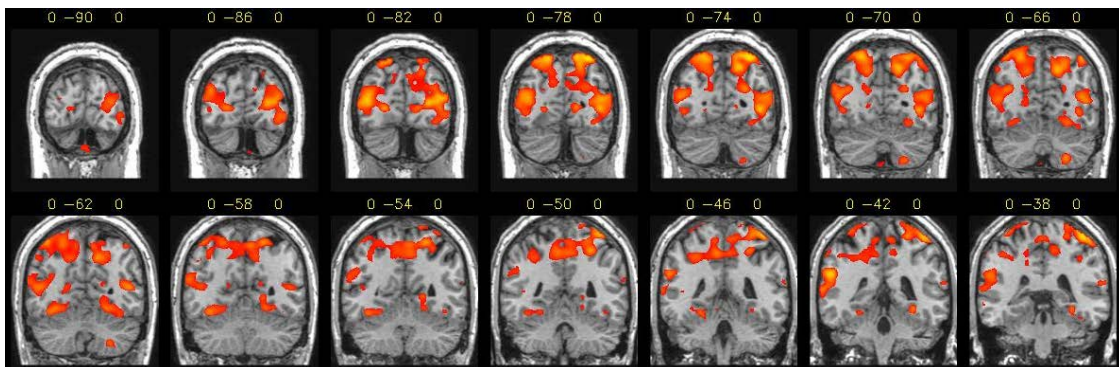
S08  
 $p < .001$



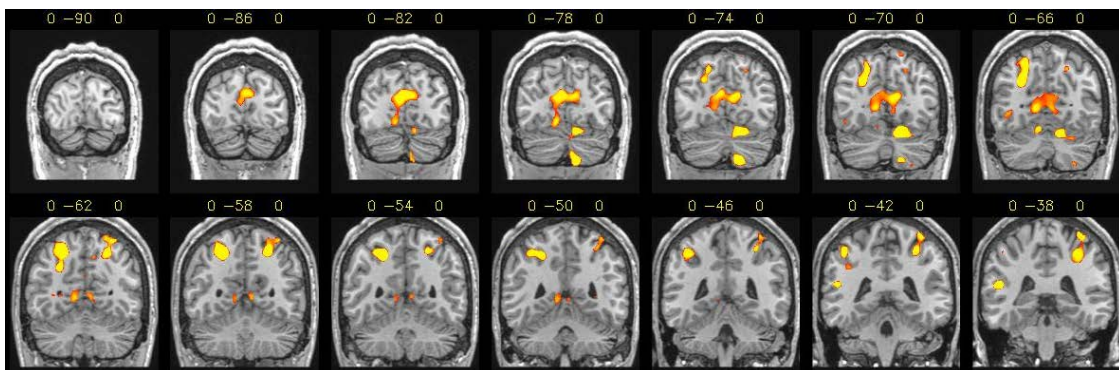
S09  
 $p < .001$



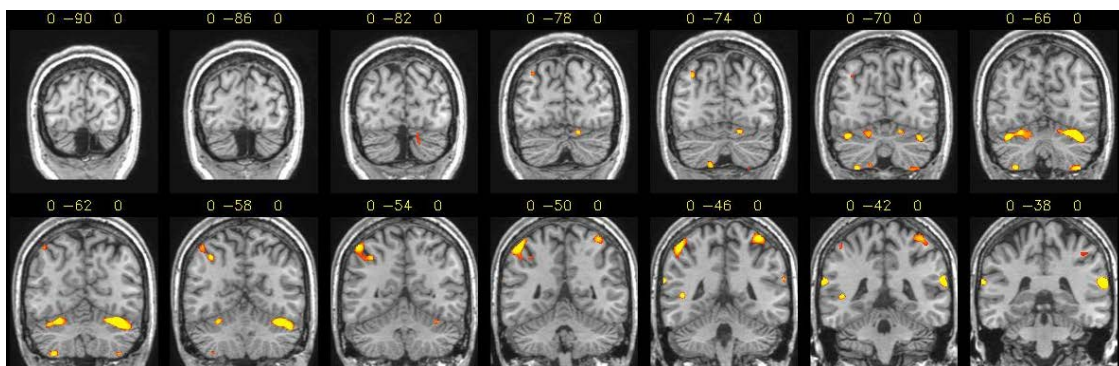
S10  
 $p < .05$



