

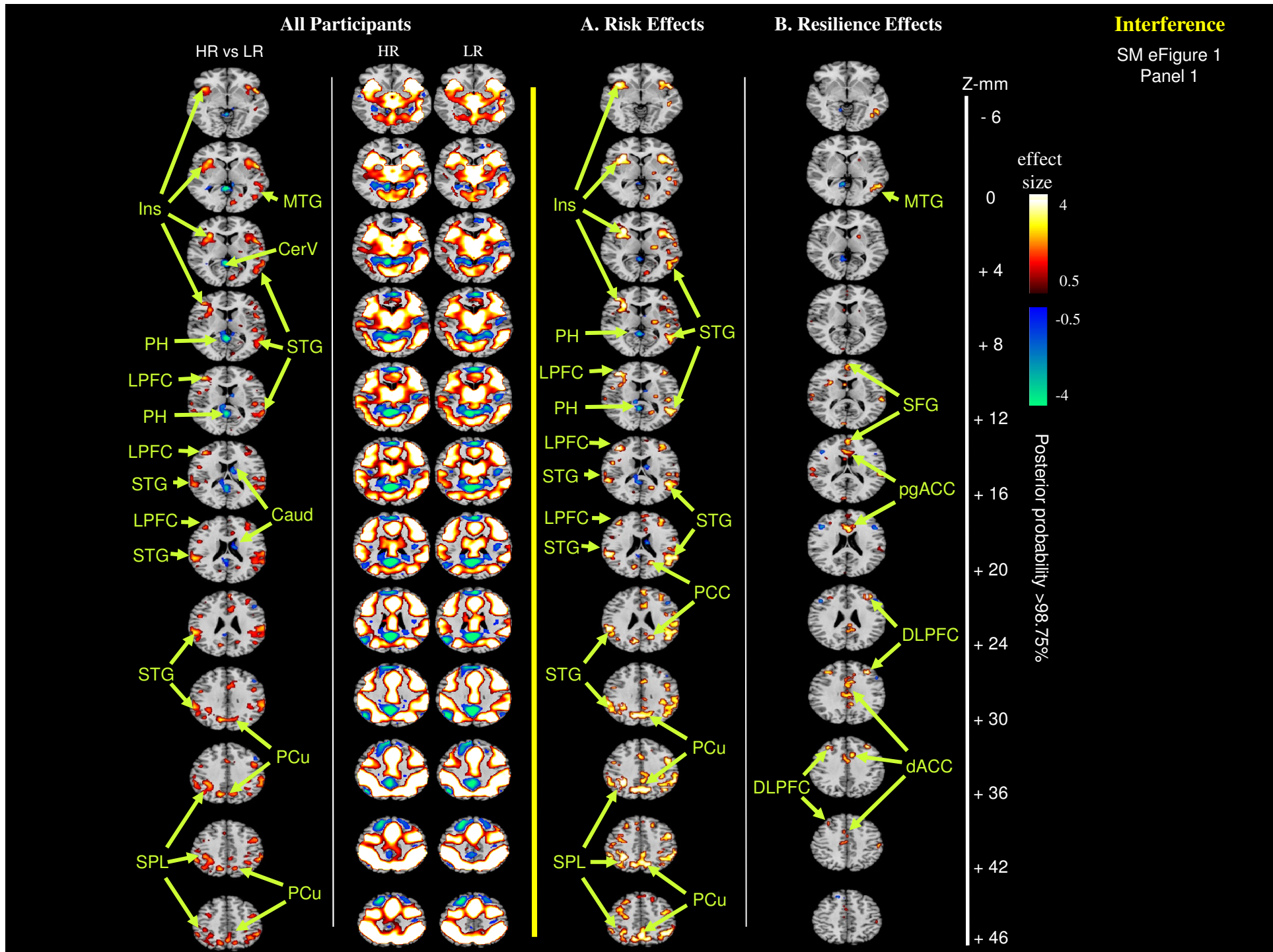
e2

All Slices Acquired for All Participants

(N=143, 83 HR, 60 LR)

Risk, Resilience, and Illness Effects

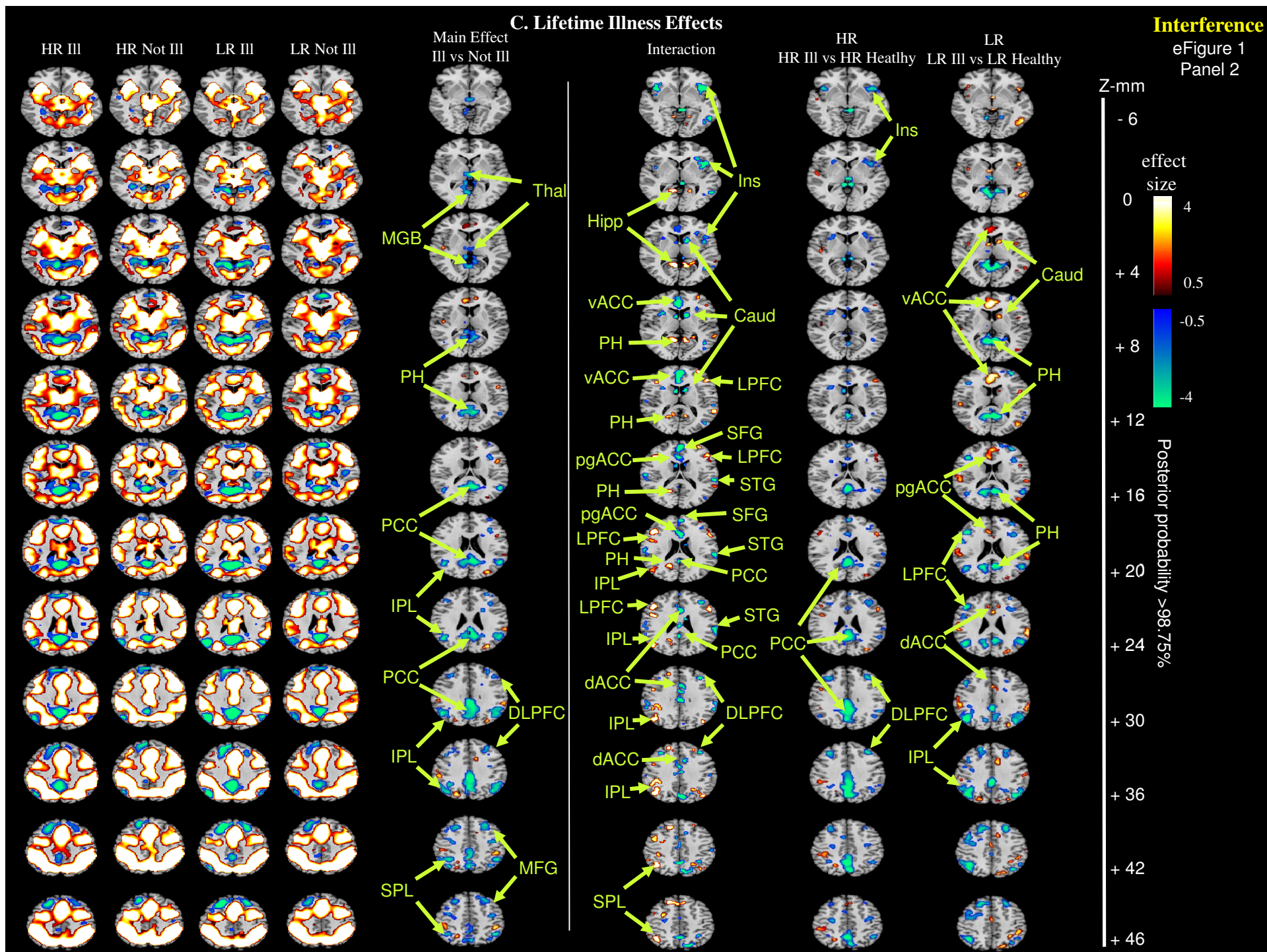
Covarying for Age, Sex, and Interference Scores



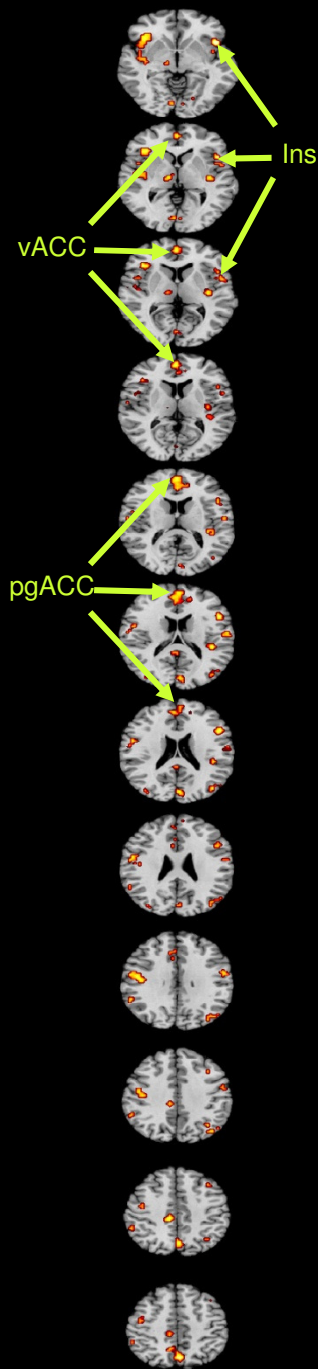
C. Lifetime Illness Effects

Interference

eFigure 1
Panel 2

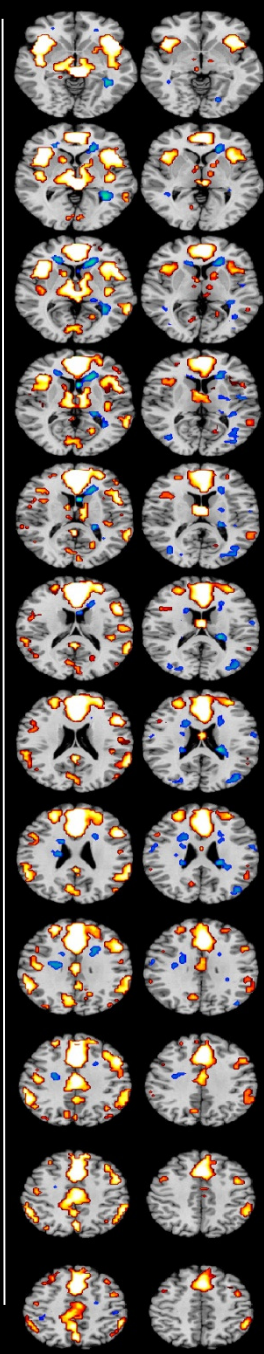


Resilience Effects



HR Not III

LR Not III

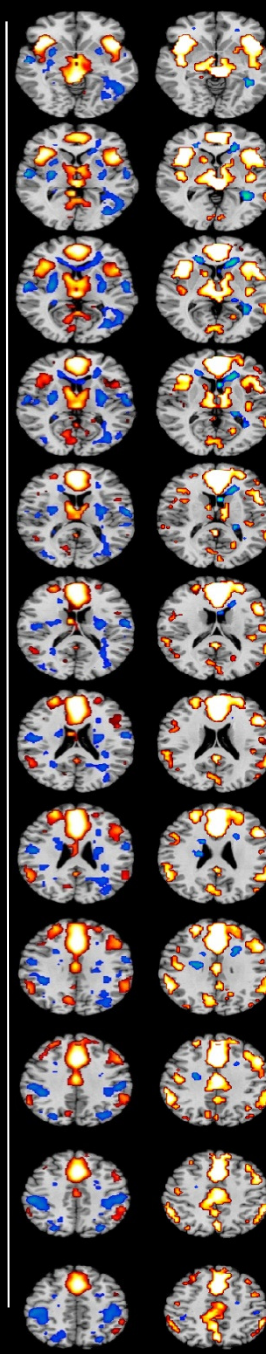
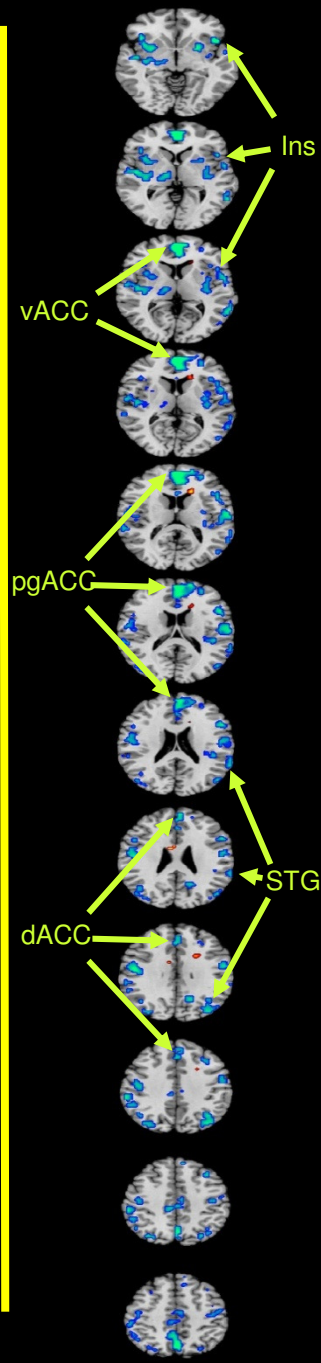


HR-Specific Illness Effects

HR III vs Not III

HR III

HR Not III



Error-Related Activity

SM eFigure 2

Z-mm

- 6

0

+ 4

+ 8

+ 12

+ 16

+ 20

+ 24

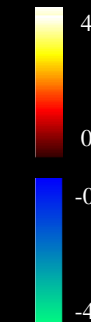
+ 30

+ 36

+ 42

+ 46

effect size



Posterior probability > 98.75%

e3

ASSESSING EFFECTS FOR MDD AND ANXIETY DISORDER SEPARATELY

(1) MDD: Covarying for 62 Participants (44 HR, 18 LR)

Who Had a Lifetime History of Anxiety Disorder

(2) Anxiety: Covarying for 59 Participants (47 HR, 12 LR)

Who Had a Lifetime History of MDD

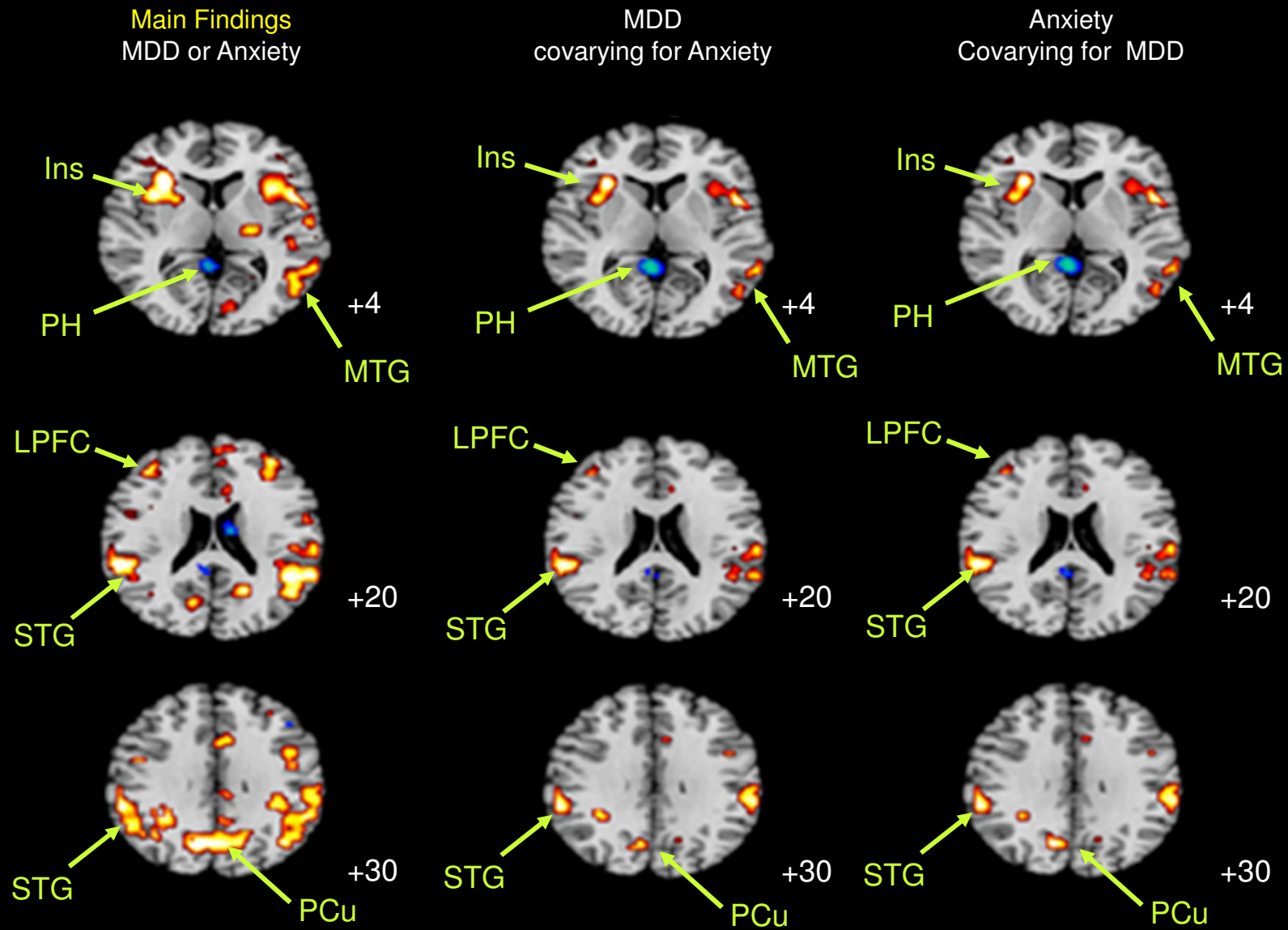
Risk, Resilience, and Illness Effects

Identified Using Regression Analyses

(covarying for age, sex, and interference effects)

