Supplementary Information (SI) for

Associations Between Alcohol Consumption and Gray and White Matter Volumes in the UK Biobank

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Supplementary Table 1. Regression Results: Volume of Gray Matter (whole brain, normalized)
log intake is measured in standardized log(1 + daily units of alcohol).

	Standard Control Variables		**Extended Control Variables**	
	N: 36,678 (df: 36,585), R^2: 0.514		N: 36,678 (df: 36,578), R^2: 0.520	
Variable	**Regression Coefficient (SE), 95% CI**	**t-stat (p-value)**	**Regression Coefficient (SE), 95% CI**	**t-stat (p-value)**
log intake	-0.1095 (0.0058), CI: [-0.1209,-0.0982]	-19.0 (p < 1.0e-16)	-0.1125 (0.0057), CI: [-0.1238,-0.1013]	-19.6 (p < 1.0e-16)
log intake^2	-0.0651 (0.0037), CI: [-0.0723,-0.0579]	-17.7 (p < 1.0e-16)	-0.0596 (0.0037), CI: [-0.0668,-0.0524]	-16.2 (p < 1.0e-16)
log intake x male	0.0174 (0.0080), CI: [0.0018,0.0330]	2.2 (p = 2.9e-02)	0.0224 (0.0079), CI: [0.0068,0.0379]	2.8 (p = 4.8e-03)
log intake x std. age	0.0080 (0.0037), CI: [0.0008,0.0152]	2.2 (p = 3.0e-02)	0.0080 (0.0037), CI: [0.0008,0.0151]	2.2 (p = 3.0e-02)
standardized age	-0.5991 (0.0038), CI: [-0.6066,-0.5916]	-157.0 (p < 1.0e-16)	-0.5995 (0.0038), CI: [-0.6069,-0.5921]	-158.0 (p < 1.0e-16)
standardized age^2	-0.0378 (0.0034), CI: [-0.0445,-0.0311]	-11.0 (p < 1.0e-16)	-0.0403 (0.0034), CI: [-0.0469,-0.0336]	-11.8 (p < 1.0e-16)
	Against model without log intake and interactions		**Against model without log intake and interactions**	
	Delta R^2: 0.0099		Delta R^2: 0.0099	
	F-test: p < 1.0e-16		F-test: p < 1.0e-16	

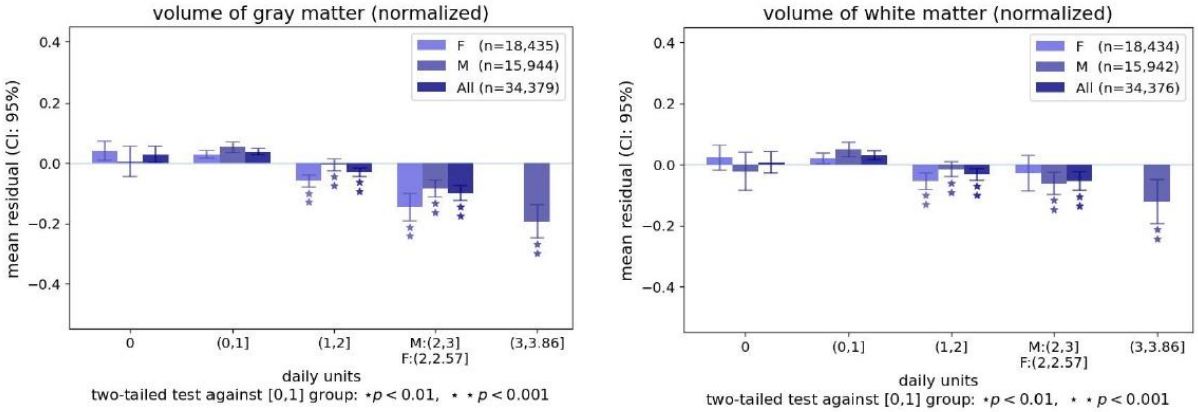
	Excluding Abstainers		**Excluding Those that Consume a High Level of Alcohol**	
	N: 33,773 (df: 33,676), R2: 0.517		N: 34,383 (df: 34,286), R2: 0.510	
Variable	**Regression Coefficient (SE), 95% CI**	**t-stat (p-value)**	**Regression Coefficient (SE), 95% CI**	**t-stat (p-value)**
log intake	-0.1025 (0.0064), CI: [-0.1151,-0.0899]	-15.9 (p < 1.0e-16)	-0.0960 (0.0073), CI: [-0.1104,-0.0817]	-13.1 (p < 1.0e-16)
log intake^2	-0.0701 (0.0045), CI: [-0.0790,-0.0611]	-15.4 (p < 1.0e-16)	-0.0499 (0.0049), CI: [-0.0595,-0.0402]	-10.1 (p < 1.0e-16)
log intake x male	0.0114 (0.0095), CI: [-0.0072,0.0299]	1.2 (p = 2.3e-01)	0.0214 (0.0088), CI: [0.0041,0.0387]	2.4 (p = 1.5e-02)
log intake x std. age	0.0127 (0.0043), CI: [0.0042,0.0212]	2.9 (p = 3.4e-03)	0.0100 (0.0040), CI: [0.0020,0.0179]	2.5 (p = 1.4e-02)
standardized age	-0.6012 (0.0040), CI: [-0.6091,-0.5933]	-149.9 (p < 1.0e-16)	-0.5989 (0.0040), CI: [-0.6066,-0.5911]	-151.2 (p < 1.0e-16)
standardized age^2	-0.0389 (0.0036), CI: [-0.0459,-0.0319]	-11.0 (p < 1.0e-16)	-0.0388 (0.0035), CI: [-0.0457,-0.0319]	-11.0 (p < 1.0e-16)
	Against model without log intake and interactions		**Against model without log intake and interactions**	
	Delta R^2: 0.0108		Delta R^2: 0.0038	
	F-test: p < 1.0e-16		F-test: p < 1.0e-16	

Supplementary Table 2. Regression Results: Volume of White Matter (whole brain, normalized)
log intake is measured in standardized log(1 + daily units of alcohol).

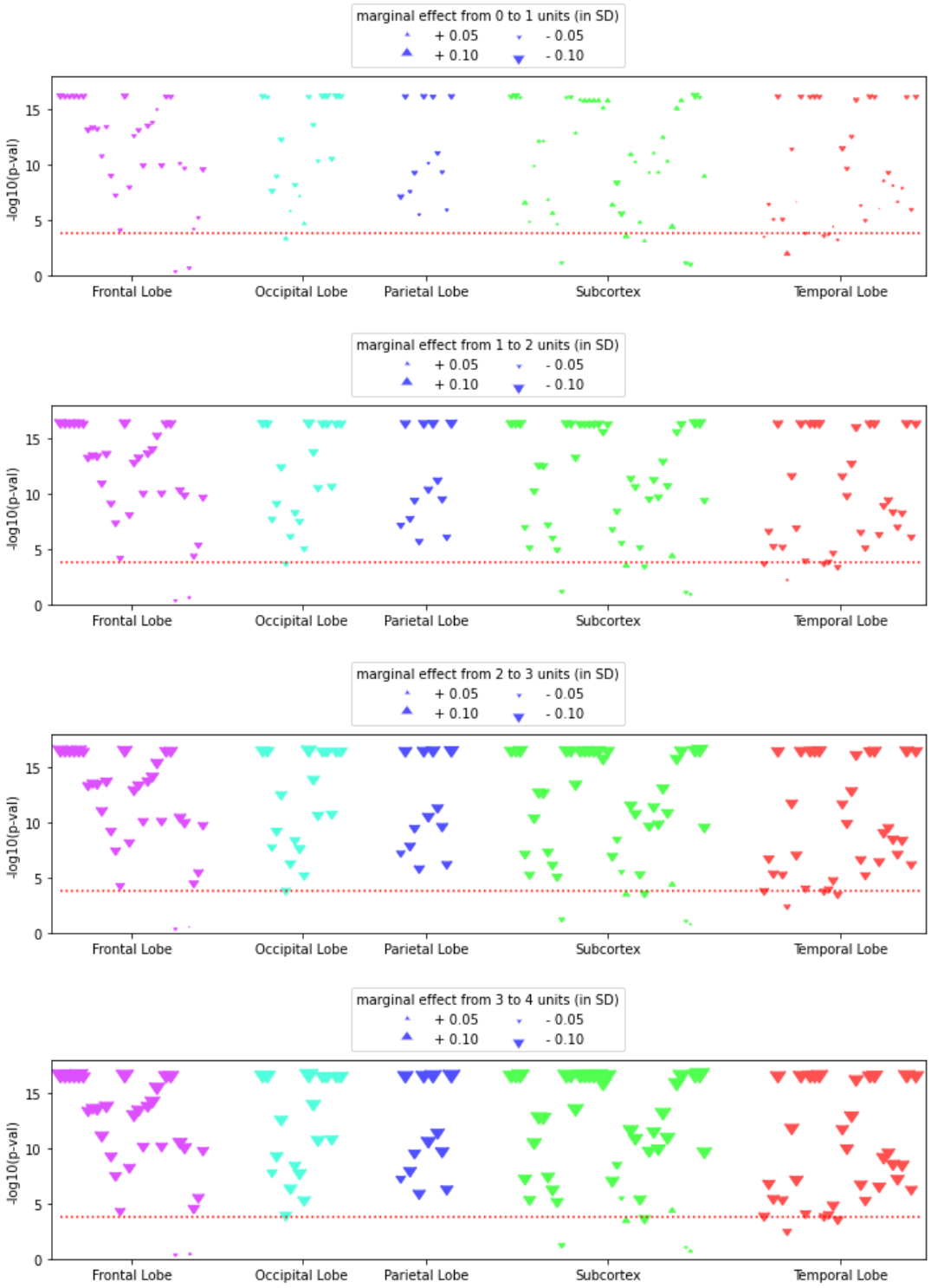
	Standard Control Variables		**Extended Control Variables**	
	N: 36,678 (df: 36,585), R^2: 0.122		N: 36,678 (df: 36,578), R^2: 0.123	
Variable	**Regression Coefficient (SE), 95% CI**	**t-stat (p-value)**	**Regression Coefficient (SE), 95% CI**	**t-stat (p-value)**
log intake	-0.0650 (0.0078), CI: [-0.0802,-0.0498]	-8.4 (p < 1.0e-16)	-0.0632 (0.0078), CI: [-0.0784,-0.0479]	-8.1 (p = 4.3e-16)
log intake^2	-0.0370 (0.0050), CI: [-0.0468,-0.0273]	-7.5 (p = 7.8e-14)	-0.0378 (0.0050), CI: [-0.0475,-0.0280]	-7.6 (p = 2.9e-14)
log intake x male	0.0164 (0.0107), CI: [-0.0046,0.0374]	1.5 (p = 1.2e-01)	0.0148 (0.0107), CI: [-0.0062,0.0358]	1.4 (p = 1.7e-01)
log intake x std. age	0.0111 (0.0050), CI: [0.0014,0.0208]	2.2 (p = 2.5e-02)	0.0110 (0.0050), CI: [0.0013,0.0207]	2.2 (p = 2.6e-02)
standardized age	-0.3213 (0.0051), CI: [-0.3313,-0.3112]	-62.6 (p < 1.0e-16)	-0.3218 (0.0051), CI: [-0.3319,-0.3118]	-62.7 (p < 1.0e-16)
standardized age^2	-0.0127 (0.0046), CI: [-0.0217,-0.0037]	-2.8 (p = 5.7e-03)	-0.0126 (0.0046), CI: [-0.0216,-0.0036]	-2.7 (p = 6.2e-03)
	Against model without log intake and interactions		**Against model without log intake and interactions**	
	Delta R^2: 0.0033		Delta R^2: 0.0032	
	F-test: p < 1.0e-16		F-test: p < 1.0e-16	

	Excluding Abstainers		**Excluding Those that Consume a High Level of Alcohol**	
	N: 33,773 (df: 33,676), R2: 0.124		N: 34,383 (df: 34,286), R2: 0.124	
Variable	**Regression Coefficient (SE), 95% CI**	**t-stat (p-value)**	**Regression Coefficient (SE), 95% CI**	**t-stat (p-value)**
log intake	-0.0599 (0.0087), CI: [-0.0769,-0.0429]	-6.9 (p = 4.6e-12)	-0.0596 (0.0098), CI: [-0.0789,-0.0403]	-6.1 (p = 1.4e-09)
log intake^2	-0.0369 (0.0061), CI: [-0.0489,-0.0249]	-6.0 (p = 1.7e-09)	-0.0327 (0.0066), CI: [-0.0456,-0.0197]	-4.9 (p = 7.9e-07)
log intake x male	0.0073 (0.0127), CI: [-0.0176,0.0323]	0.6 (p = 5.7e-01)	0.0148 (0.0119), CI: [-0.0084,0.0381]	1.3 (p = 2.1e-01)
log intake x std. age	0.0187 (0.0059), CI: [0.0072,0.0301]	3.2 (p = 1.4e-03)	0.0088 (0.0054), CI: [-0.0019,0.0194]	1.6 (p = 1.1e-01)
standardized age	-0.3251 (0.0054), CI: [-0.3357,-0.3146]	-60.2 (p < 1.0e-16)	-0.3223 (0.0053), CI: [-0.3327,-0.3119]	-60.6 (p < 1.0e-16)
standardized age^2	-0.0133 (0.0048), CI: [-0.0227,-0.0040]	-2.8 (p = 5.3e-03)	-0.0135 (0.0047), CI: [-0.0228,-0.0043]	-2.9 (p = 4.2e-03)
	Against model without log intake and interactions		**Against model without log intake and interactions**	
	Delta R^2: 0.0036		Delta R^2: 0.0014	
	F-test: p < 1.0e-16		F-test: p = 5.0e-13	

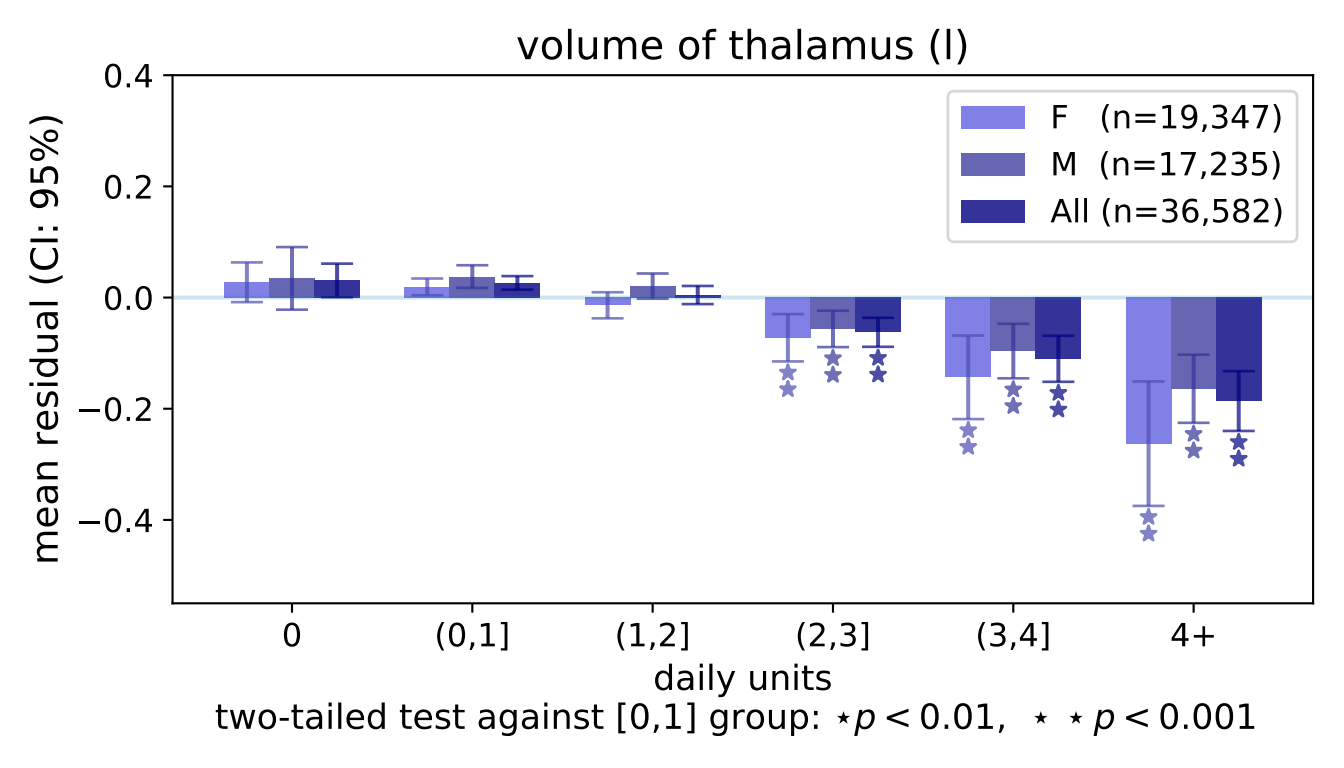
Supplementary Figure 1. Bar plots representing the average residual volume of whole-brain gray and white matter volume for individuals grouped by the number of daily alcohol units after excluding heavy drinkers and controlling for standard control variables. The mean residuals are in terms of standard deviations of the dependent variable, where zero represents the average residual in the sample. The error bars represent the 95% confidence interval. *p<0.01 and **p<.0001 for groups showing a significant difference in pairwise two-tailed t-test (uncorrected) against the group consuming up to one alcohol unit daily. F = females, M = males.

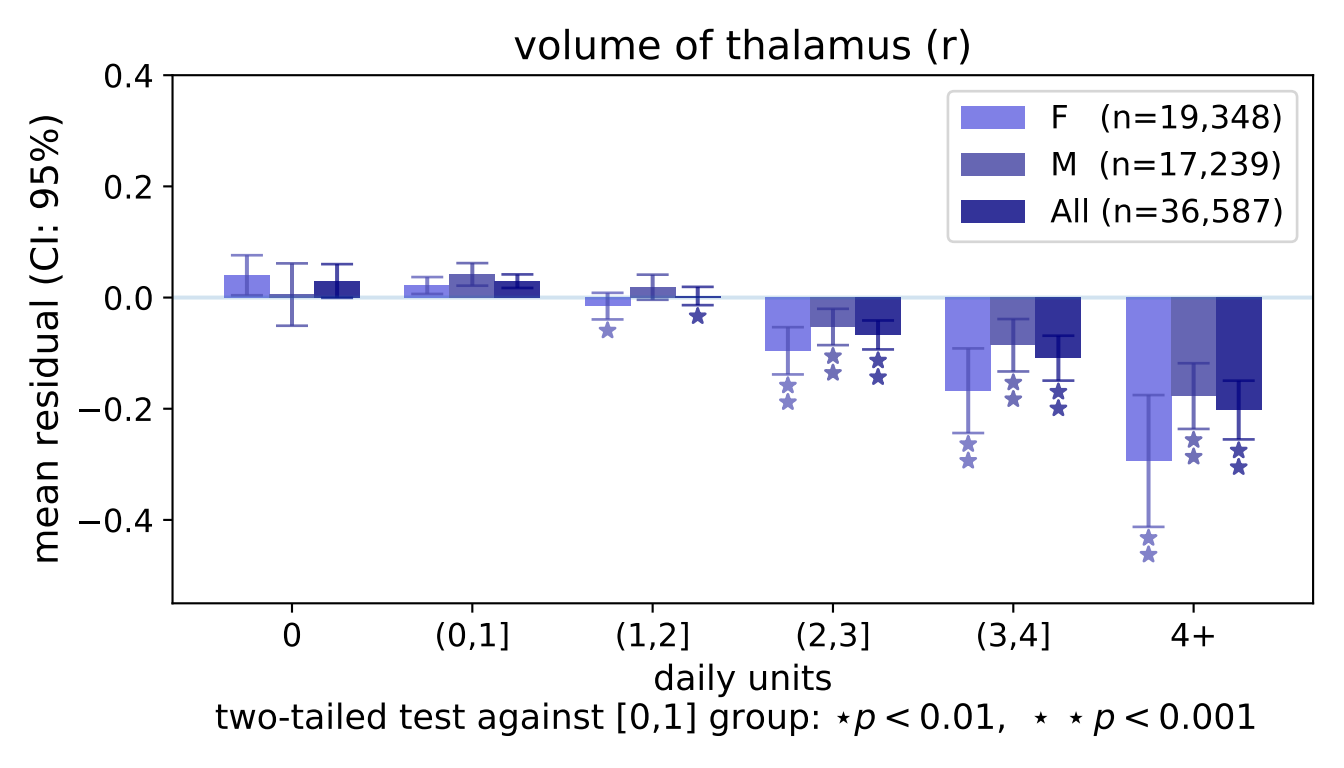


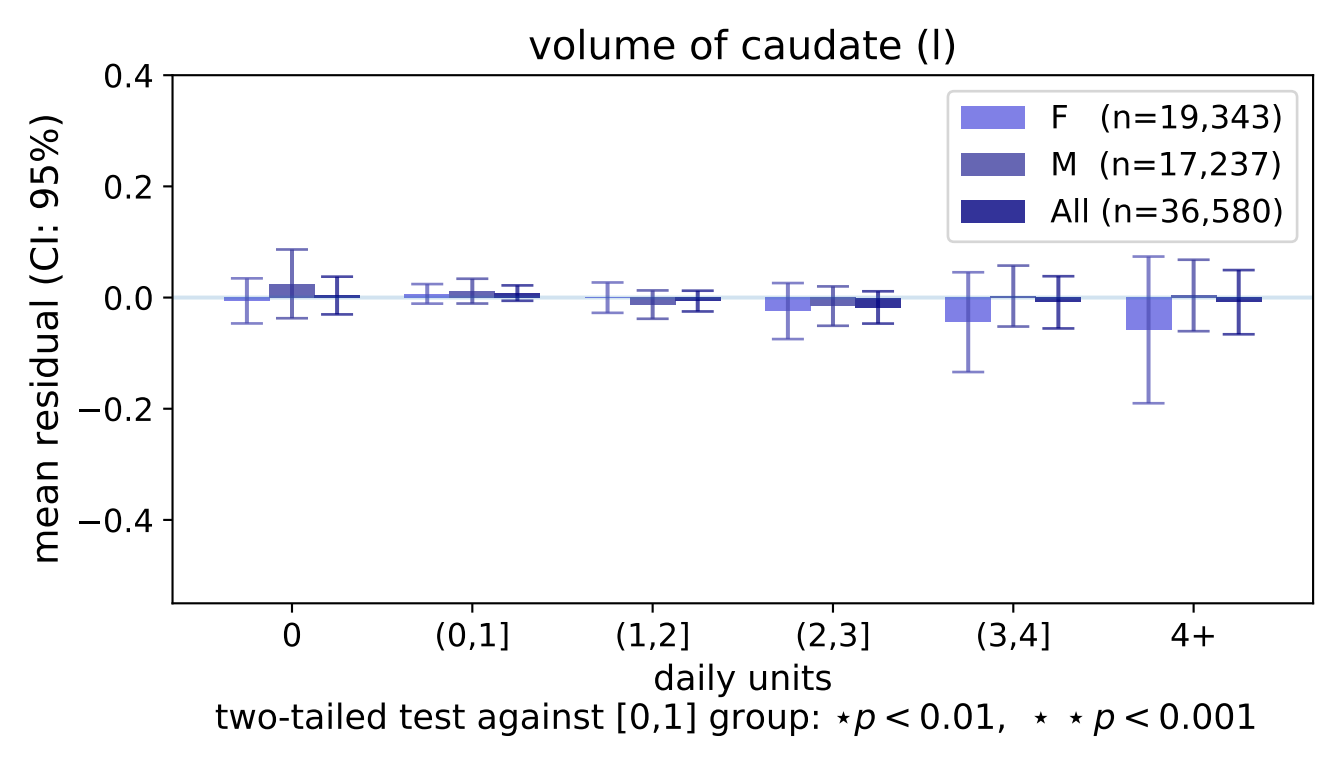
Supplementary Figure 2. Associations between alcohol intake and regional gray matter volume imaging-derived phenotypes predicted from the regression model with standard controls, arranged into brain lobes along the x-axis. For these variables, the significance of the correlation is plotted vertically in units of –log10(p-value). The dotted horizontal line indicates the threshold corresponding to multiple correction using the Holm method (1.64×10^{-4}).

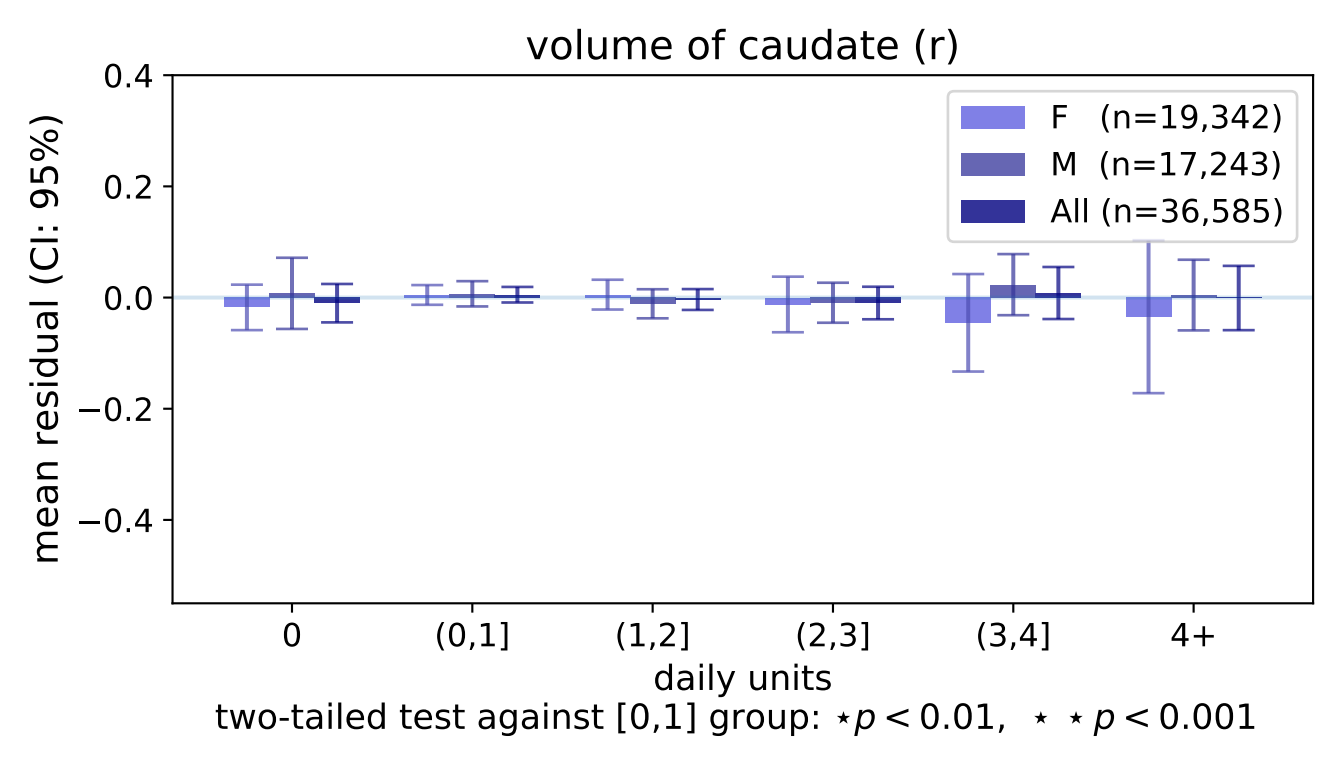


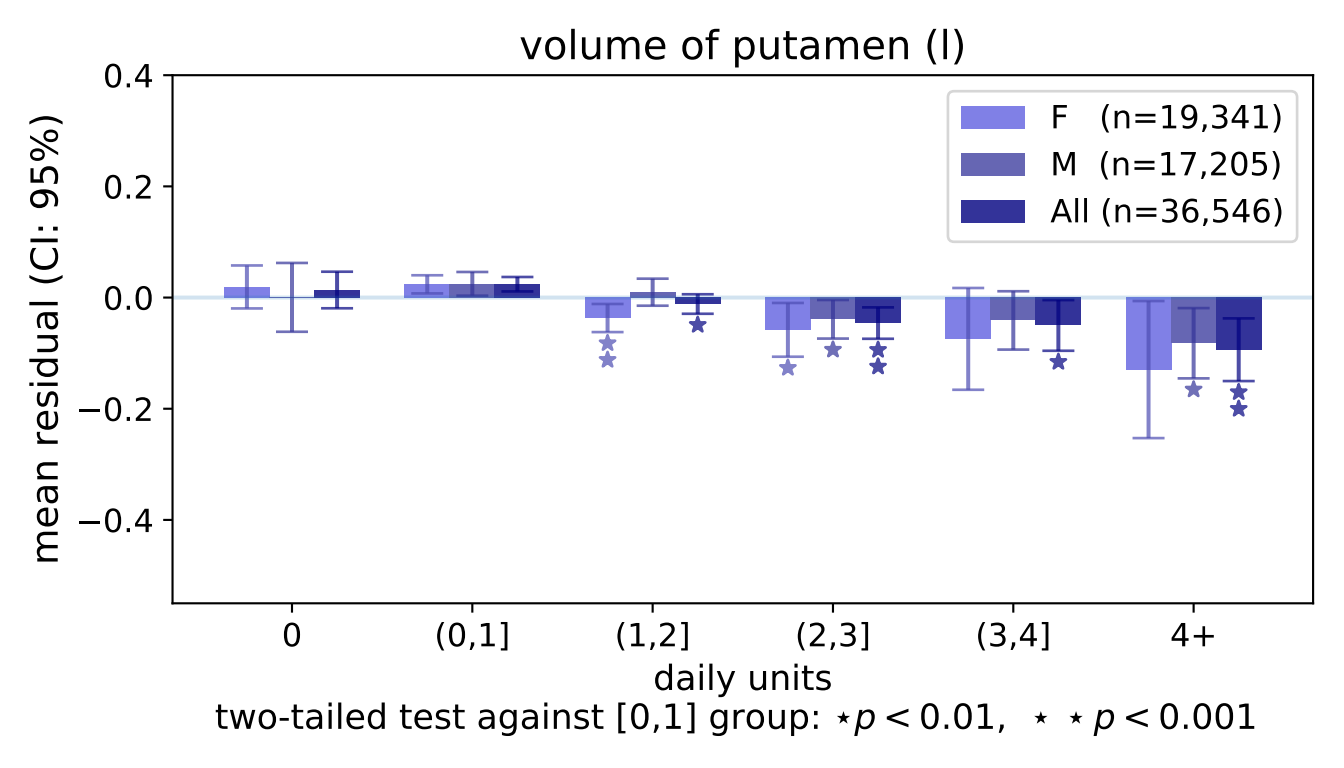
Supplementary Figure 3. Bar plots representing the average residual volume of localized gray matter volume imaging-derived phenotypes for individuals grouped by the number of daily alcohol units after excluding heavy drinkers and controlling for standard control variables. The mean residuals are in terms of standard deviations of the dependent variable, where zero represents the average residual in the sample. The error bars represent the 95% confidence interval. *p<0.01 and **p<.0001 for groups showing a significant difference in pairwise two-tailed t-test (uncorrected) against the group consuming up to one alcohol unit daily. F = females, M = males, l = left, r = right.

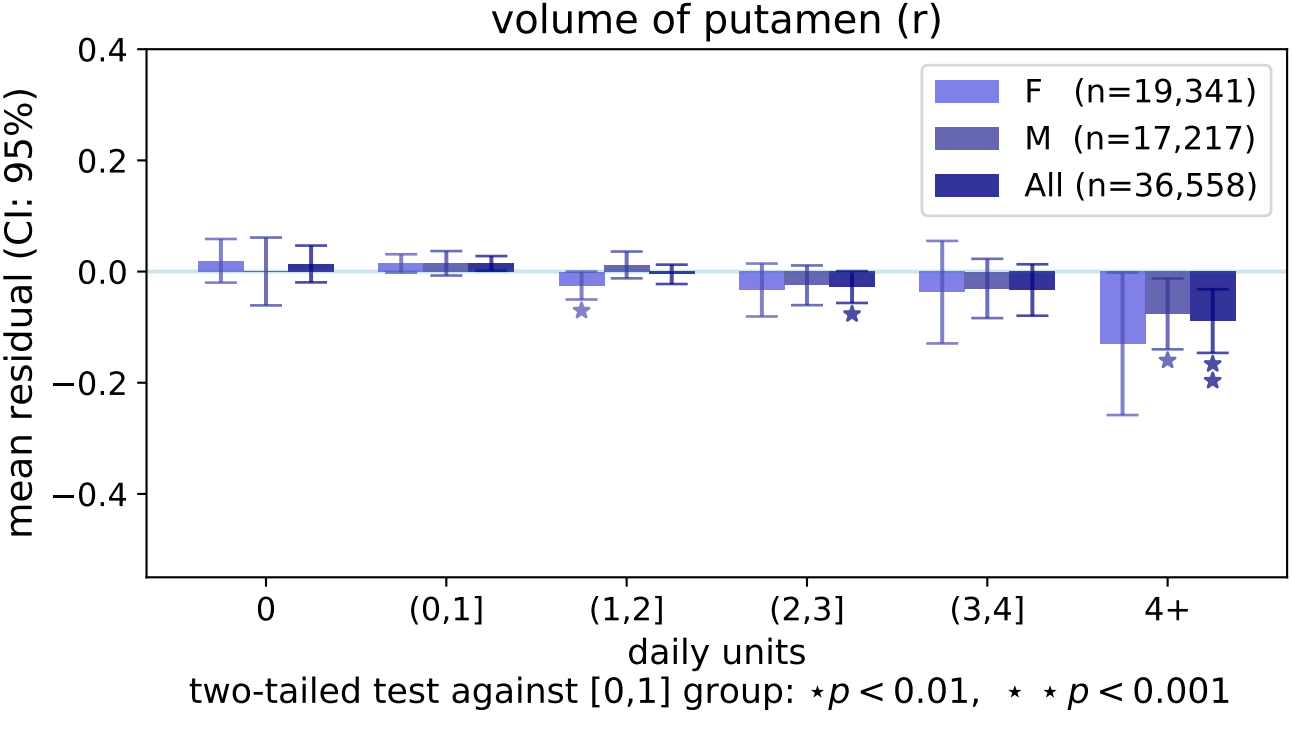

volume of thalamus (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,347)
M (n=17,235)
All (n=36,582)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

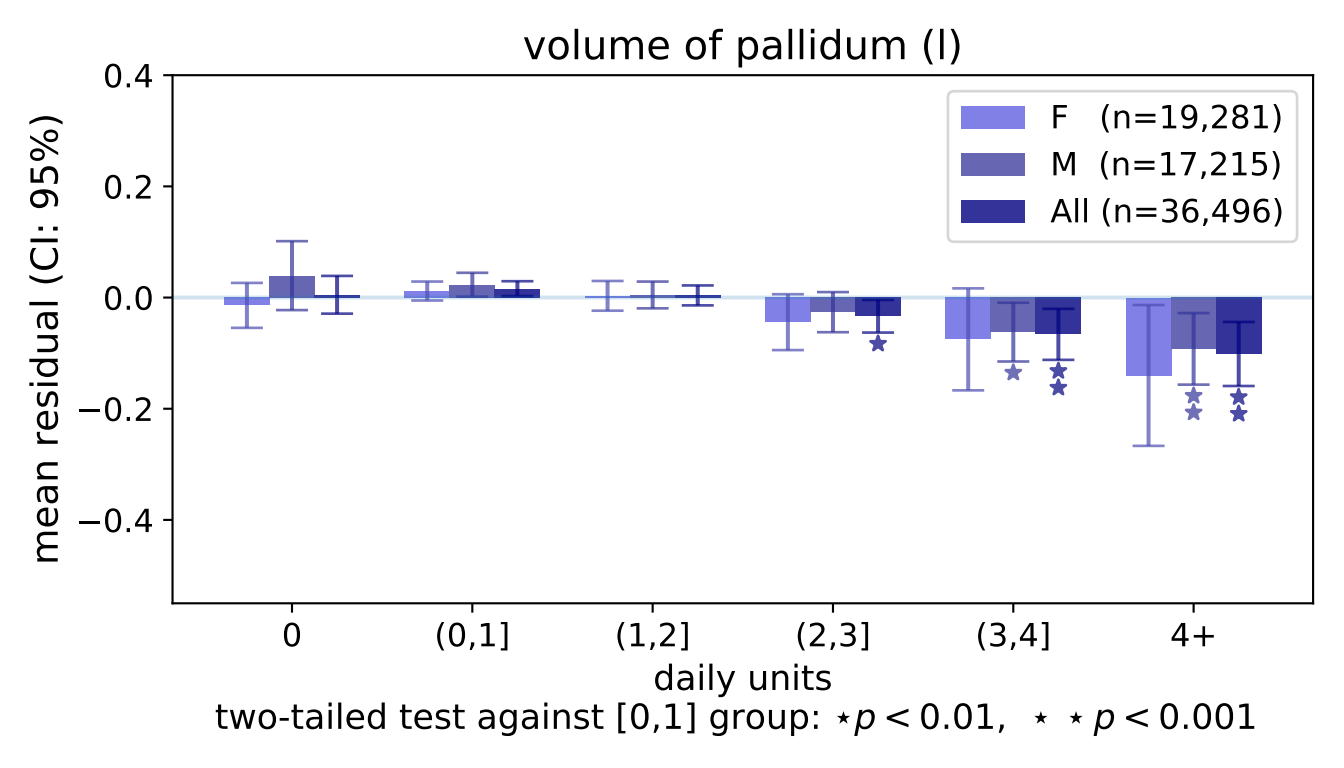

volume of thalamus (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,348)
M (n=17,239)
All (n=36,587)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