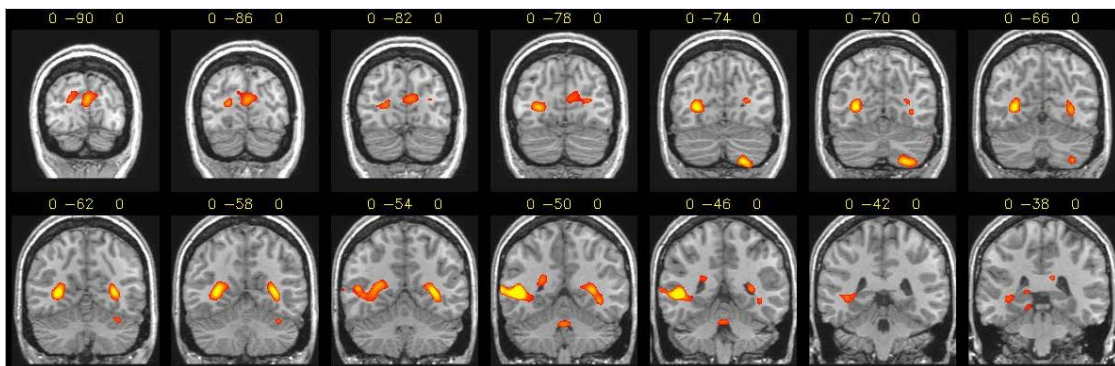
S11  
 $p < .001$



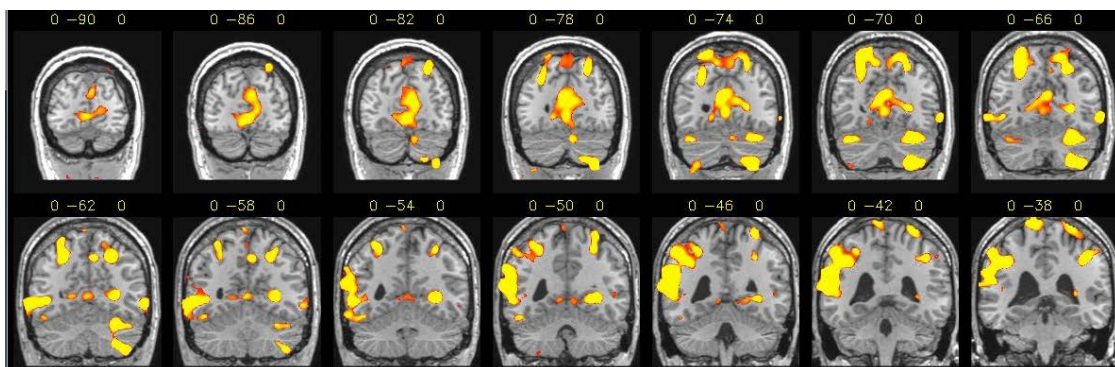
S12  
 $p < .001$



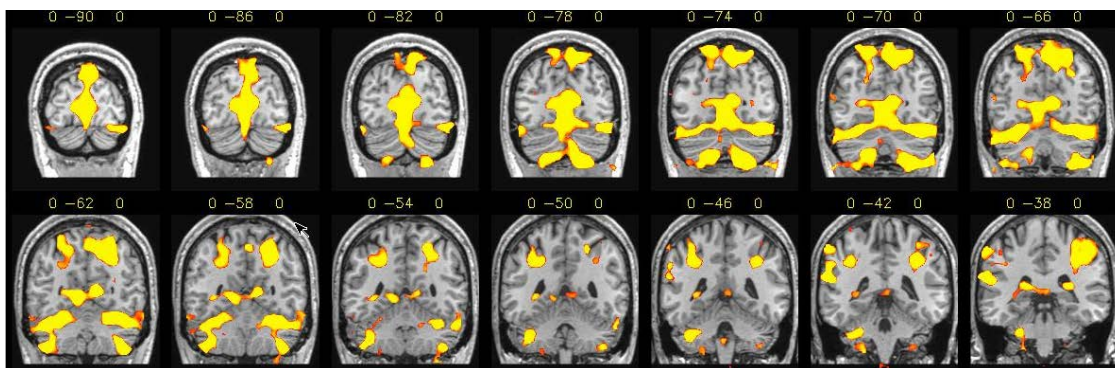
S13  
 $p < .05$



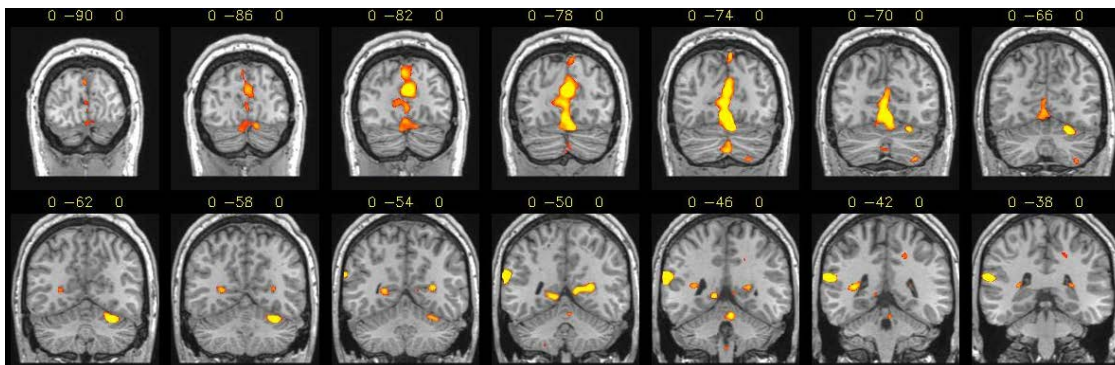