RISK EFFECTS

Interference-Related Activity



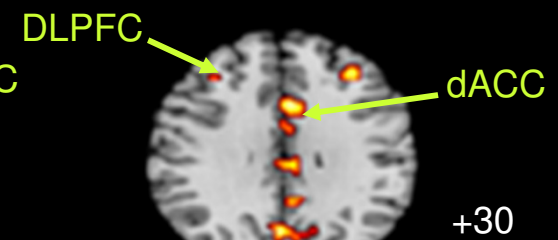
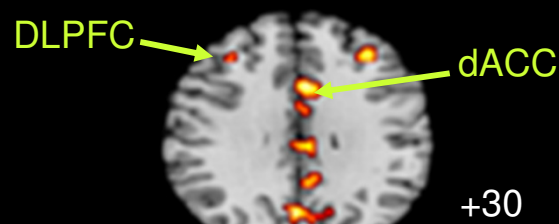
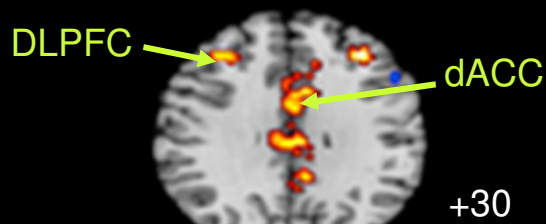
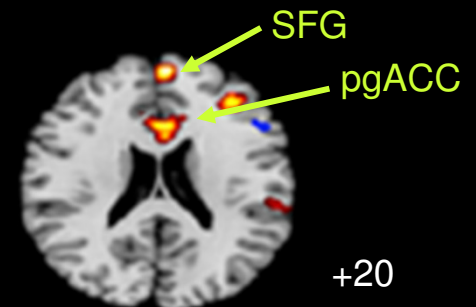
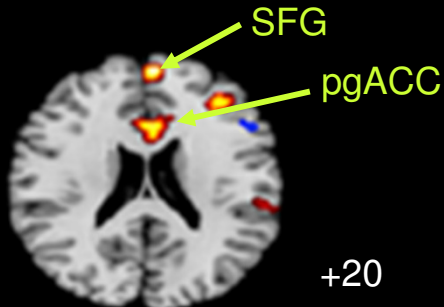
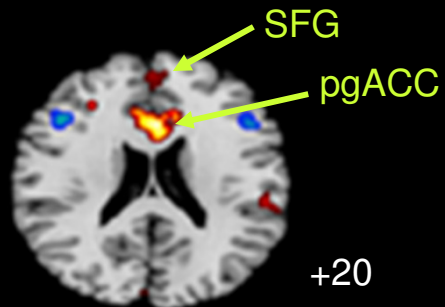
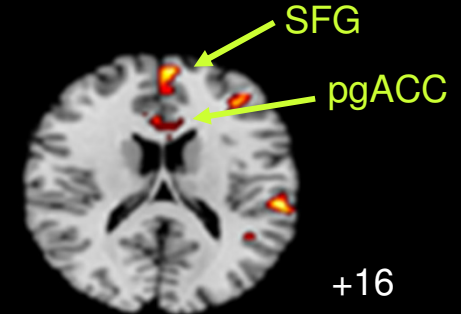
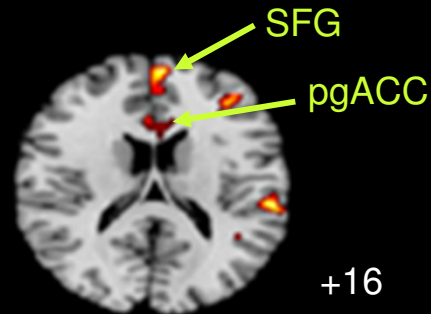
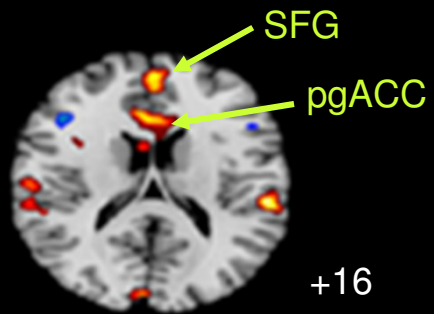
RESILIENCE EFFECTS

Interference-Related Activity

Main Findings
MDD or Anxiety

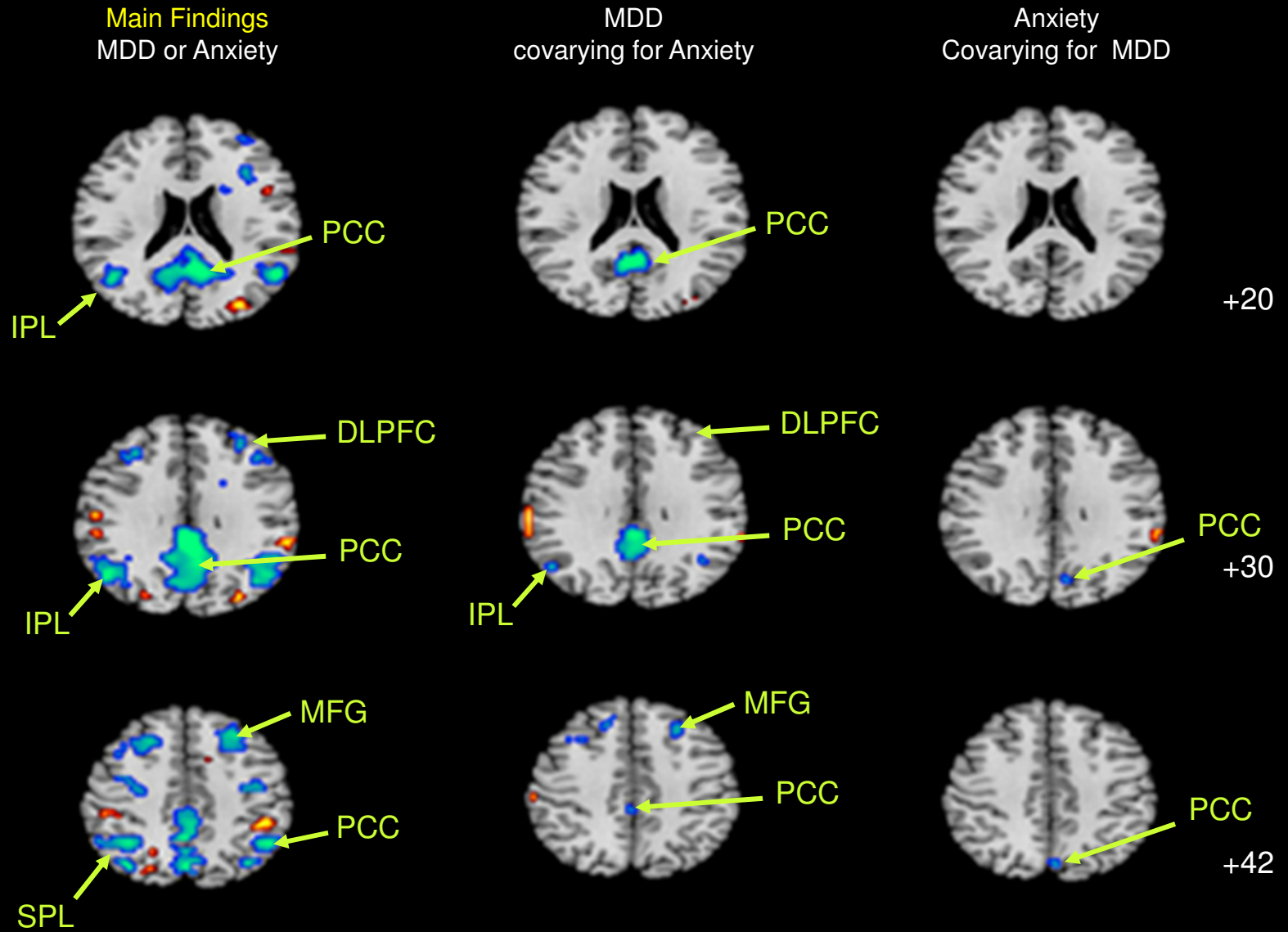
MDD
covarying for Anxiety

Anxiety
Covarying for MDD



LIFETIME ILLNESS EFFECTS

Interference-Related Activity



e4

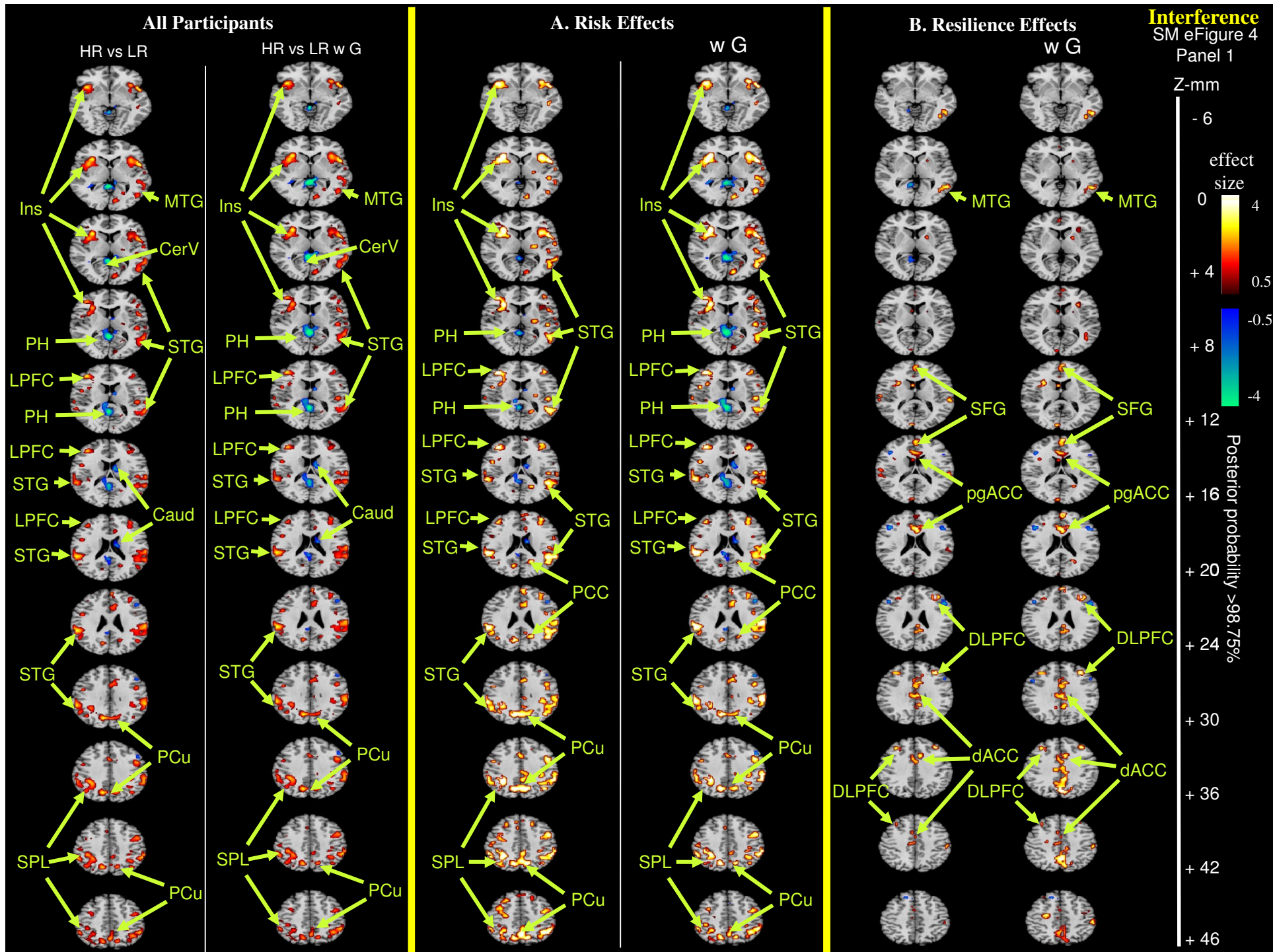
Findings while Covarying for Generation 2 or 3

Identification of Risk, Resilience, and Illness Effects

Covarying for Age, Sex, Interference Scores, and Generation (G2 or G3),
all participants included (N=143, 83 HR, 60 LR)

Columns labeled “w G” are maps generated while covarying for Generation

Columns without “w G” are the findings without covarying for Generation



Main Effect III vs Not III

C. Lifetime Illness Effects

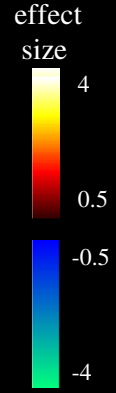
Interaction

Interference

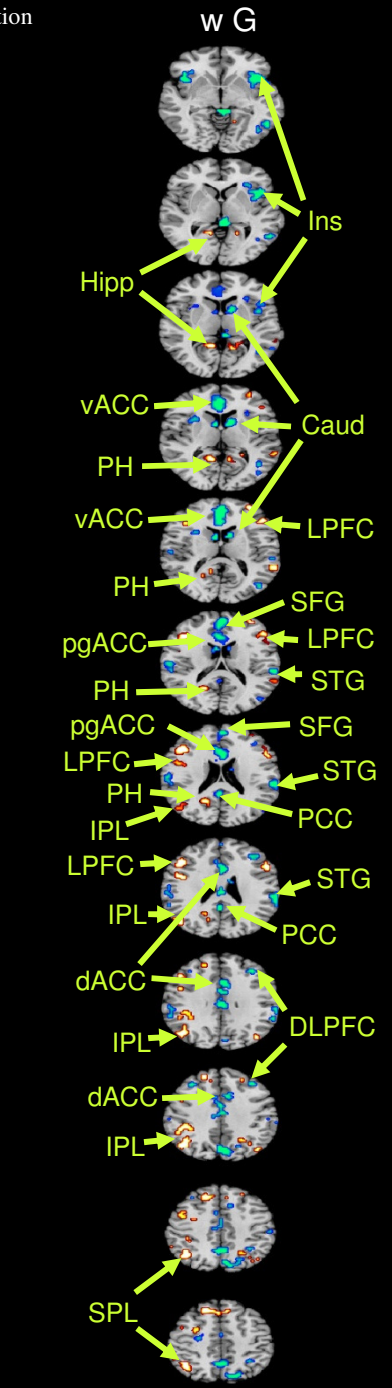
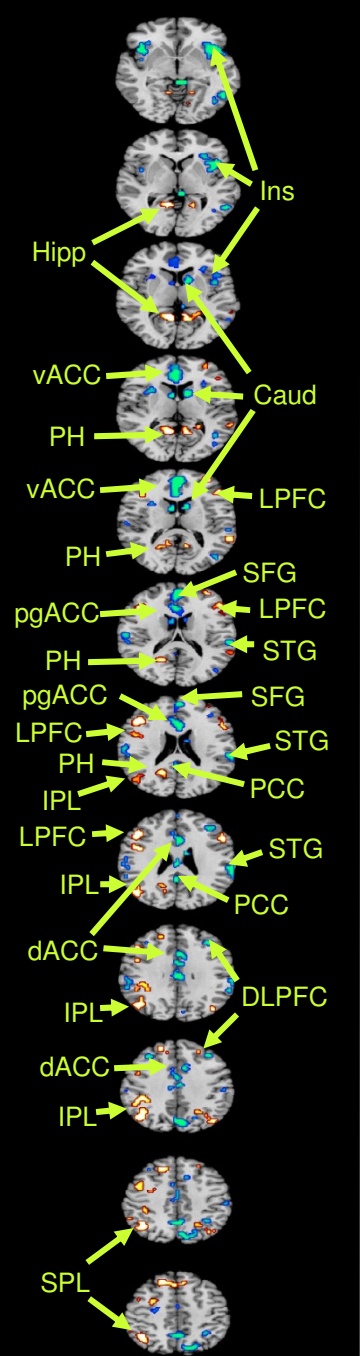
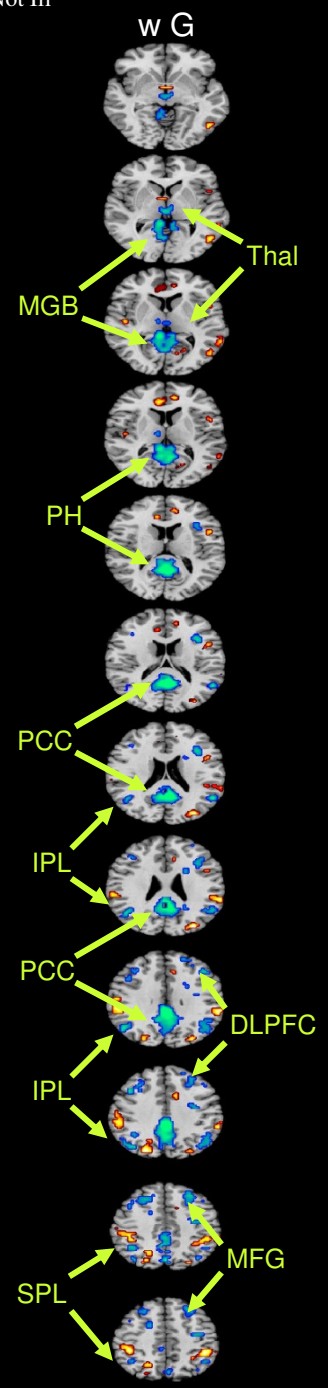
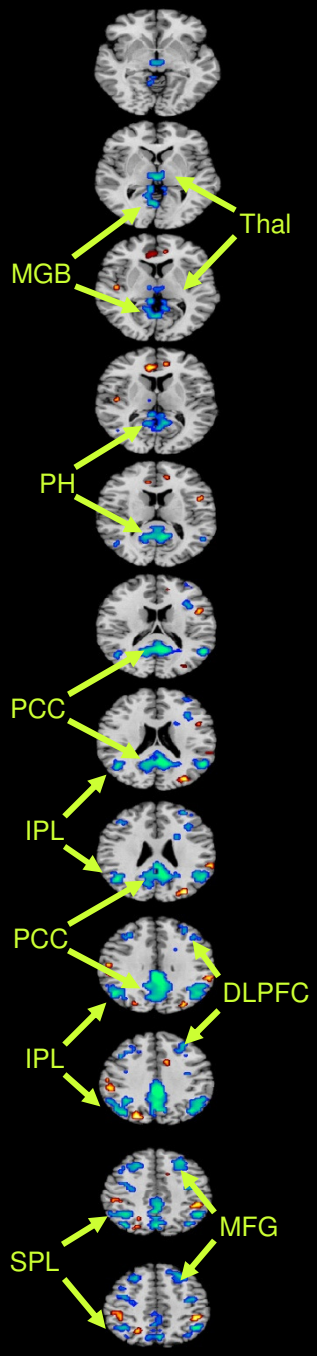
SM eFigure 4
Panel 2