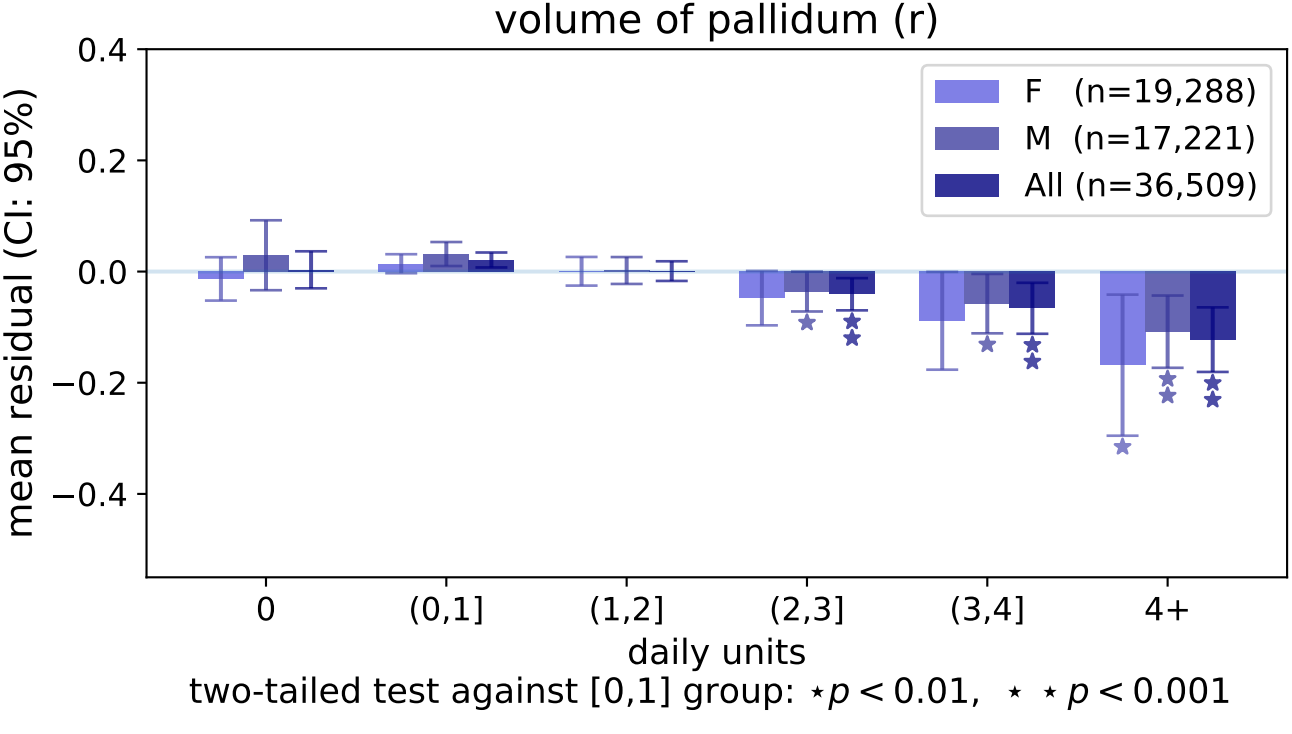

volume of caudate (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,343)
M (n=17,237)
All (n=36,580)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

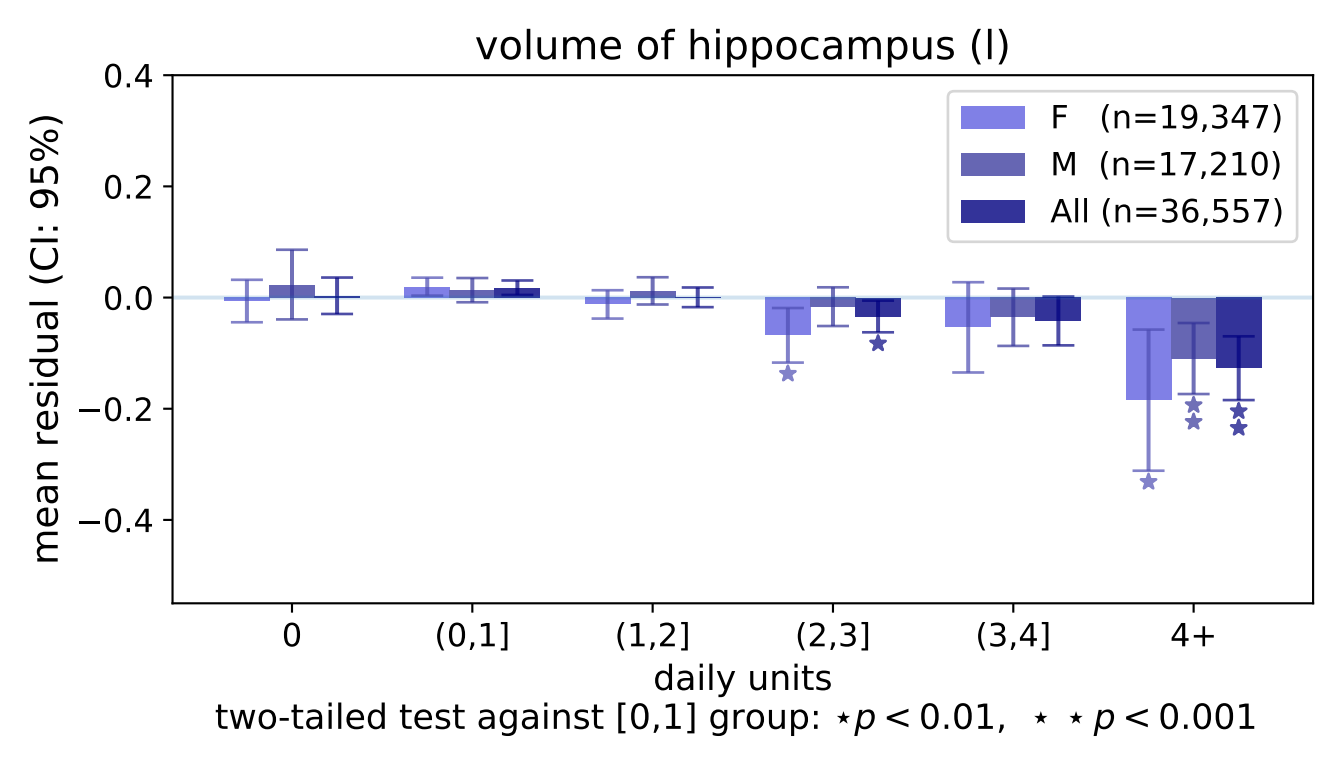

volume of caudate (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,342)
M (n=17,243)
All (n=36,585)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

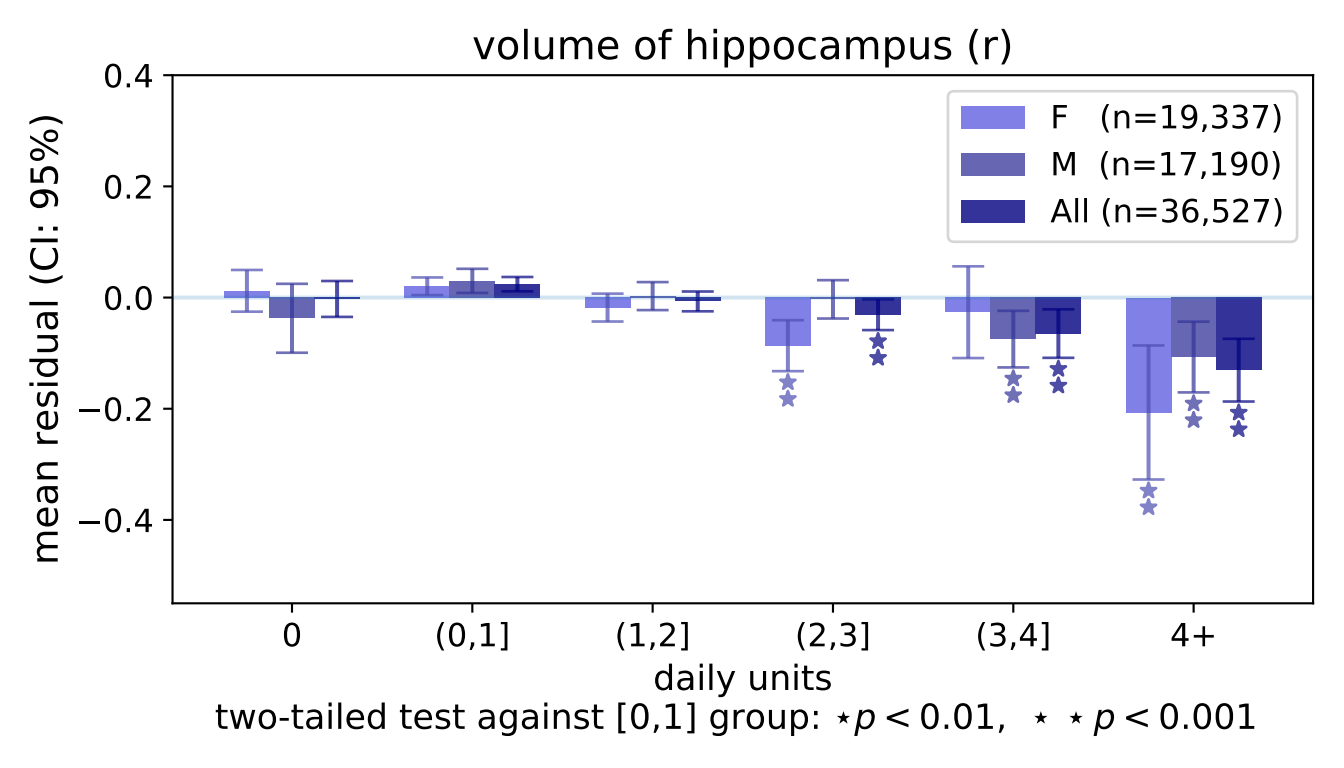

volume of putamen (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,341)
M (n=17,205)
All (n=36,546)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆ $p < 0.01$, ⋆ ⋆ $p < 0.001$

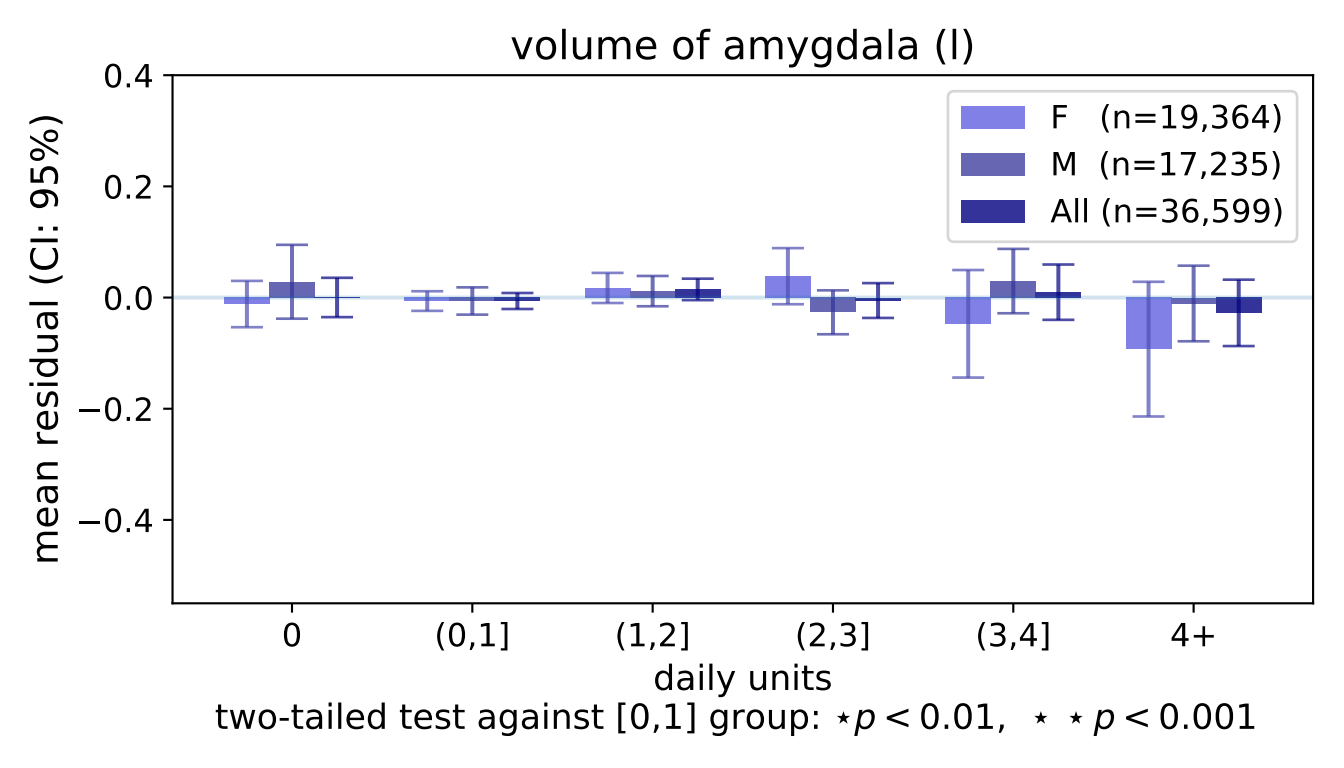

volume of putamen (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,341)
M (n=17,217)
All (n=36,558)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

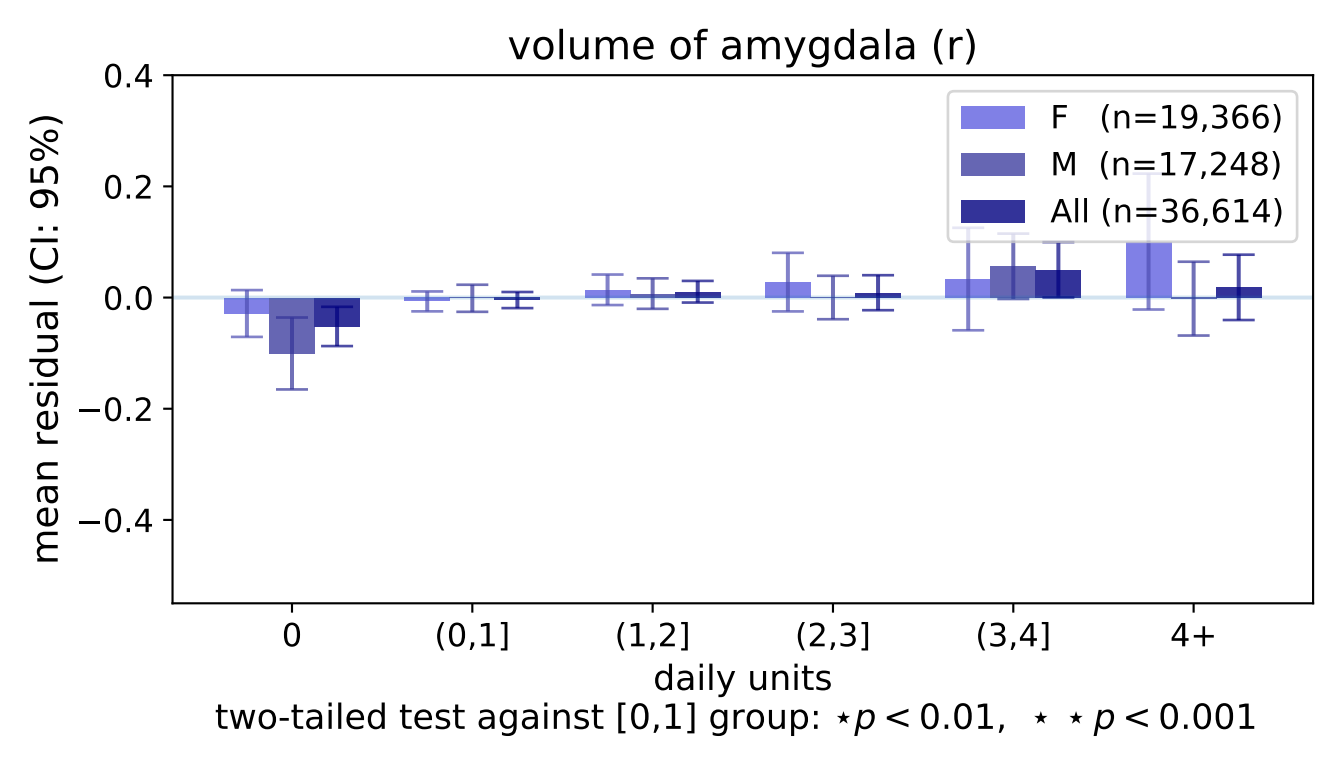

volume of pallidum (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,281)
M (n=17,215)
All (n=36,496)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

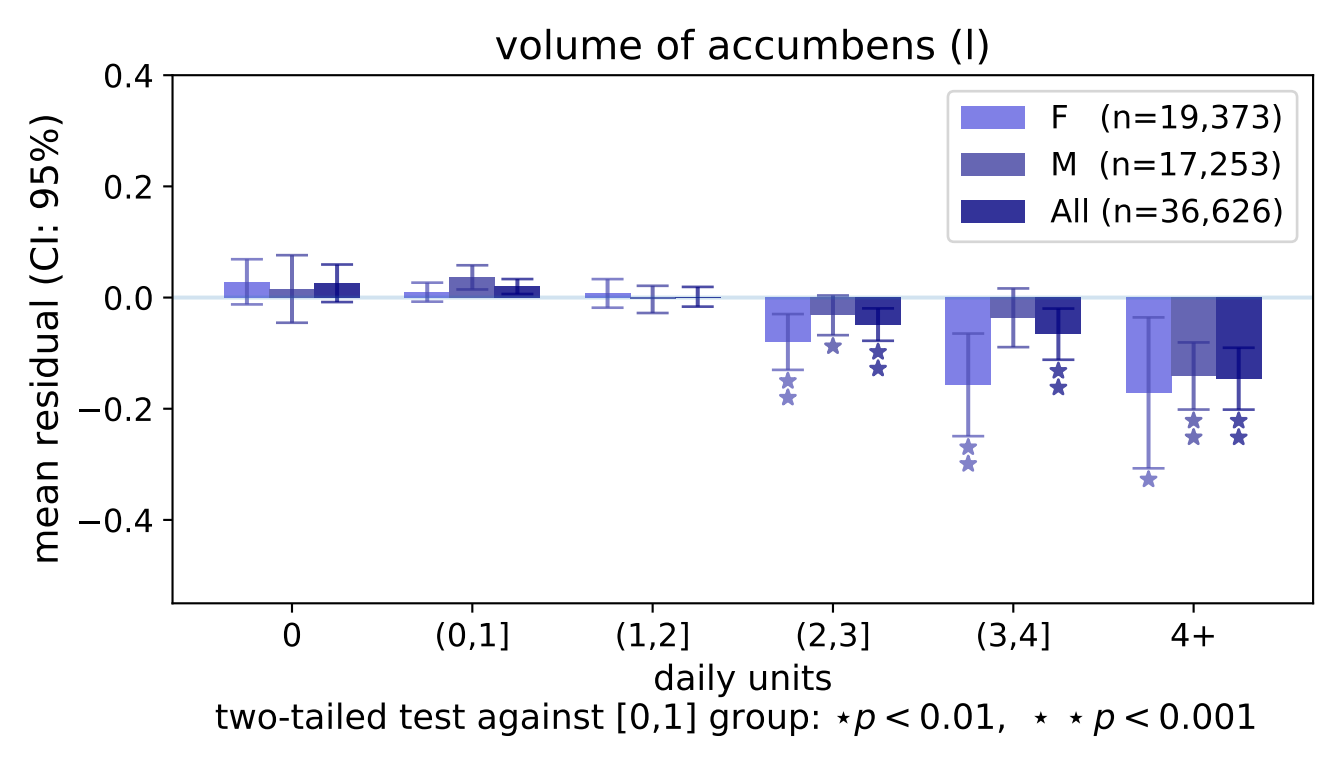

volume of pallidum (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,288)
M (n=17,221)
All (n=36,509)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

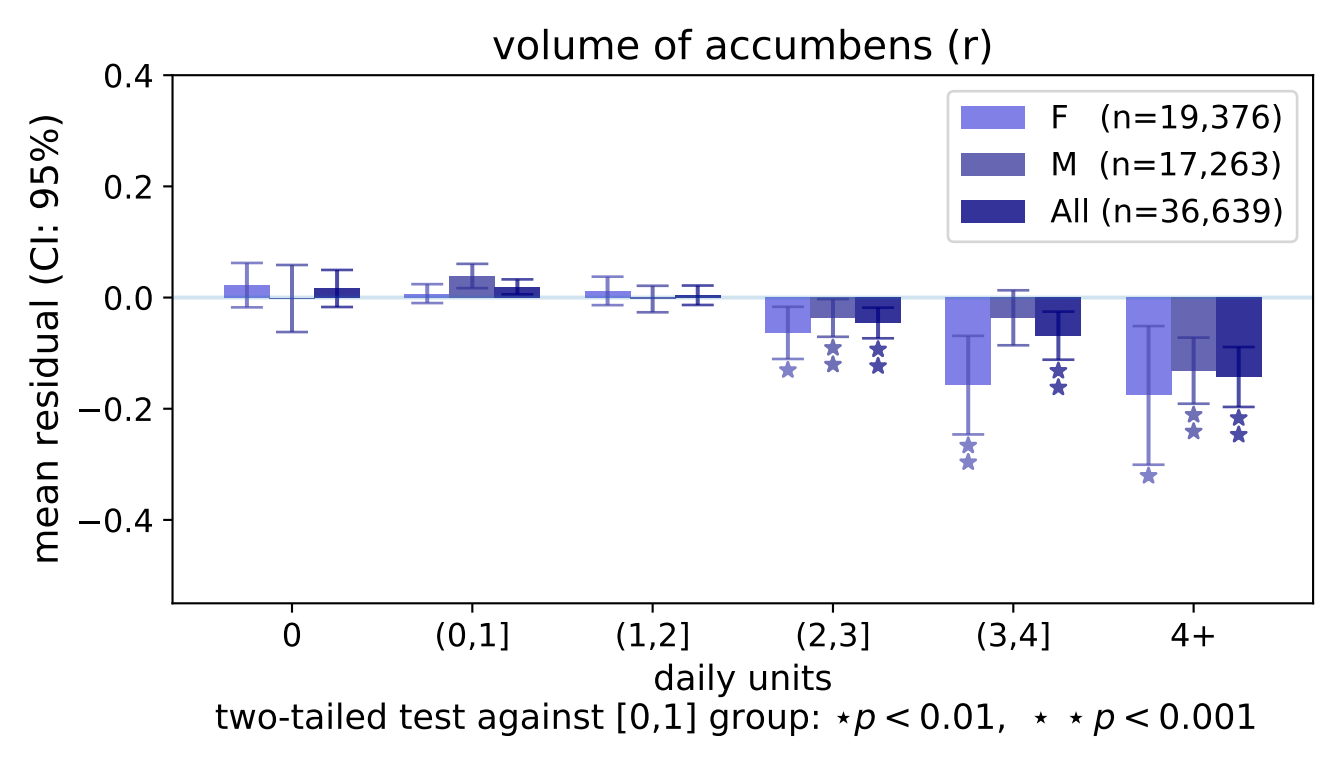

volume of hippocampus (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,347)
M (n=17,210)
All (n=36,557)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

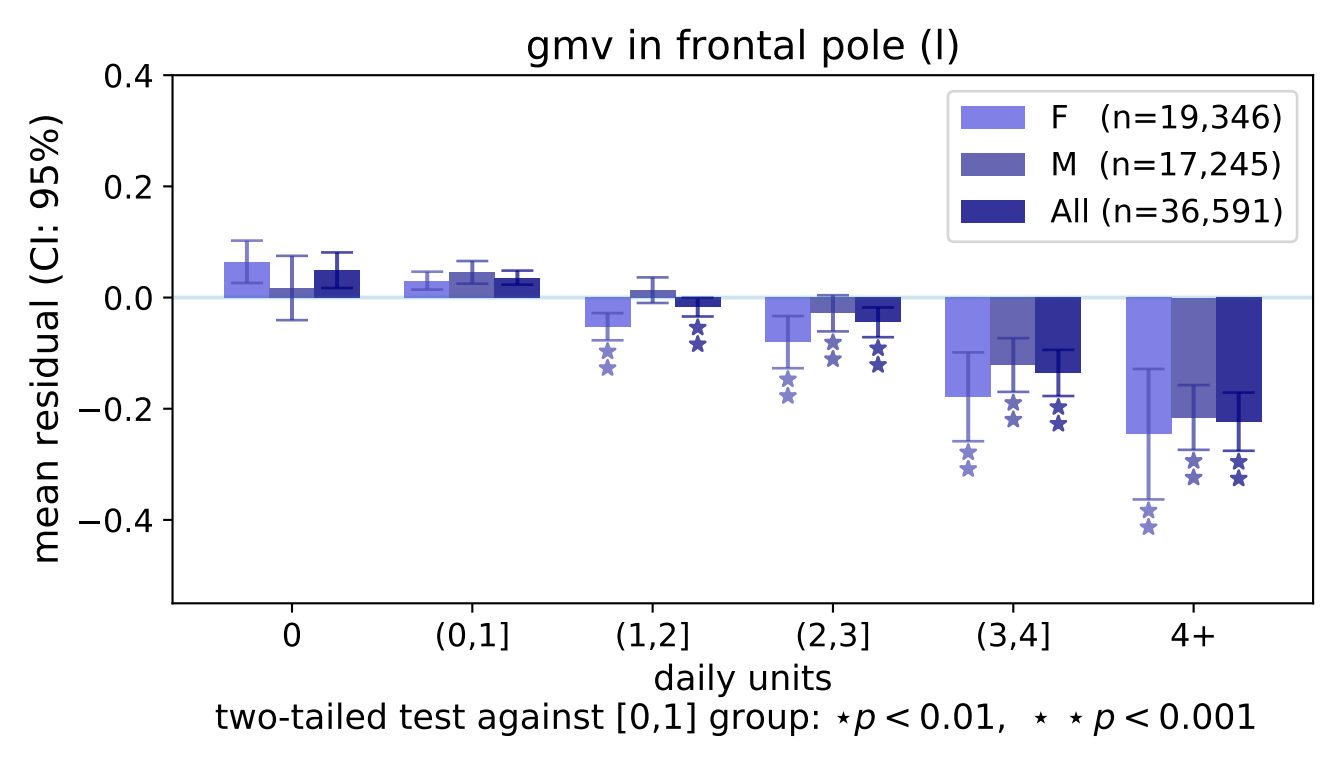

volume of hippocampus (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,337)
M (n=17,190)
All (n=36,527)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

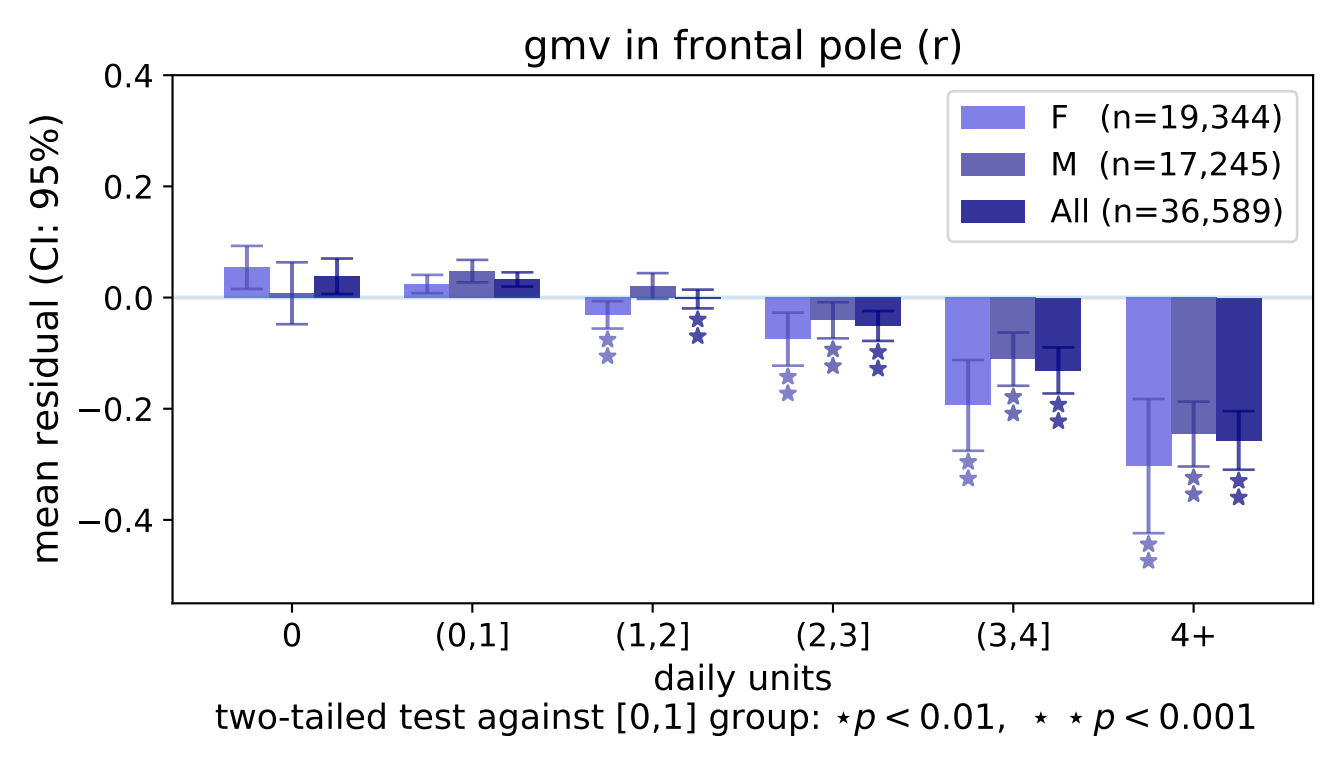

volume of amygdala (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,364)
M (n=17,235)
All (n=36,599)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

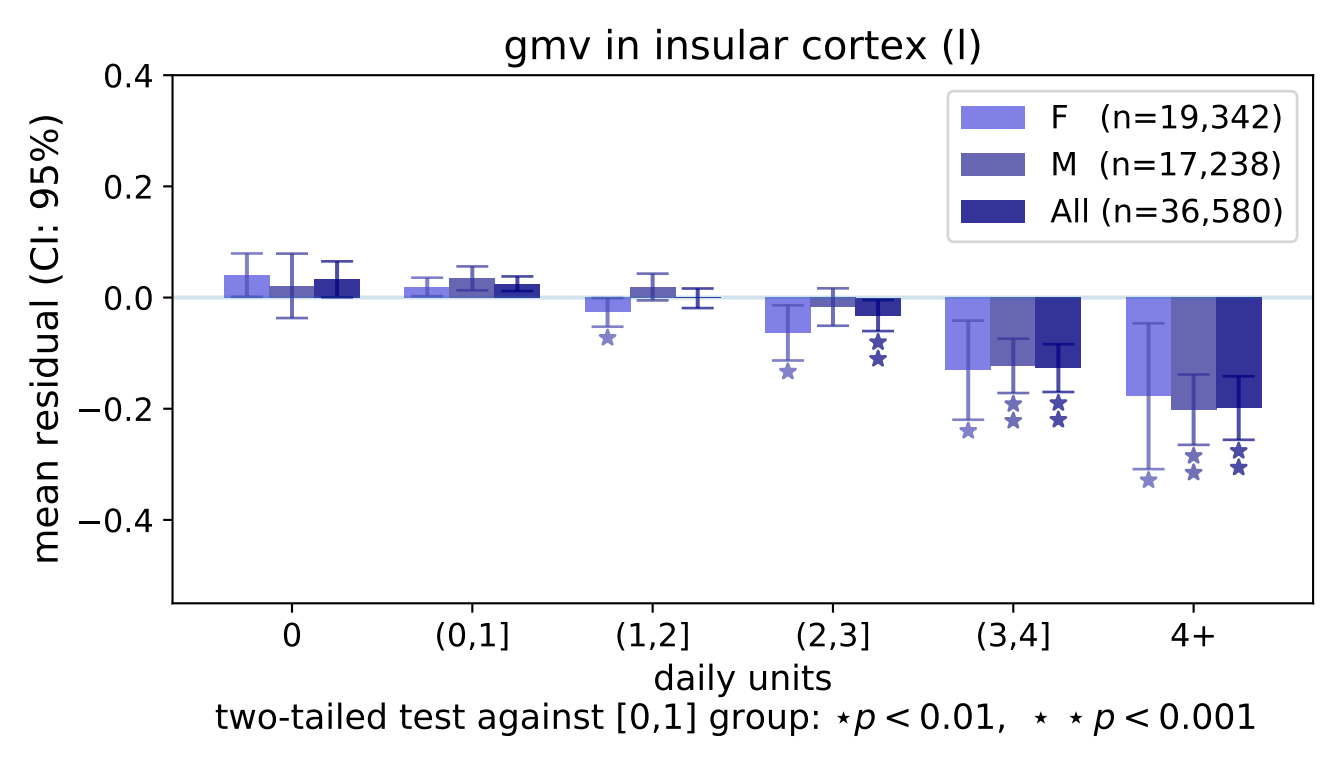

volume of amygdala (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,366)
M (n=17,248)
All (n=36,614)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

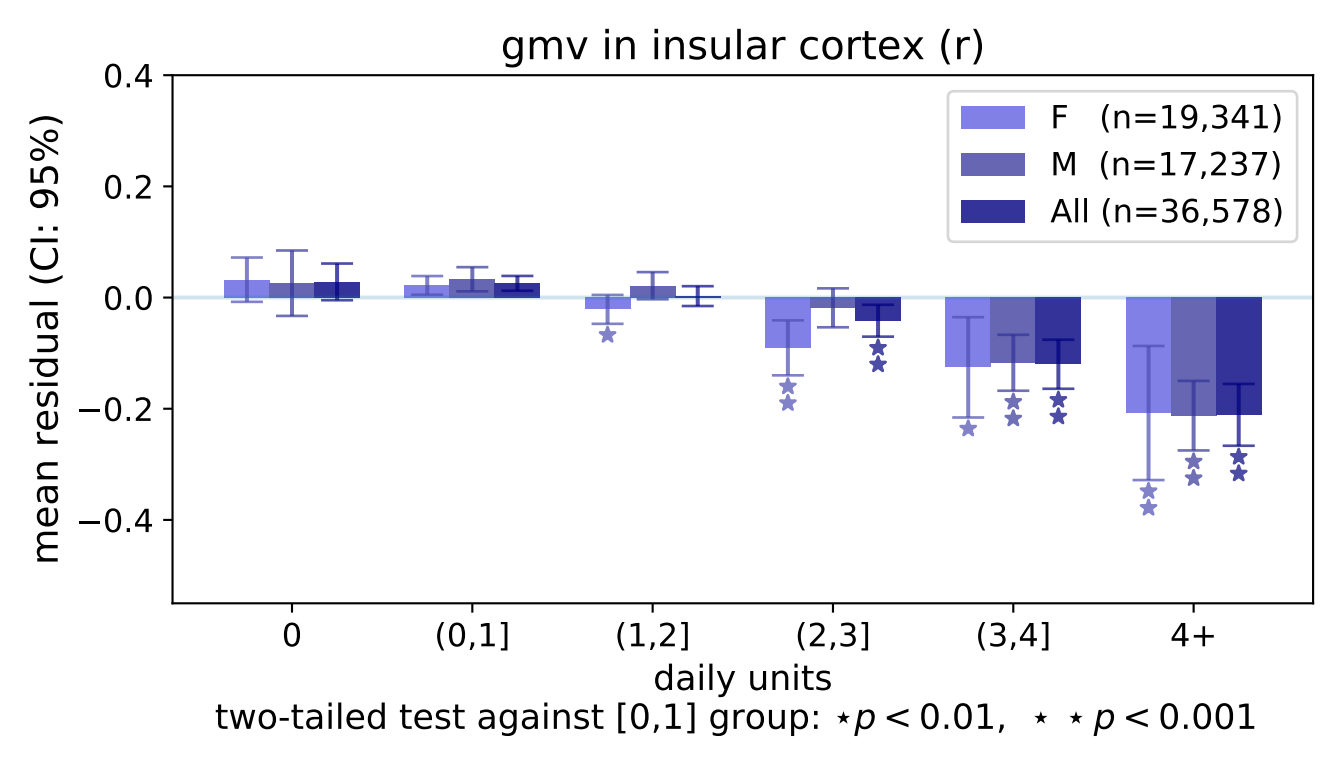

volume of accumbens (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,373)
M (n=17,253)
All (n=36,626)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