S14  
 $p < .001$



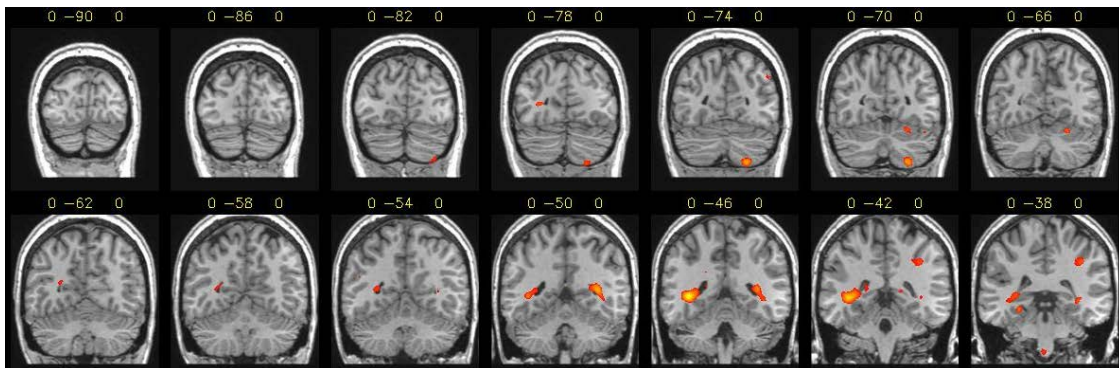
S15  
 $p < .001$



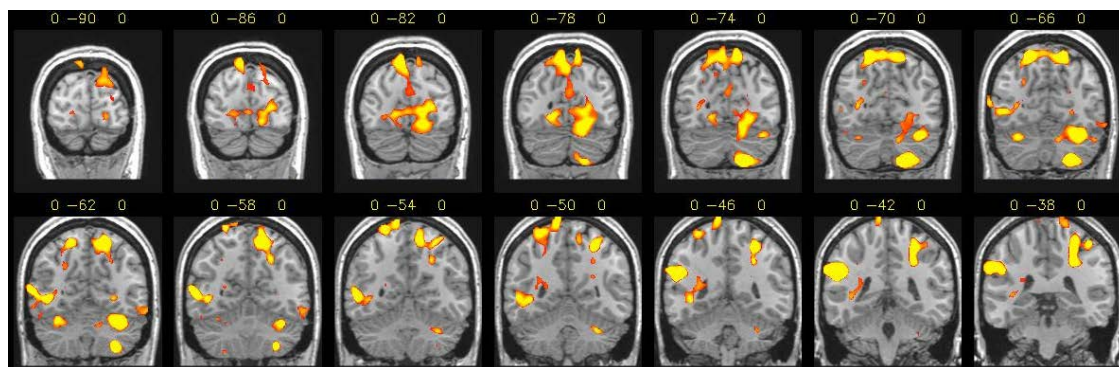
S16  
 $p < .001$



S17  
p<.05



S18  
p<.001



S19  
p<.001