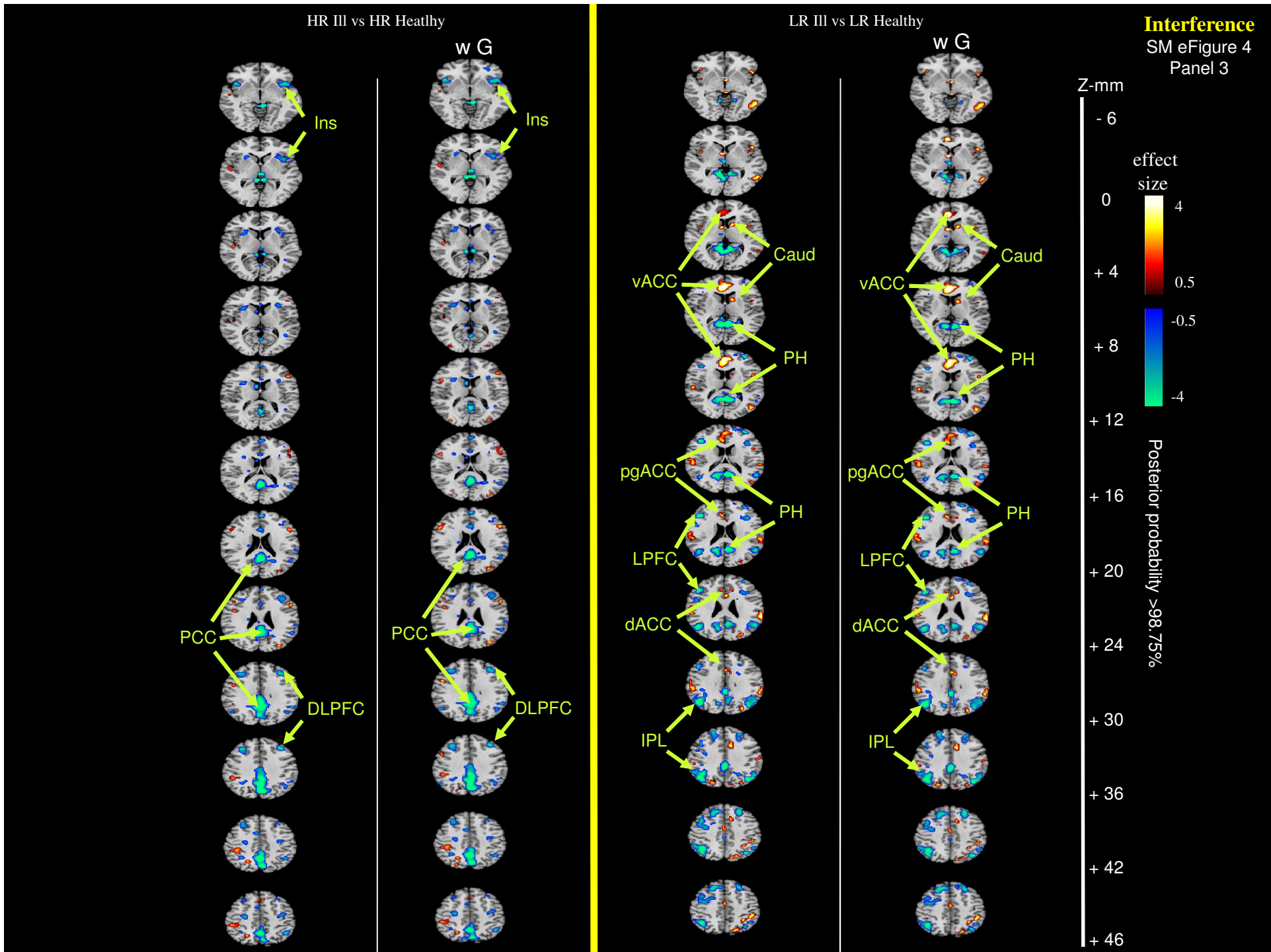
Z-mm

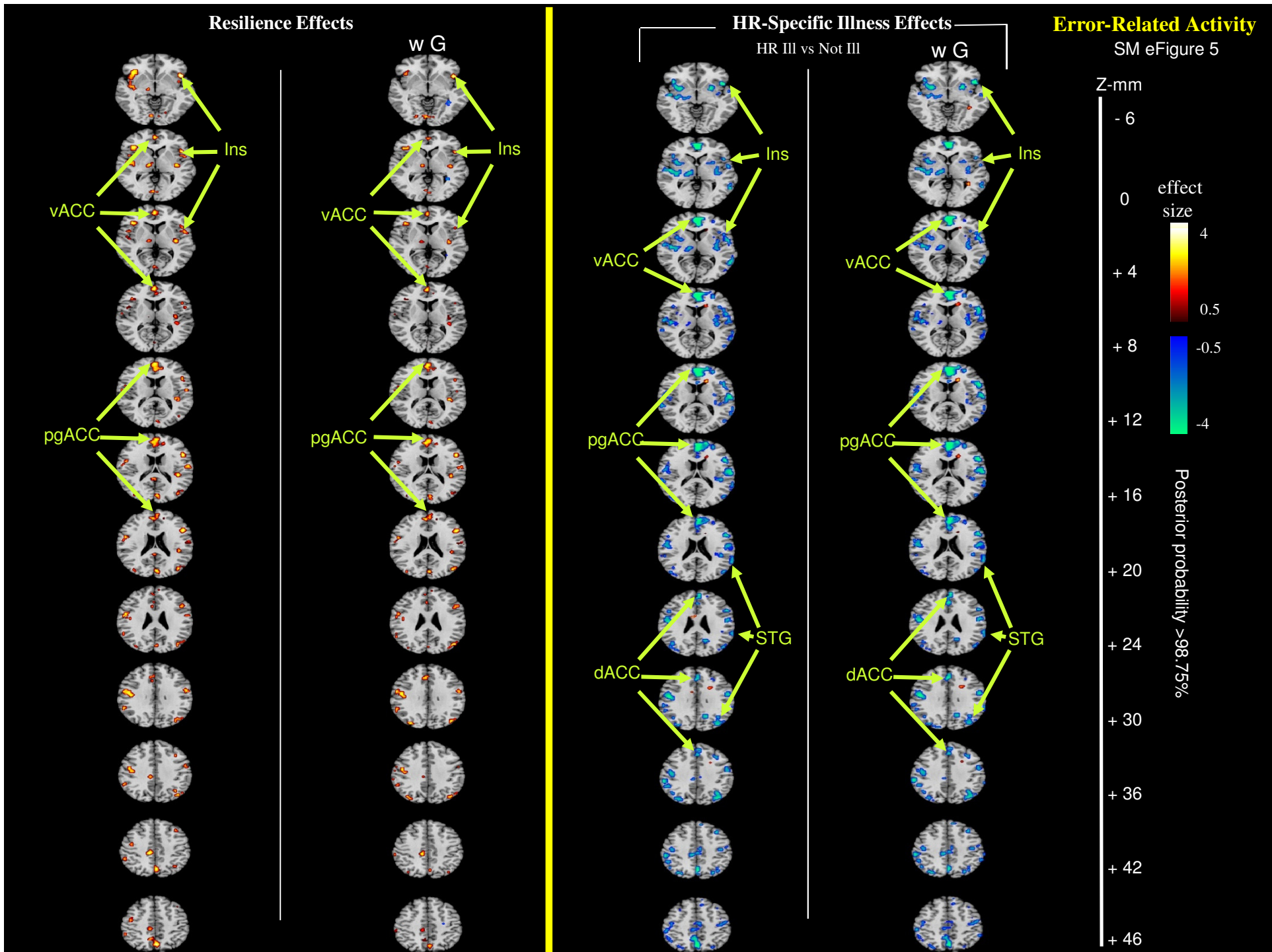
-6
+4
+8
+12
+16
+20
+24
+30
+36
+42
+46



Posterior probability >98.75%







e5

Findings when Excluding 25 Participants (N=20 HR, N=5 LR)

Taking Psychotropic Medications at the Time of Scan

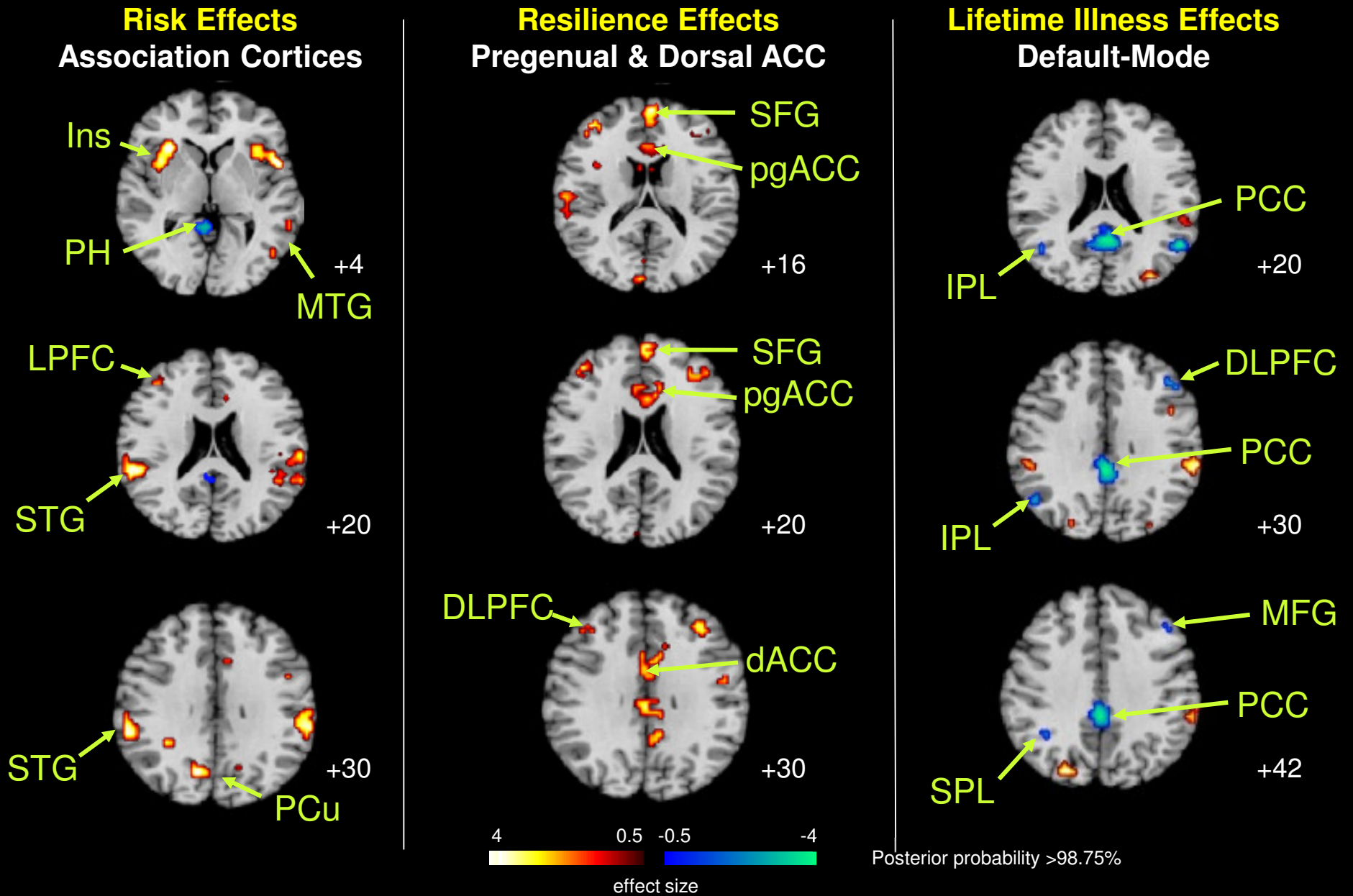
Risk, Resilience, and Illness Effects

Identified Using Regression Analyses

(covarying for age, sex, and interference effects)

Interference-Related Activity

Excluding 25 Participants Taking Psychotropic Medications



e6

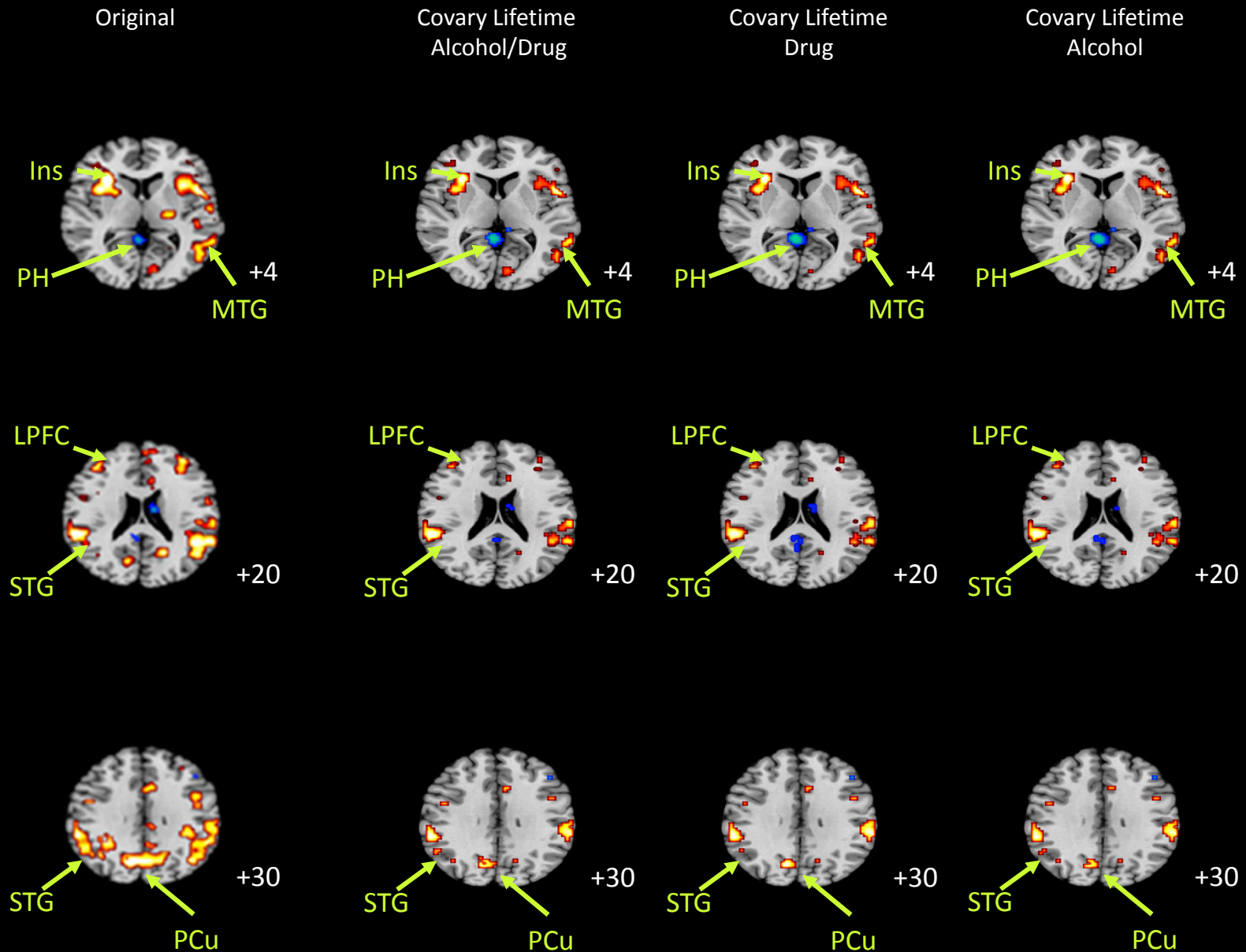
**Findings when Excluding N=34 (HR=21, LR=13) Participants Who Had
a Lifetime History of Abuse or Dependence
on Either Drugs (N=23; HR 17, LR 6) or Alcohol (N=24; HR 24, LR 8)**

Risk, Resilience, and Illness Effects
Identified Using Regression Analyses
(covarying for age, sex, and interference effects)