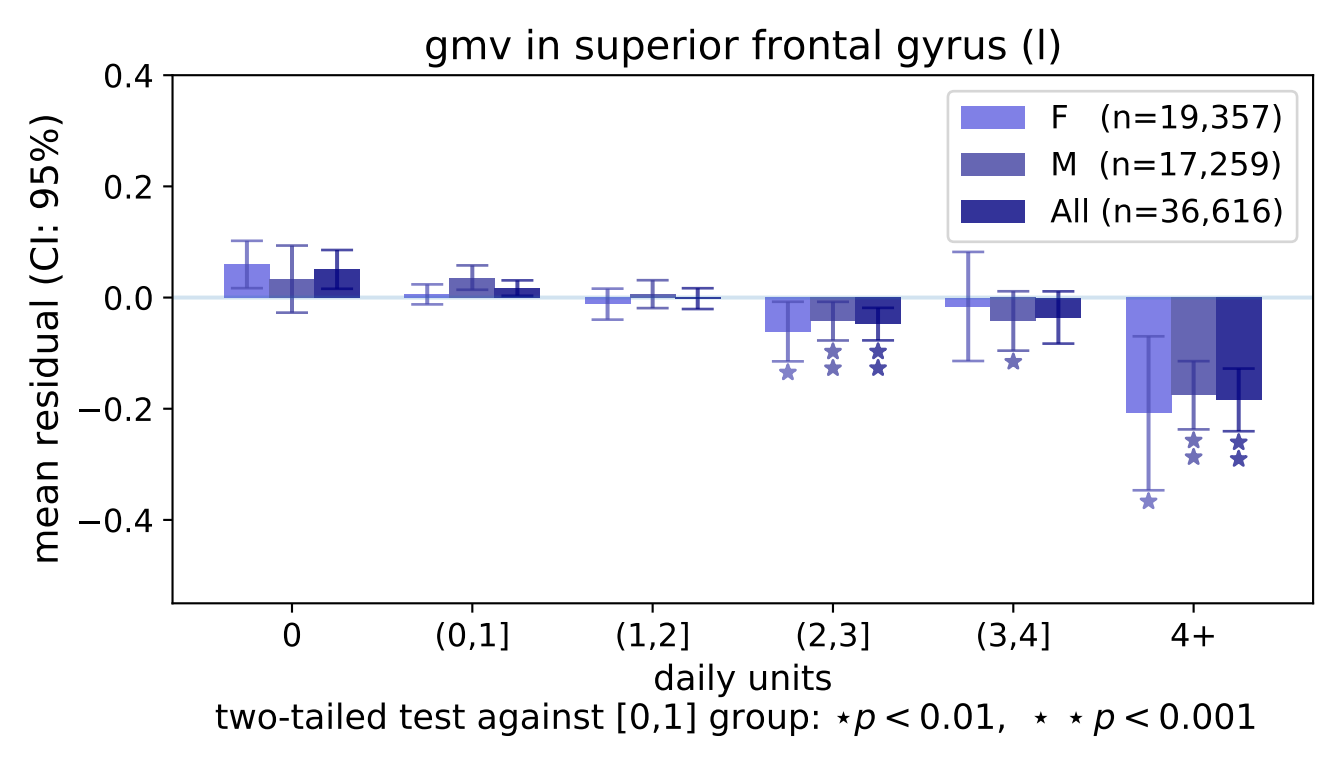

volume of accumbens (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,376)
M (n=17,263)
All (n=36,639)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

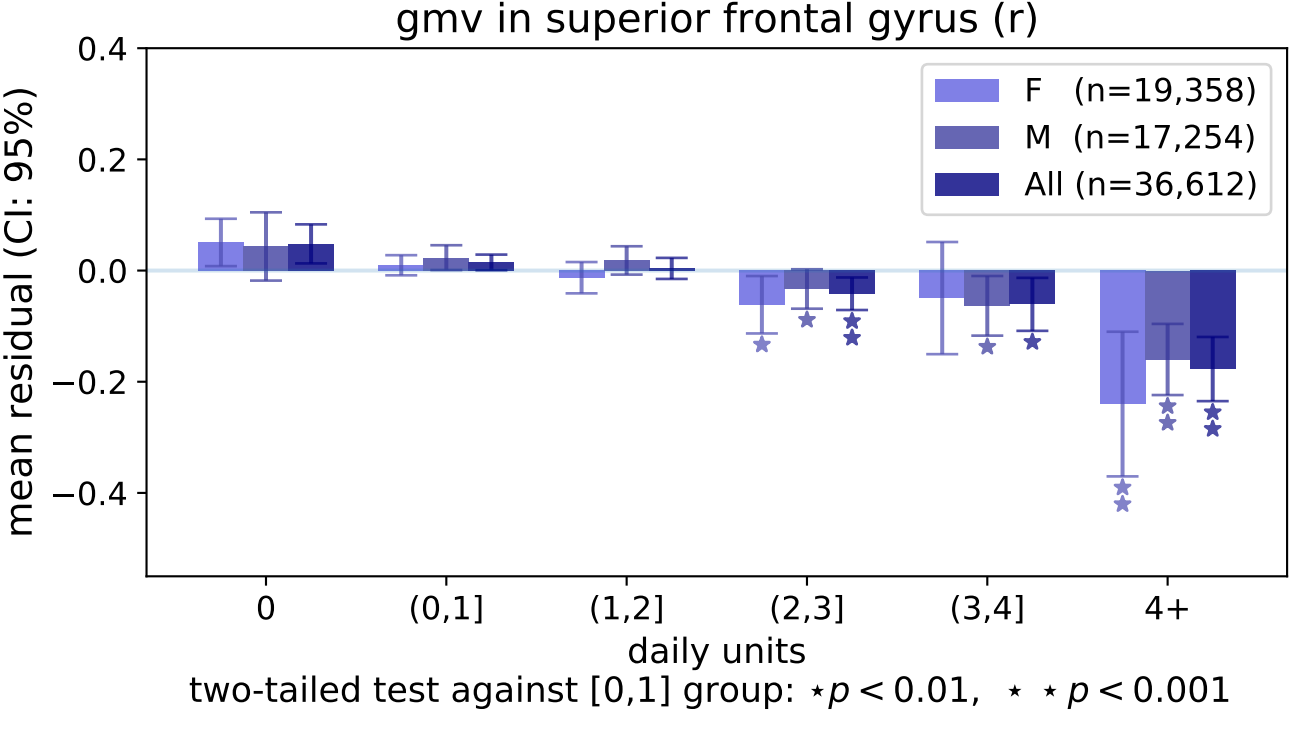

gmv in frontal pole (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,346)
M (n=17,245)
All (n=36,591)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

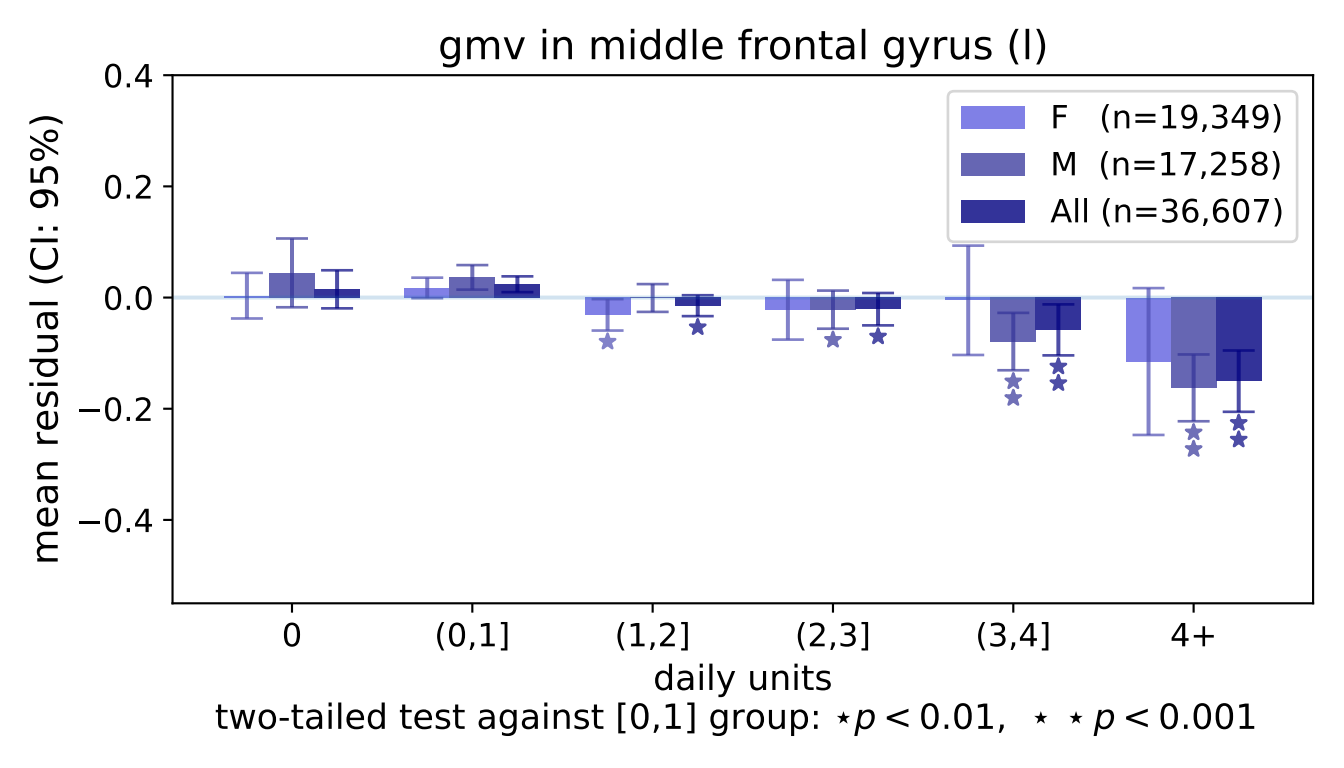

gmv in frontal pole (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,344)
M (n=17,245)
All (n=36,589)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆ $p < 0.01$, ⋆ ⋆ $p < 0.001$

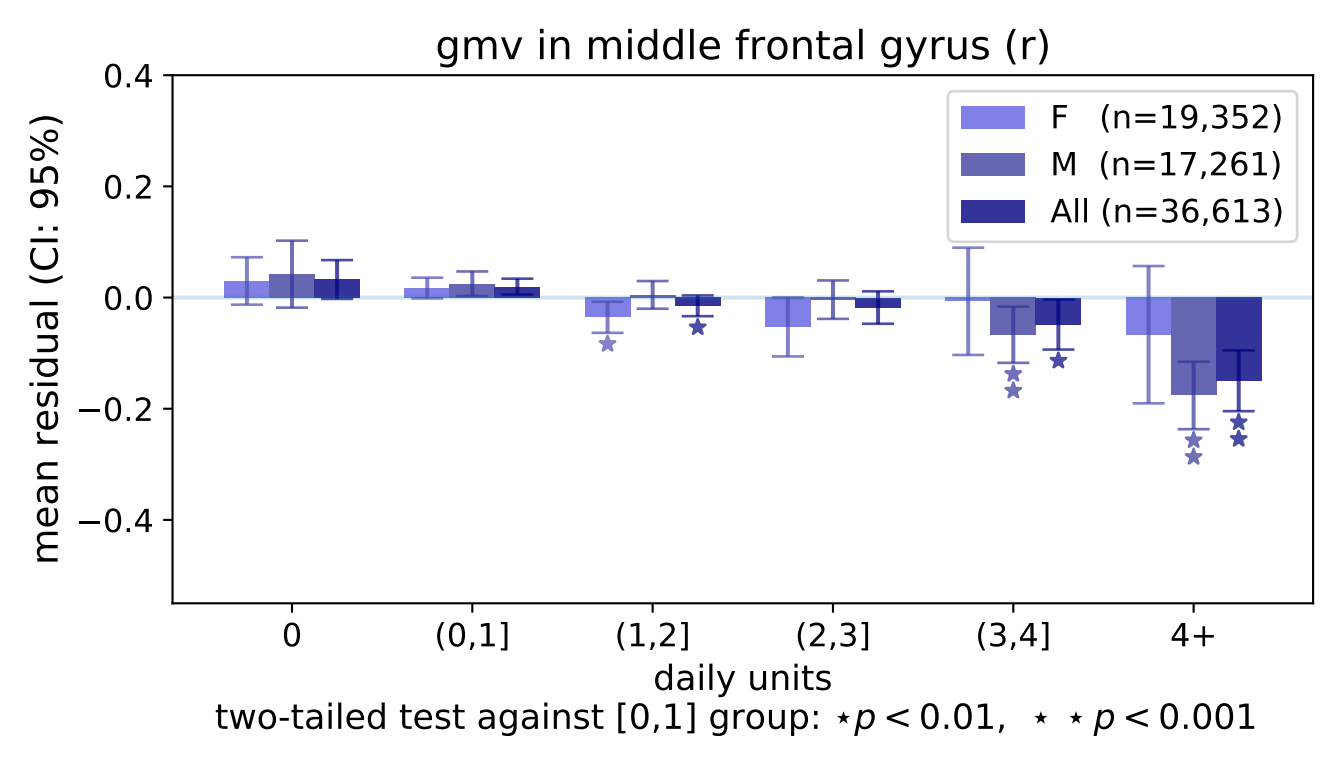

gmv in insular cortex (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,342)
M (n=17,238)
All (n=36,580)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

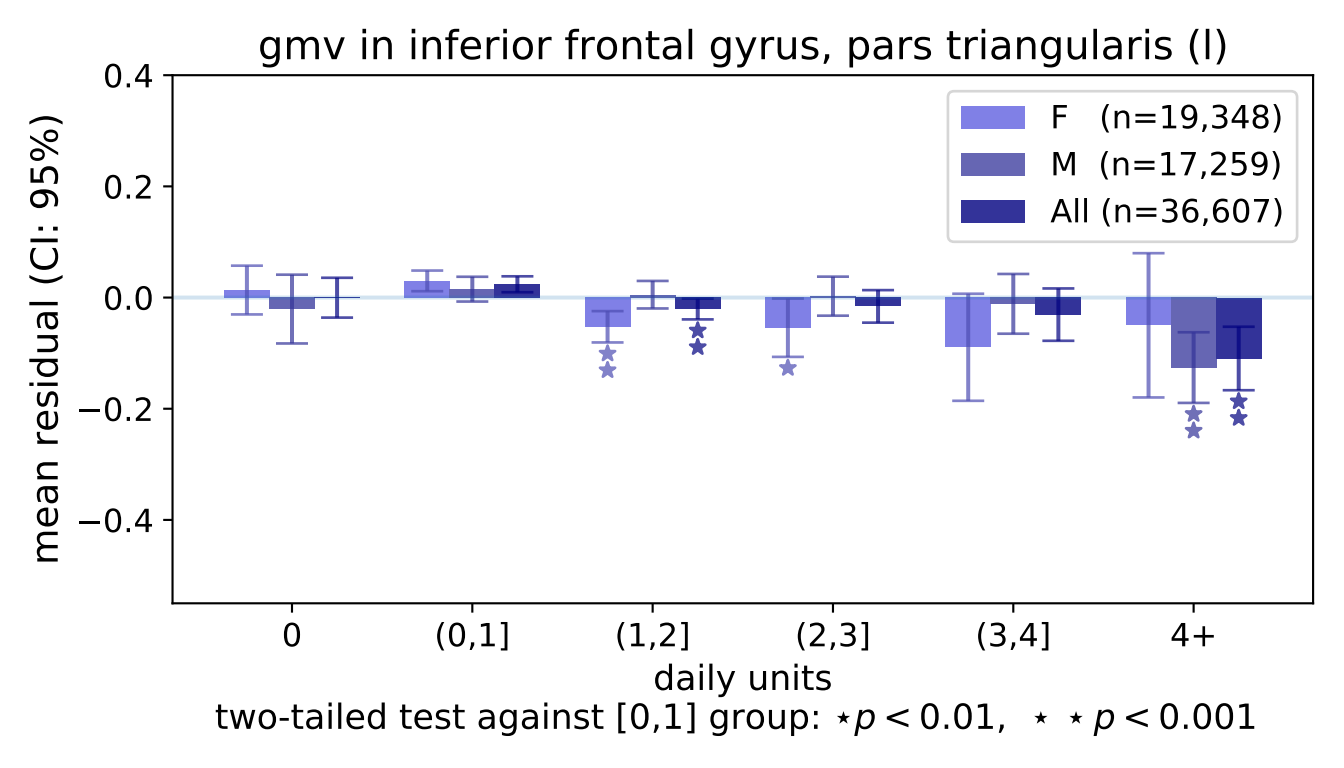

gmv in insular cortex (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,341)
M (n=17,237)
All (n=36,578)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

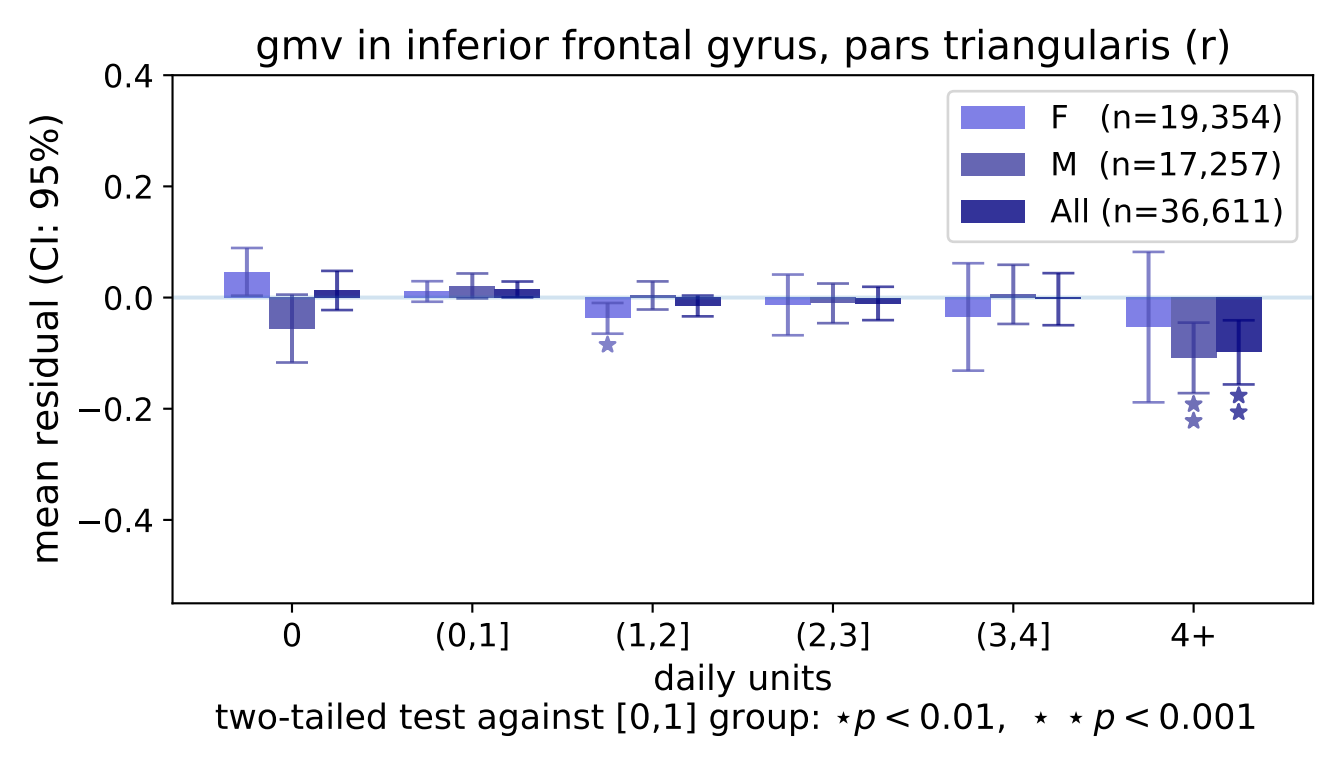

gmv in superior frontal gyrus (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,357)
M (n=17,259)
All (n=36,616)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

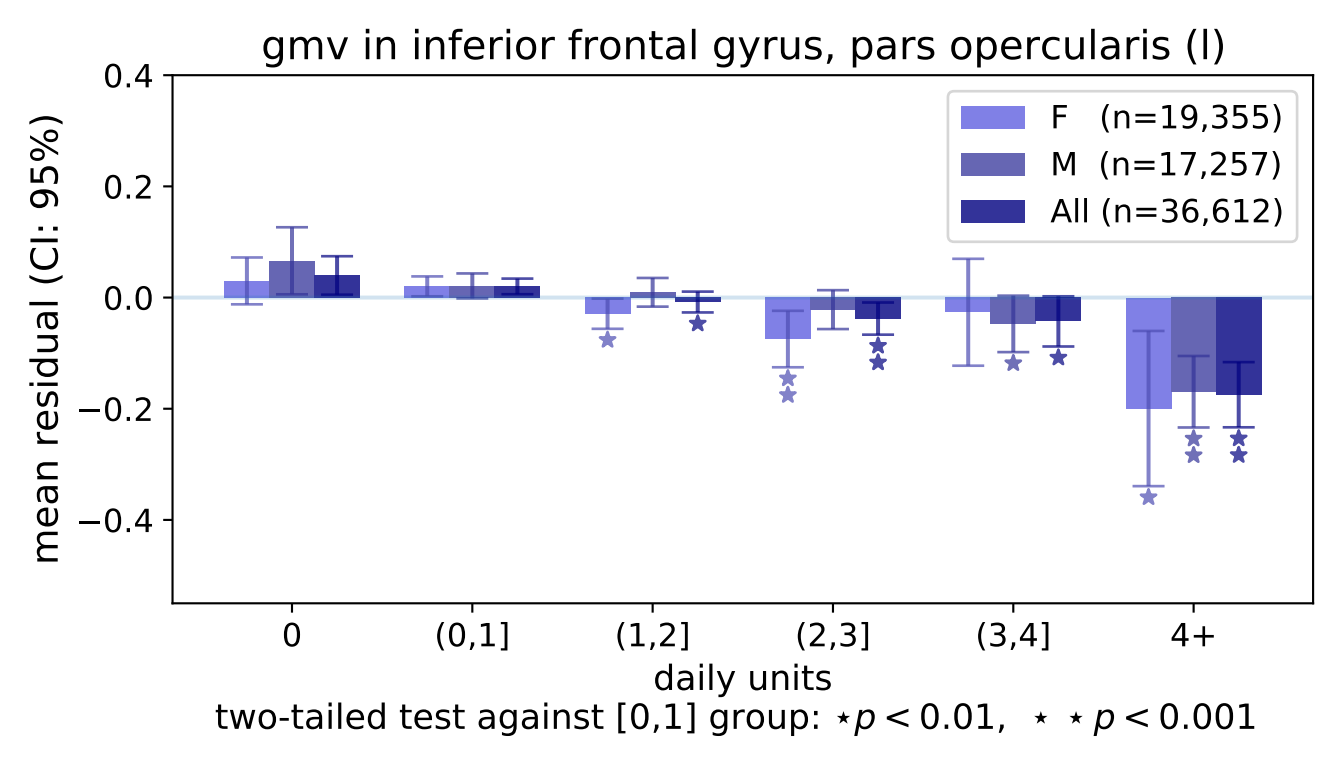

gmv in superior frontal gyrus (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,358)
M (n=17,254)
All (n=36,612)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

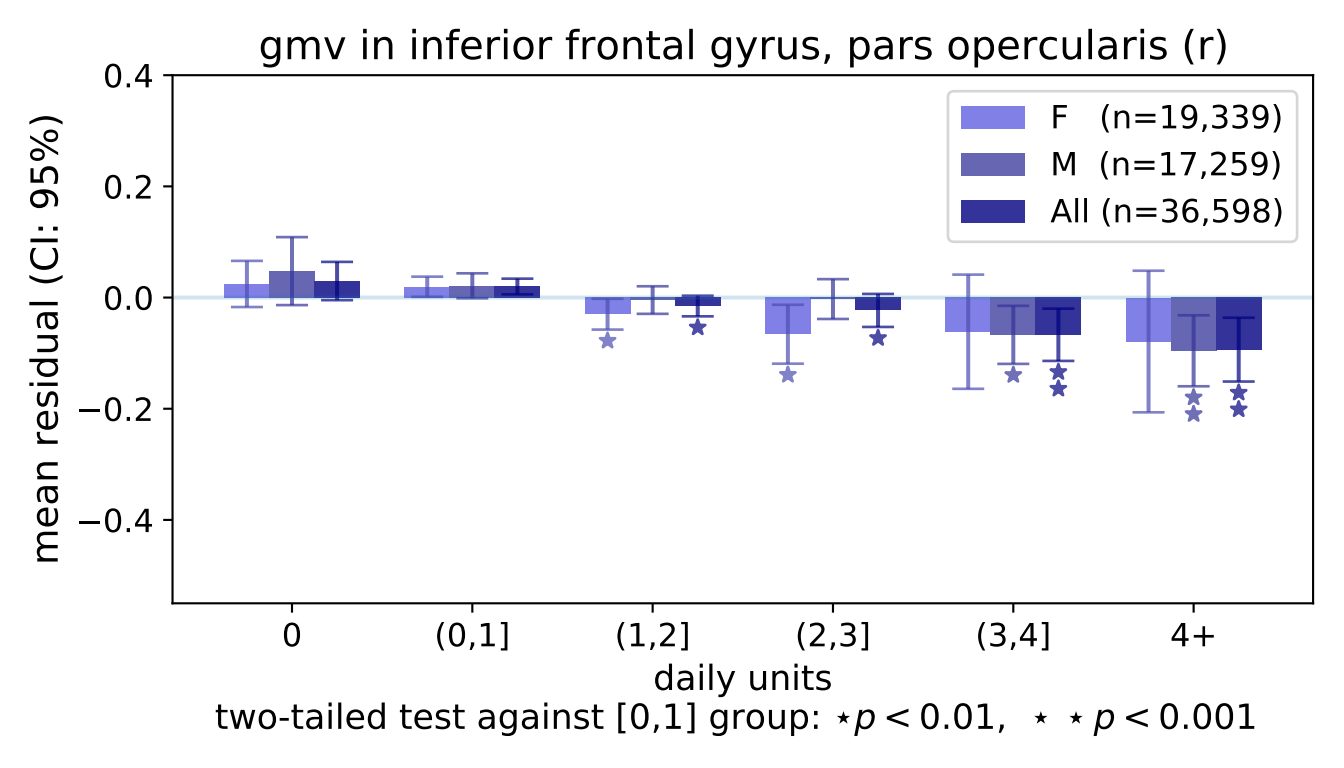

gmv in middle frontal gyrus (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,349)
M (n=17,258)
All (n=36,607)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

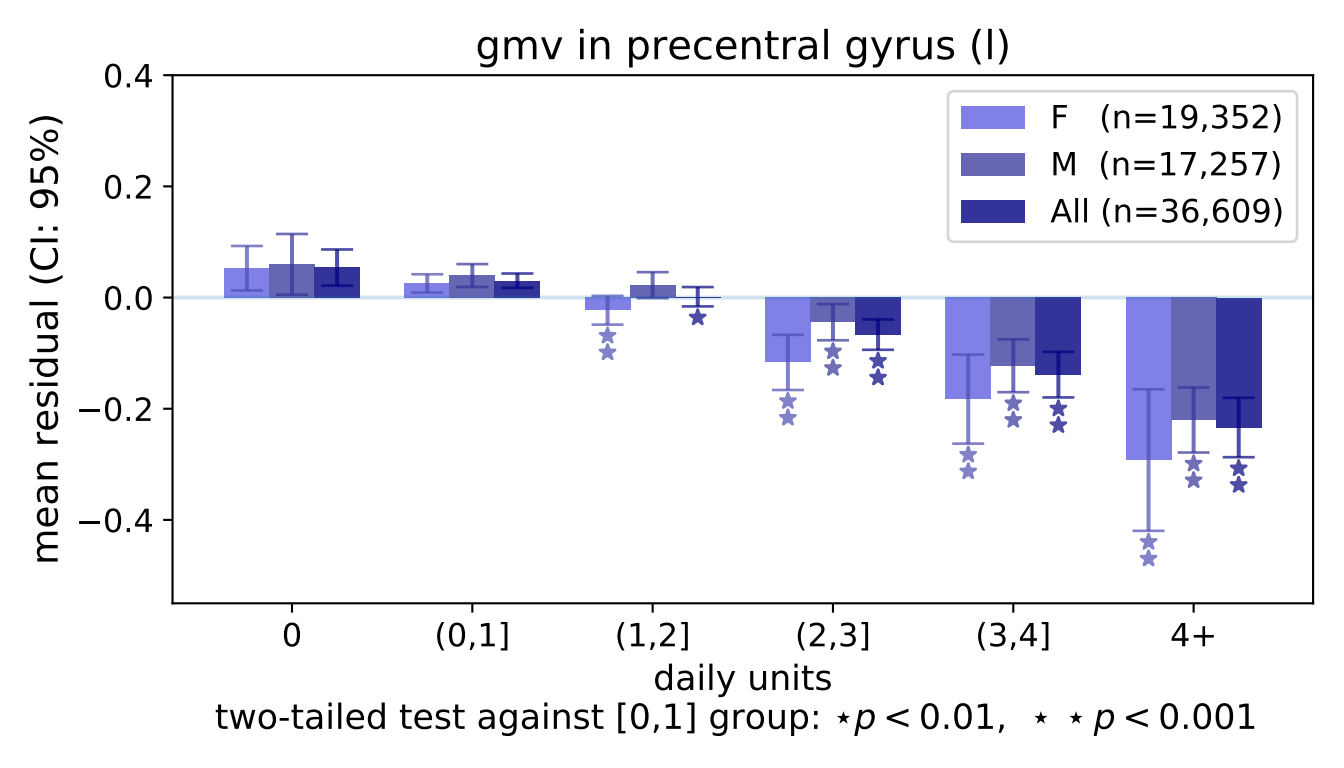

gmv in middle frontal gyrus (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,352)
M (n=17,261)
All (n=36,613)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

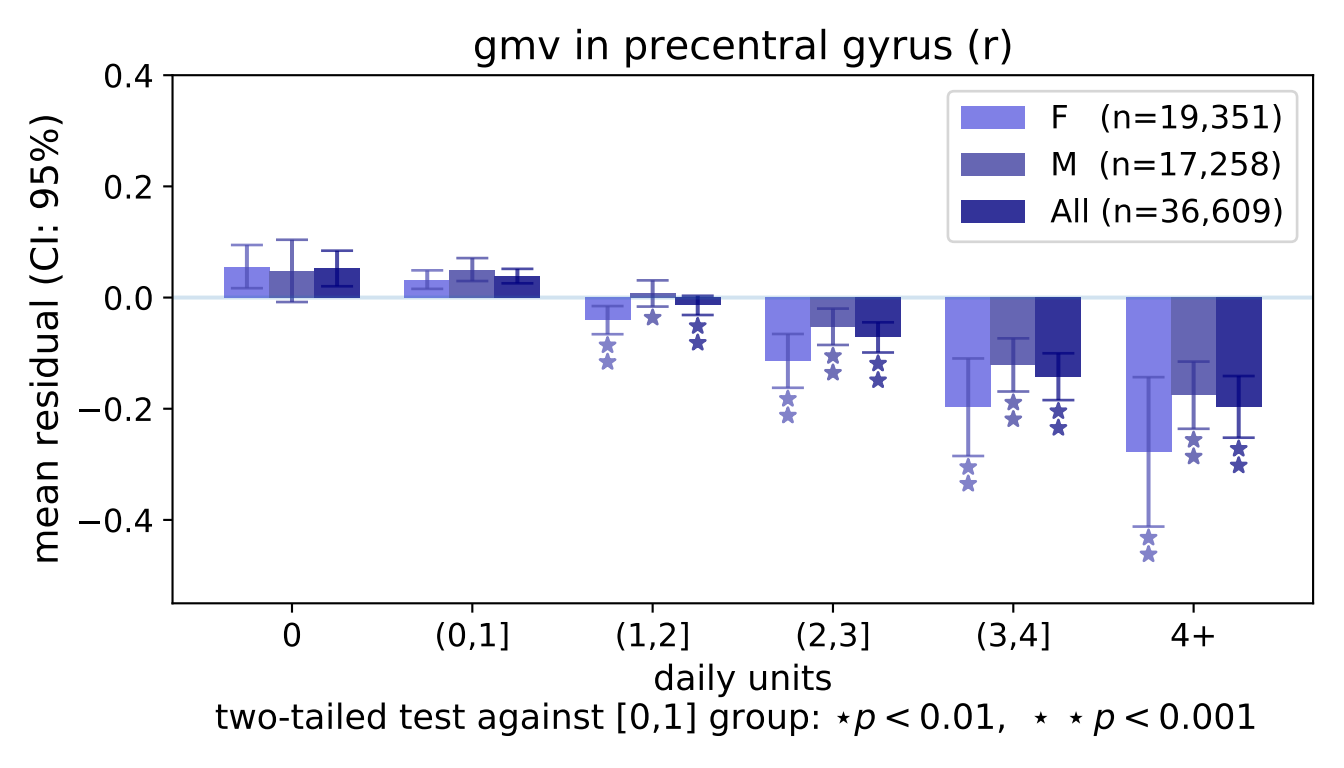

gmv in inferior frontal gyrus, pars triangularis (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,348)
M (n=17,259)
All (n=36,607)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

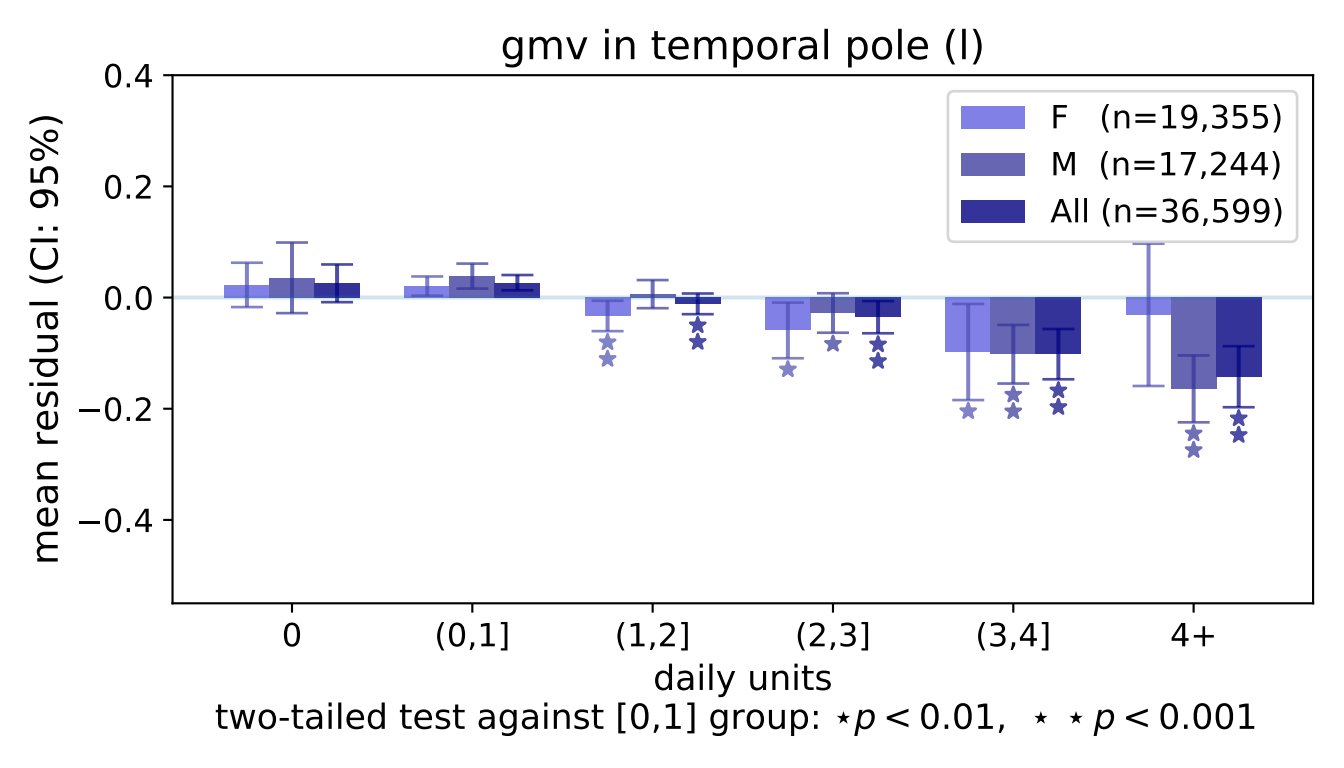

gmv in inferior frontal gyrus, pars triangularis (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,354)
M (n=17,257)
All (n=36,611)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