Interference-Related Activity

Risk Effects

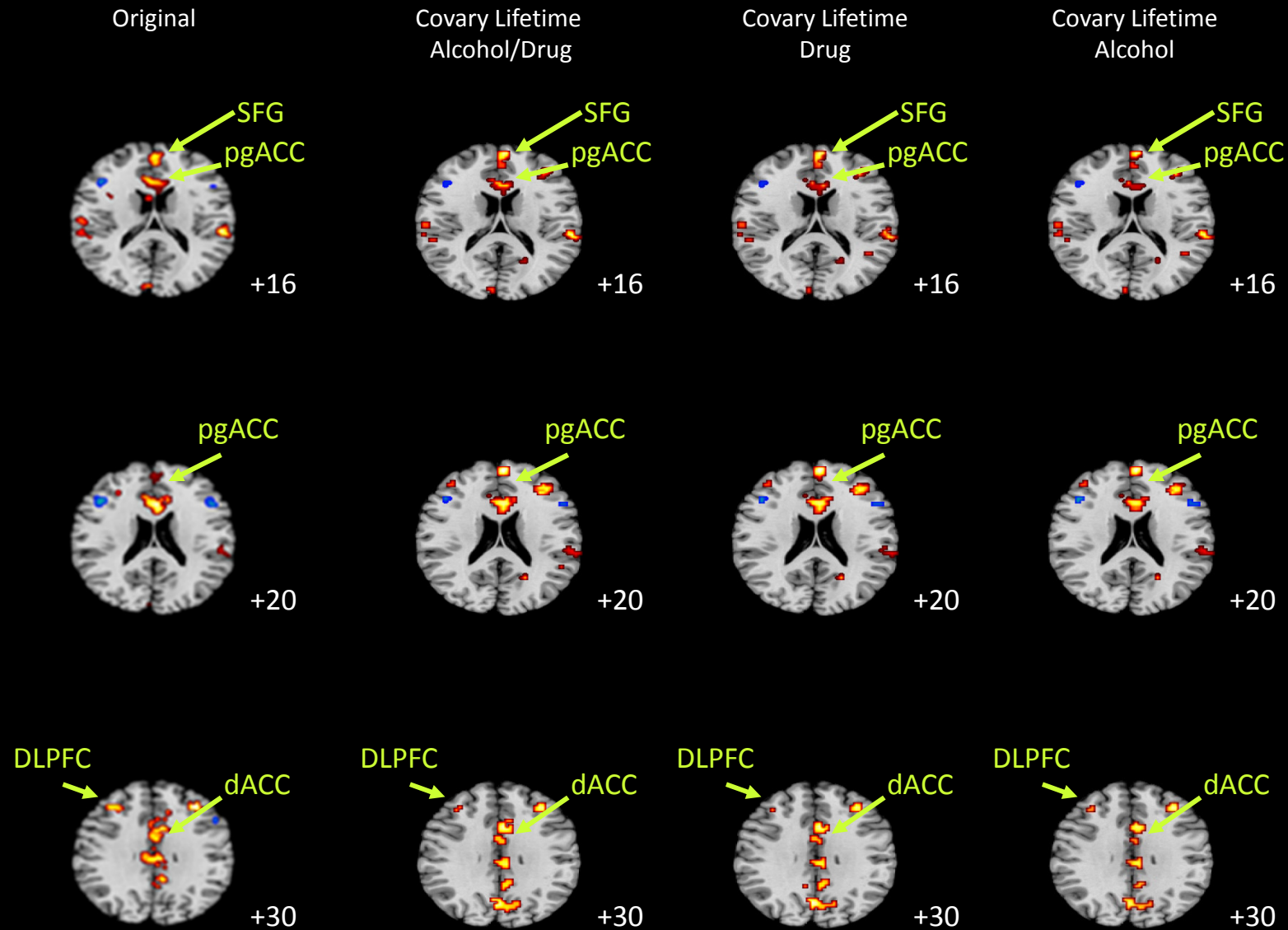
SM eFigure 7
Panel 1



Interference-Related Activity

Resilience Effects

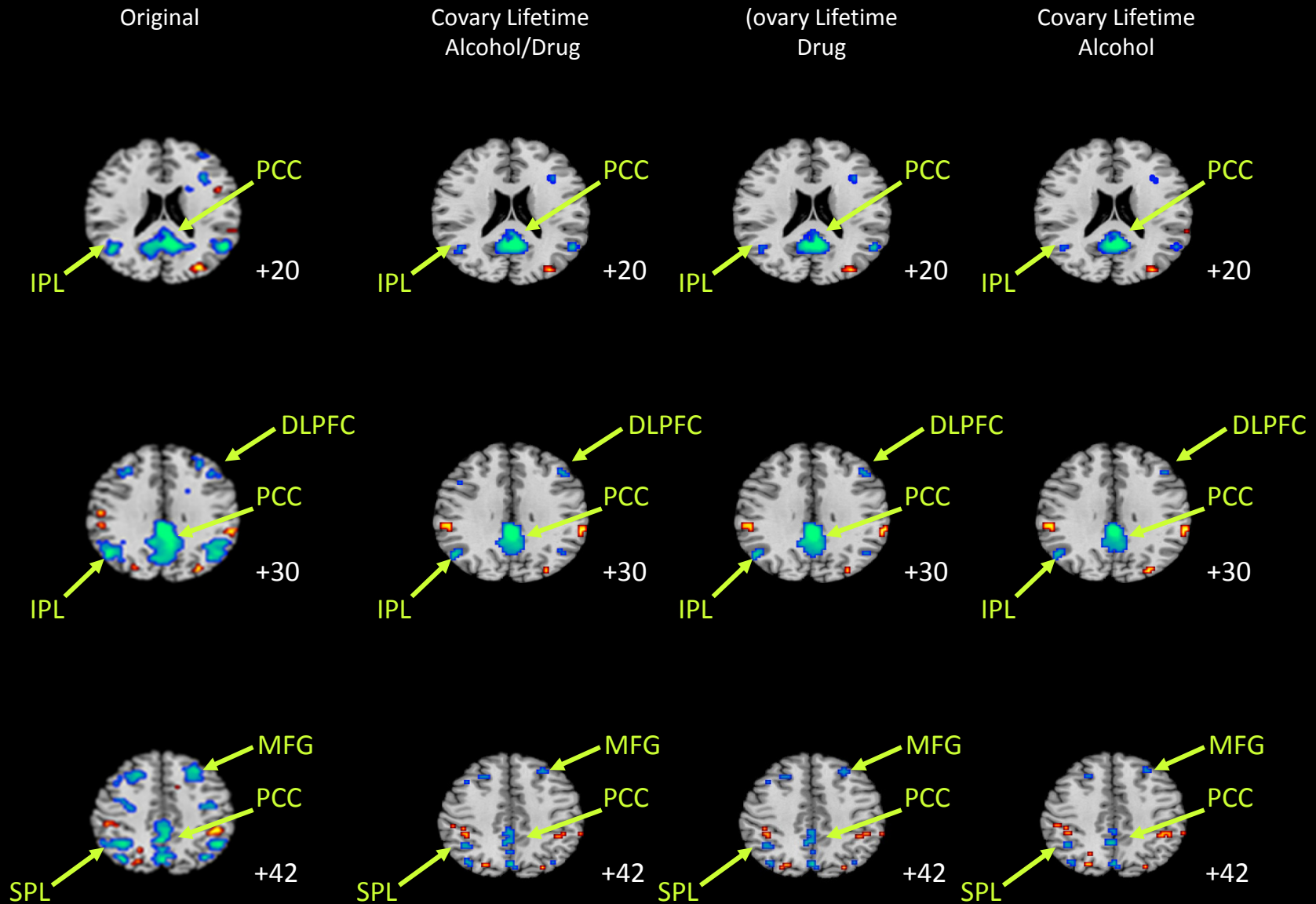
SM eFigure 7
Panel 2



Interference-Related Activity

Lifetime Illness Effects

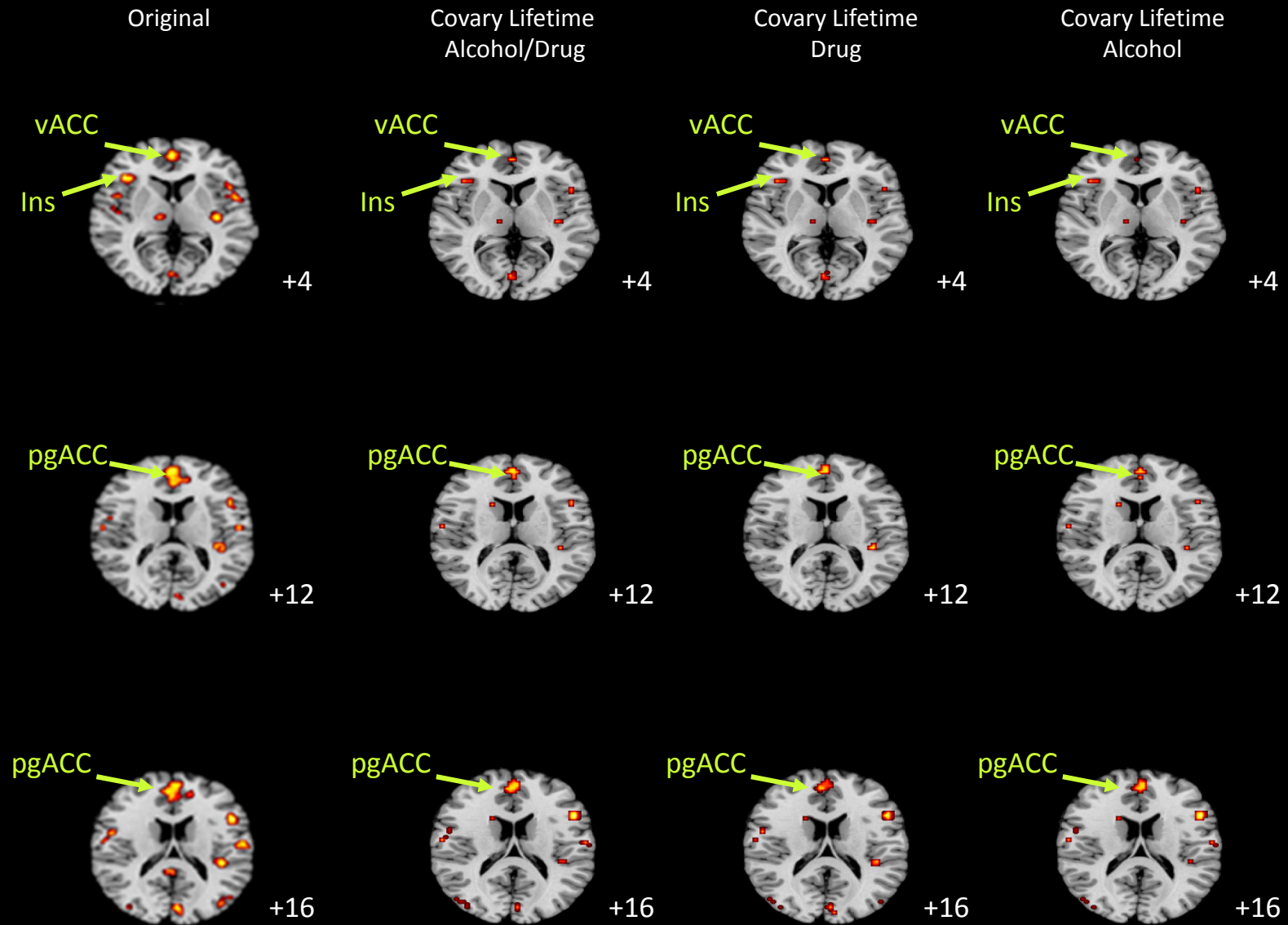
SM eFigure 7
Panel 3



Error-Related Activity

Resilience Effects

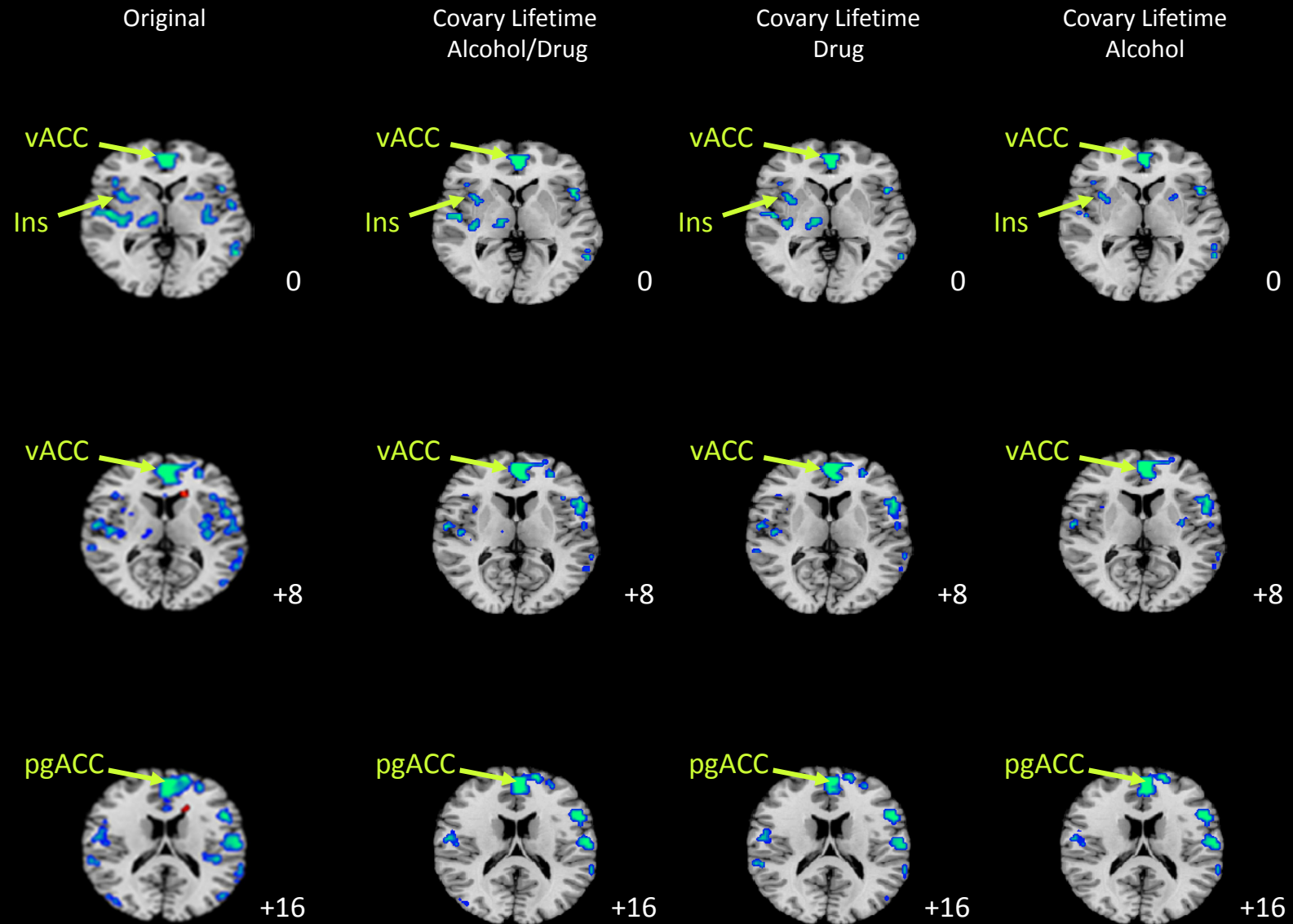
SM eFigure 7
Panel 4



Error-Related Activity

HR Illness Effects

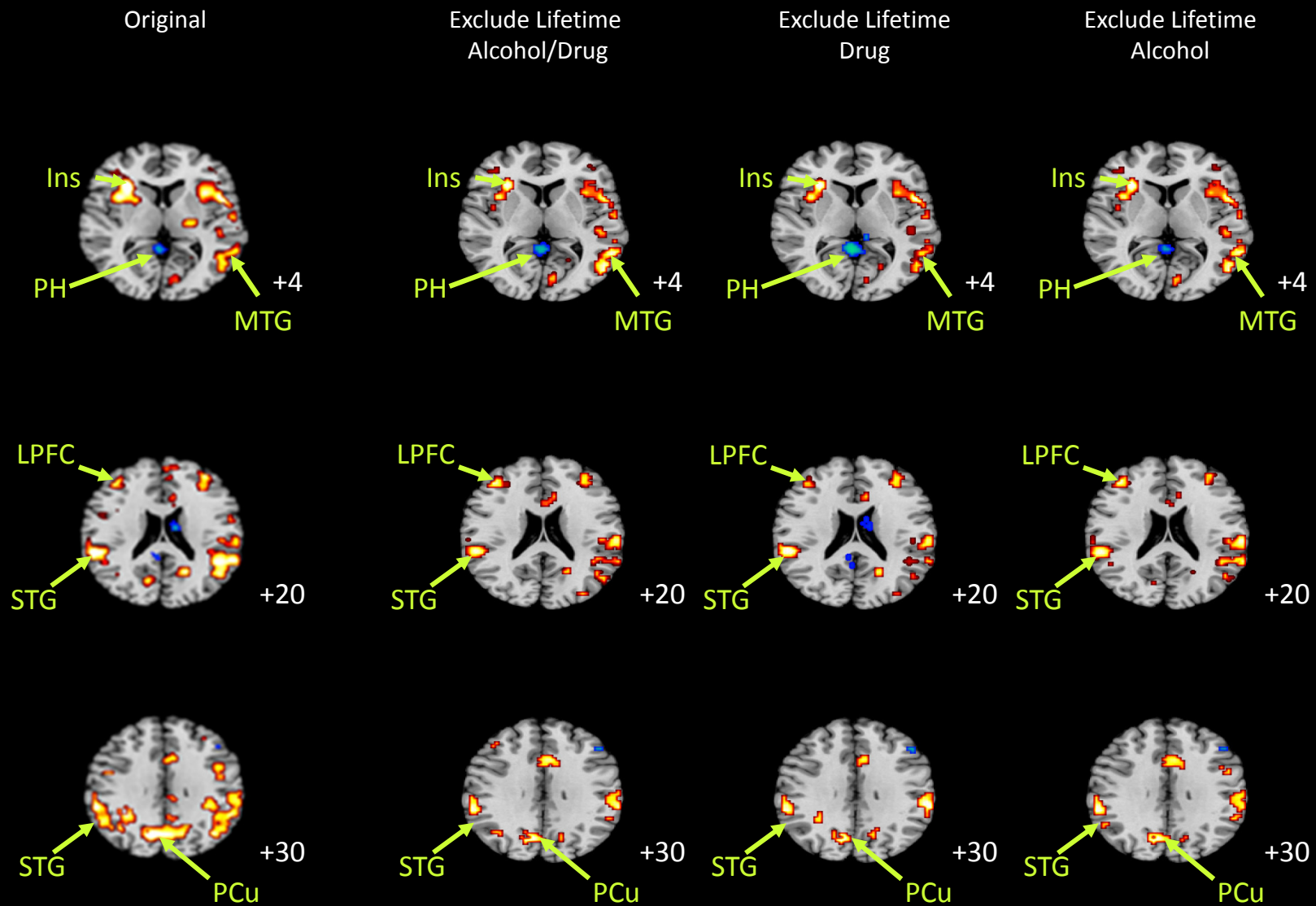
SM eFigure 7
Panel 5



Interference-Related Activity

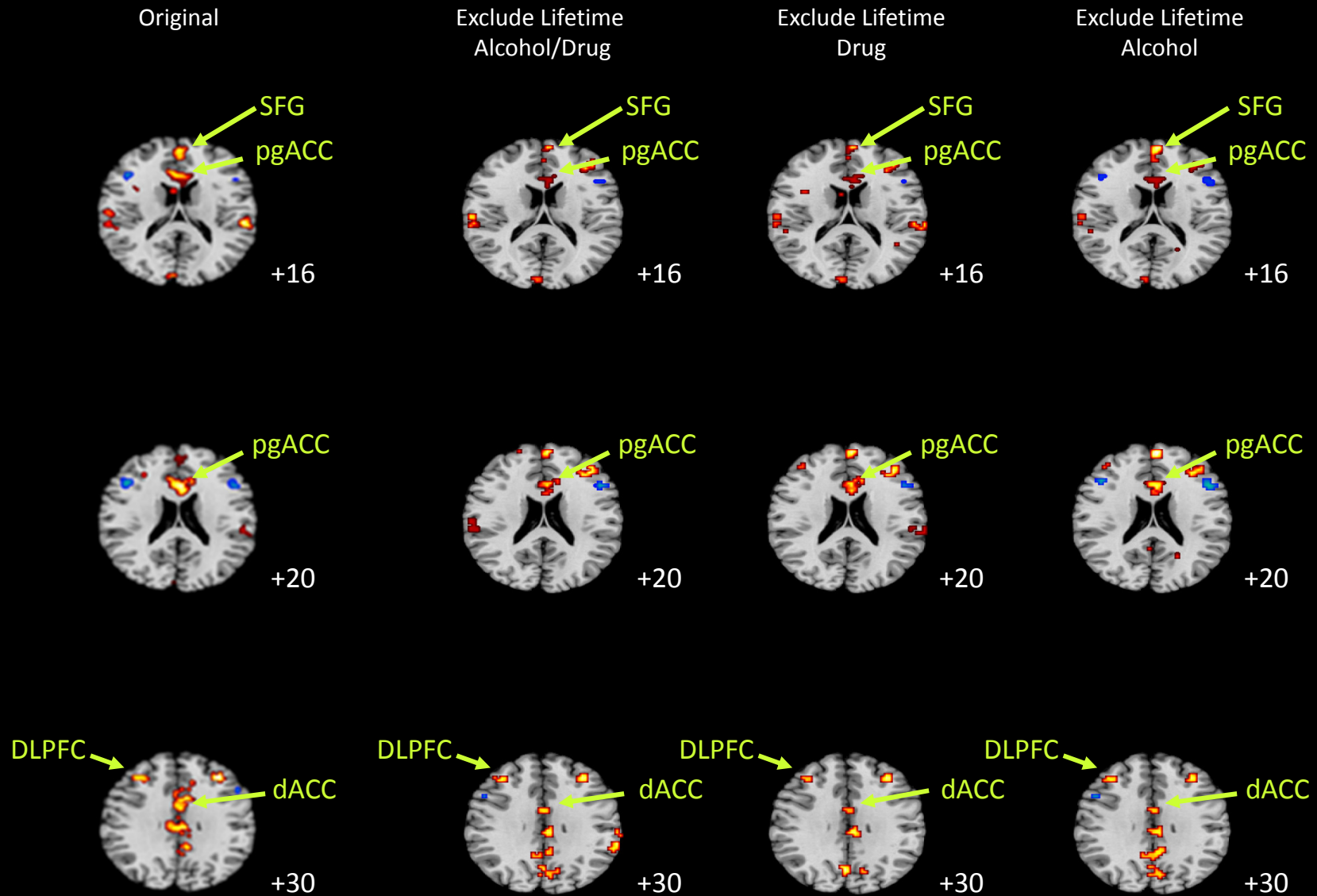
Risk Effects

SM eFigure 7
Panel 6



Interference-Related Activity Resilience Effects

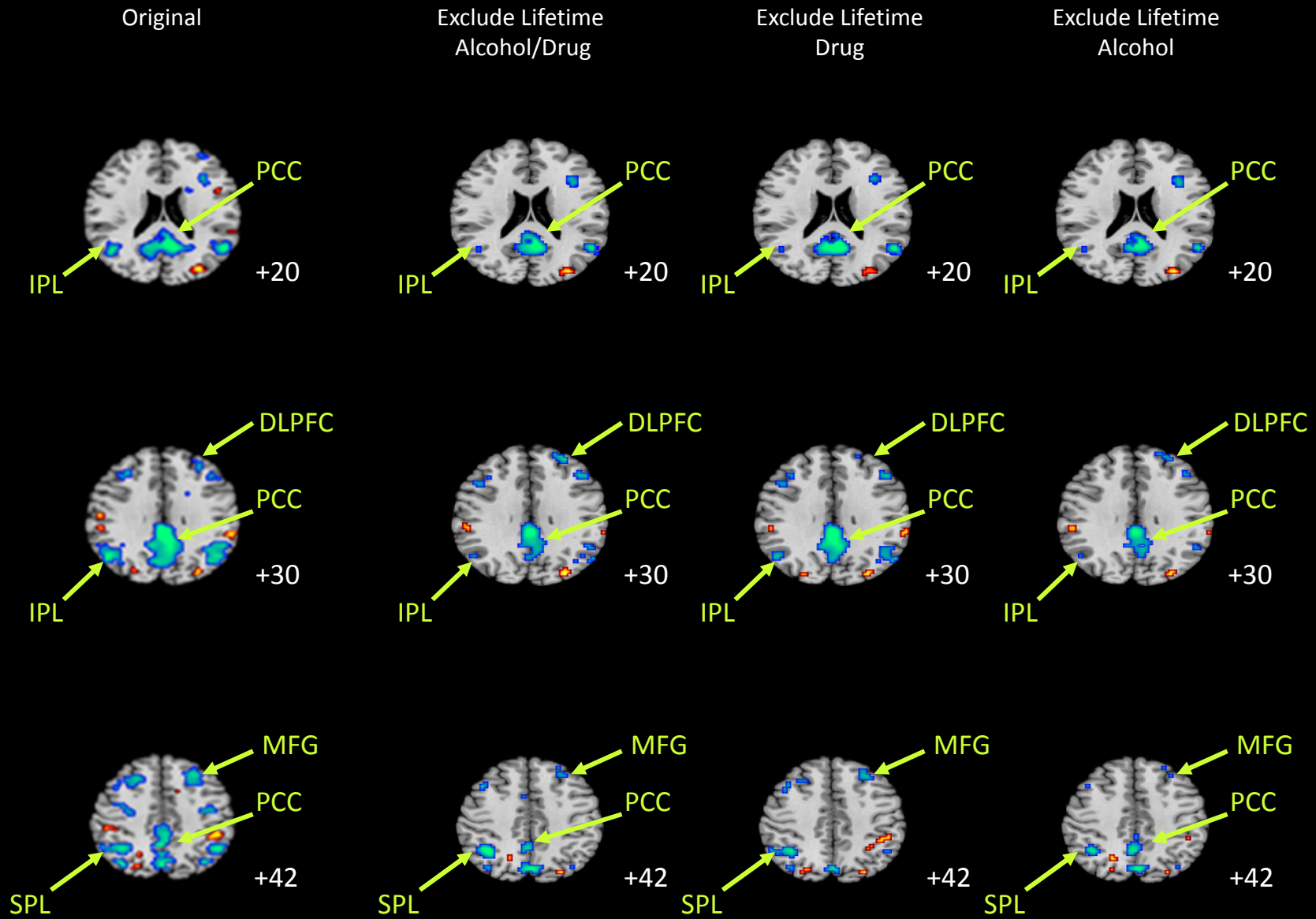
SM eFigure 7
Panel 7



Interference-Related Activity

Lifetime Illness Effects

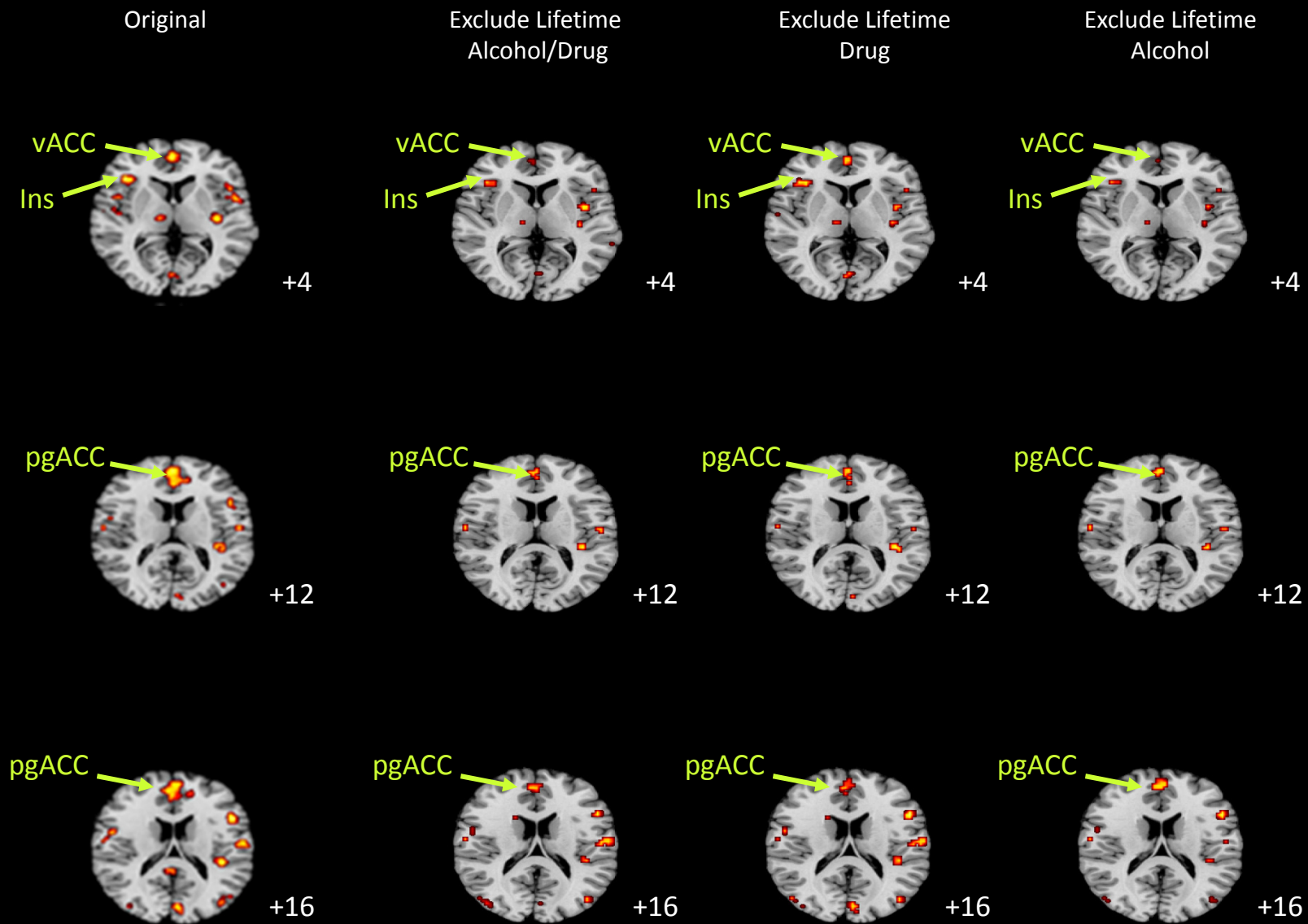
SM eFigure 7
Panel 8



Error-Related Activity

Resilience Effects

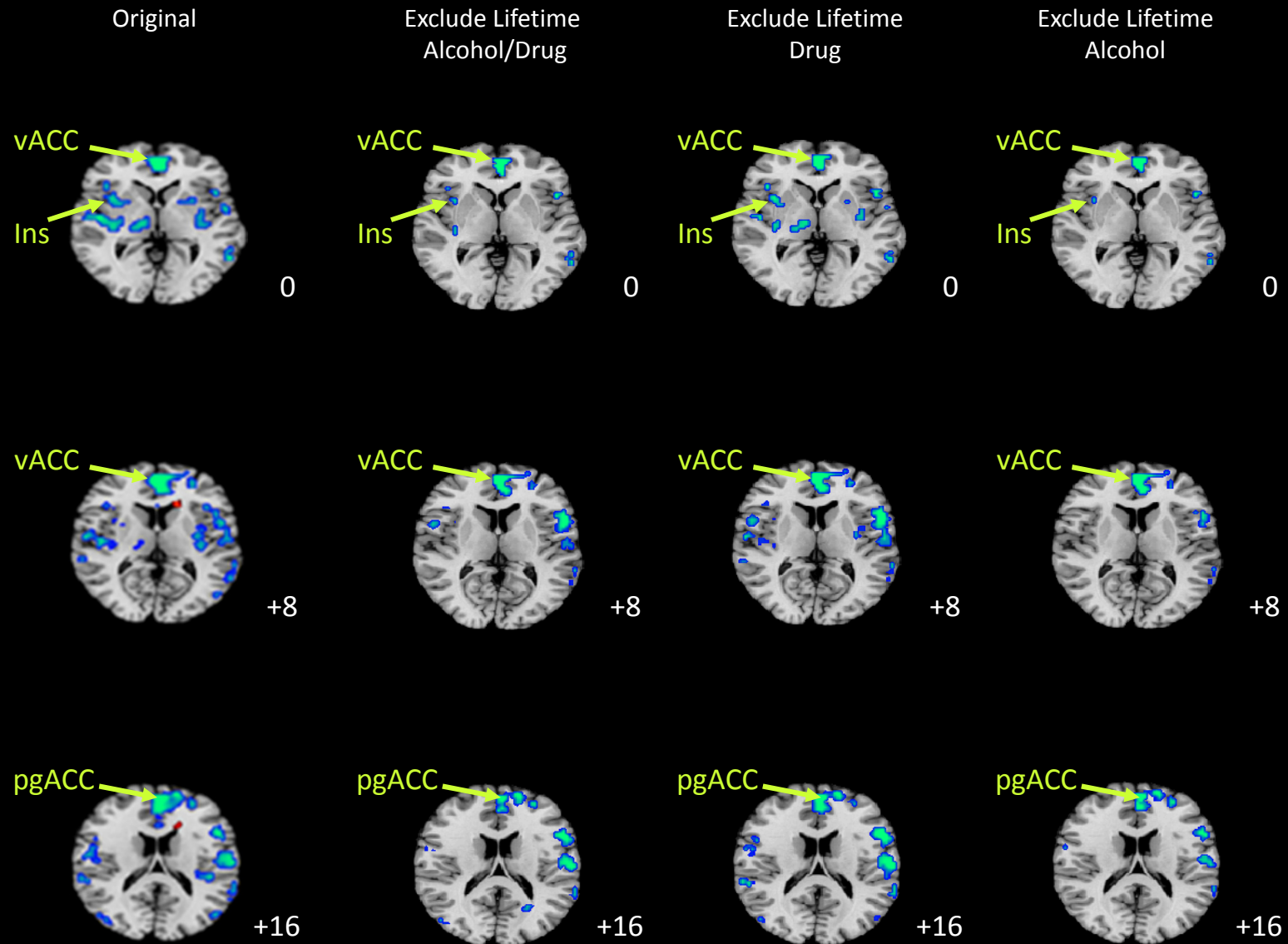
SM eFigure 7
Panel 9



Error-Related Activity

HR Illness Effects

SM eFigure 7
Panel 10



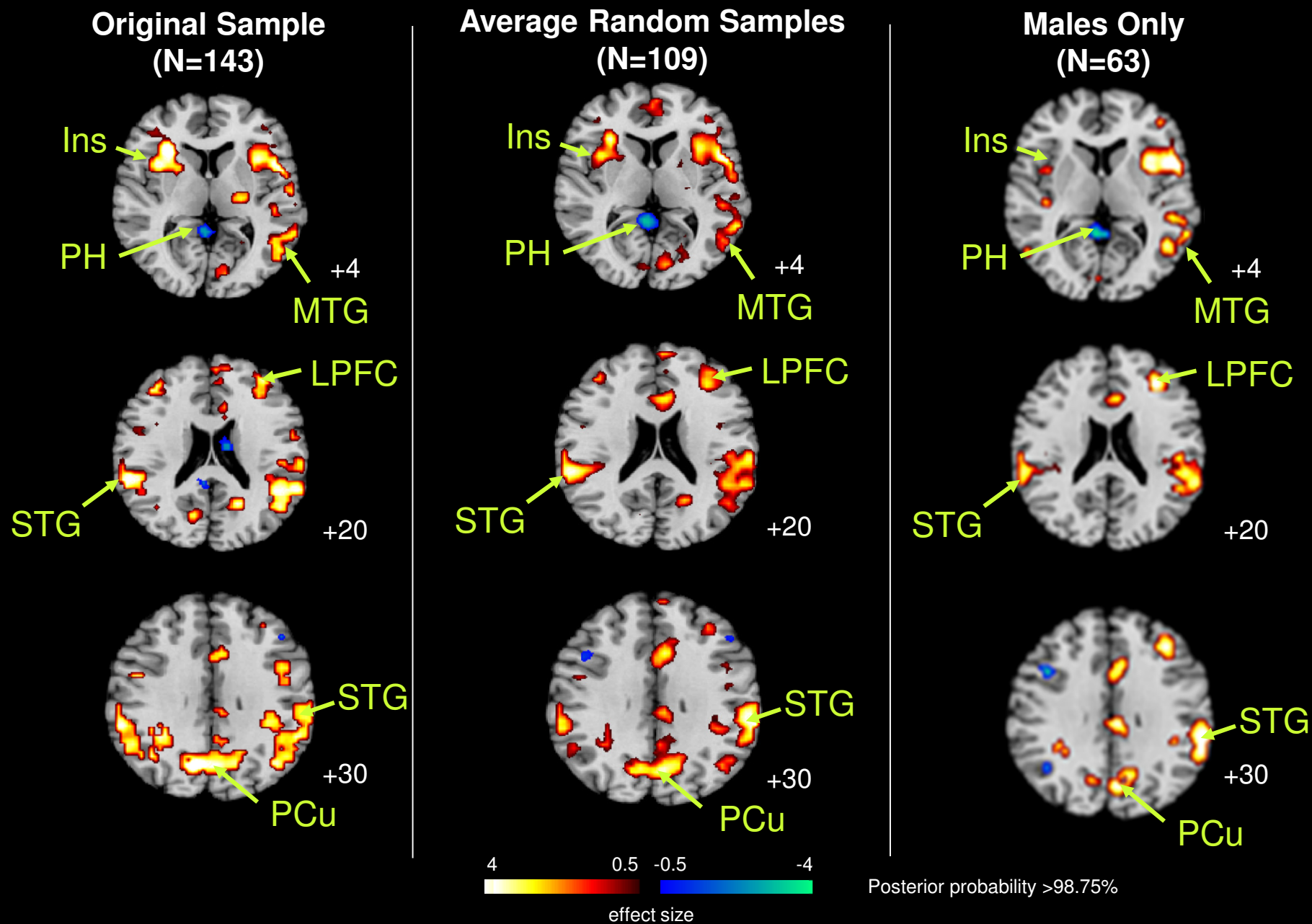
e7

**Average of Activation Maps from 10 Random Samplings of 6 Females with MDD/Anxiety
to Demographically Match 6 Females without MDD/Anxiety,
Yielding 10 Subsamples of the Total Group,
with N=109 (49 HR, 60 LR) in Each Random Sample**