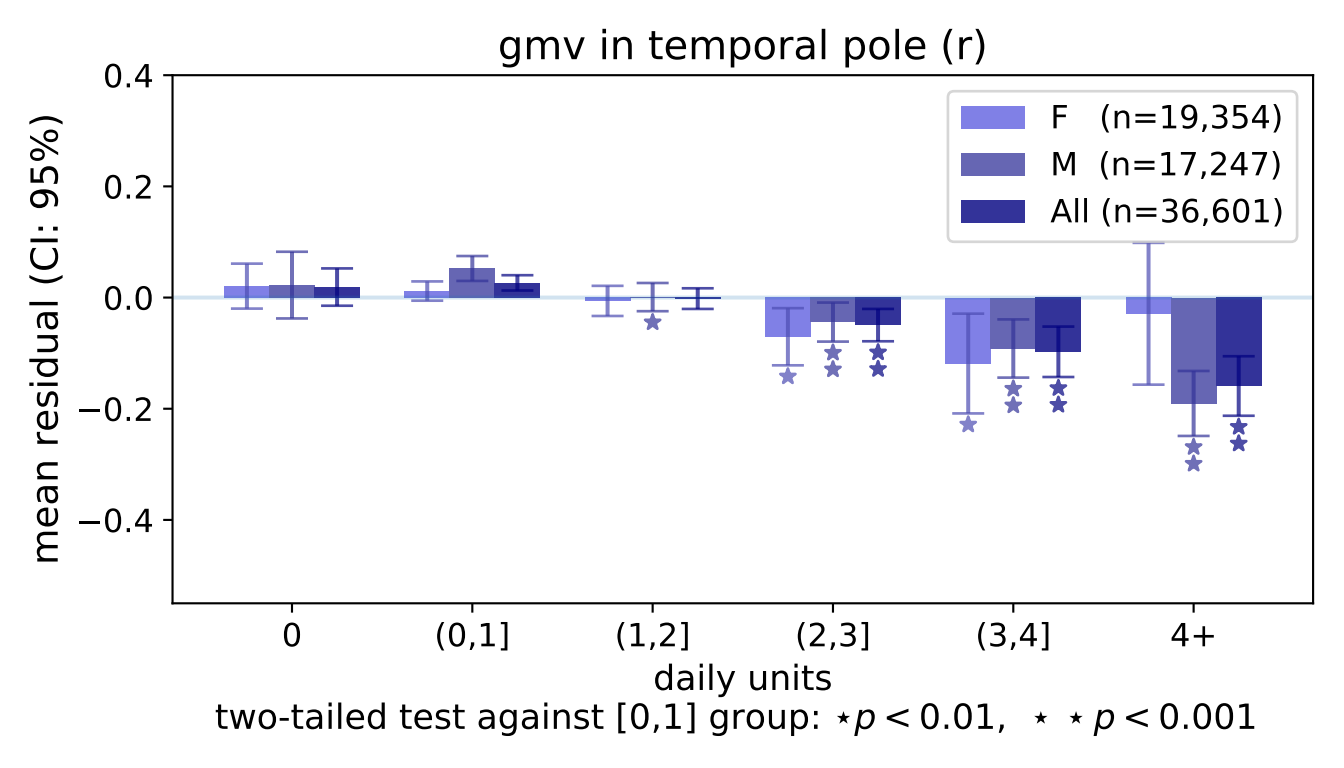

gmv in inferior frontal gyrus, pars opercularis (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,355)
M (n=17,257)
All (n=36,612)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

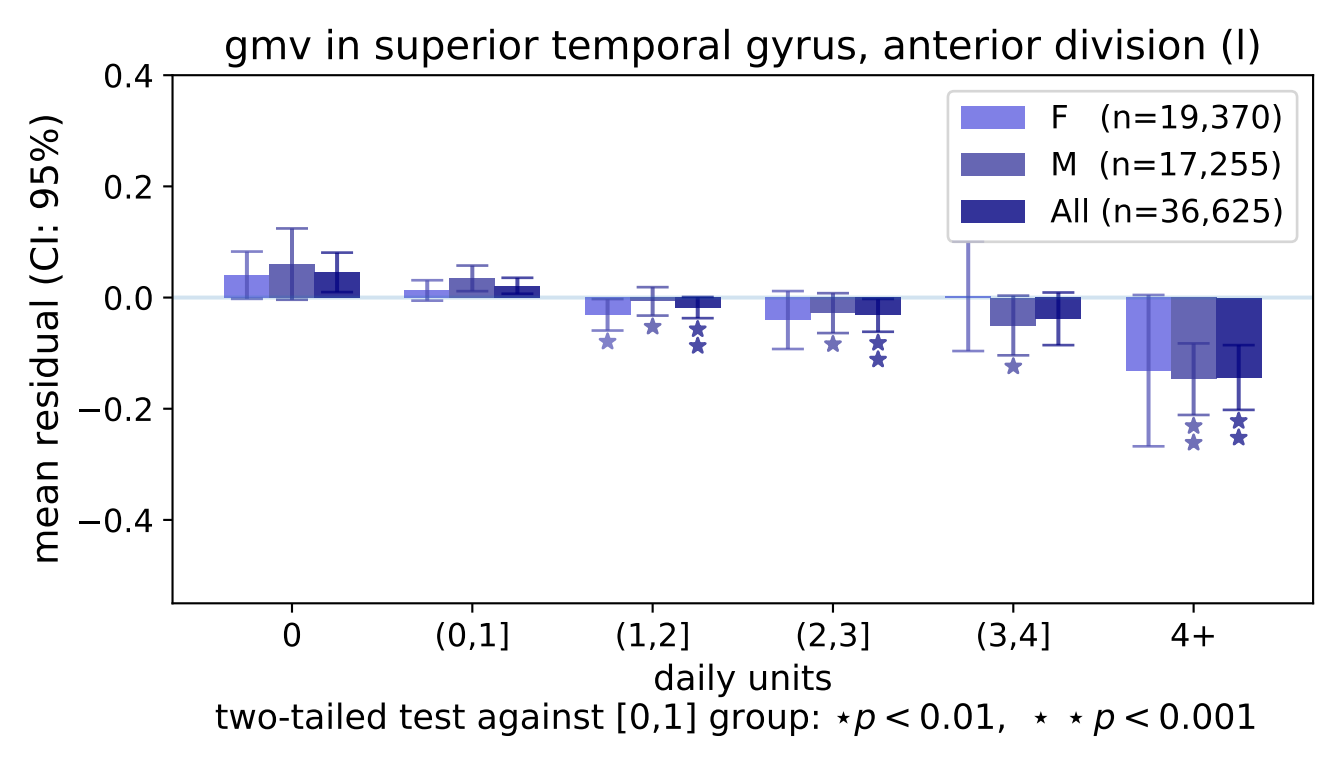

gmv in inferior frontal gyrus, pars opercularis (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,339)
M (n=17,259)
All (n=36,598)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

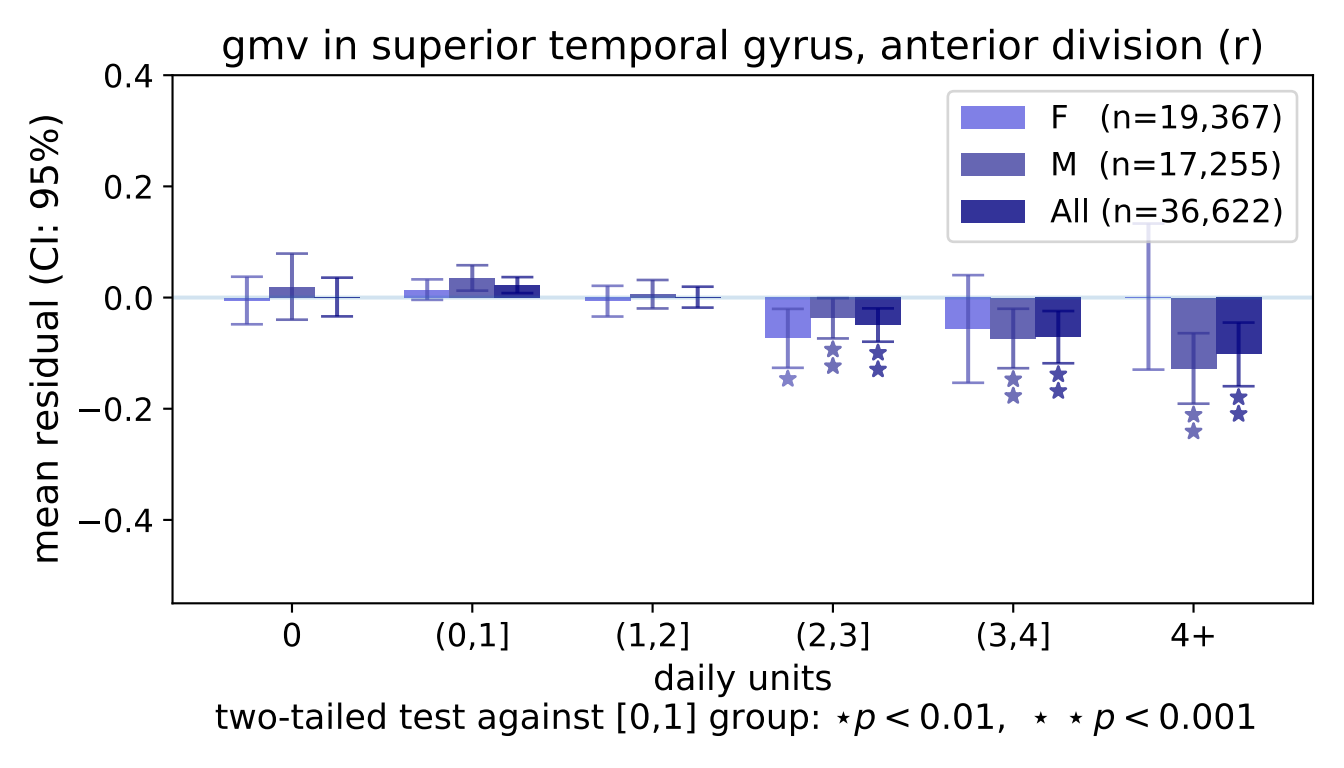

gmv in precentral gyrus (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,352)
M (n=17,257)
All (n=36,609)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

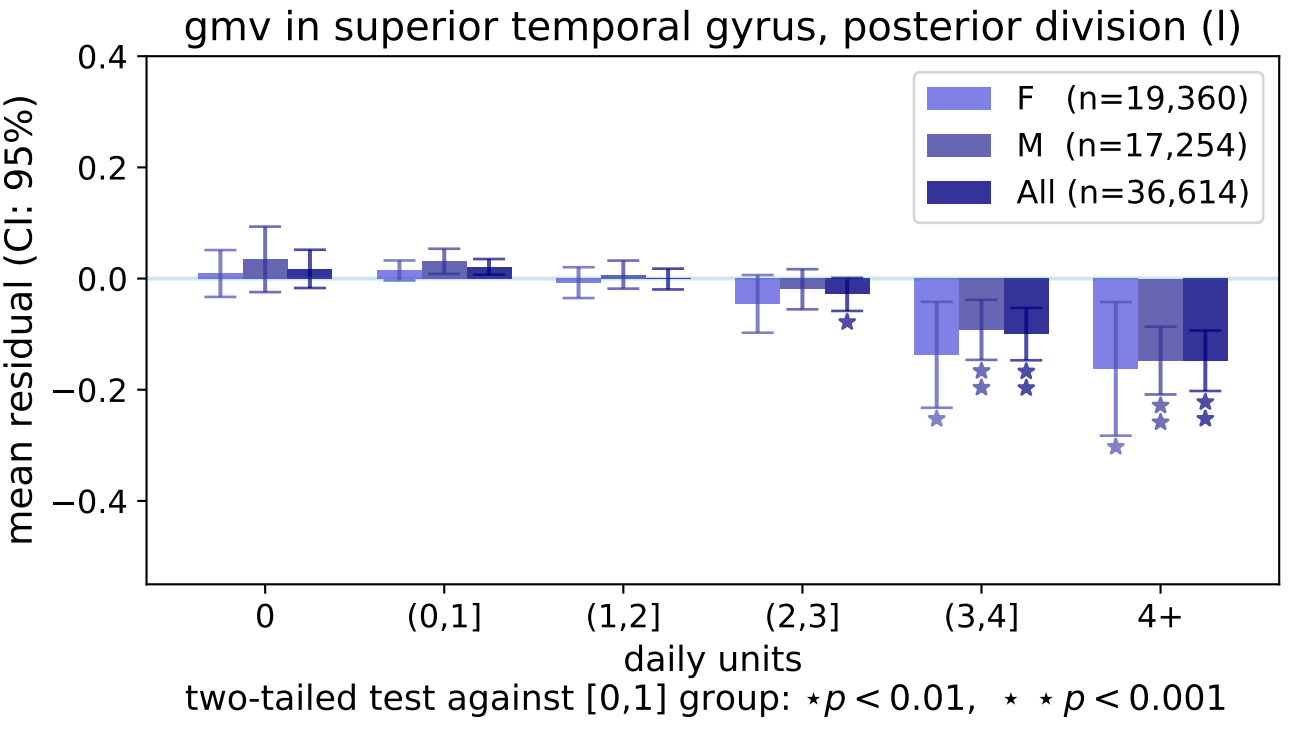

gmv in precentral gyrus (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,351)
M (n=17,258)
All (n=36,609)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

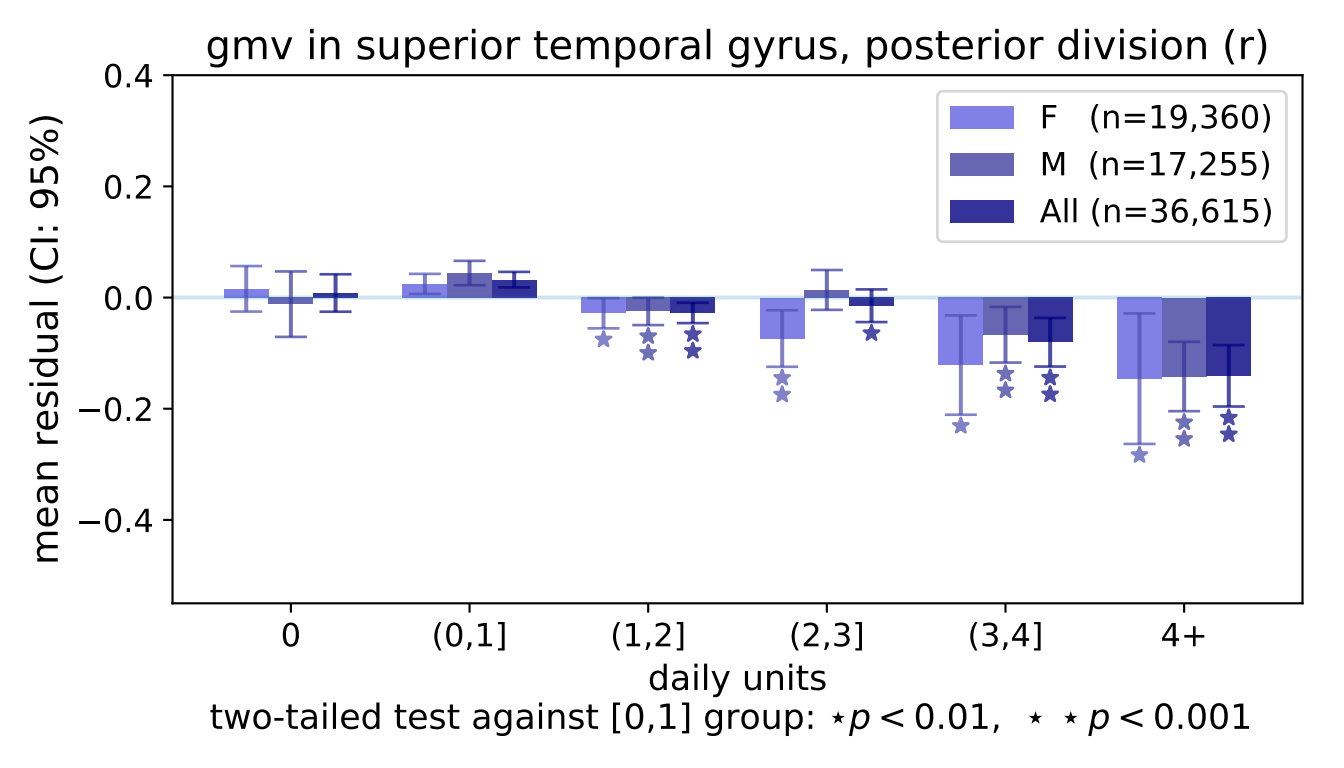

gmv in temporal pole (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,355)
M (n=17,244)
All (n=36,599)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

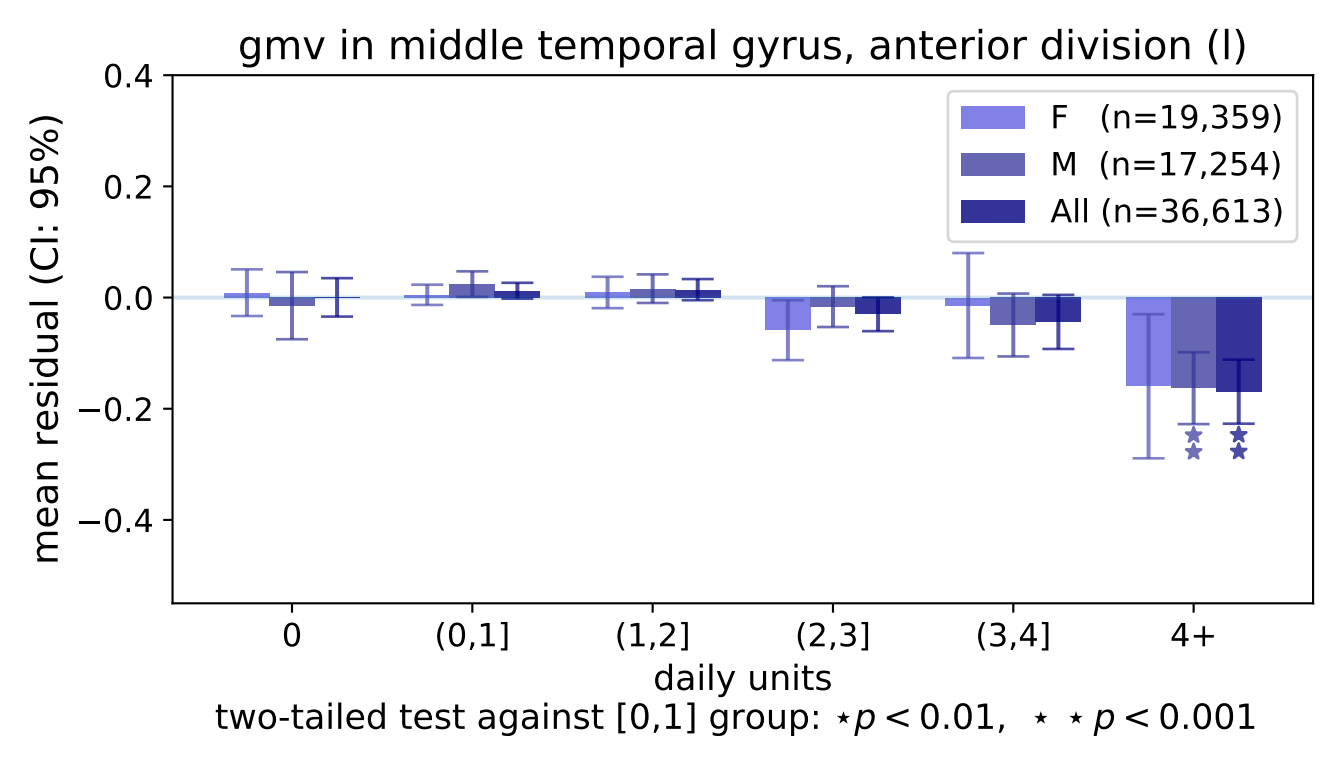

gmv in temporal pole (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,354)
M (n=17,247)
All (n=36,601)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

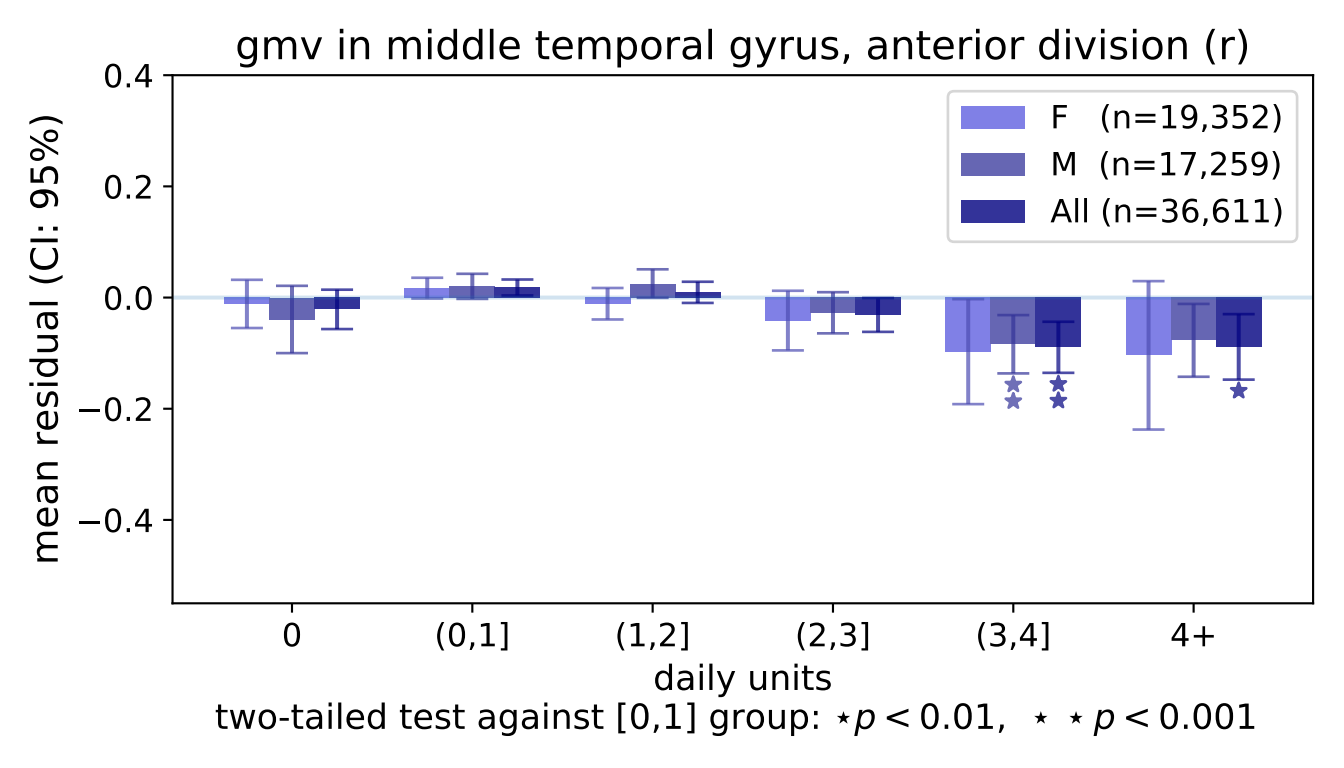

gmv in superior temporal gyrus, anterior division (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,370)
M (n=17,255)
All (n=36,625)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆ $p < 0.01$, ⋆ ⋆ $p < 0.001$

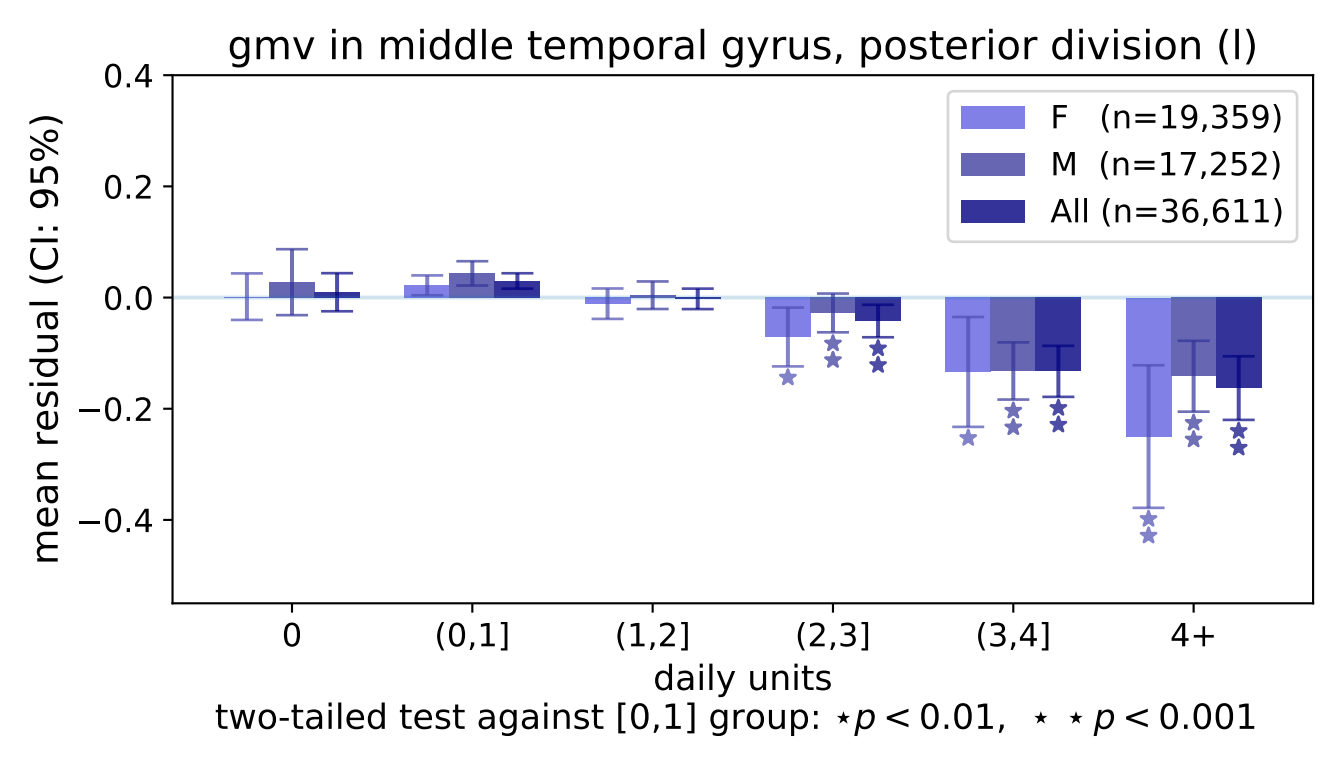

gmv in superior temporal gyrus, anterior division (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,367)
M (n=17,255)
All (n=36,622)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

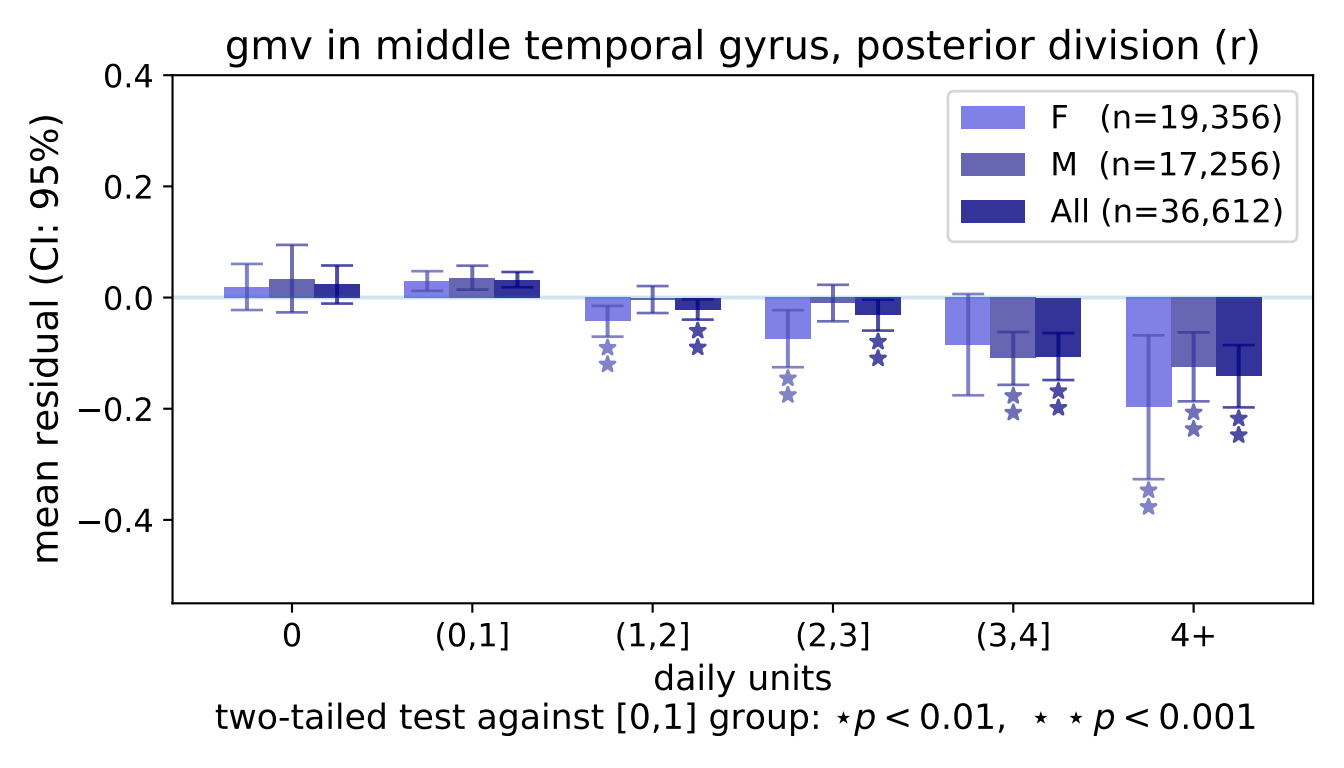

gmv in superior temporal gyrus, posterior division (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,360)
M (n=17,254)
All (n=36,614)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

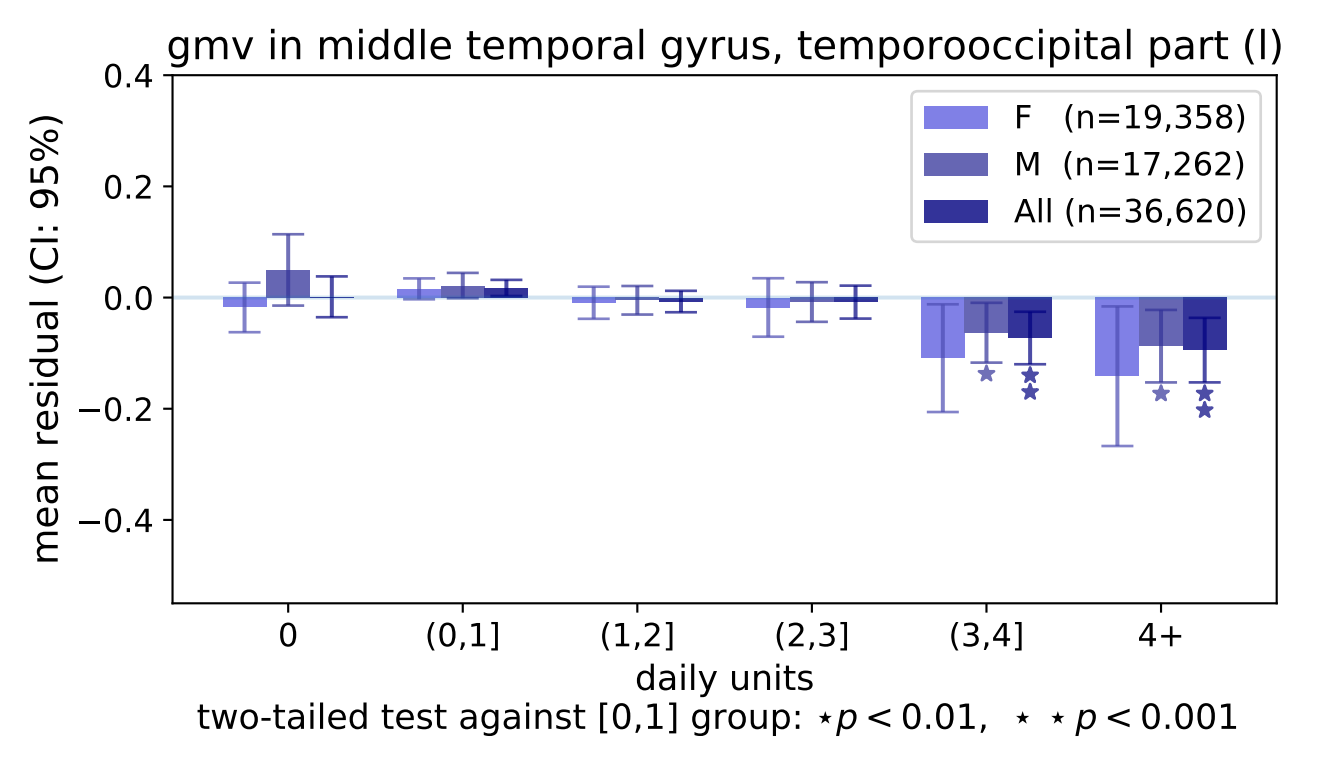

gmv in superior temporal gyrus, posterior division (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,360)
M (n=17,255)
All (n=36,615)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆ $p < 0.001$

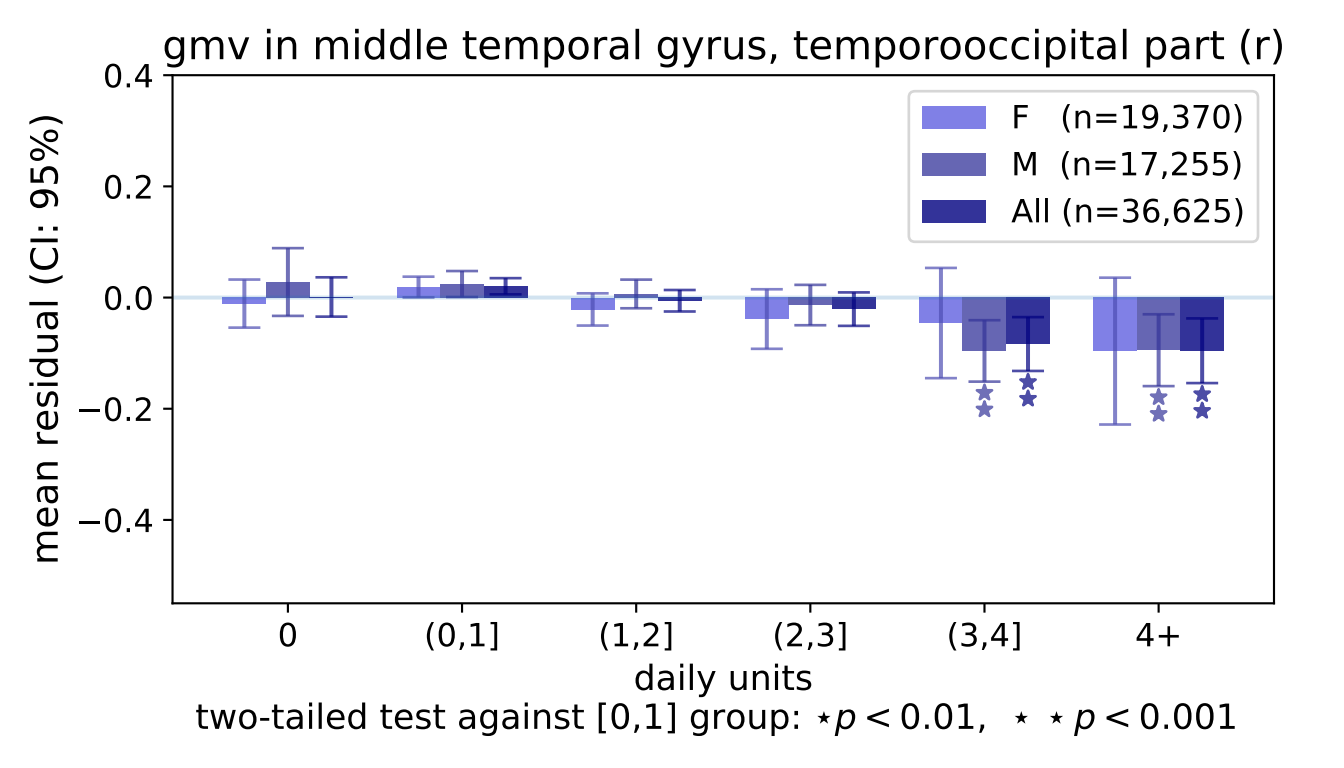

gmv in middle temporal gyrus, anterior division (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,359)
M (n=17,254)
All (n=36,613)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