Identification of Risk, Resilience, and Illness Effects
(covarying for age and interference effects)

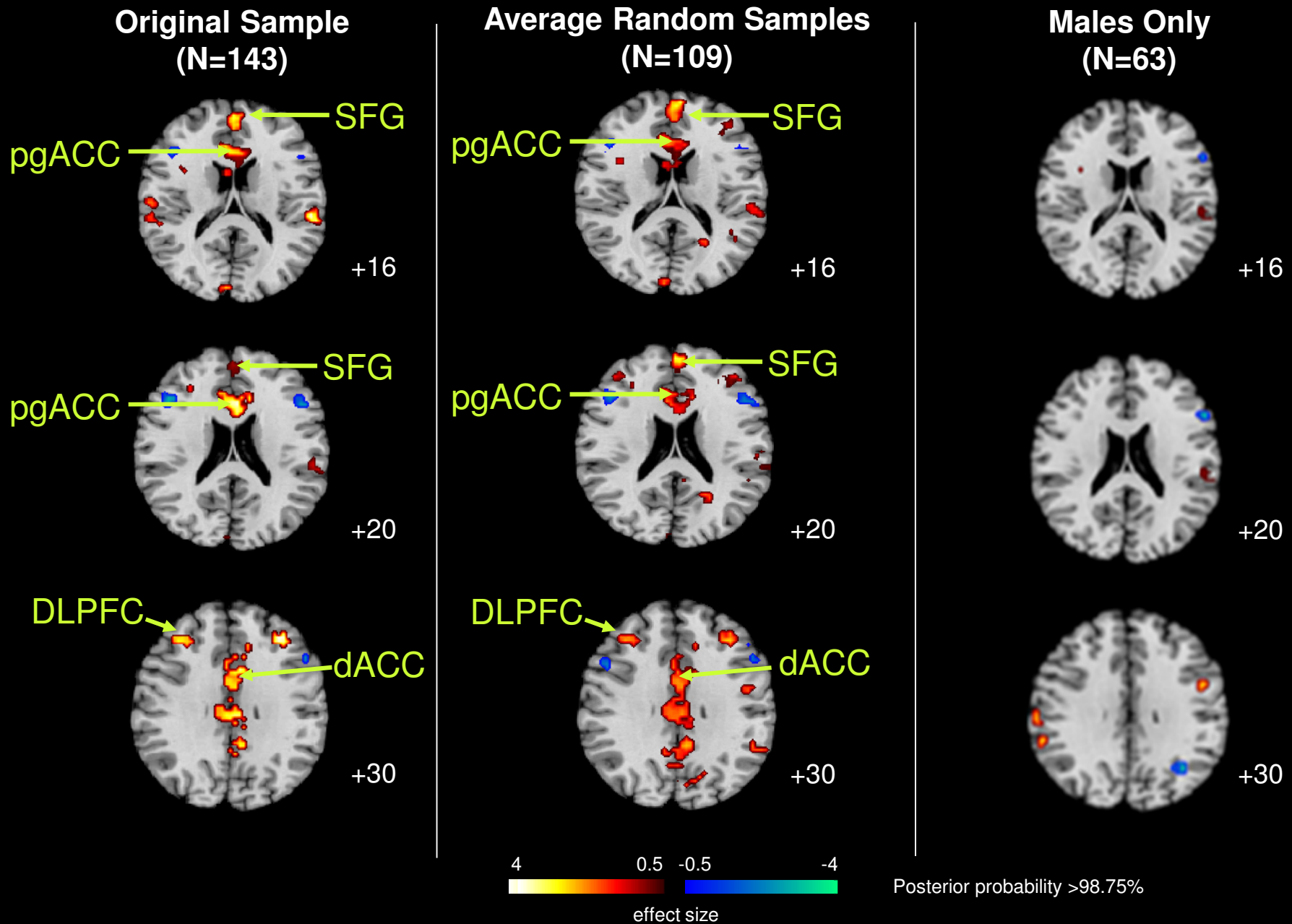
Interference-Related Activity: Risk Effects

SM eFigure 8
Panel 1



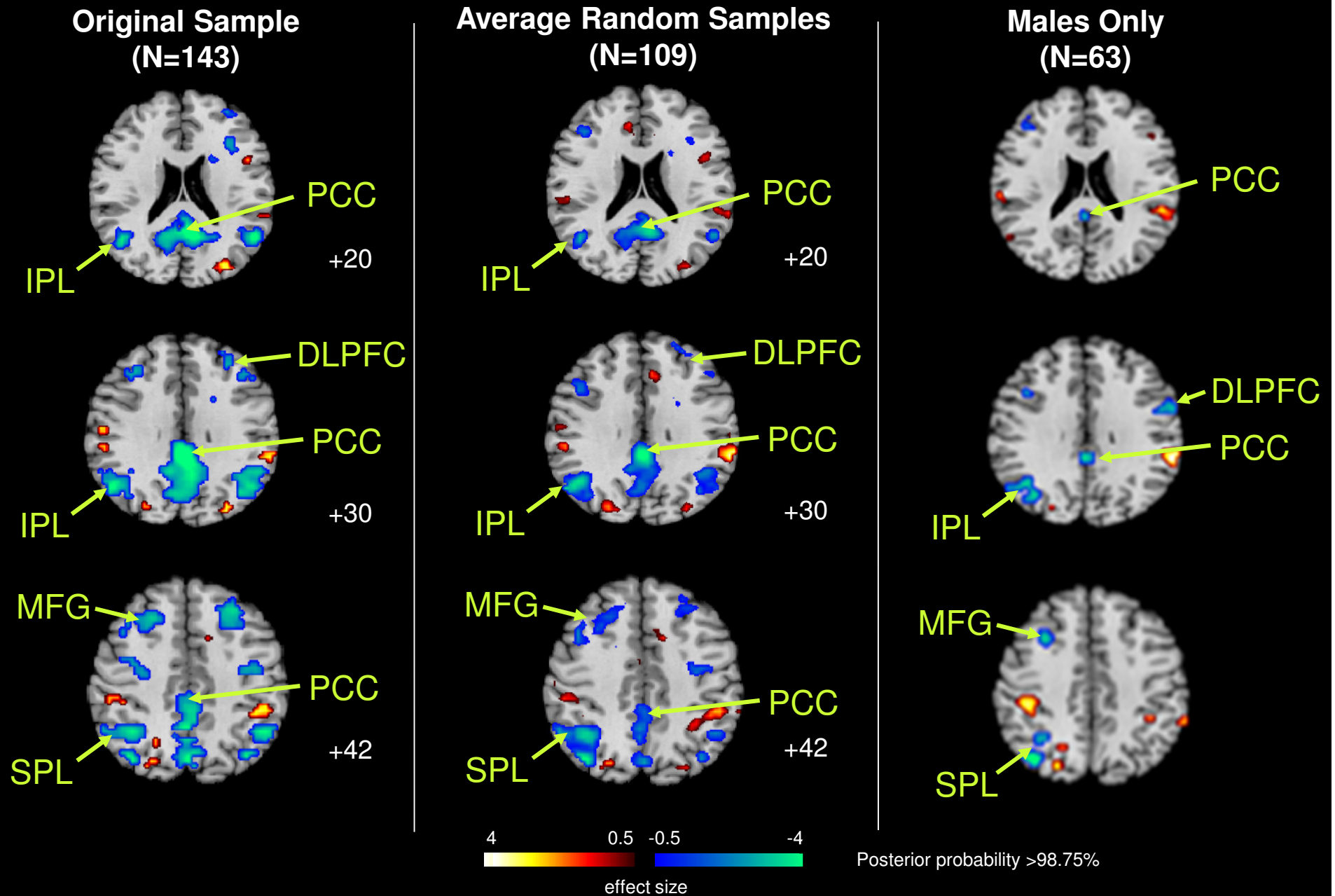
Interference-Related Activity: Resilience Effects

SM eFigure 8
Panel 2



Interference-Related Activity: Lifetime Illness Effects

SM eFigure 8
Panel 3



e8

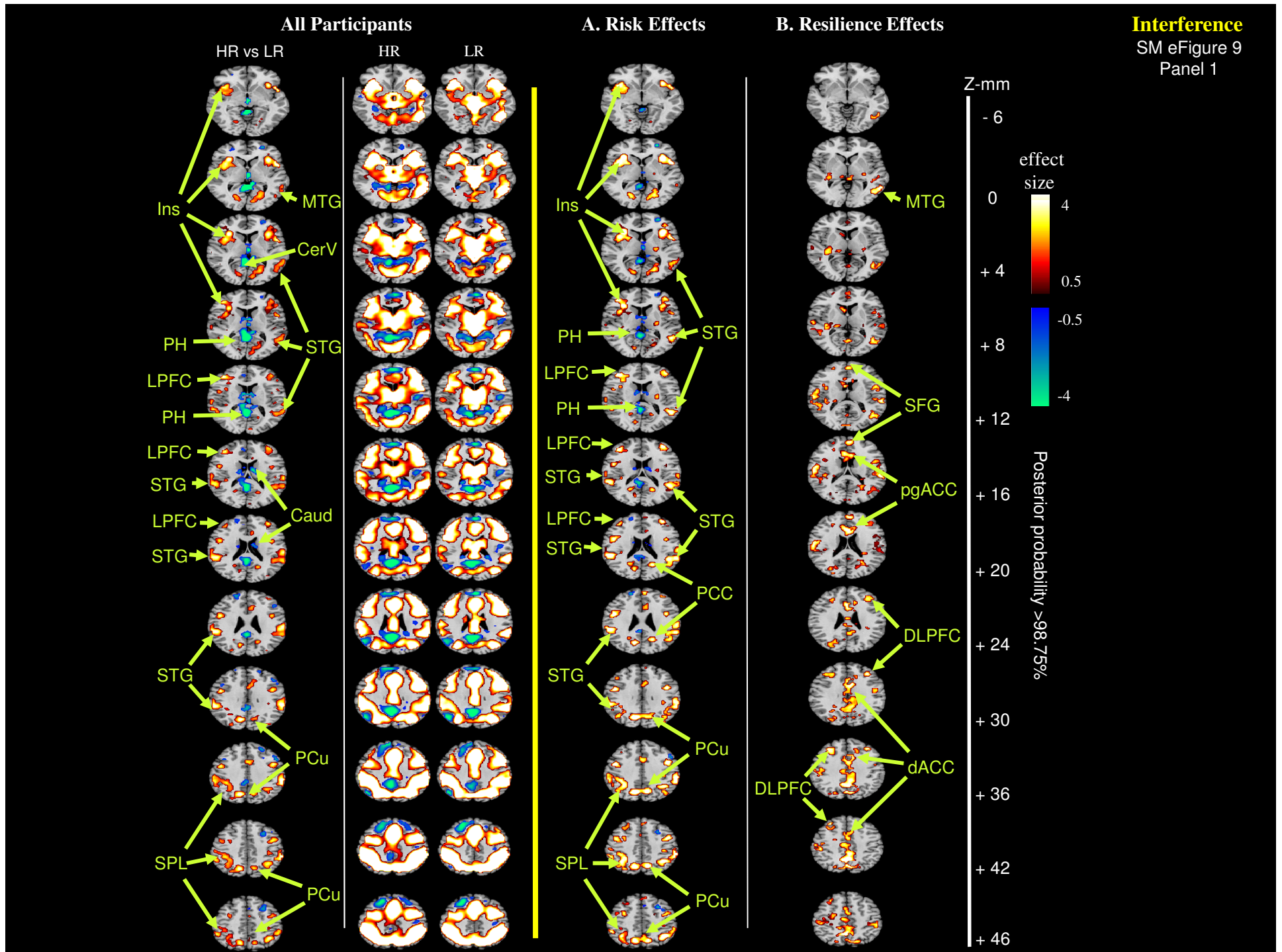
Findings when Including Only Participants 25 Years of Age or Older

(N=84; 58 HR, 26 LR)

Risk, Resilience, and Illness Effects

Identified Using Regression Analyses

(covarying for age, sex, and interference effects)