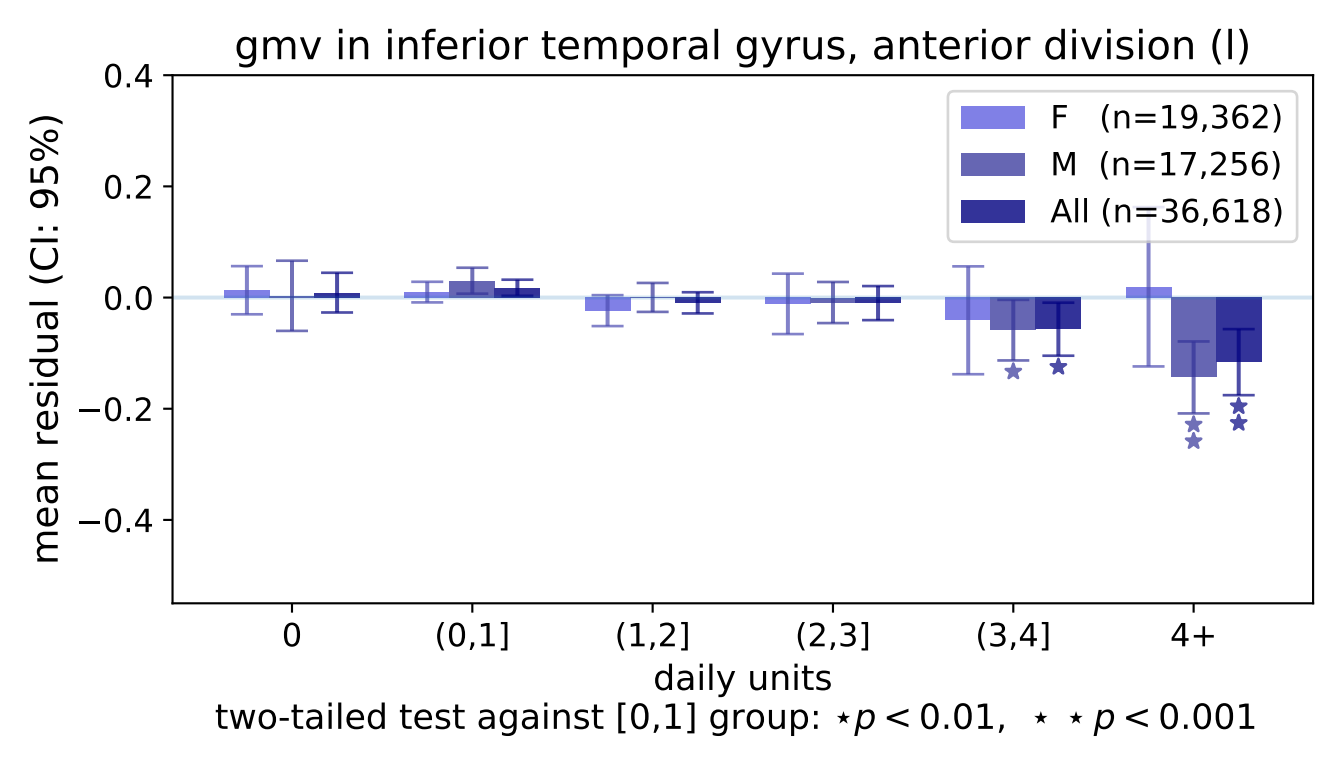

gmv in middle temporal gyrus, anterior division (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,352)
M (n=17,259)
All (n=36,611)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

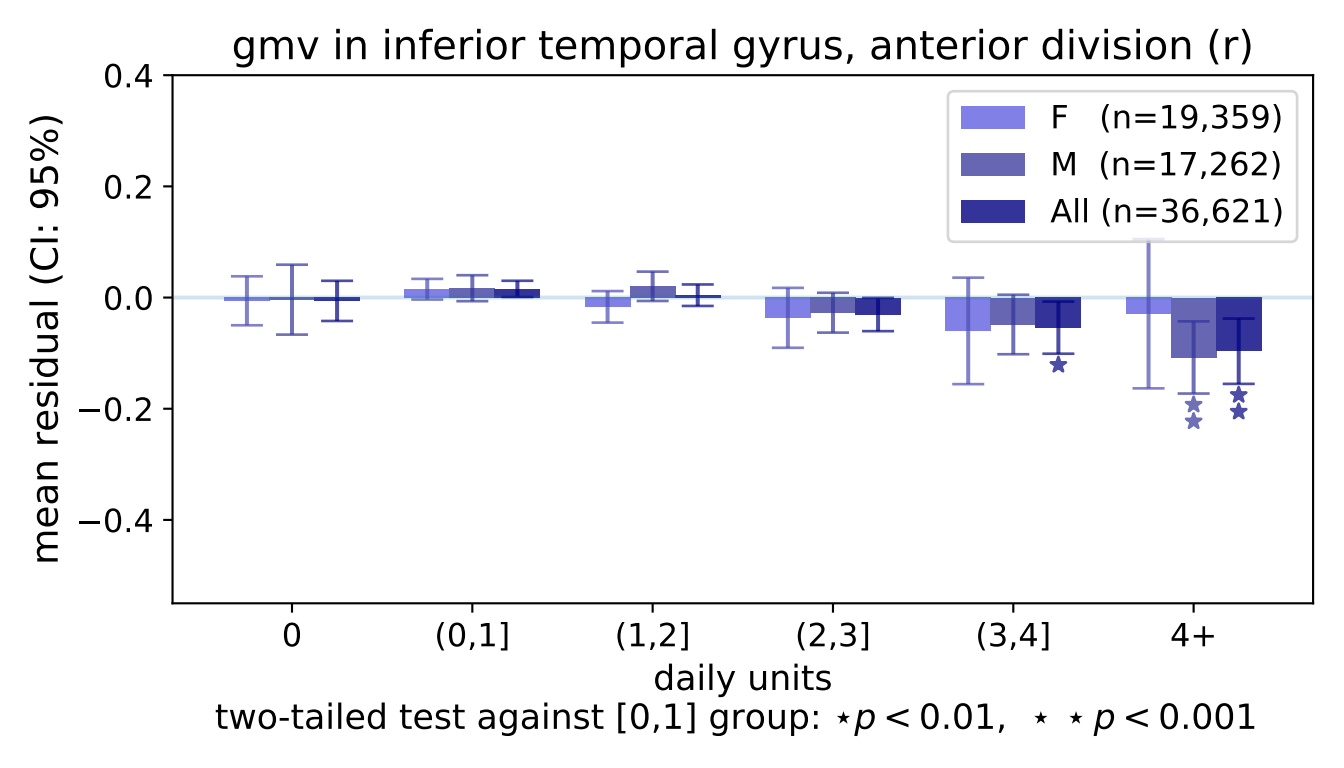

gmv in middle temporal gyrus, posterior division (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,359)
M (n=17,252)
All (n=36,611)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆ $p < 0.01$, ⋆ ⋆ $p < 0.001$

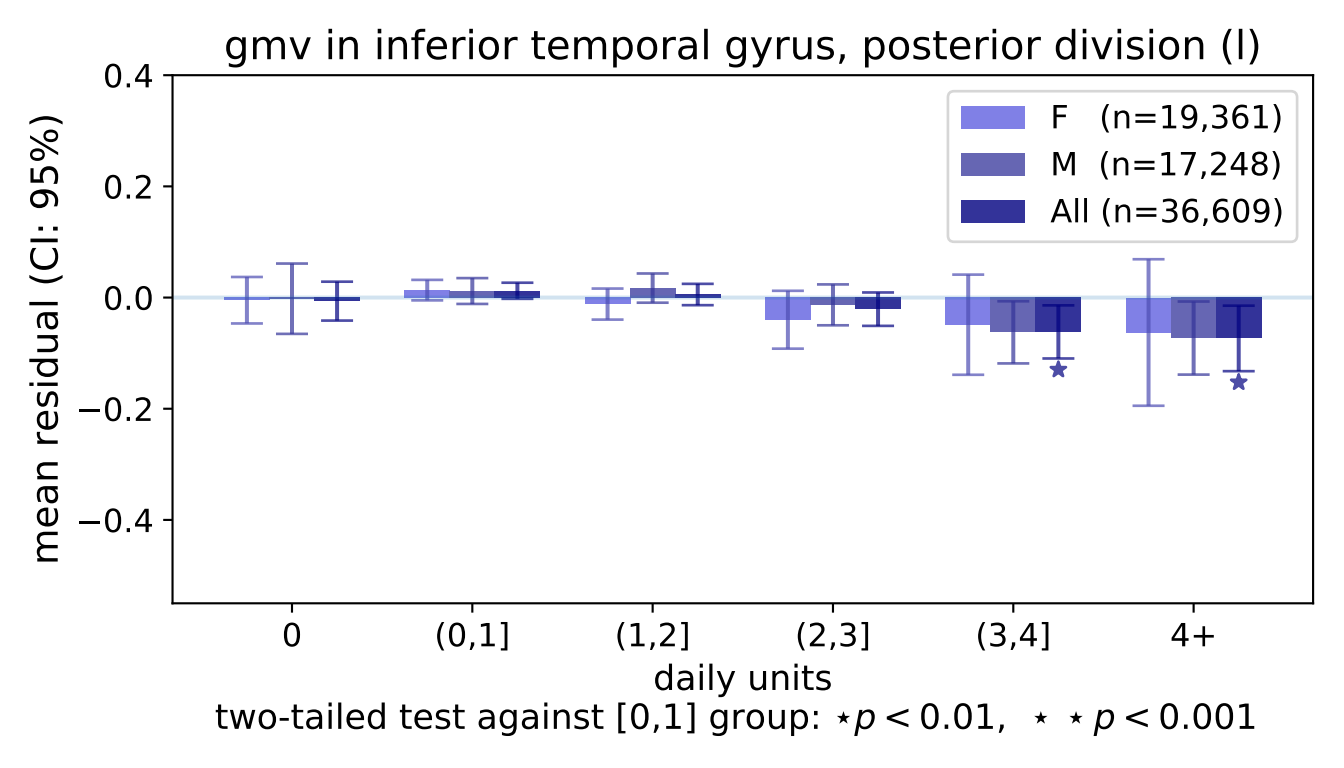

gmv in middle temporal gyrus, posterior division (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,356)
M (n=17,256)
All (n=36,612)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆⋆$p < 0.001$

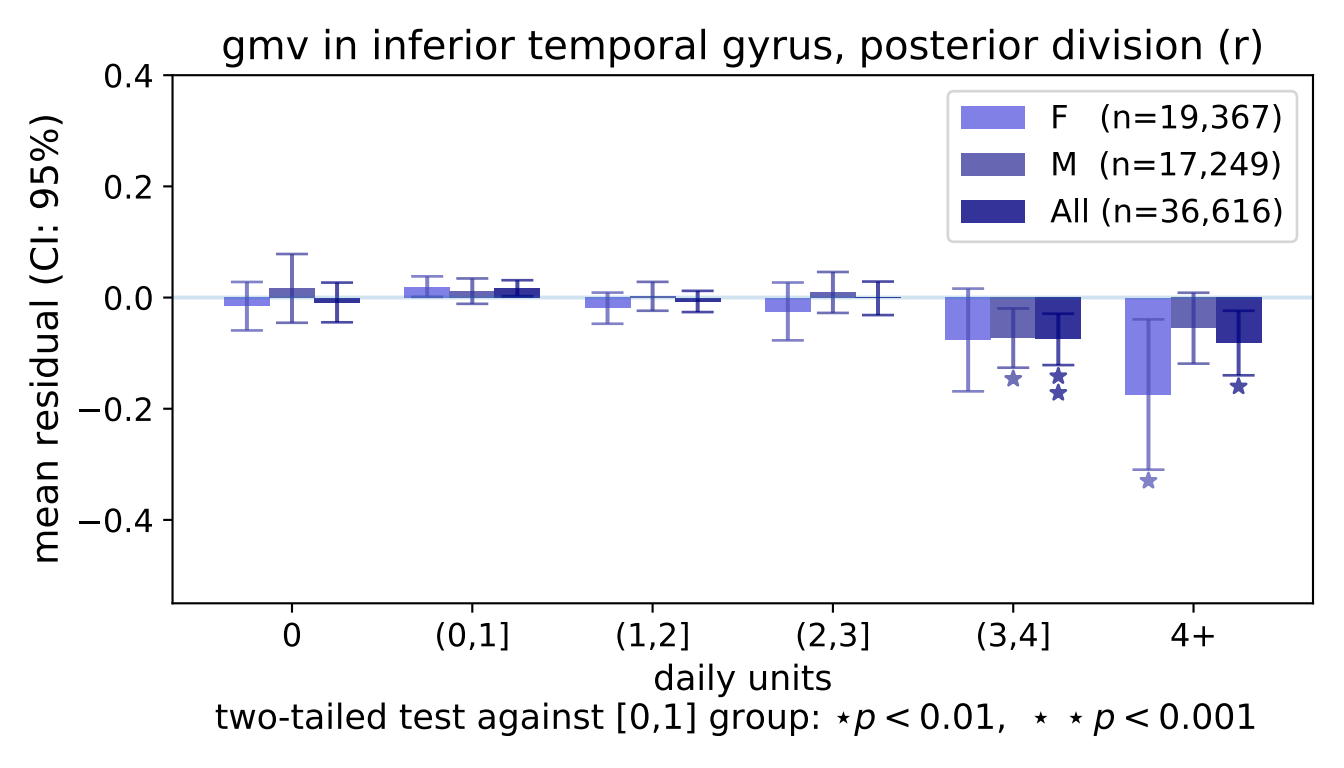

gmv in middle temporal gyrus, temporooccipital part (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,358)
M (n=17,262)
All (n=36,620)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆⋆ $p < 0.001$

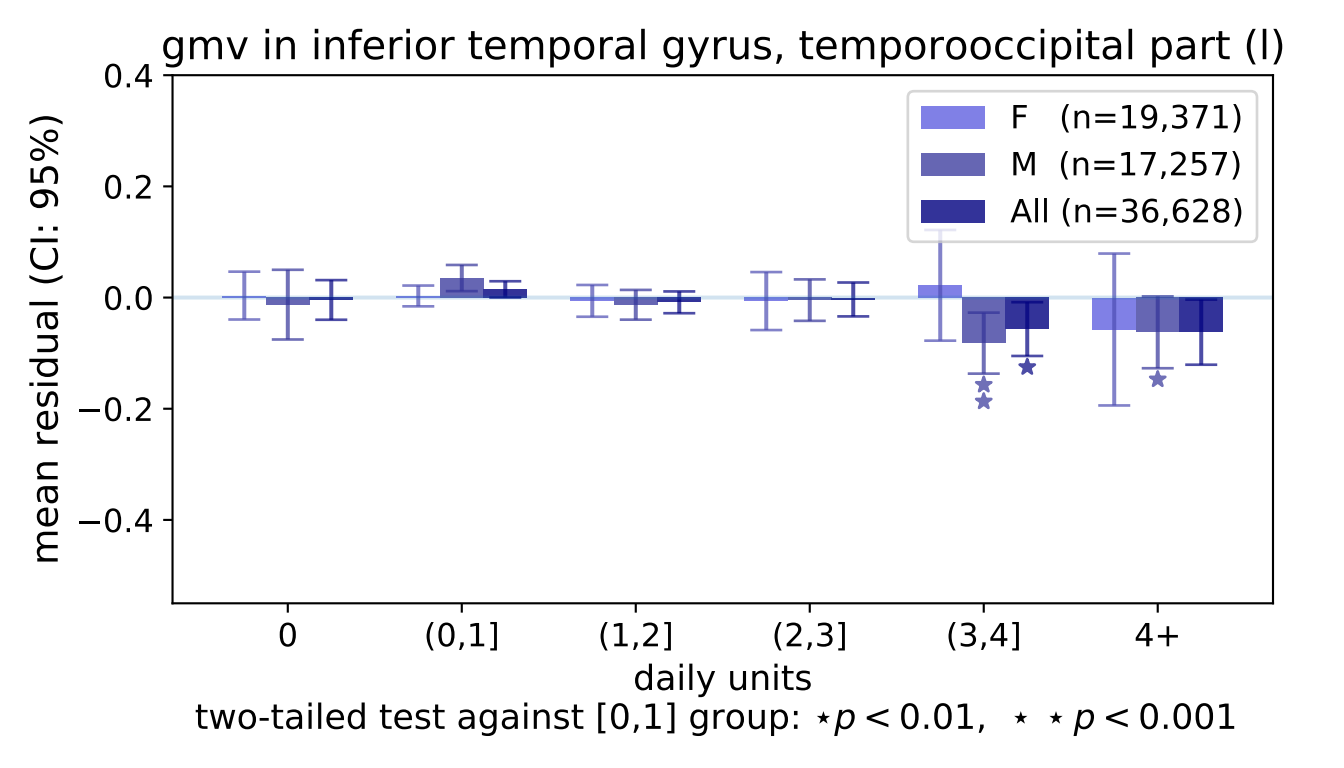

gmv in middle temporal gyrus, temporooccipital part (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,370)
M (n=17,255)
All (n=36,625)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆⋆ $p < 0.001$

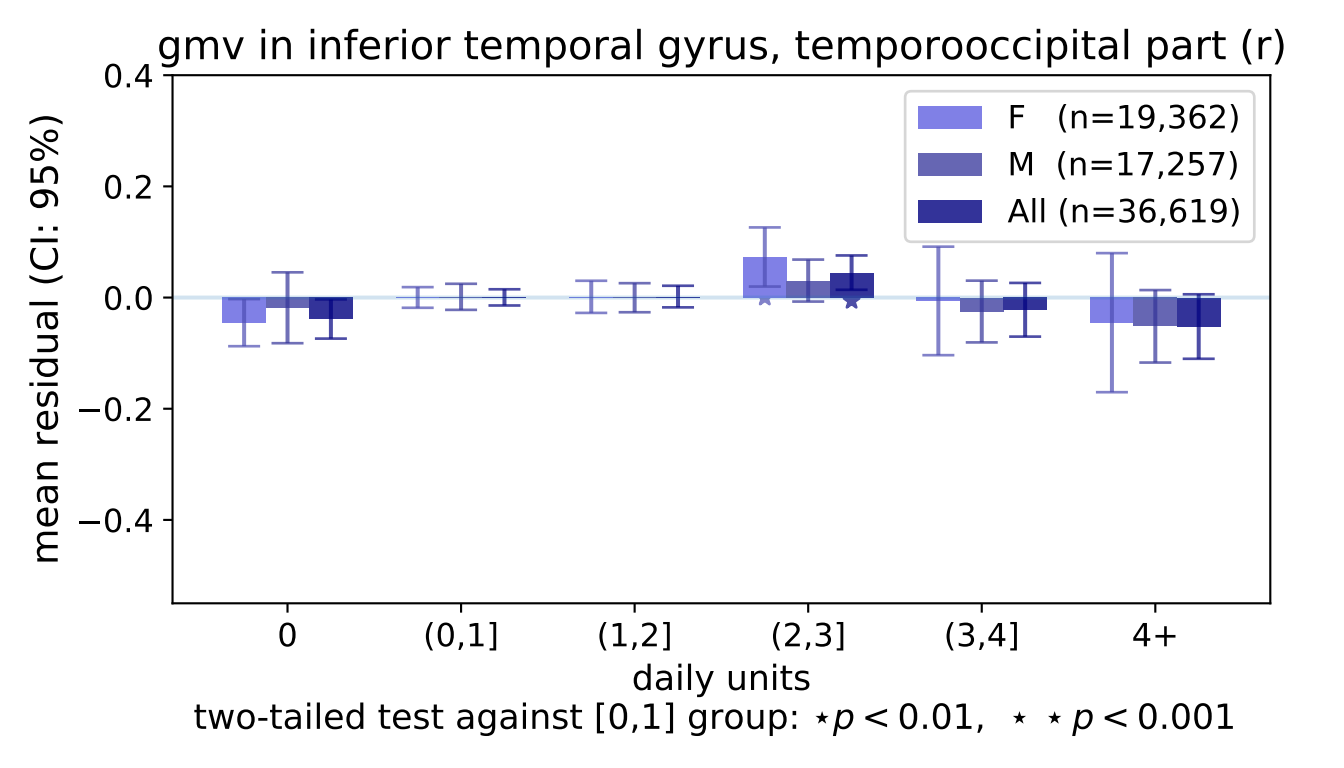

gmv in inferior temporal gyrus, anterior division (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,362)
M (n=17,256)
All (n=36,618)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

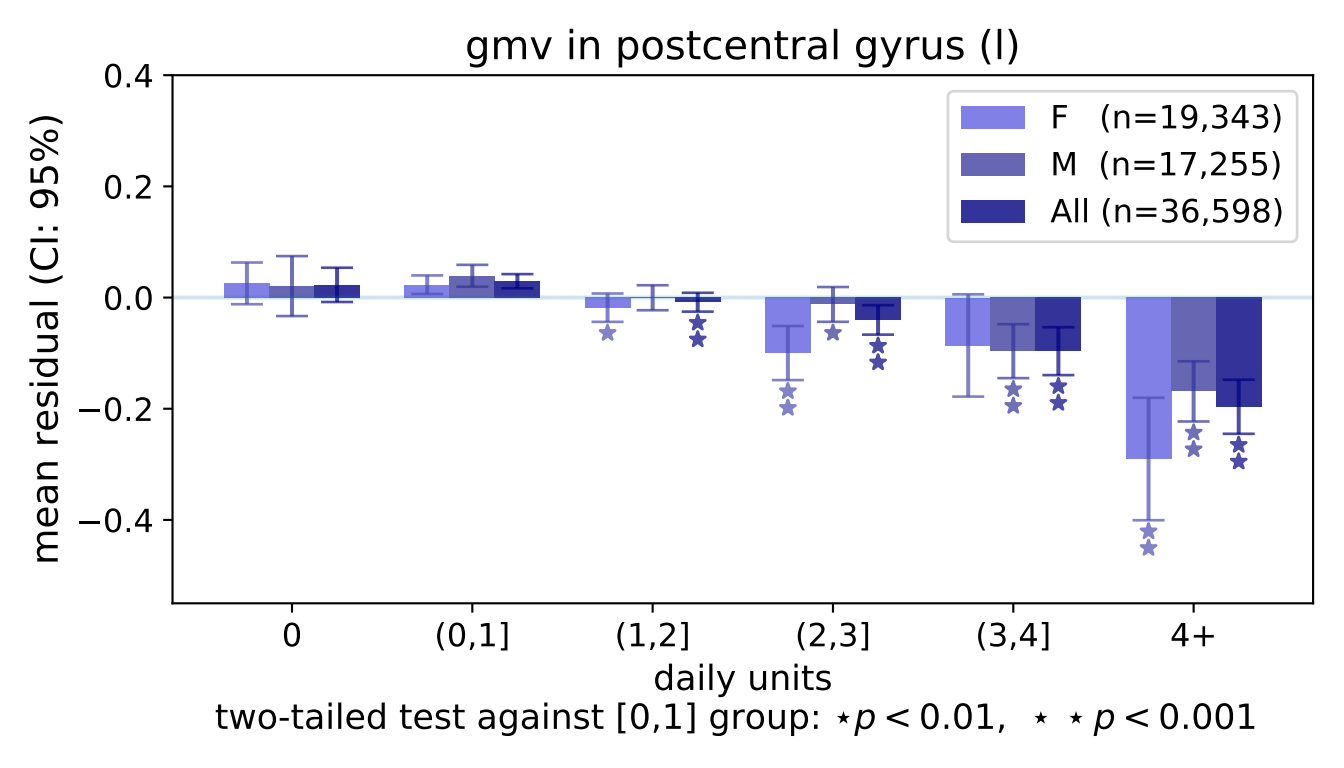

gmv in inferior temporal gyrus, anterior division (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,359)
M (n=17,262)
All (n=36,621)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆ $p < 0.01$, ⋆ ⋆ $p < 0.001$

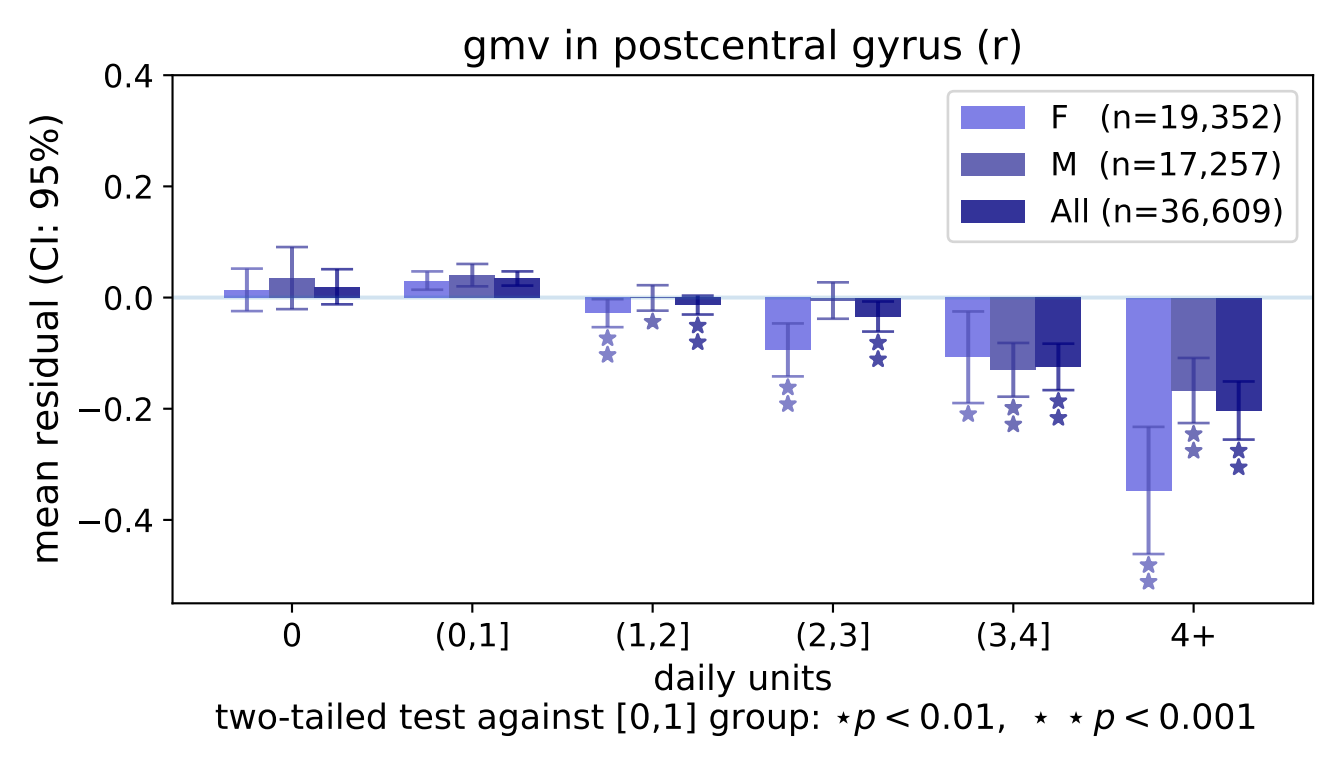

gmv in inferior temporal gyrus, posterior division (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,361)
M (n=17,248)
All (n=36,609)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

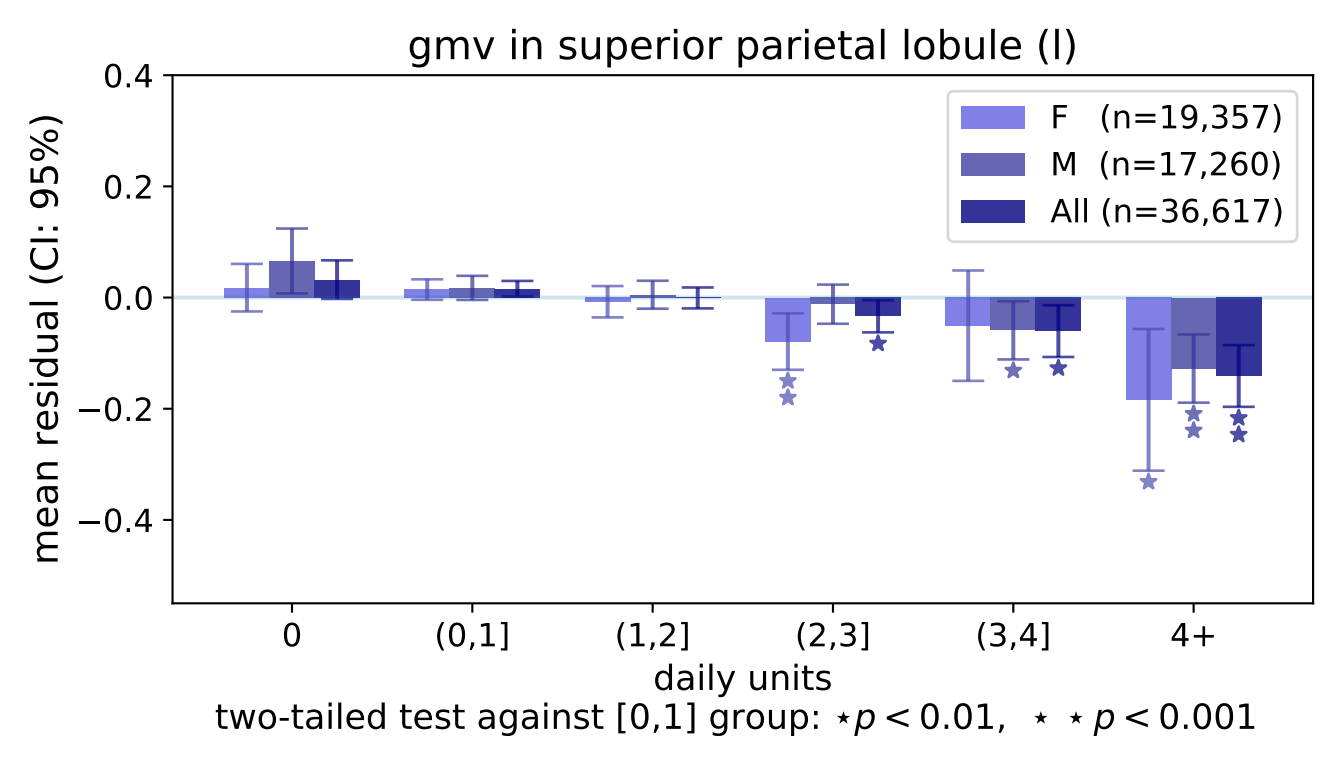

gmv in inferior temporal gyrus, posterior division (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,367)
M (n=17,249)
All (n=36,616)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

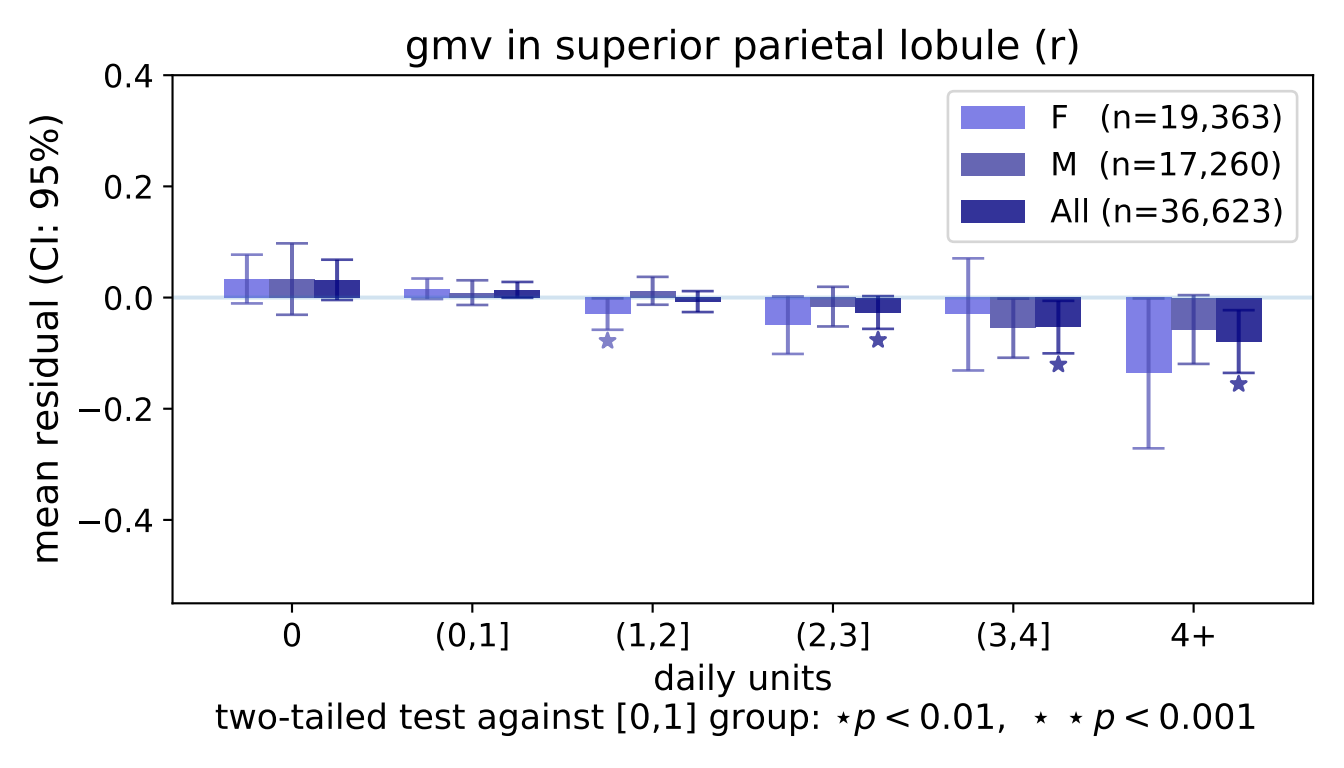

gmv in inferior temporal gyrus, temporooccipital part (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,371)
M (n=17,257)
All (n=36,628)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆⋆$p < 0.001$

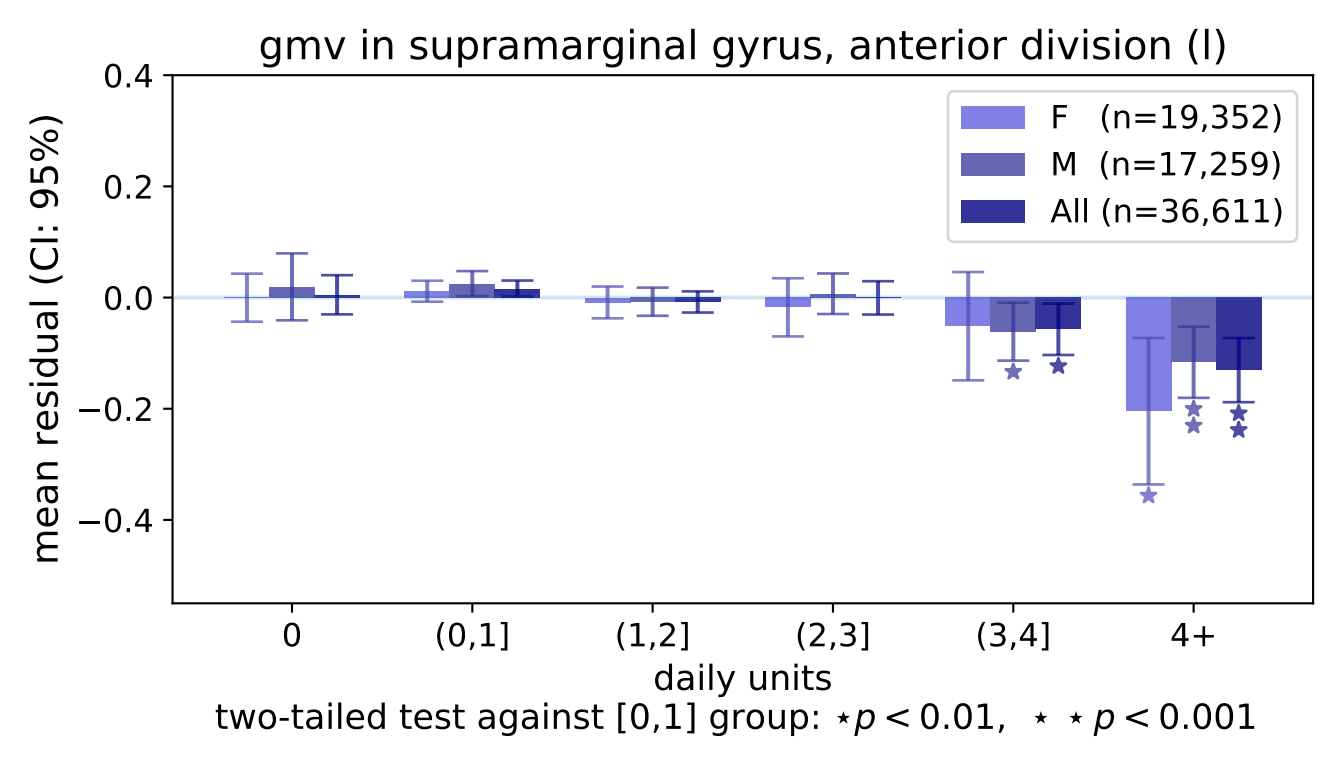

gmv in inferior temporal gyrus, temporooccipital part (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,362)
M (n=17,257)
All (n=36,619)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆ $p < 0.001$