C. Lifetime Illness Effects

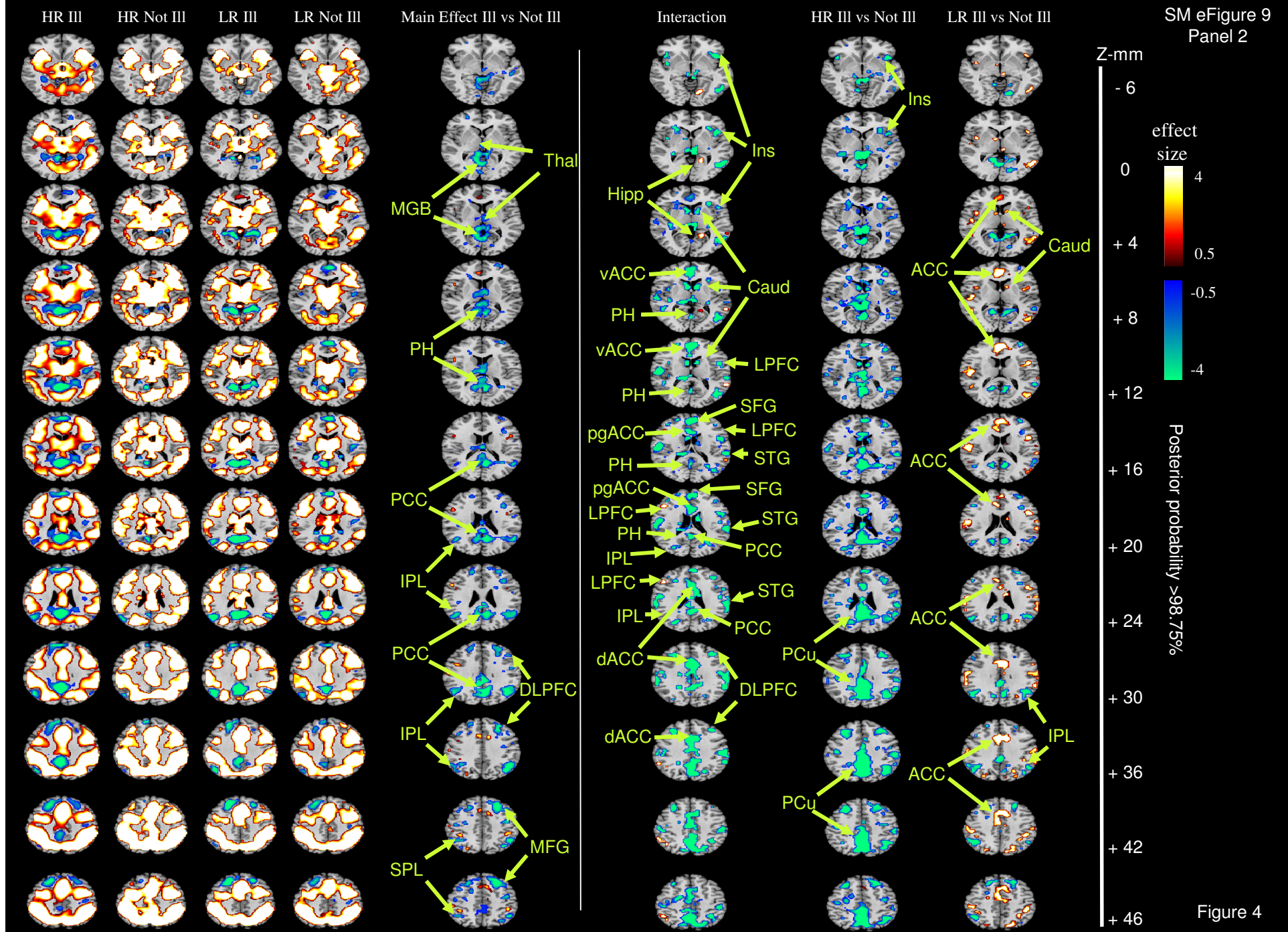


Figure 4

Resilience Effects

HR Not III LR Not III

HR-Specific Illness Effects

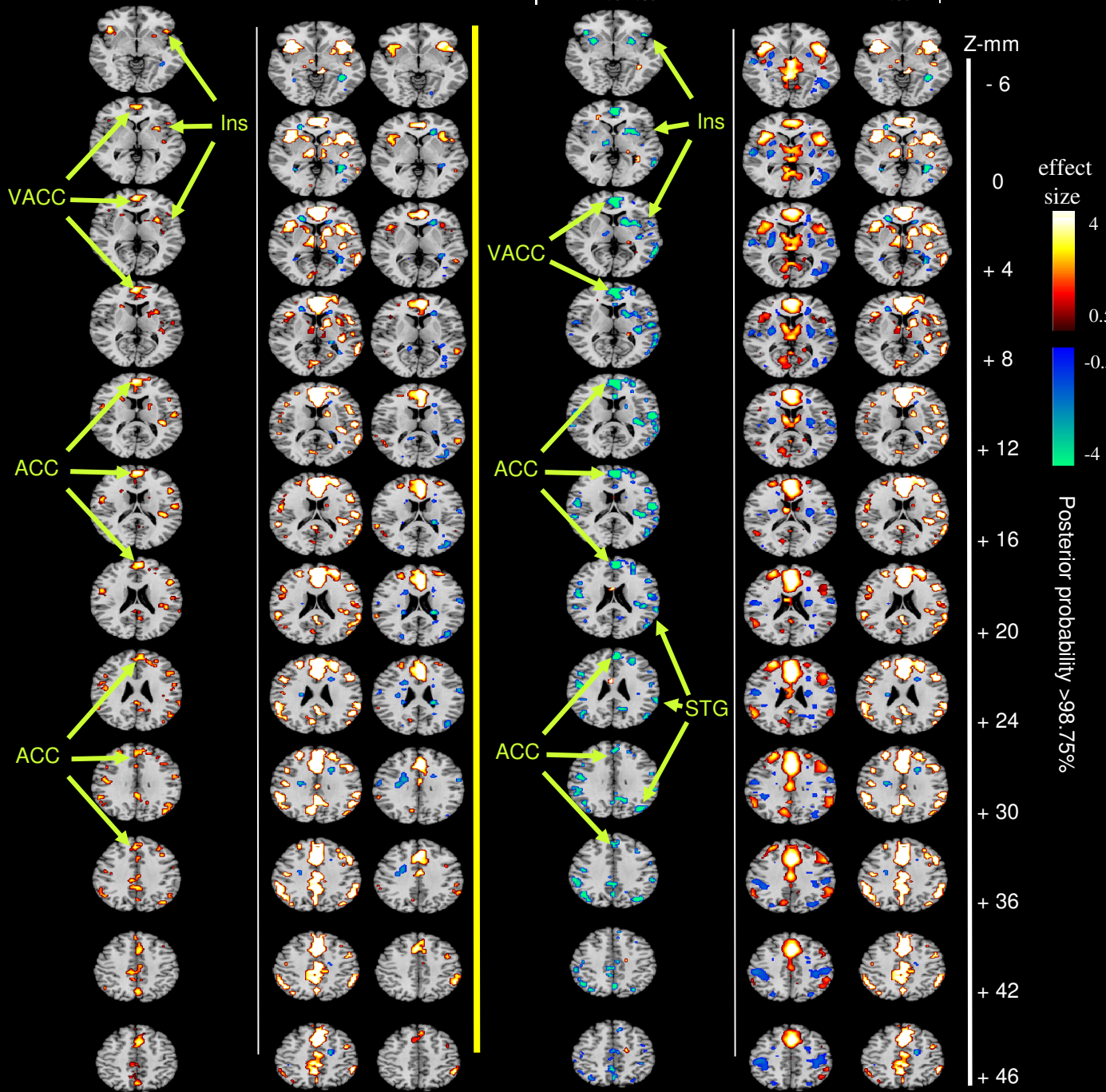
HR III vs Not III

HR III

HR Not III

Error-Related Activity

SM eFigure 10



e9

**Interference-Related Activity without Covarying for
Generation (G2 or G3) or the Genealogical Index of Familiarity (GIF)**

(N=143, 83 HR, 60 LR)

**Risk, Resilience, and Illness Effects
Covarying for Age, Sex, and Interference Scores**

Interference-Related Activity Covarying for Age, Sex, and Interference

SM eFigure 11

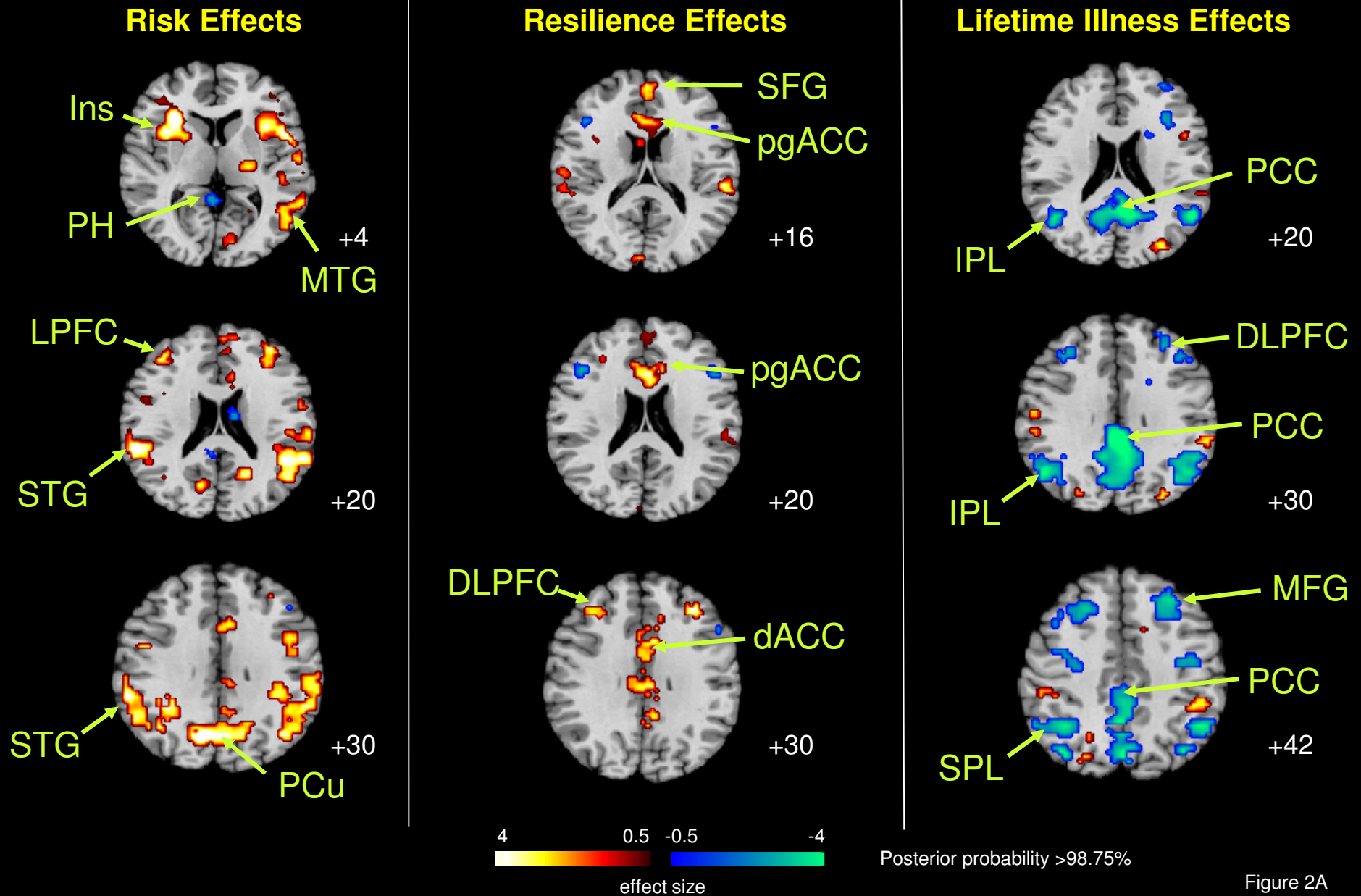


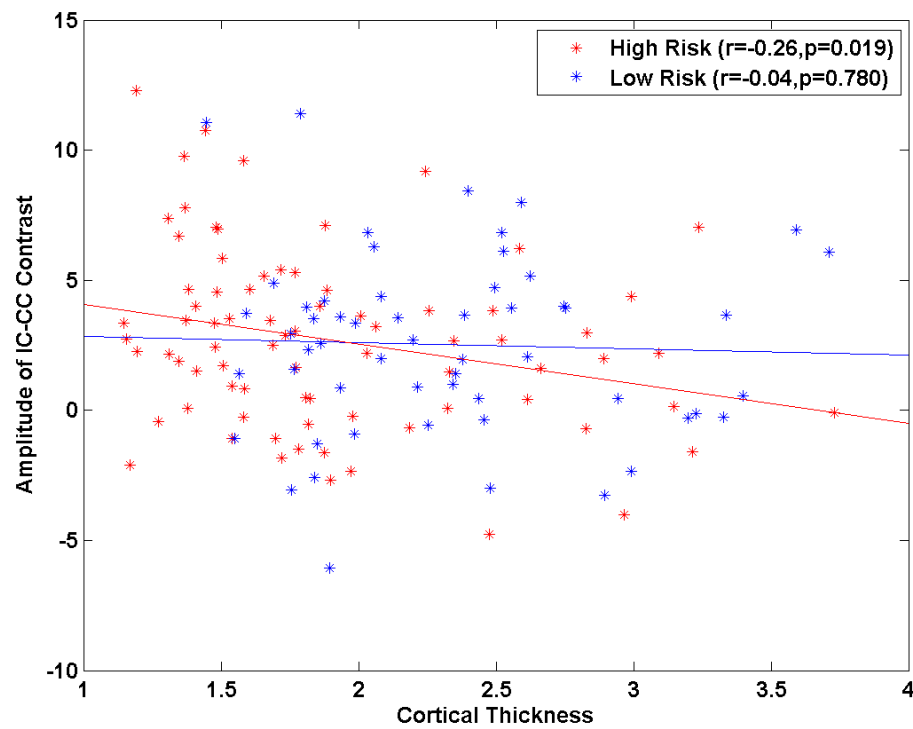
Figure 2A

e10

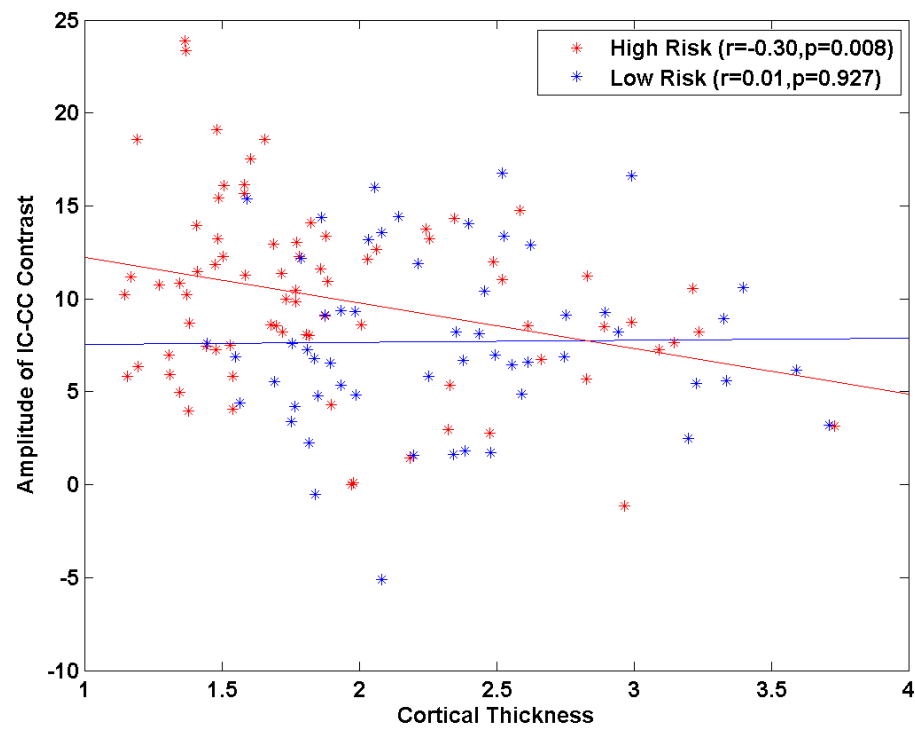
**Correlation of Activation in the Risk Effects Map
with a Measure of Right Hemisphere Cortical Thickness**

N=134 (78 HR, 56 LR) participants who had both functional and anatomical measures

Lateral Prefrontal Cortex



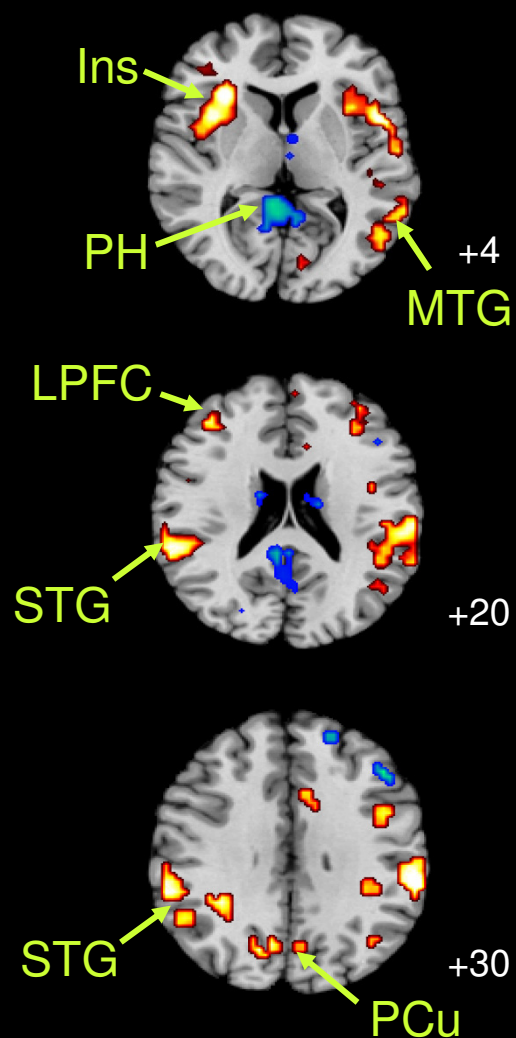
Insula



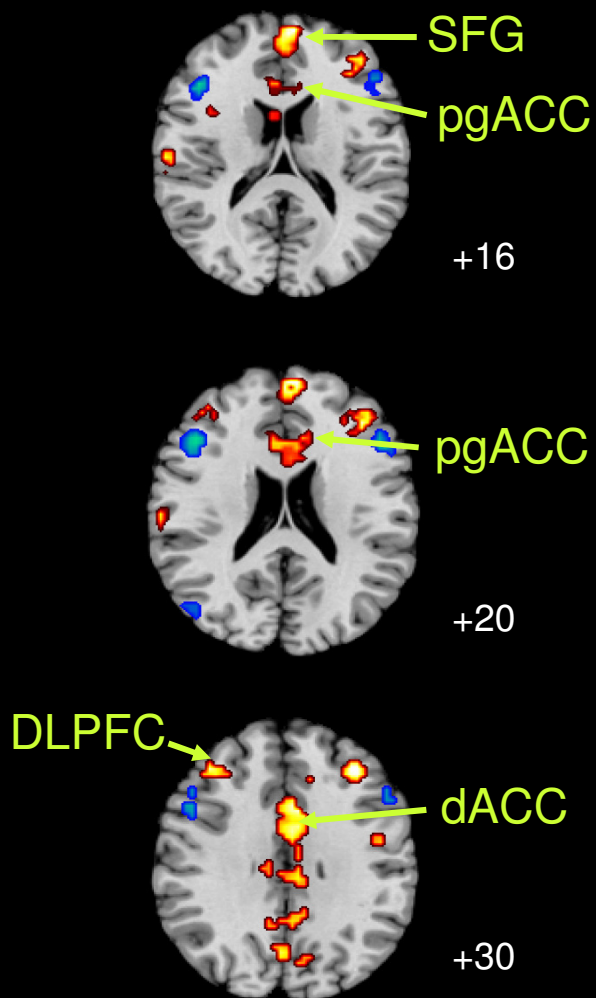
Interference-Related Activity

Covarying for Right Hemisphere Cortical Thickness, Age, Sex, and Interference
 N=134 (78 HR, 56 LR)