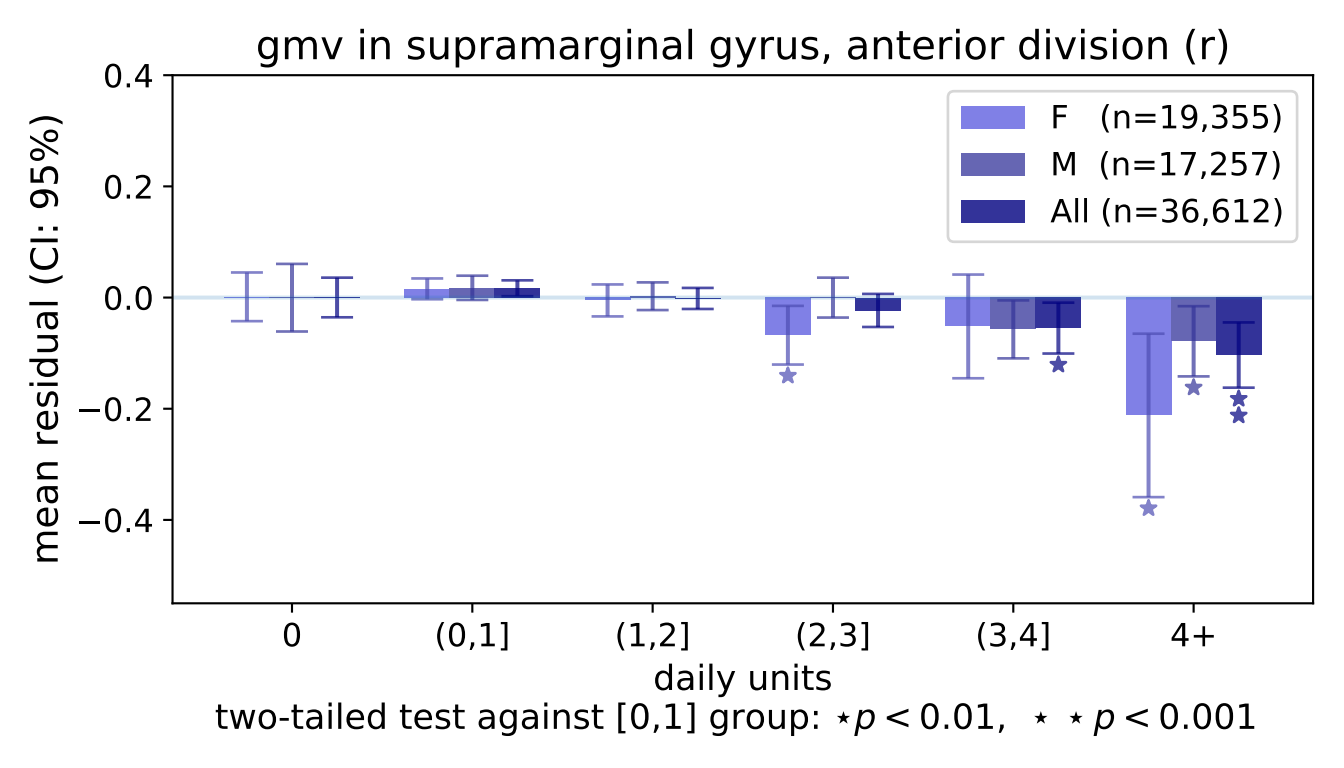

gmv in postcentral gyrus (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,343)
M (n=17,255)
All (n=36,598)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

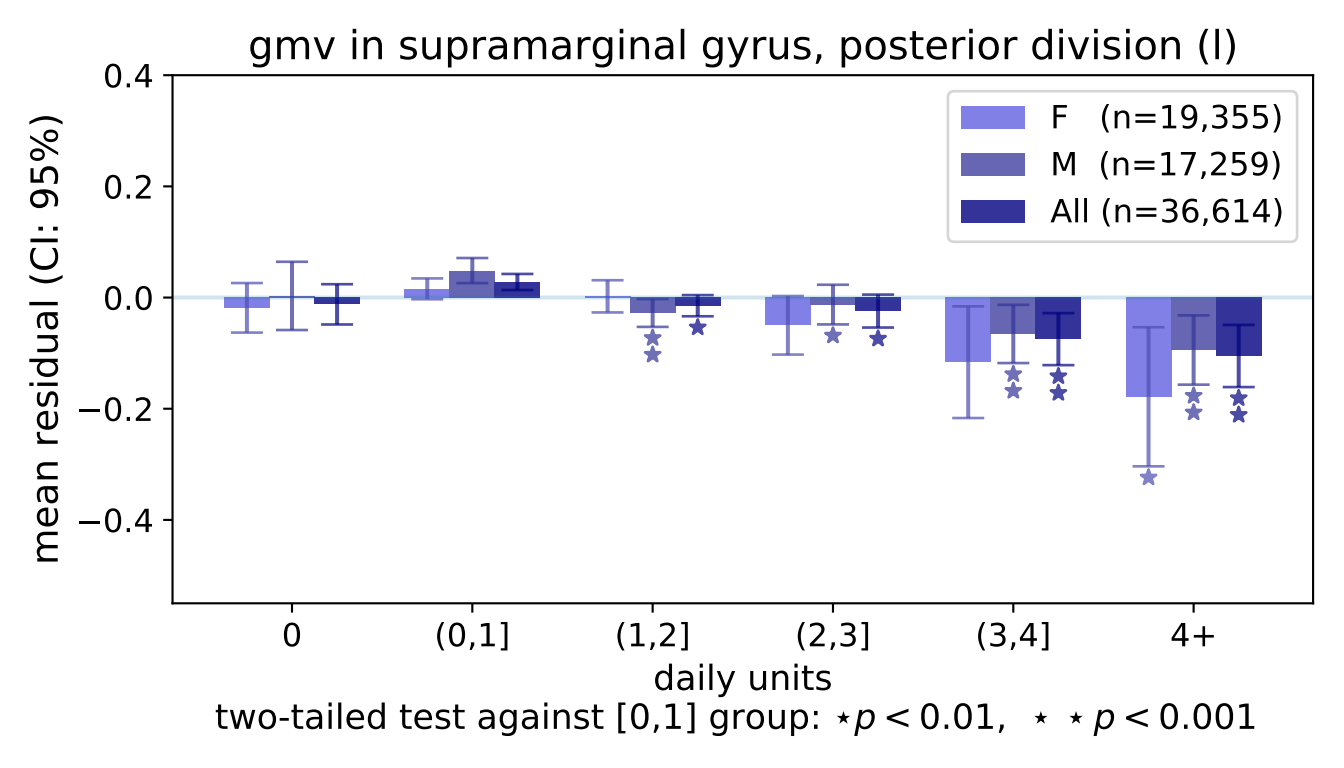

gmv in postcentral gyrus (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,352)
M (n=17,257)
All (n=36,609)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

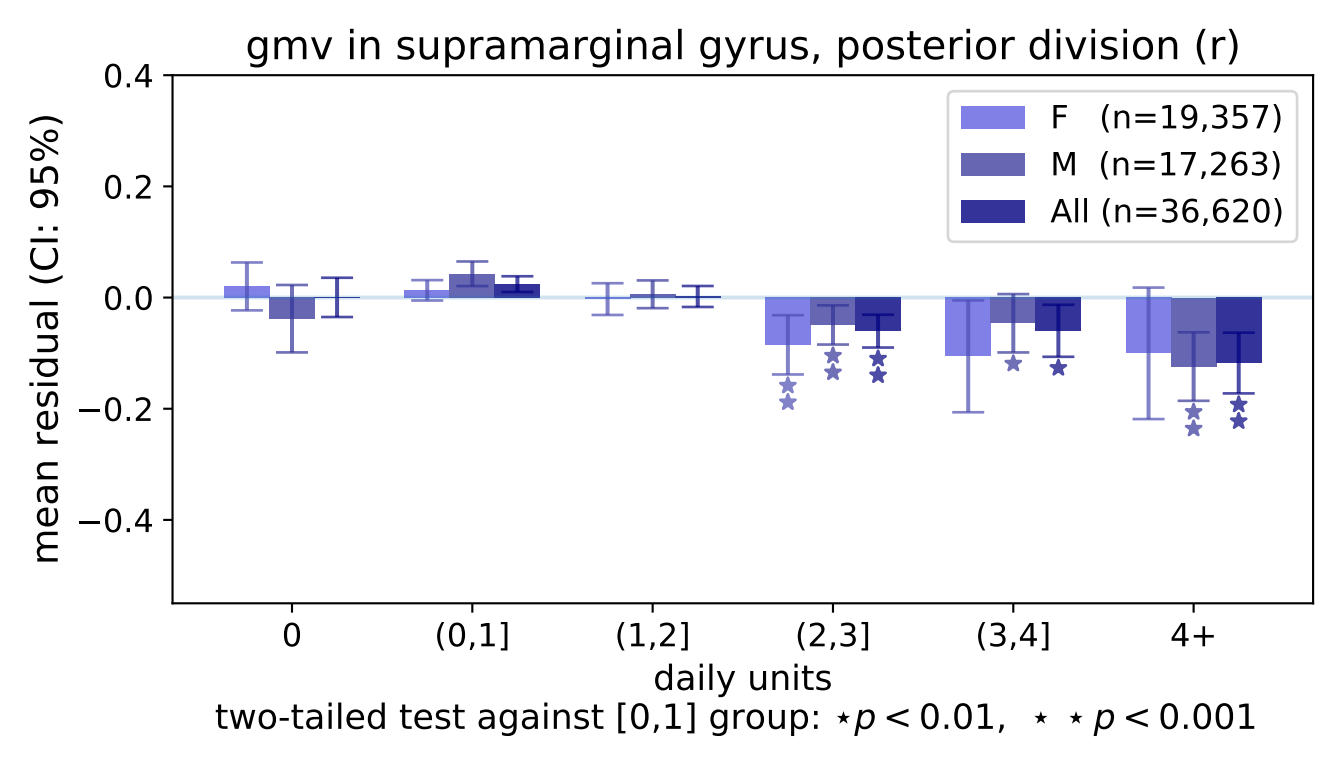

gmv in superior parietal lobule (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,357)
M (n=17,260)
All (n=36,617)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

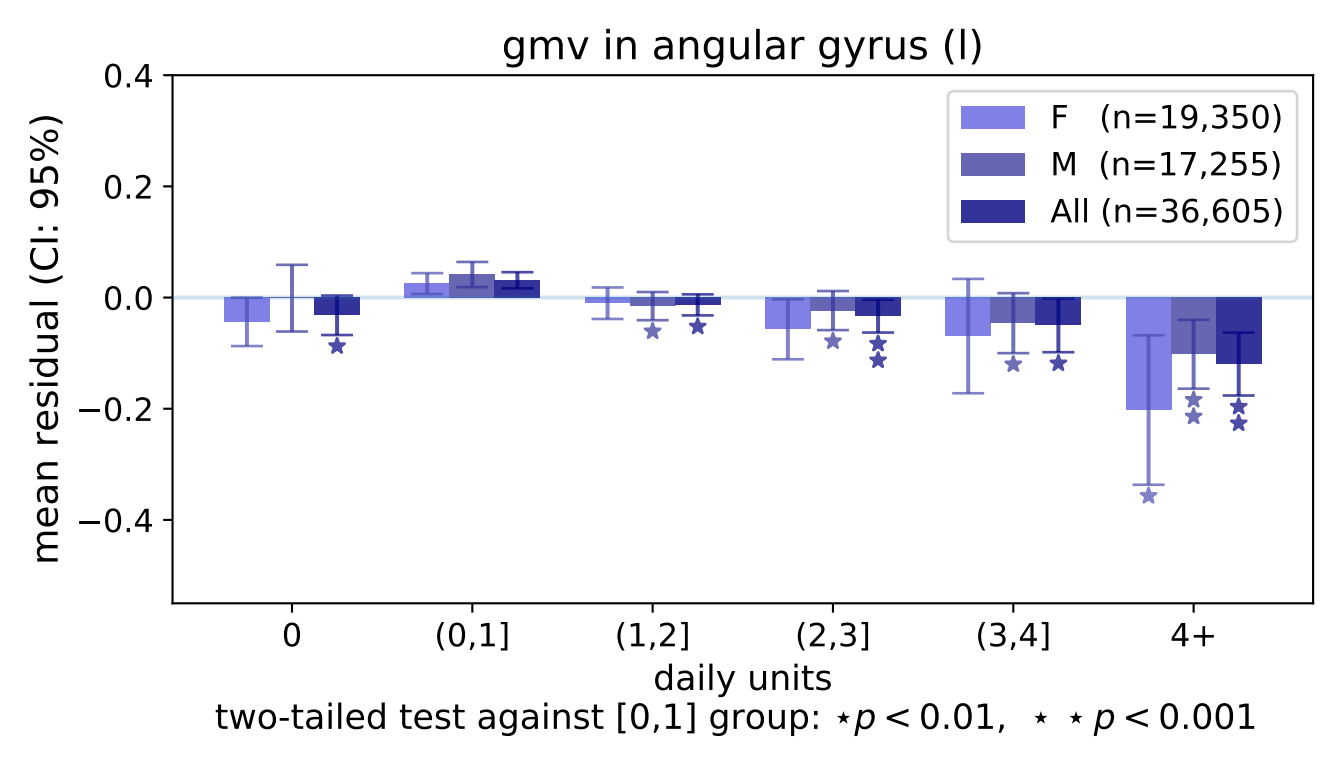

gmv in superior parietal lobule (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,363)
M (n=17,260)
All (n=36,623)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

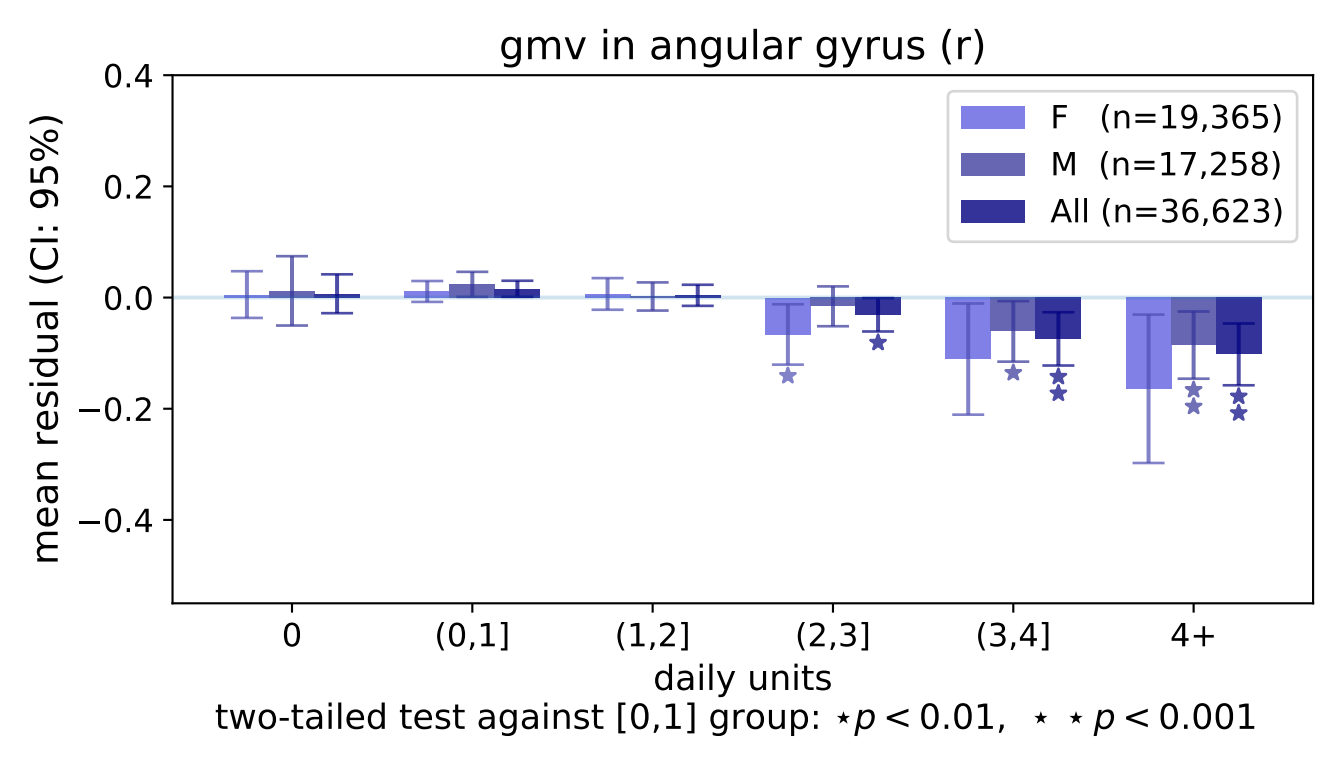

gmv in supramarginal gyrus, anterior division (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,352)
M (n=17,259)
All (n=36,611)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

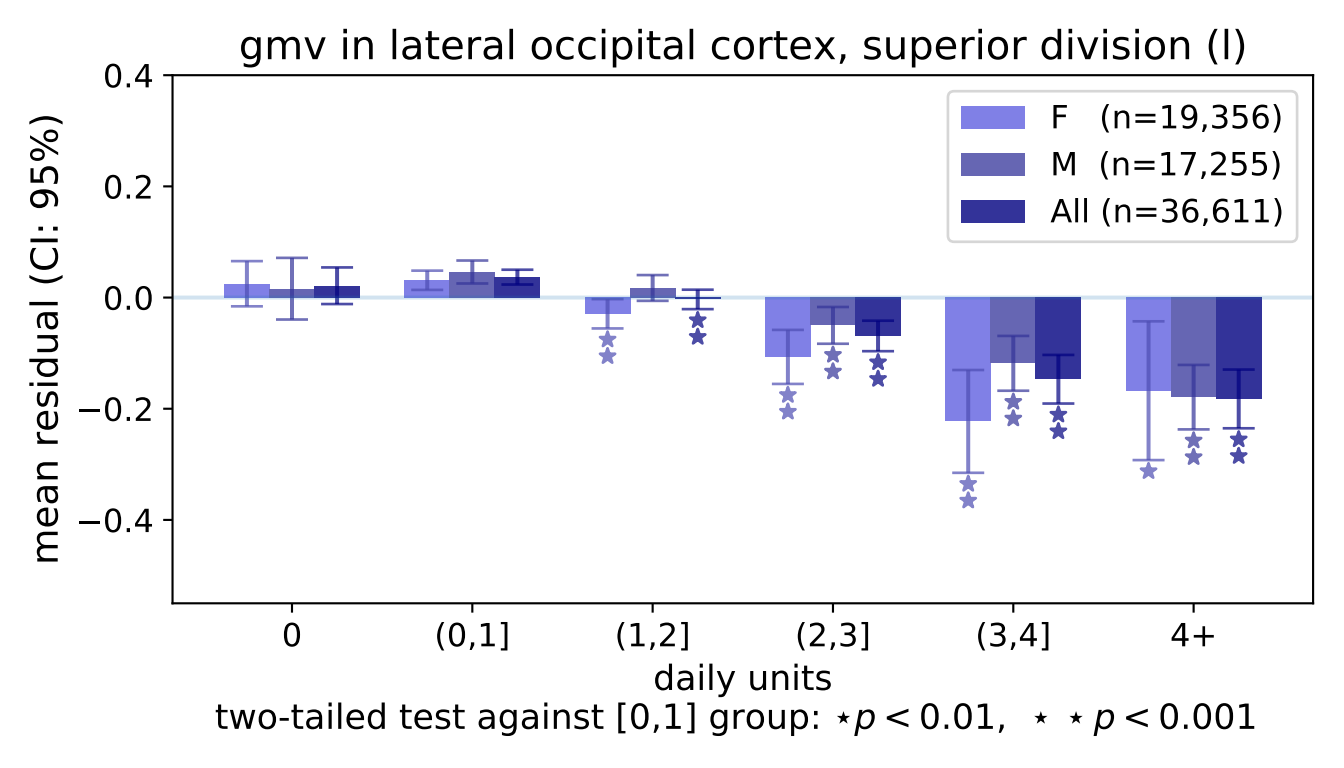

gmv in supramarginal gyrus, anterior division (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,355)
M (n=17,257)
All (n=36,612)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

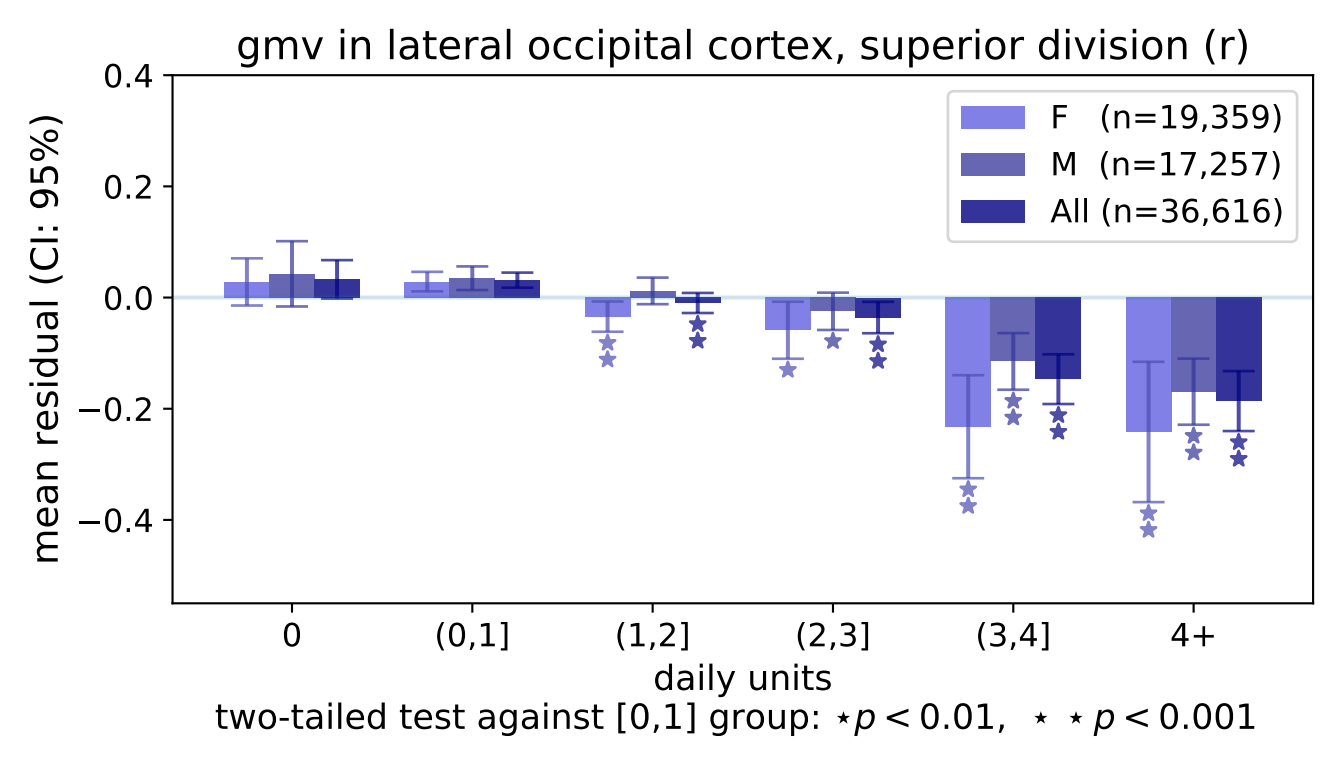

gmv in supramarginal gyrus, posterior division (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,355)
M (n=17,259)
All (n=36,614)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

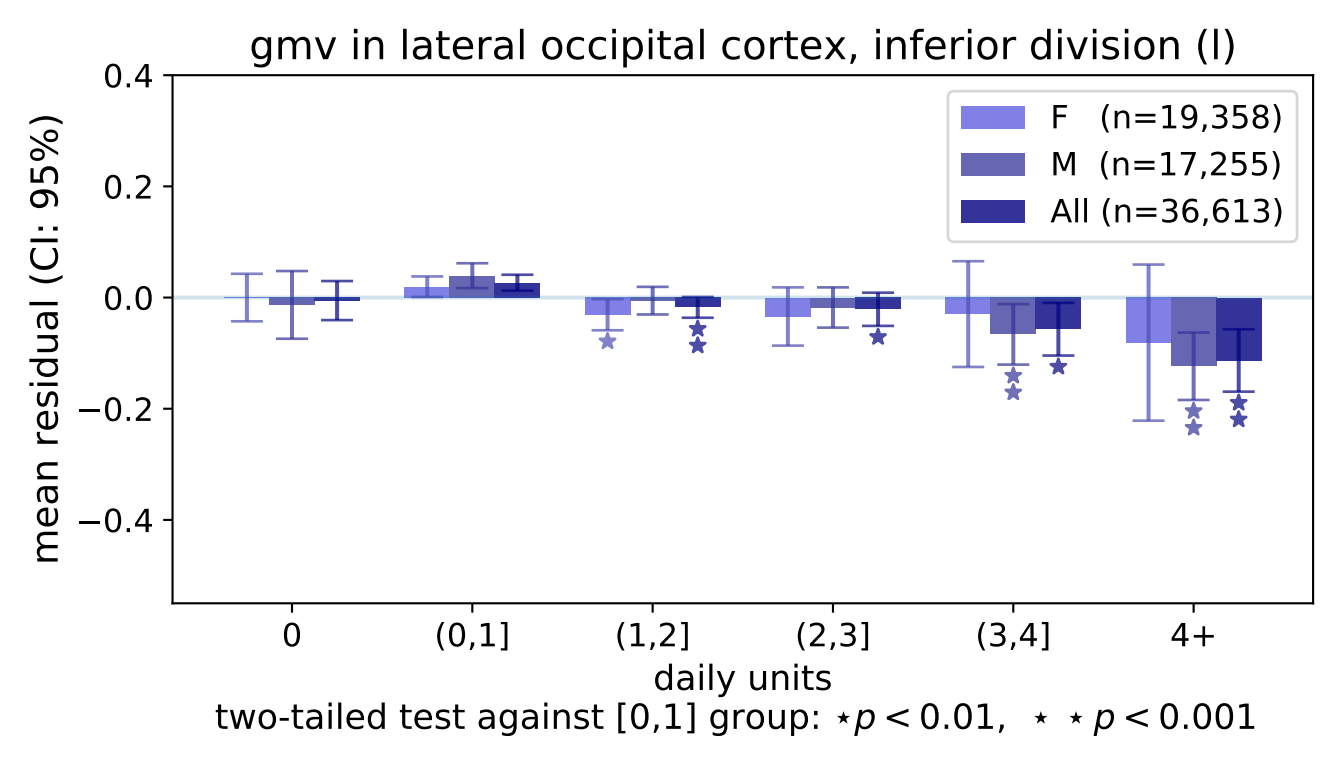

gmv in supramarginal gyrus, posterior division (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,357)
M (n=17,263)
All (n=36,620)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆ $p < 0.01$, ⋆ ⋆ $p < 0.001$

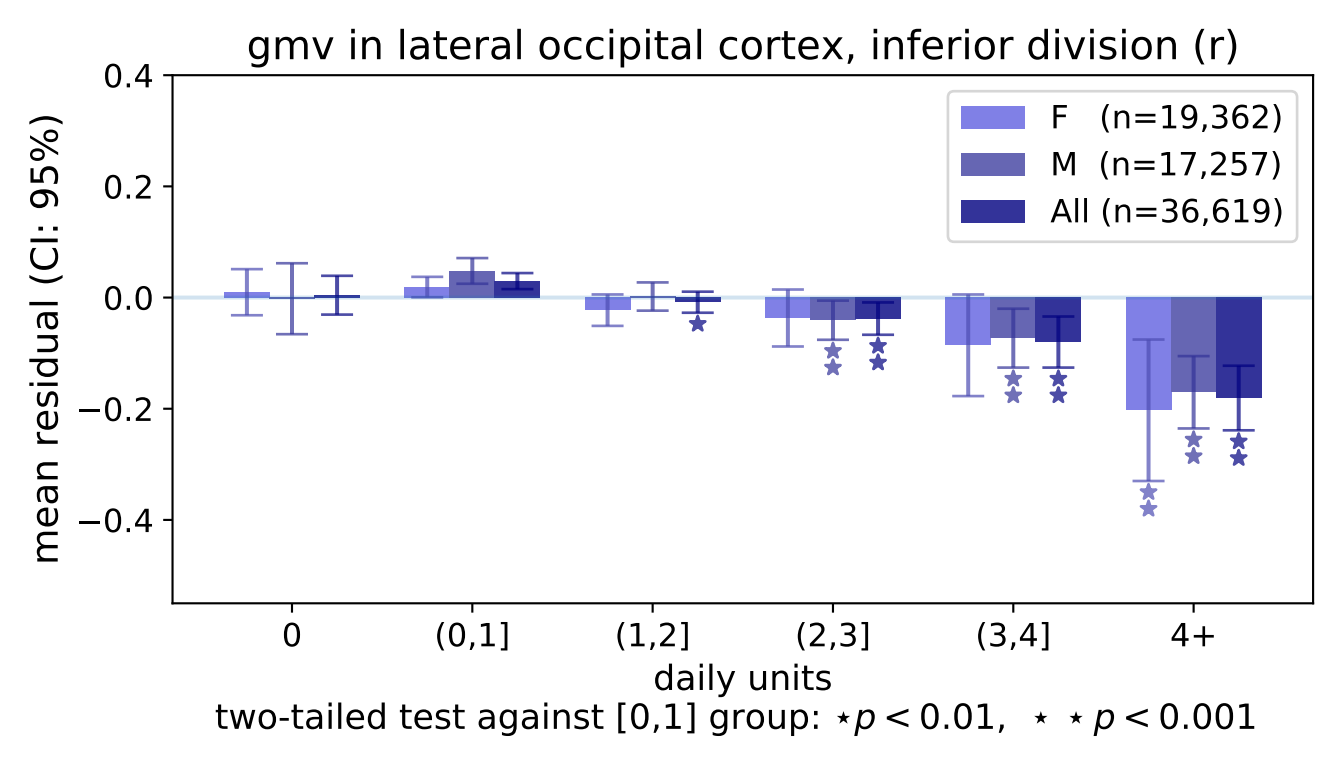

gmv in angular gyrus (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,350)
M (n=17,255)
All (n=36,605)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

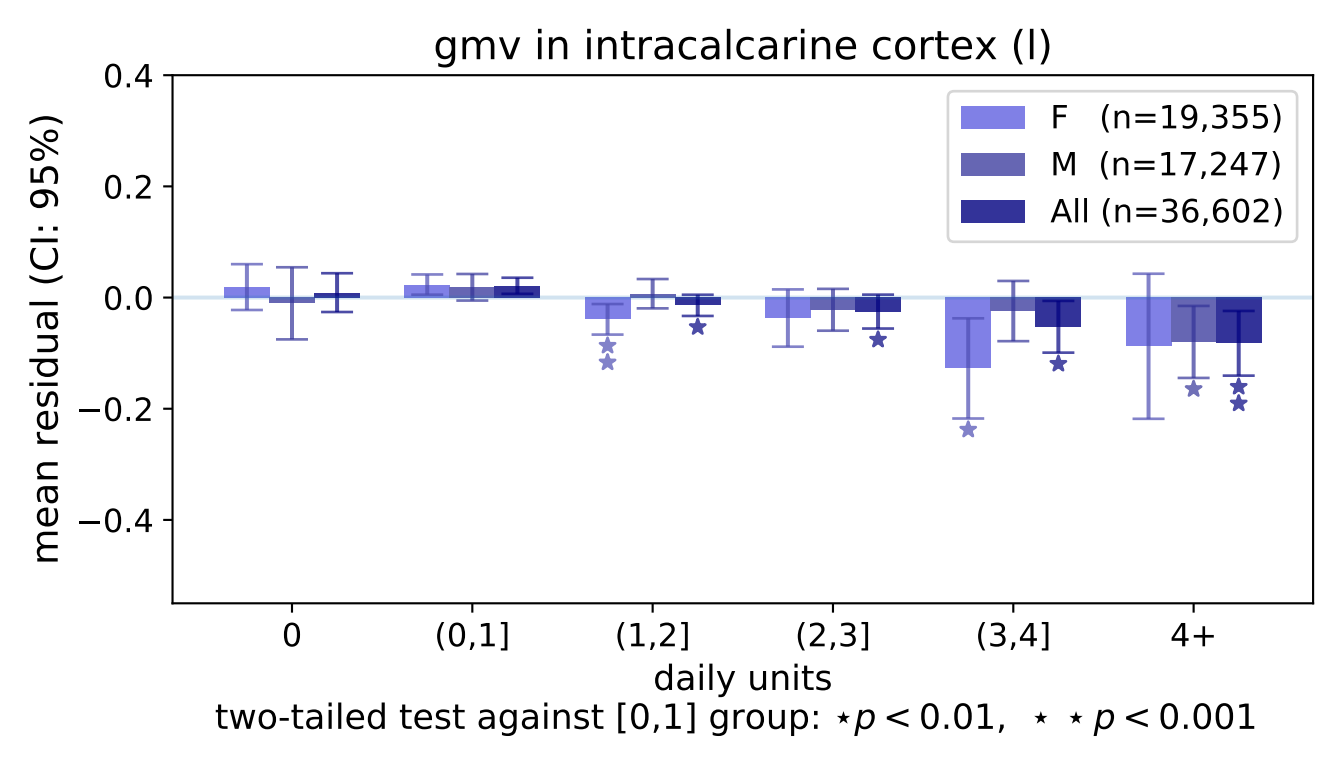

gmv in angular gyrus (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,365)
M (n=17,258)
All (n=36,623)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

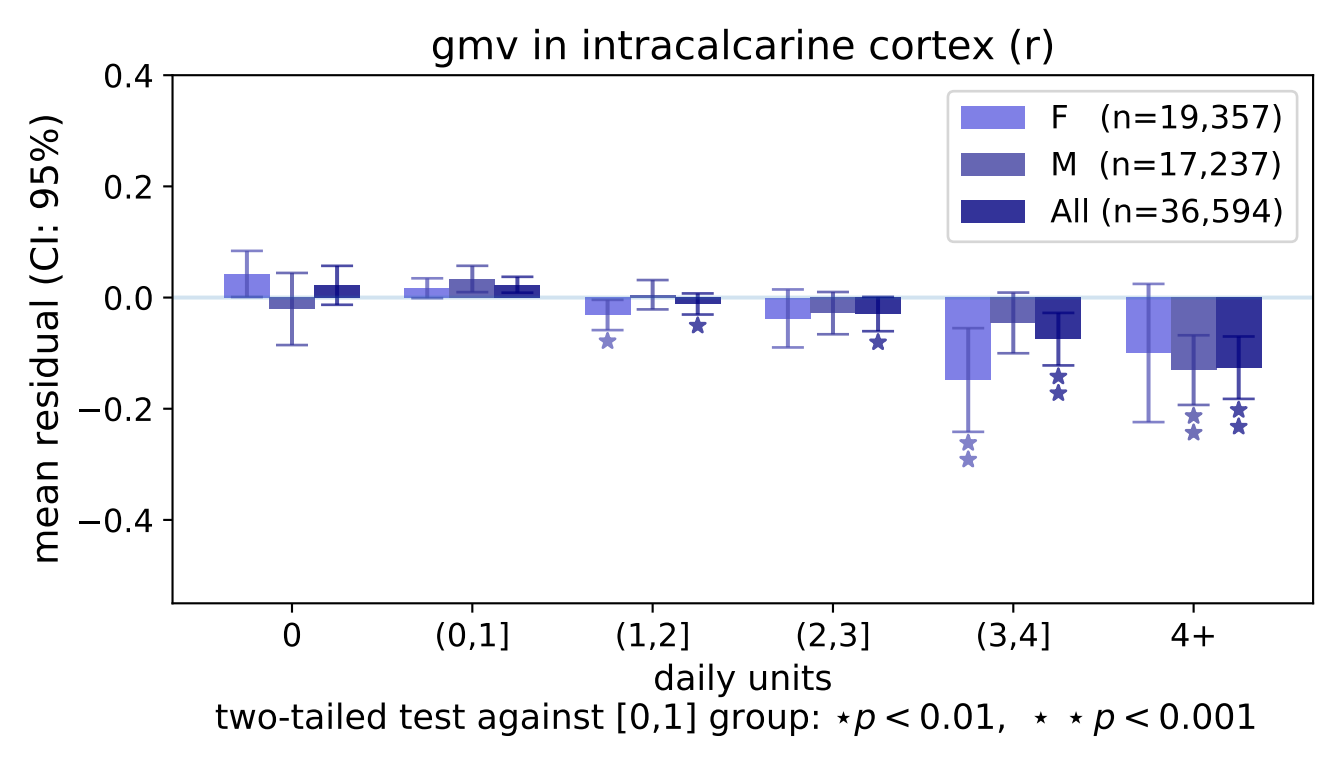

gmv in lateral occipital cortex, superior division (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,356)
M (n=17,255)
All (n=36,611)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

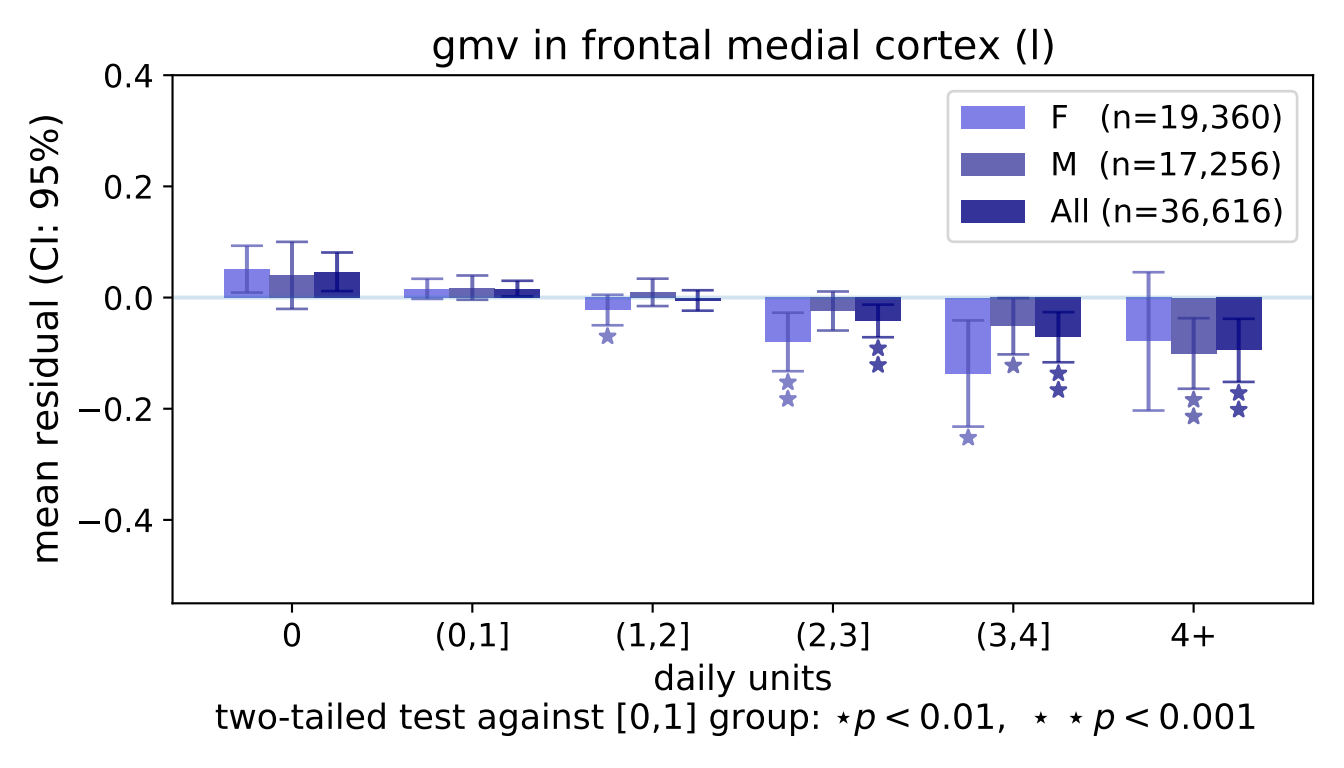

gmv in lateral occipital cortex, superior division (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,359)
M (n=17,257)
All (n=36,616)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

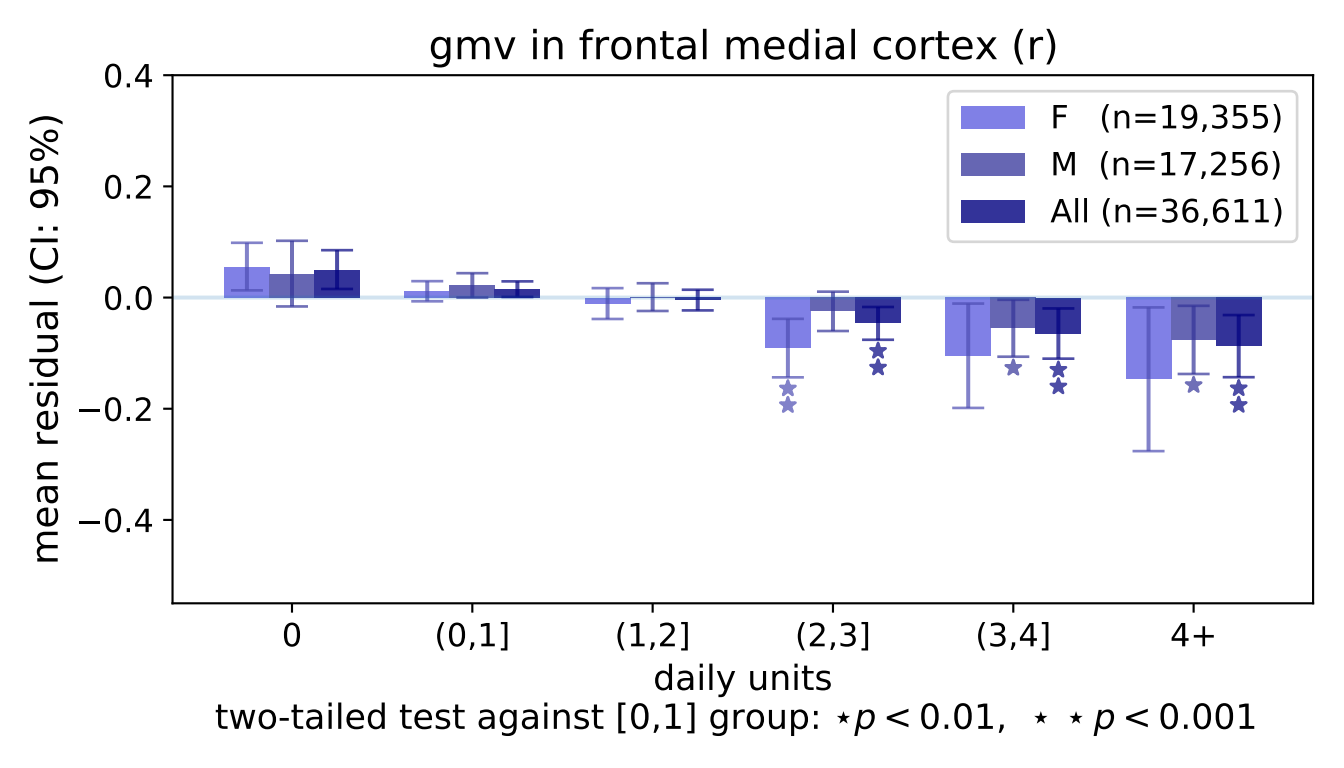

gmv in lateral occipital cortex, inferior division (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,358)
M (n=17,255)
All (n=36,613)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

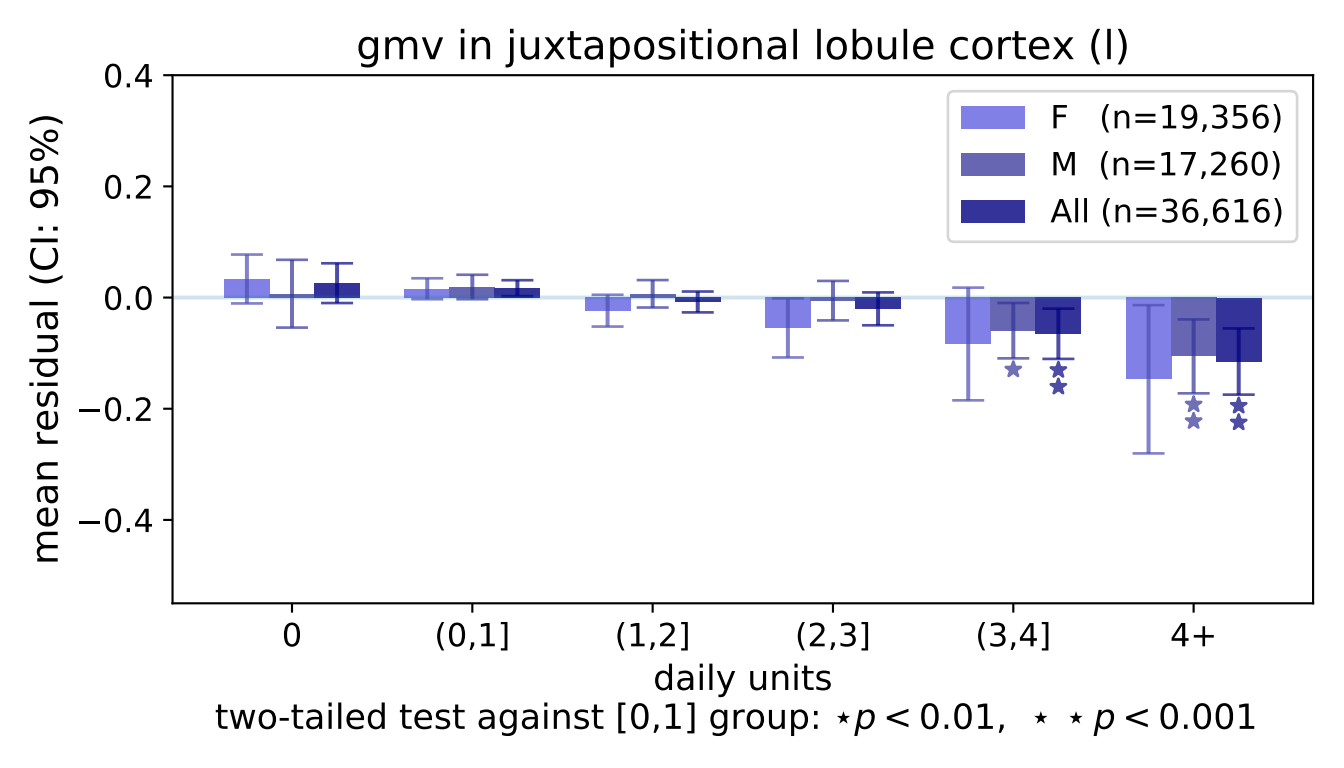

gmv in lateral occipital cortex, inferior division (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,362)
M (n=17,257)
All (n=36,619)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

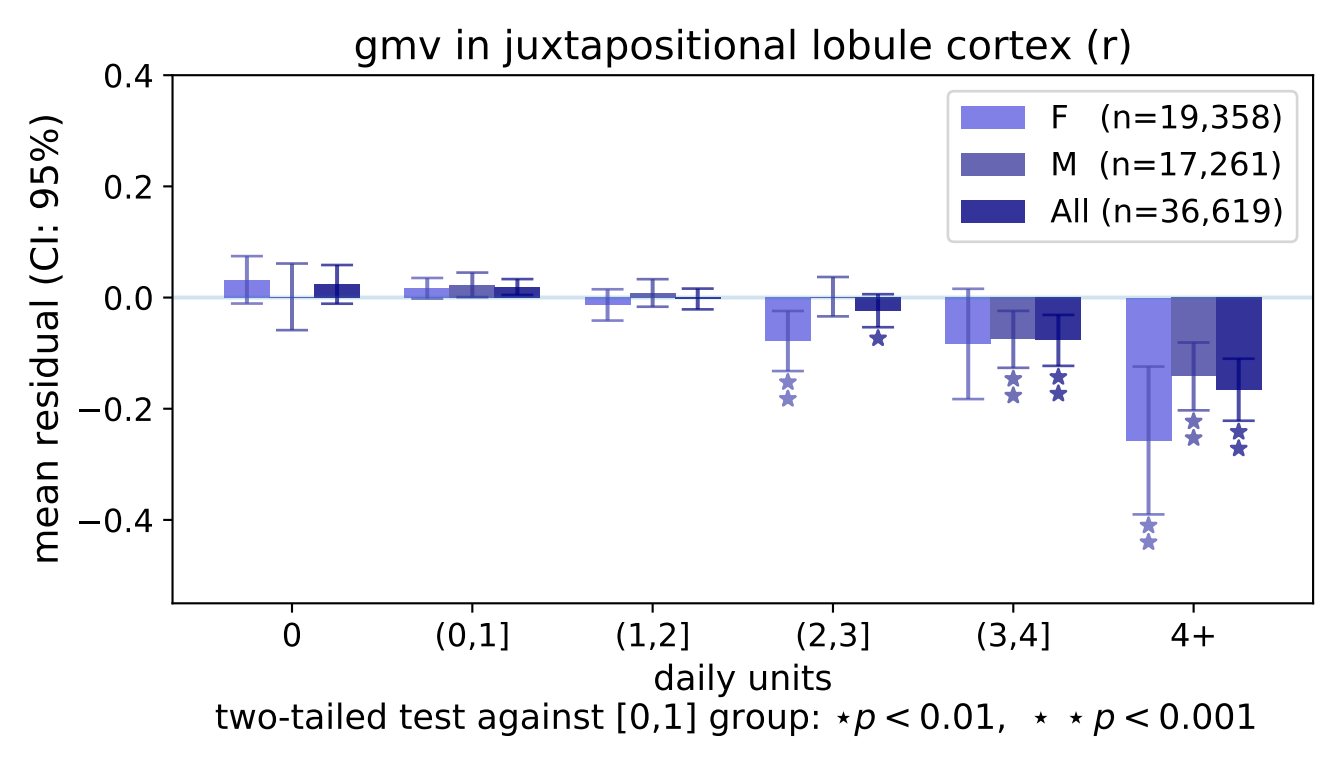

gmv in intracalcarine cortex (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,355)
M (n=17,247)
All (n=36,602)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

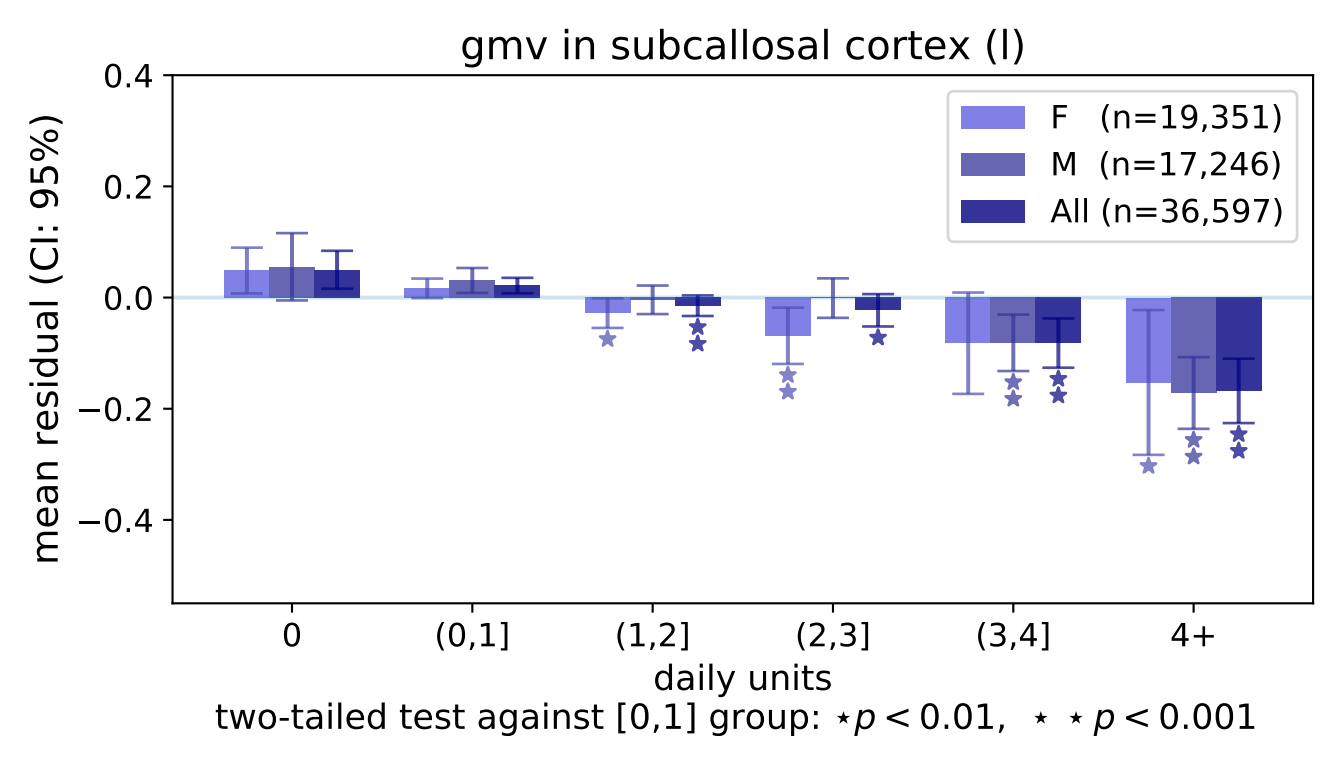

gmv in intracalcarine cortex (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,357)
M (n=17,237)
All (n=36,594)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

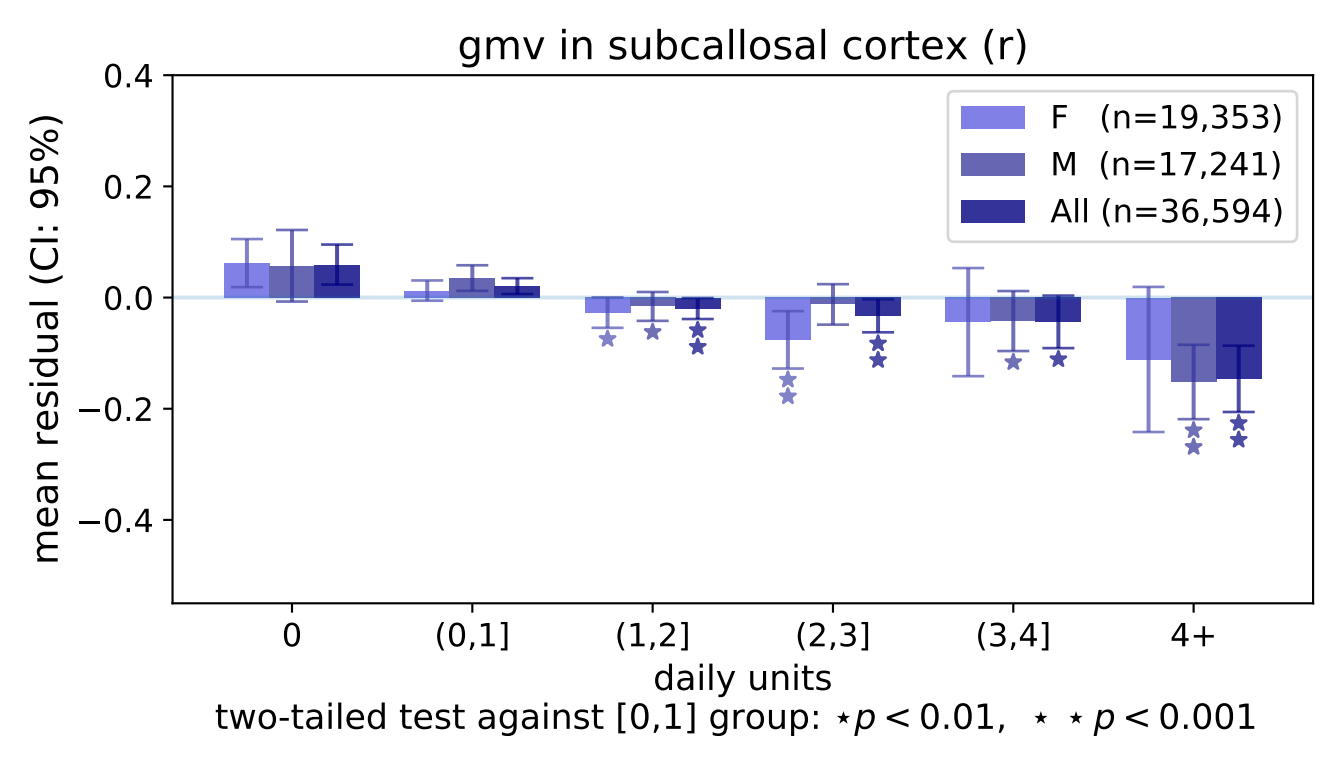

gmv in frontal medial cortex (l)
F (n=19,360)
M (n=17,256)
All (n=36,616)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

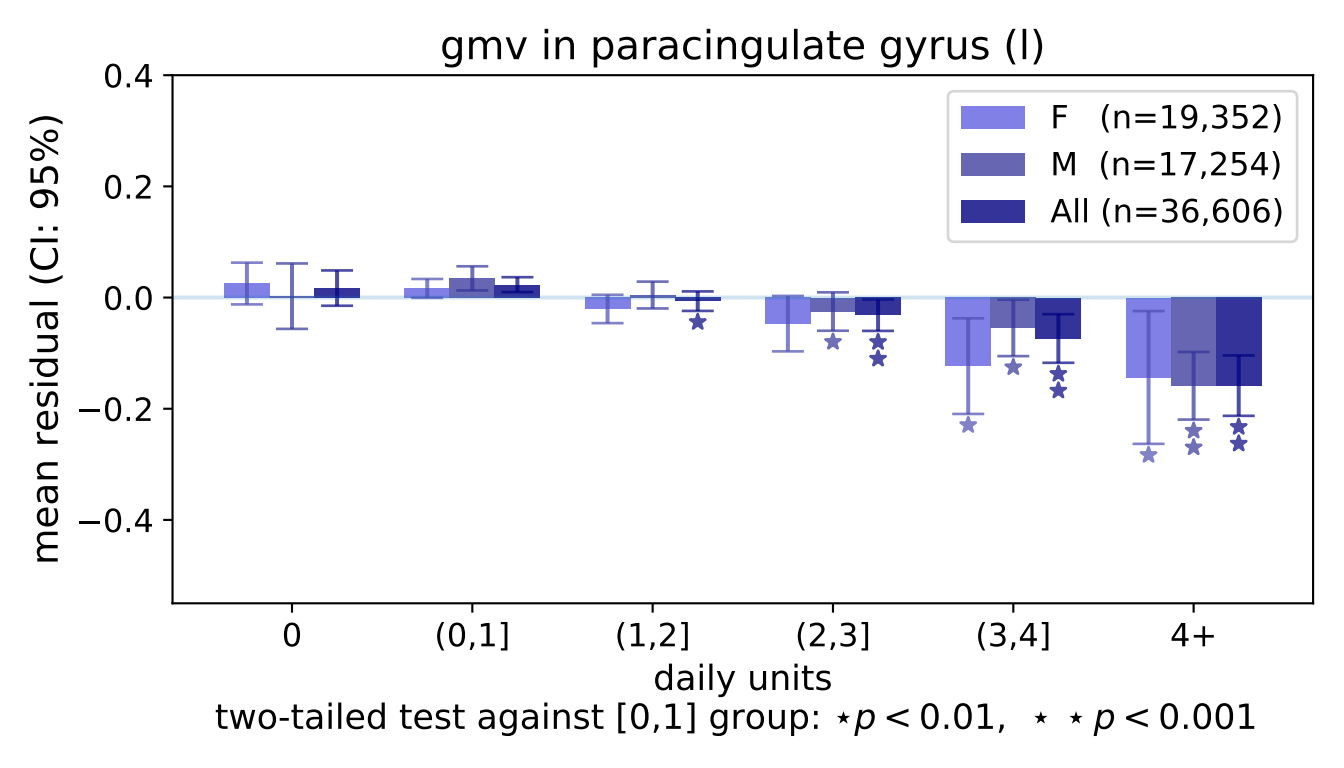

gmv in frontal medial cortex (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,355)
M (n=17,256)
All (n=36,611)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

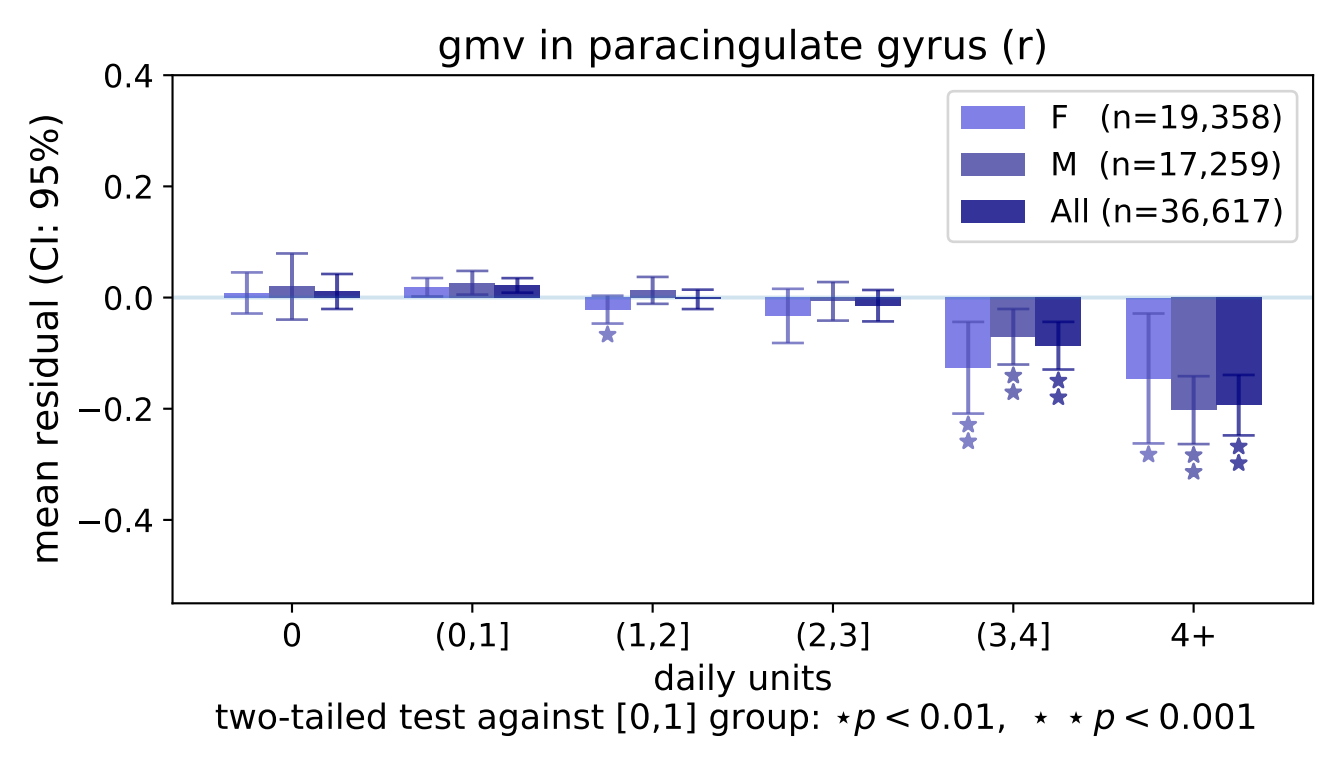

gmv in juxtapositional lobule cortex (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,356)
M (n=17,260)
All (n=36,616)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

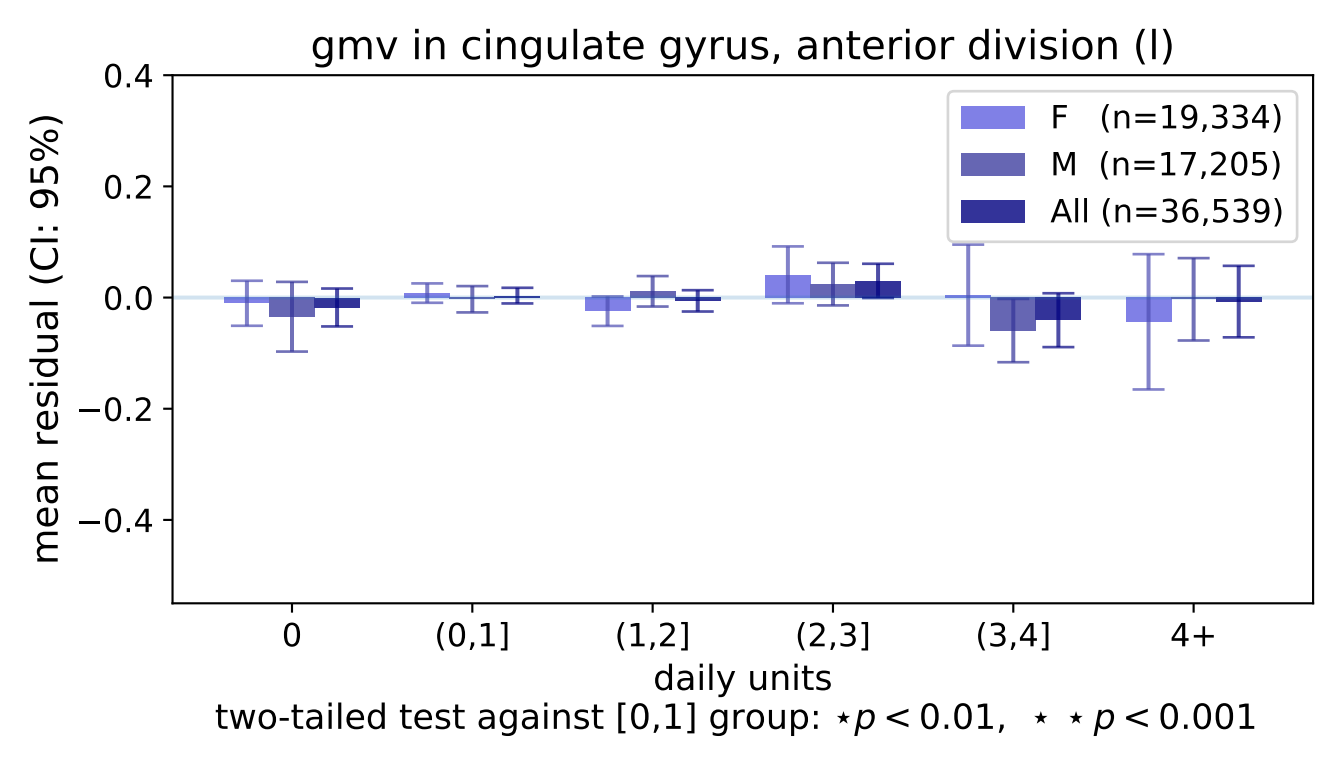

gmv in juxtapositional lobule cortex (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,358)
M (n=17,261)
All (n=36,619)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

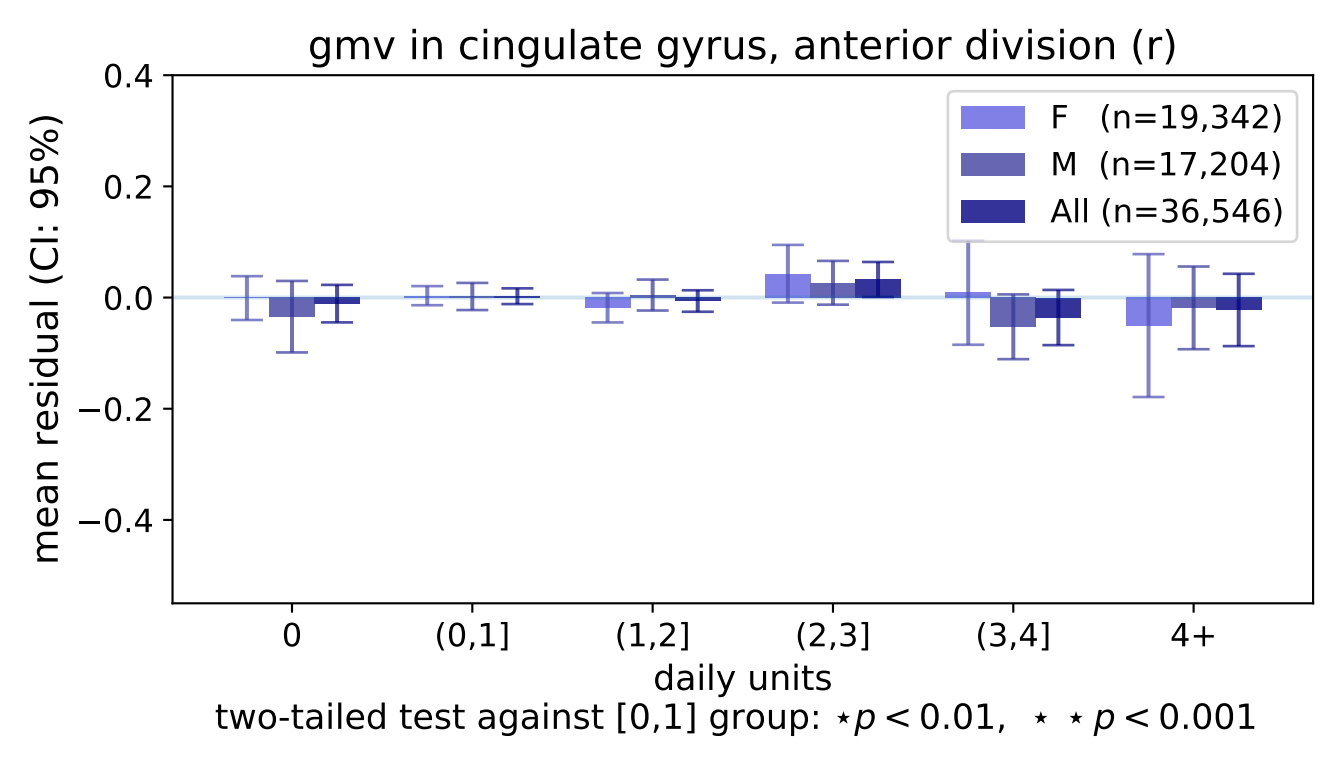

gmv in subcallosal cortex (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,351)
M (n=17,246)
All (n=36,597)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

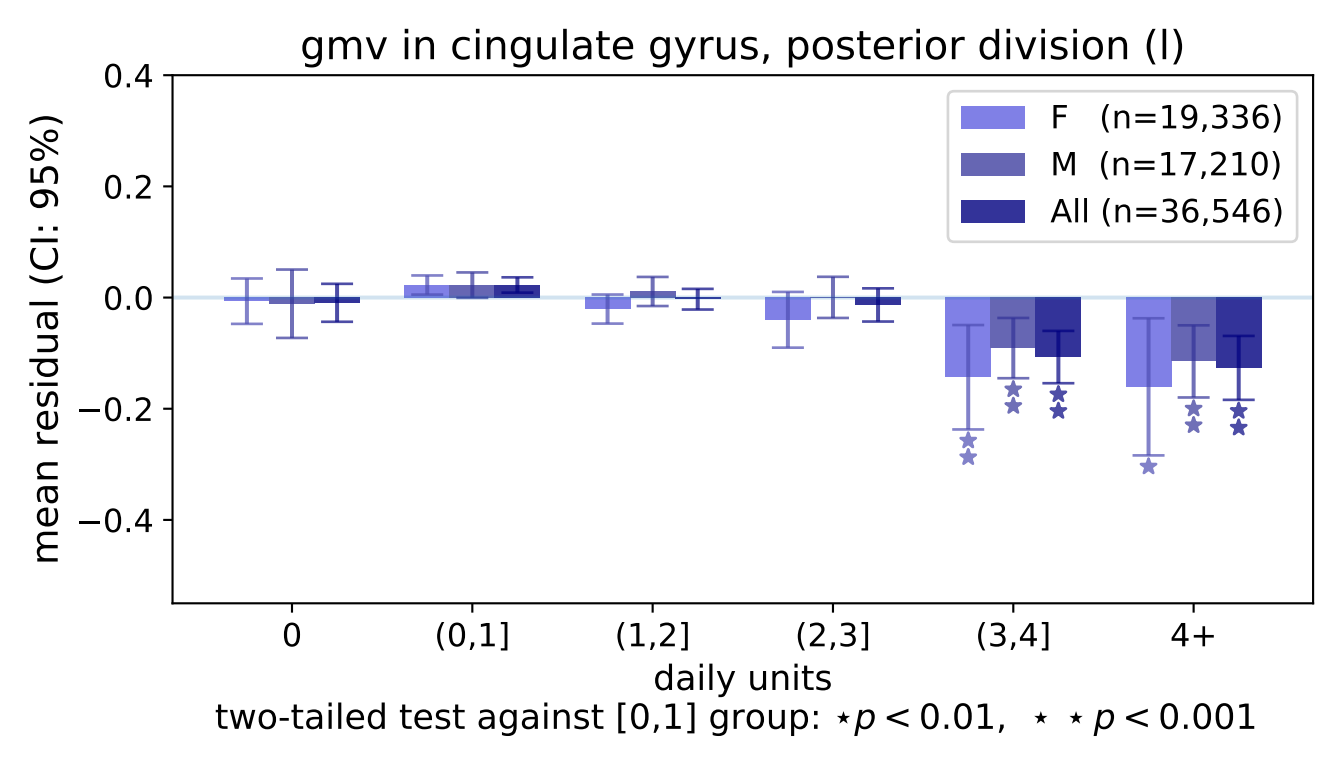

gmv in subcallosal cortex (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,353)
M (n=17,241)
All (n=36,594)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆ $p < 0.01$, ⋆ ⋆ $p < 0.001$