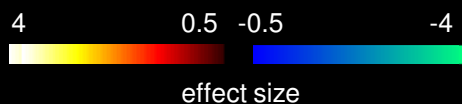
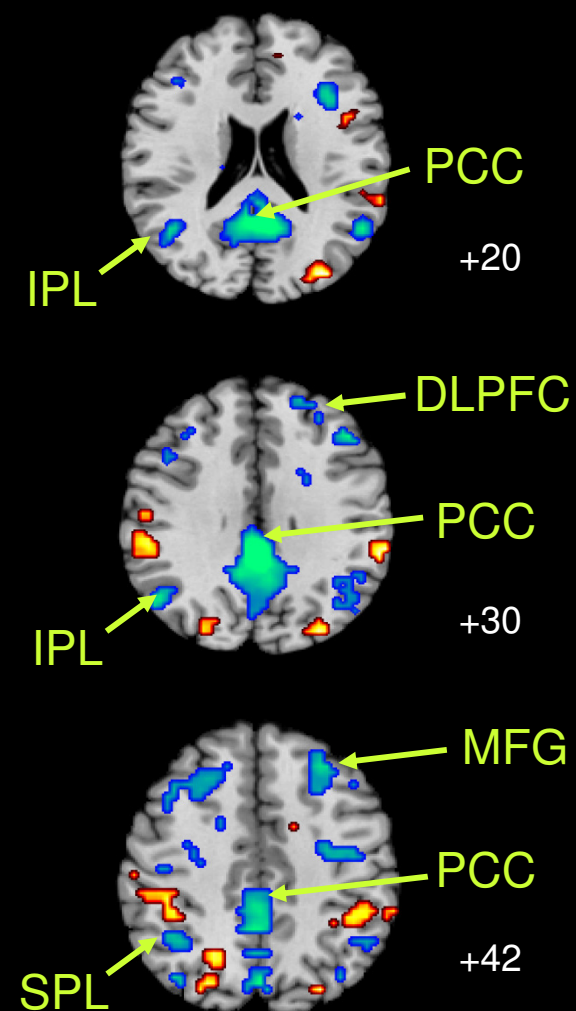
Risk Effects



Resilience Effects



Lifetime Illness Effects



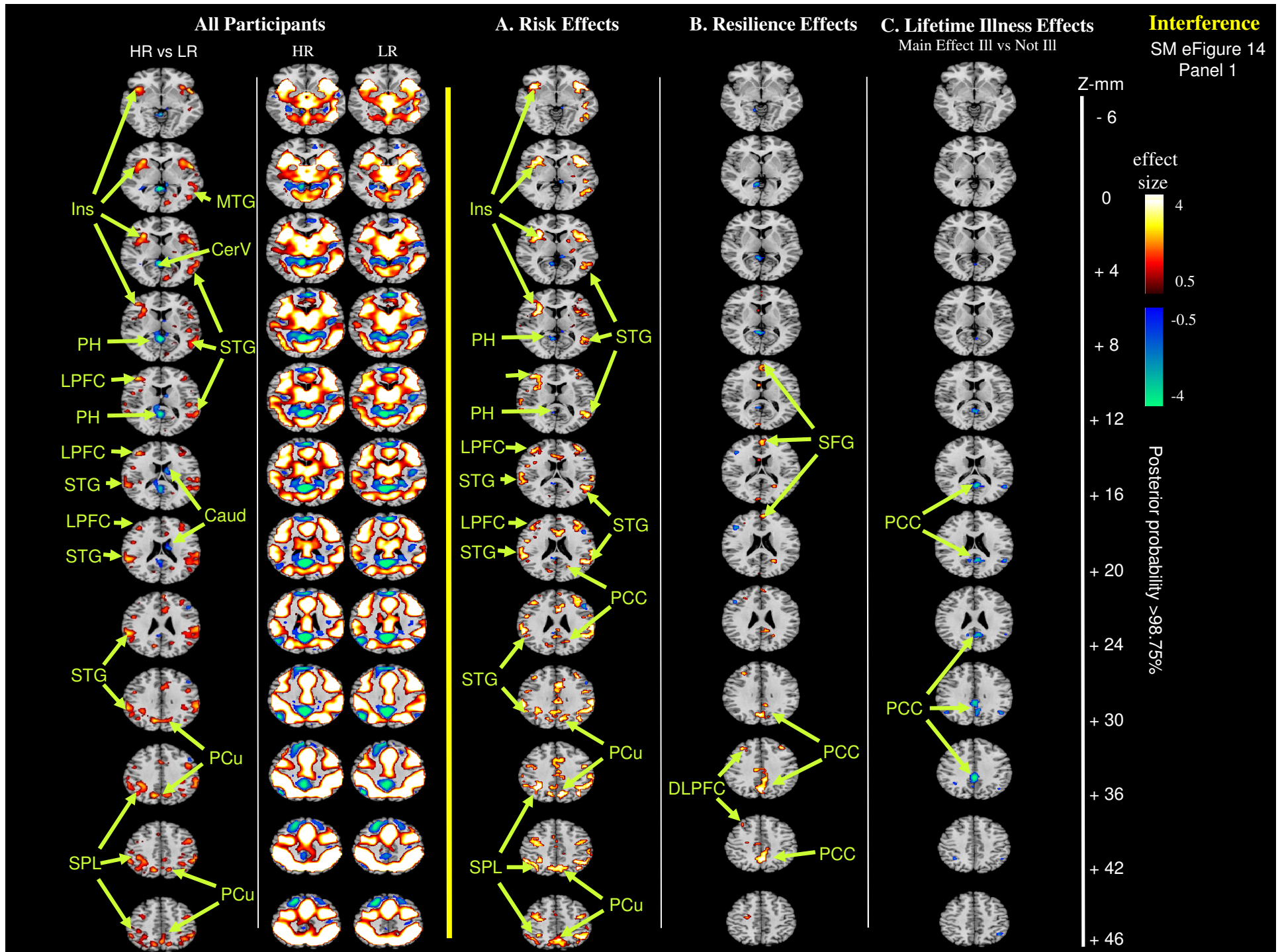
Posterior probability >98.75%

e11

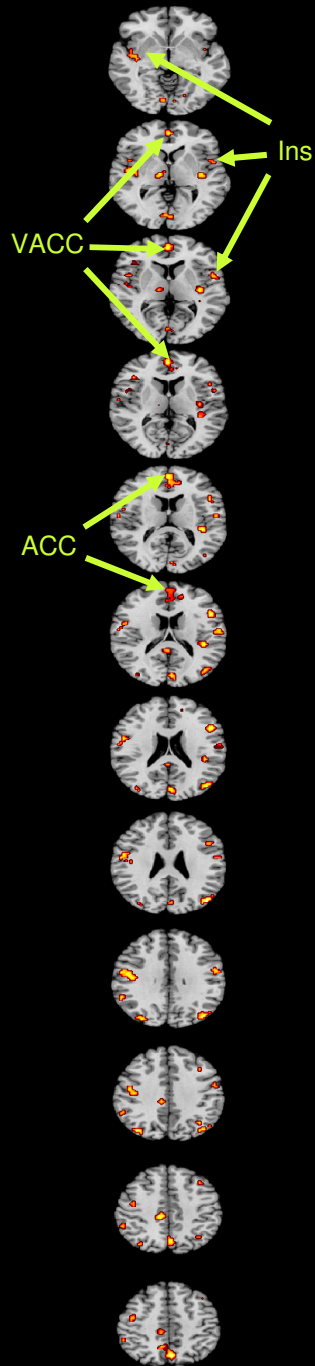
Logical Conjunction Analyses

Identification of Risk, Resilience, and Illness Effects

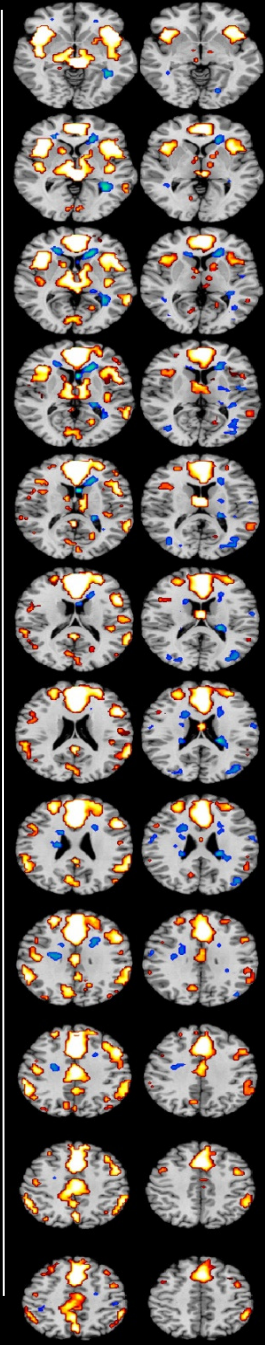
All participants (N=143, 83 HR, 60 LR)



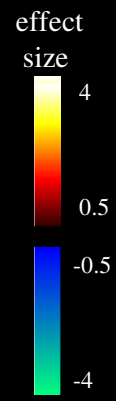
Resilience Effects



HR Not III LR Not III



Z-mm



Posterior probability >98.75%

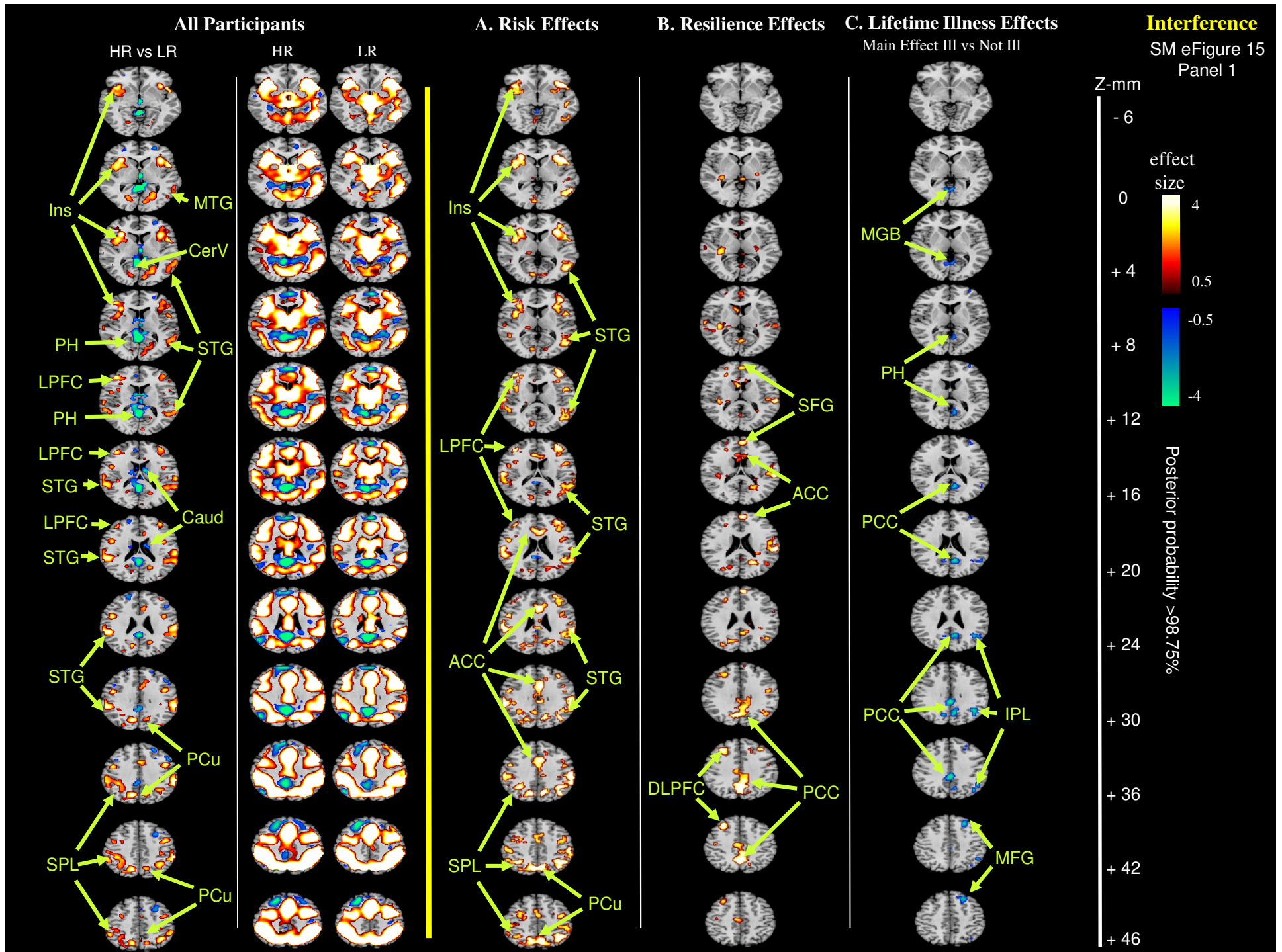
Error-Related Activity

SM eFigure 14
Panel 2

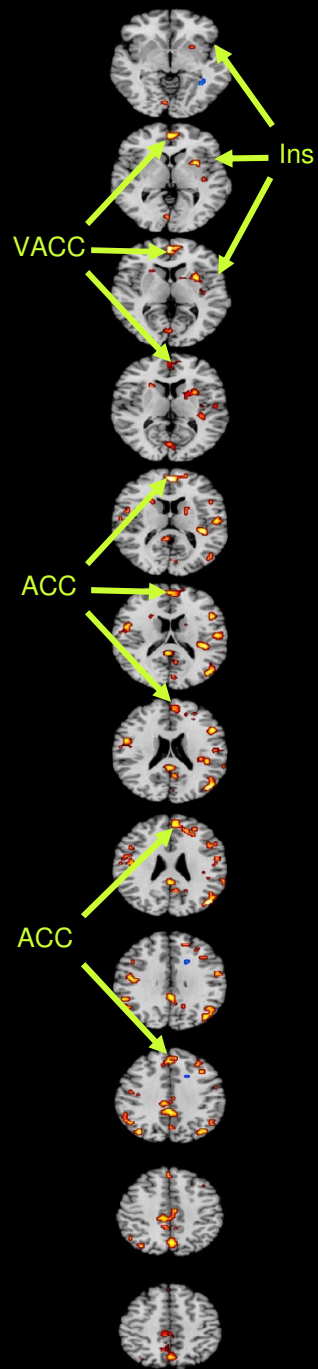
Logical Conjunction Analyses

(for Participants 25 Years or Older -- N=84; 58 HR, 26 LR)

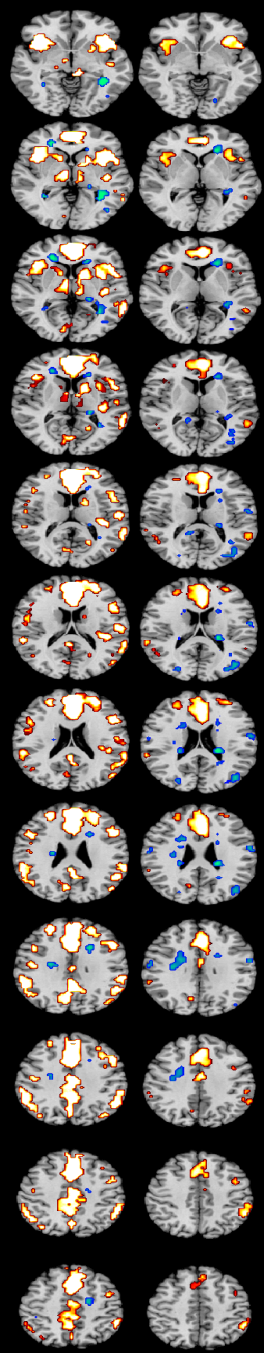
Identification of Risk, Resilience, and Illness Effects



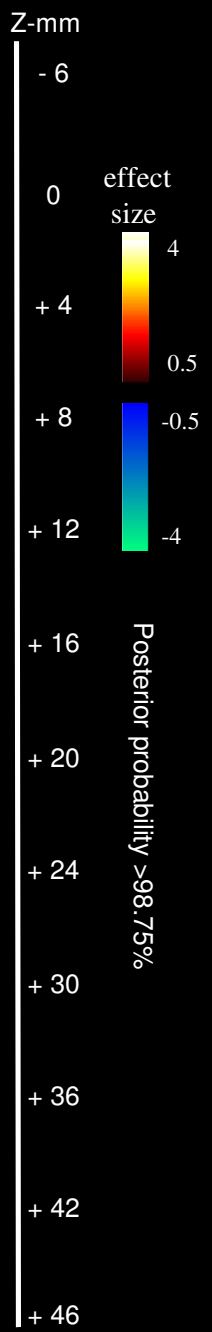
Resilience Effects



HR Not III LR Not III



Error-Related Activity



SM eFigure 15
Panel 2