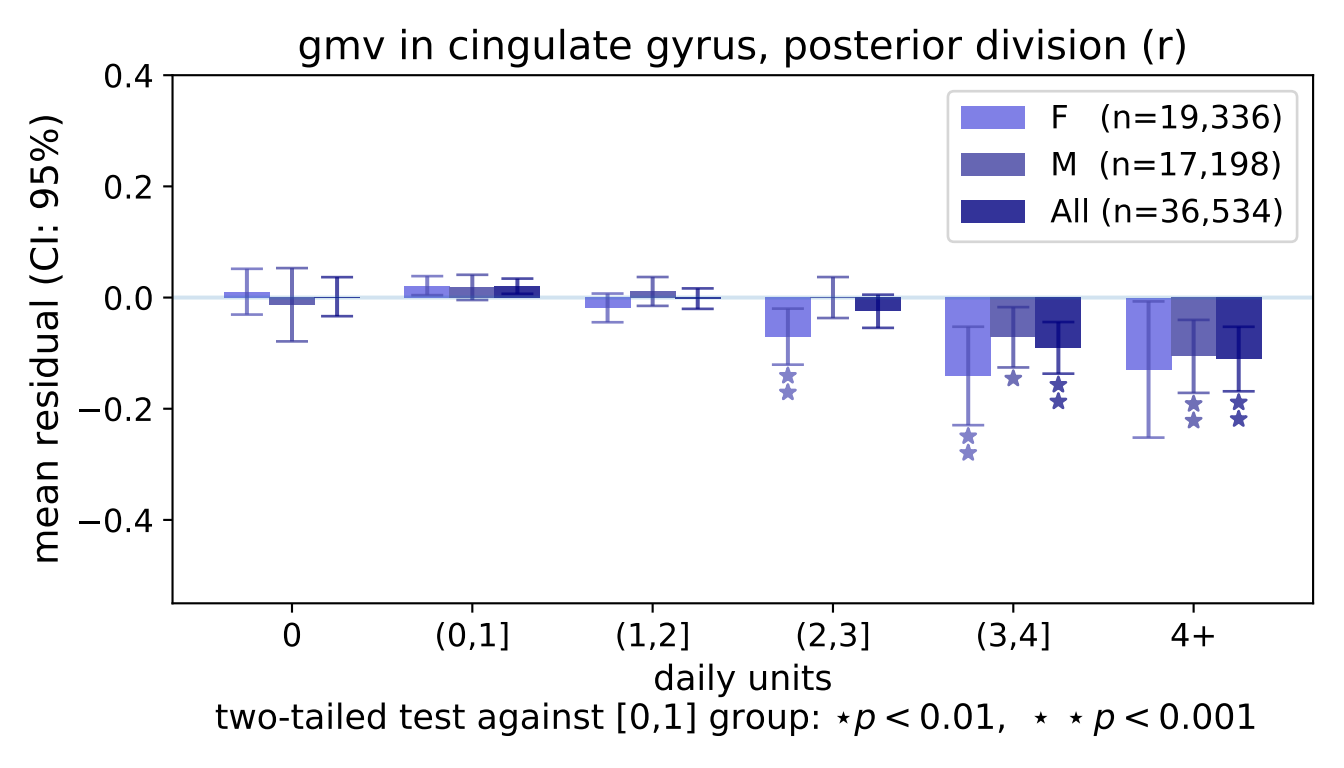

gmv in paracingulate gyrus (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,352)
M (n=17,254)
All (n=36,606)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆ $p < 0.01$, ⋆ ⋆ $p < 0.001$

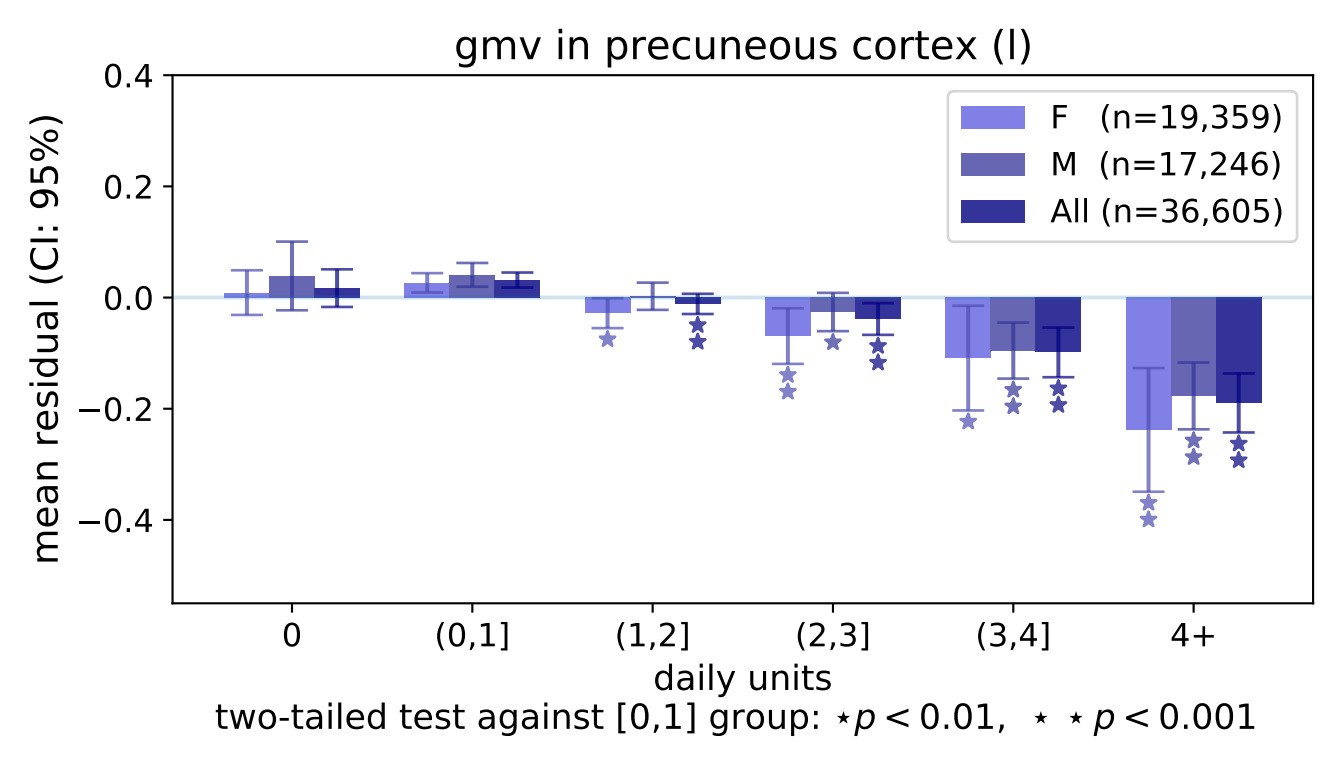

gmv in paracingulate gyrus (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,358)
M (n=17,259)
All (n=36,617)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

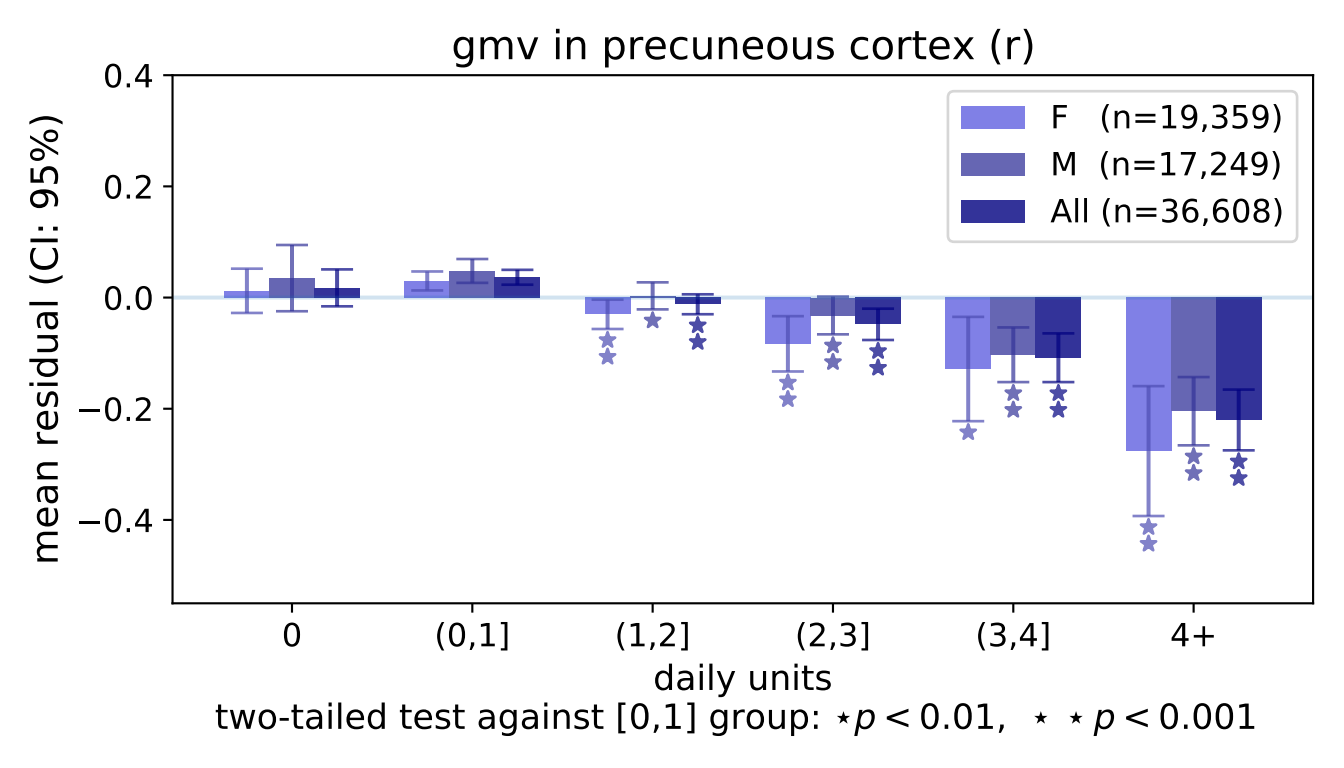

gmv in cingulate gyrus, anterior division (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,334)
M (n=17,205)
All (n=36,539)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

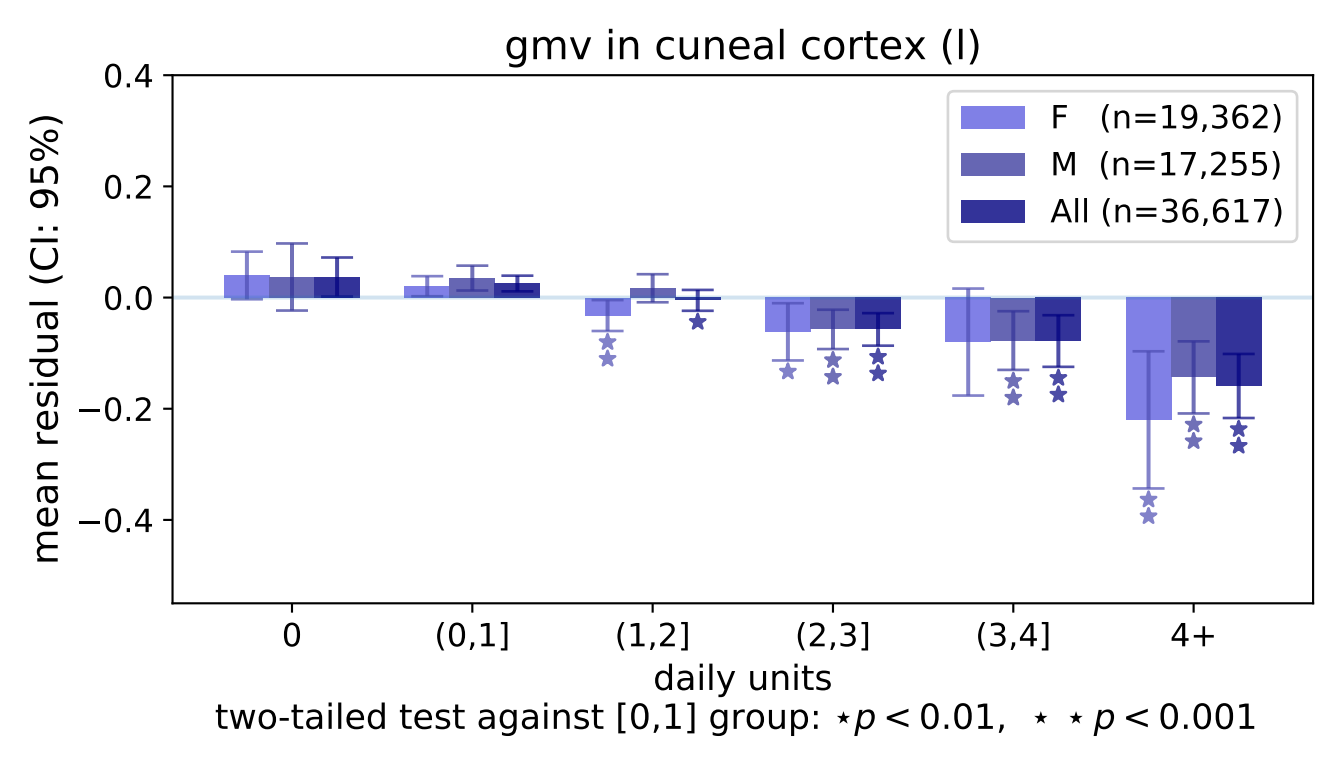

gmv in cingulate gyrus, anterior division (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,342)
M (n=17,204)
All (n=36,546)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

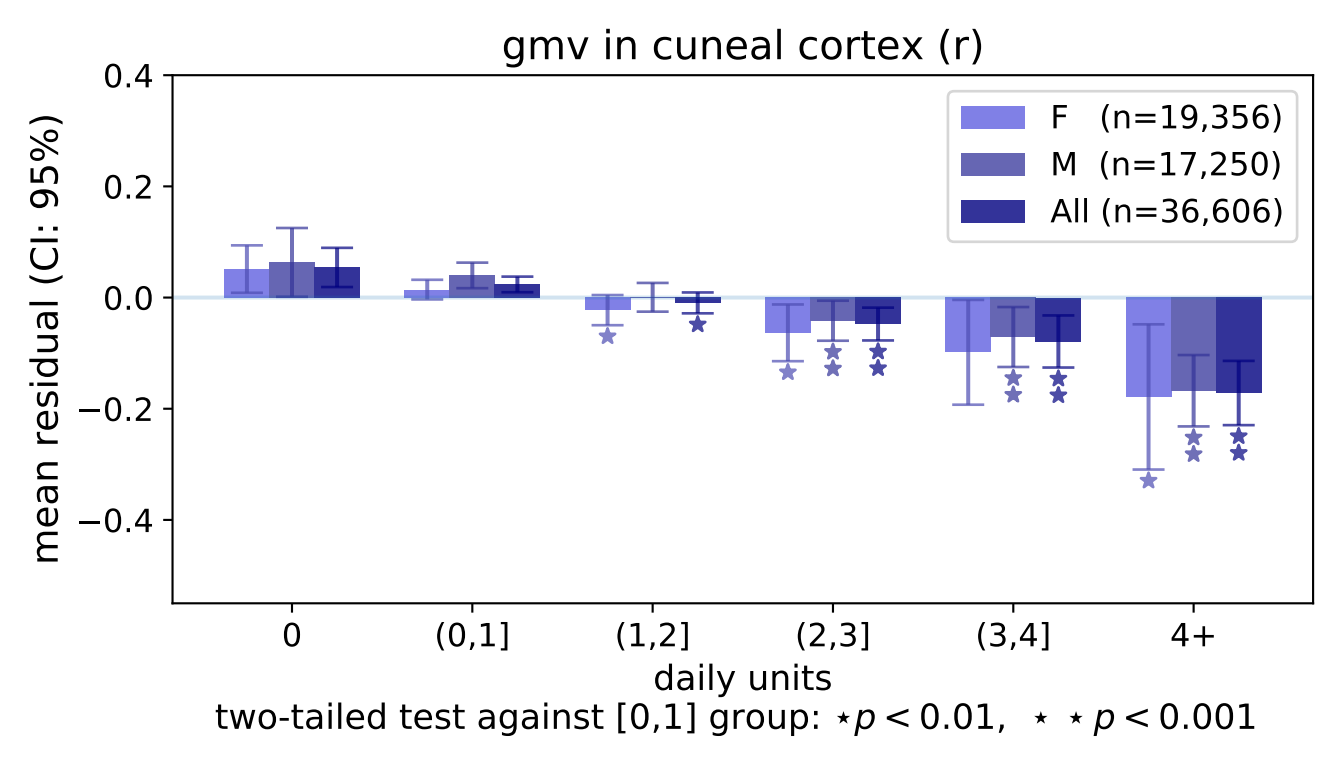

gmv in cingulate gyrus, posterior division (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,336)
M (n=17,210)
All (n=36,546)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

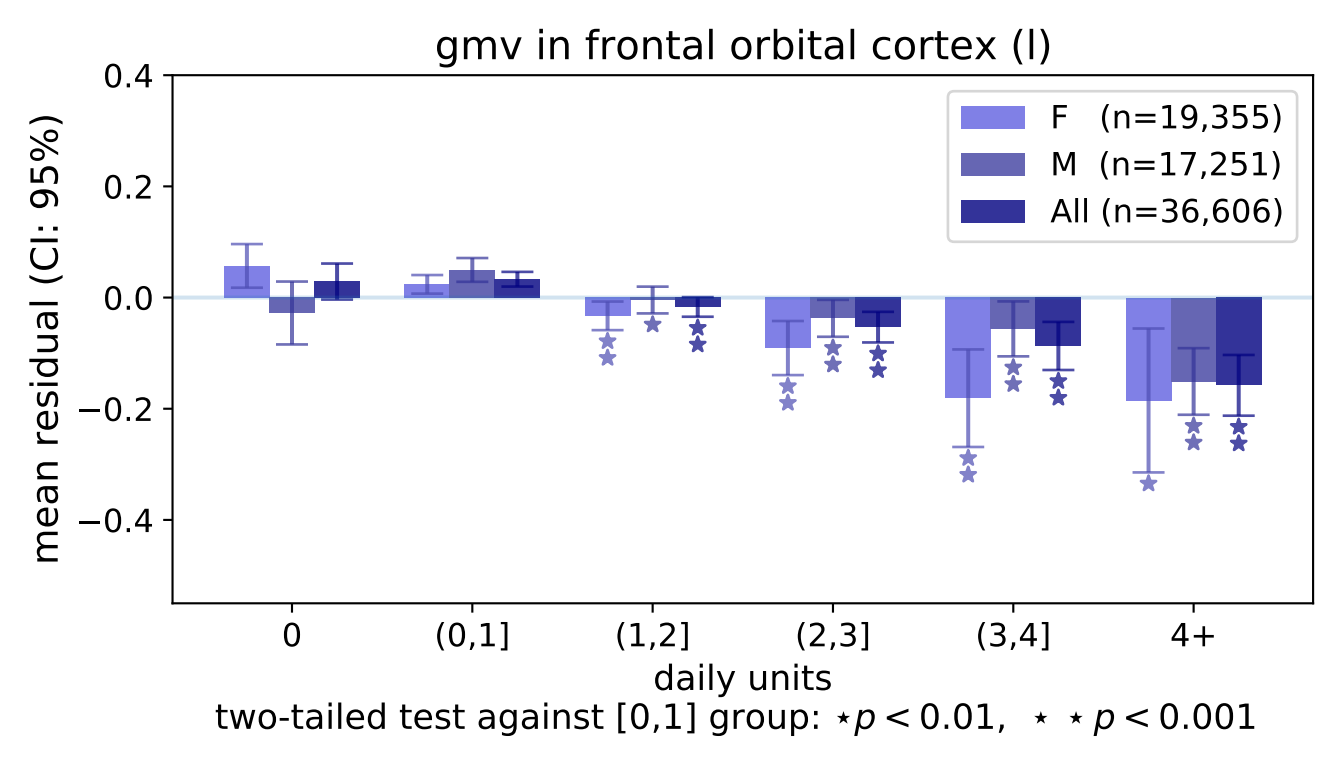

gmv in cingulate gyrus, posterior division (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,336)
M (n=17,198)
All (n=36,534)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

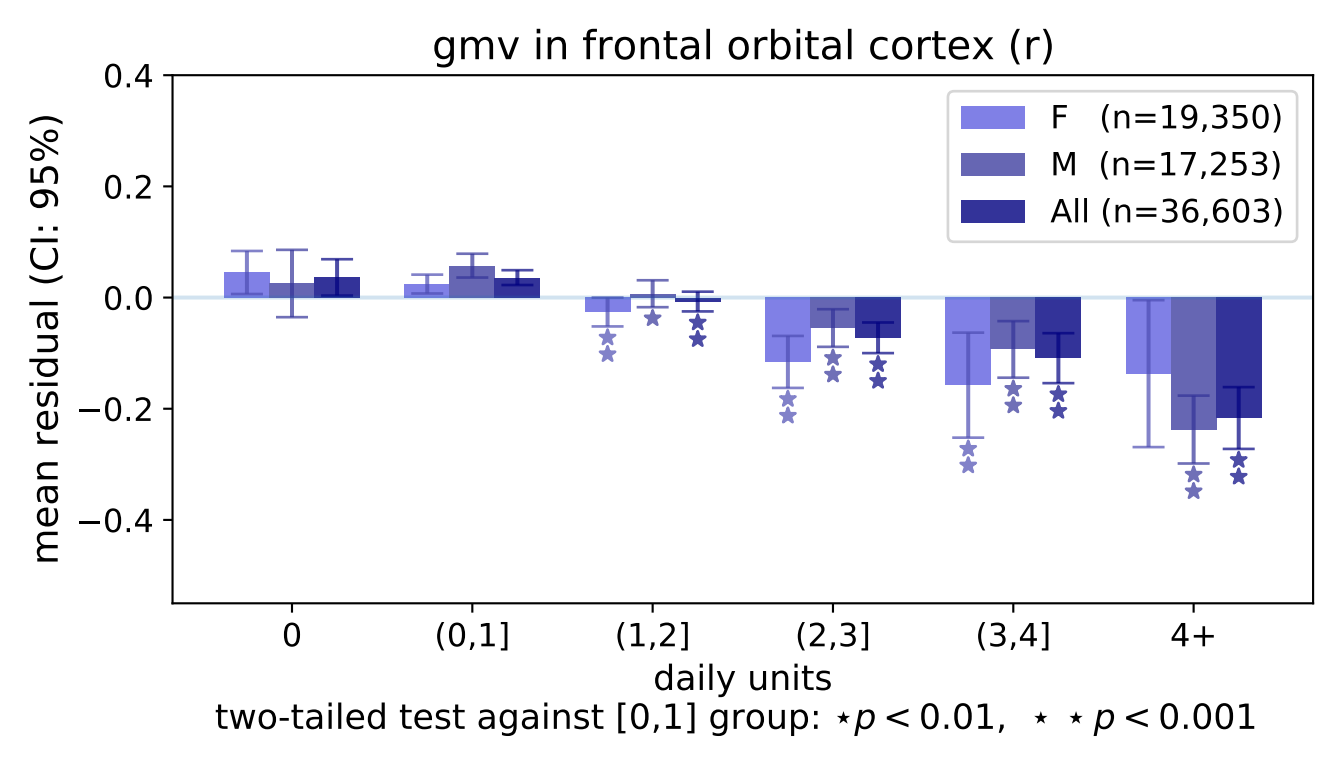

gmv in precuneous cortex (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,359)
M (n=17,246)
All (n=36,605)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

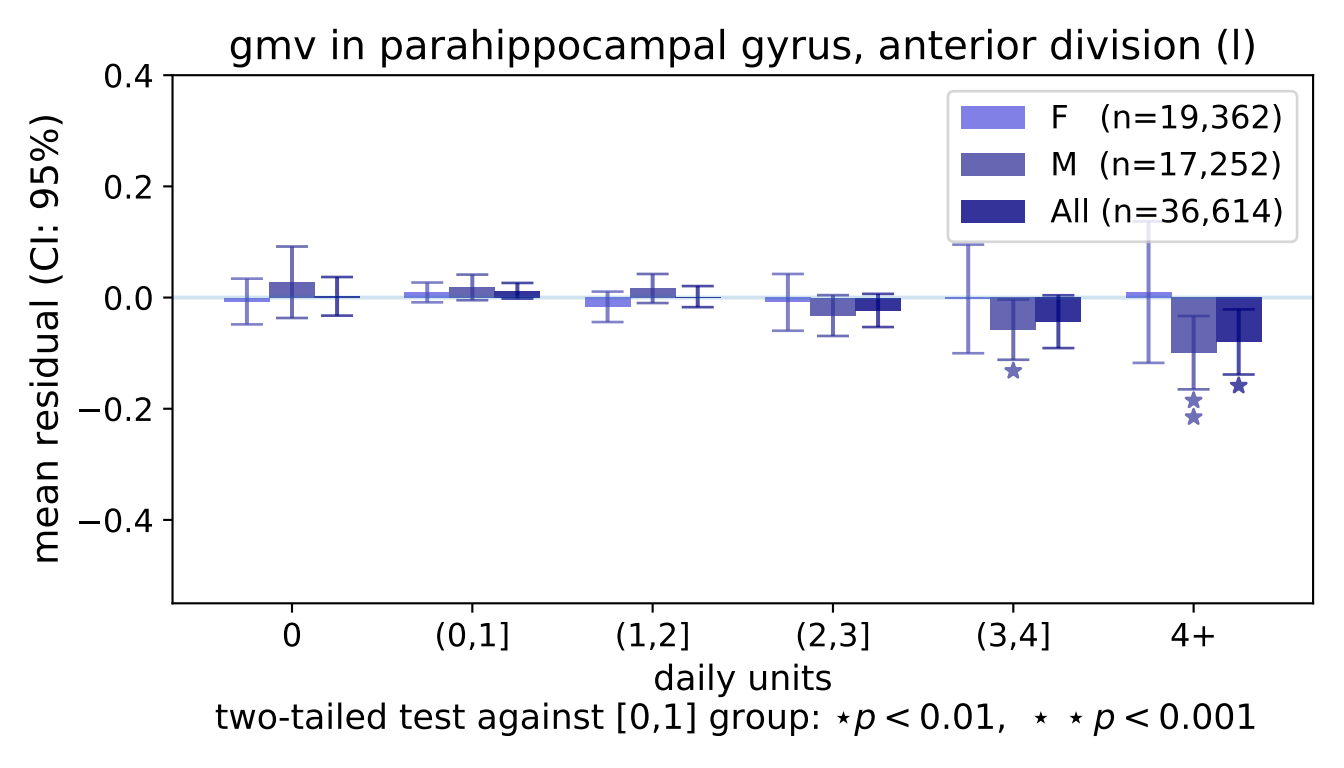

gmv in precuneous cortex (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,359)
M (n=17,249)
All (n=36,608)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

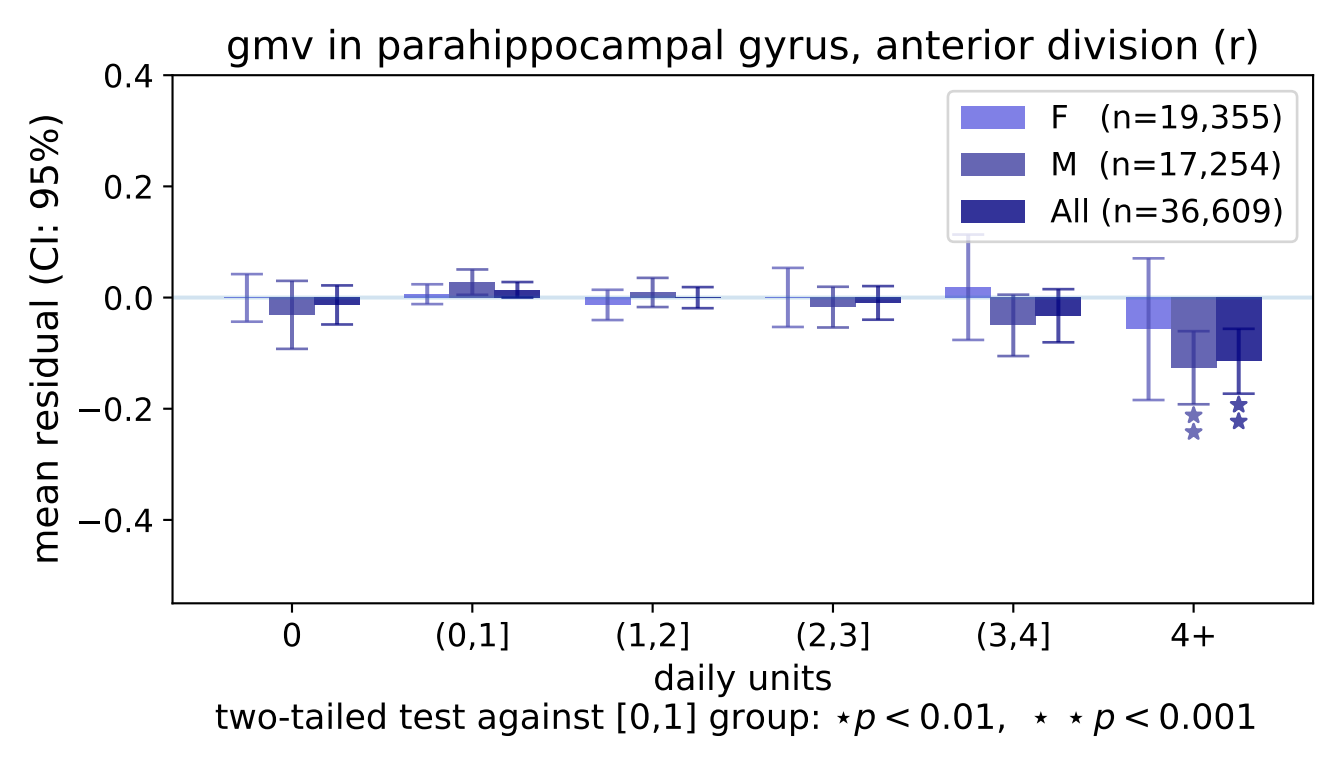

gmv in cuneal cortex (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,362)
M (n=17,255)
All (n=36,617)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

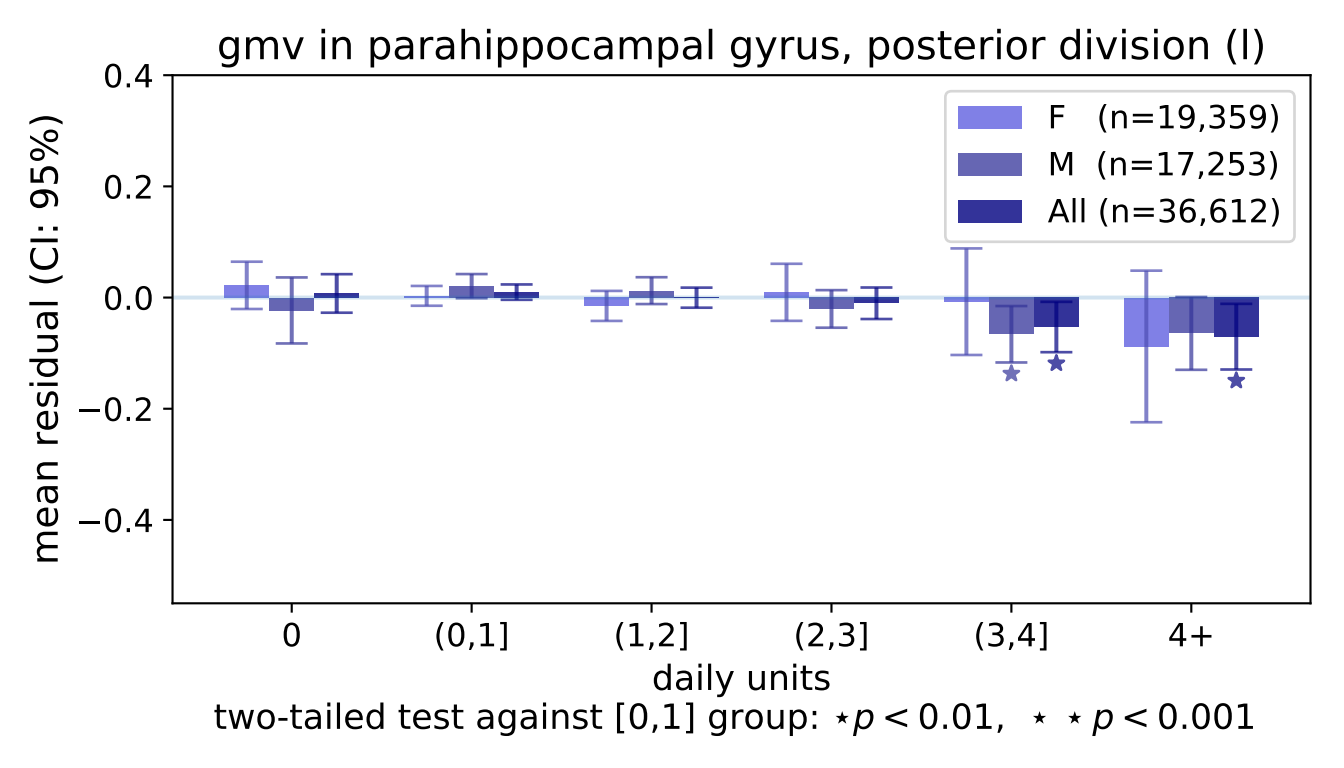

gmv in cuneal cortex (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,356)
M (n=17,250)
All (n=36,606)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

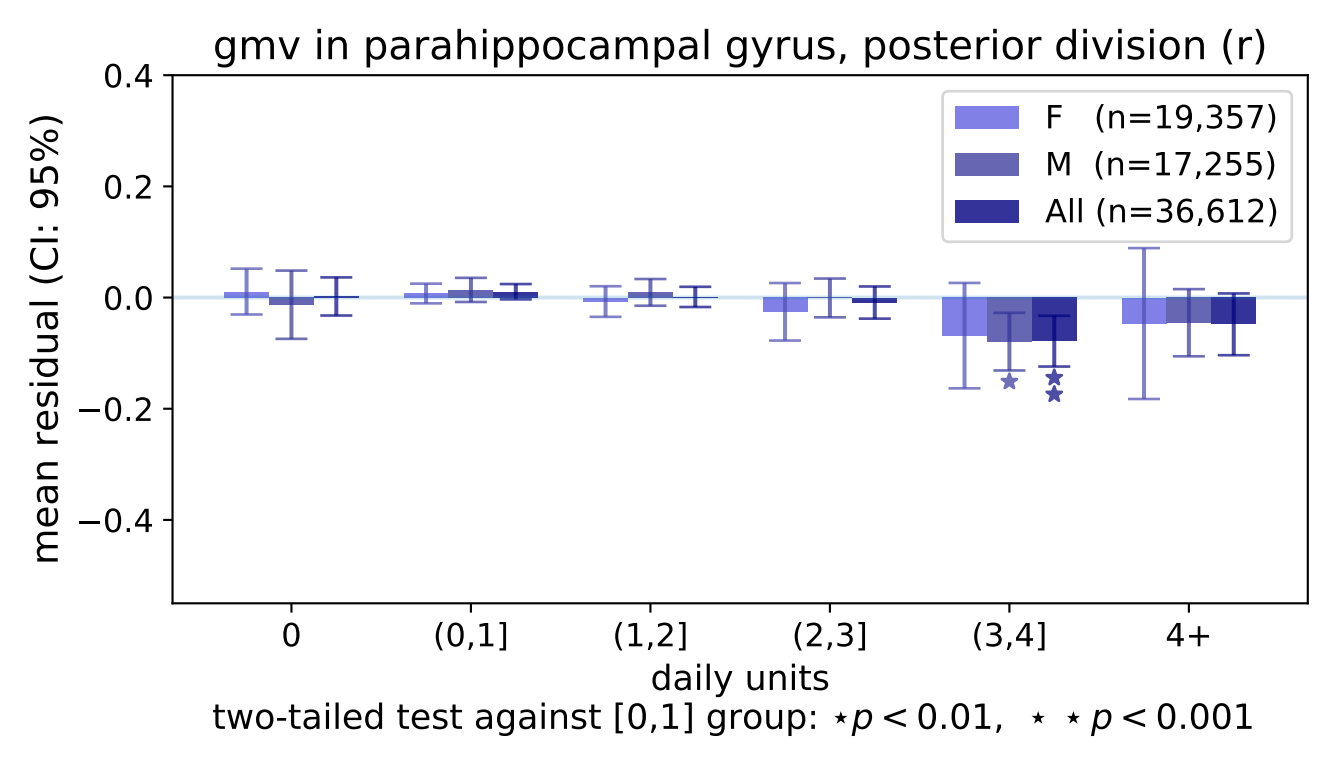

gmv in frontal orbital cortex (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,355)
M (n=17,251)
All (n=36,606)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

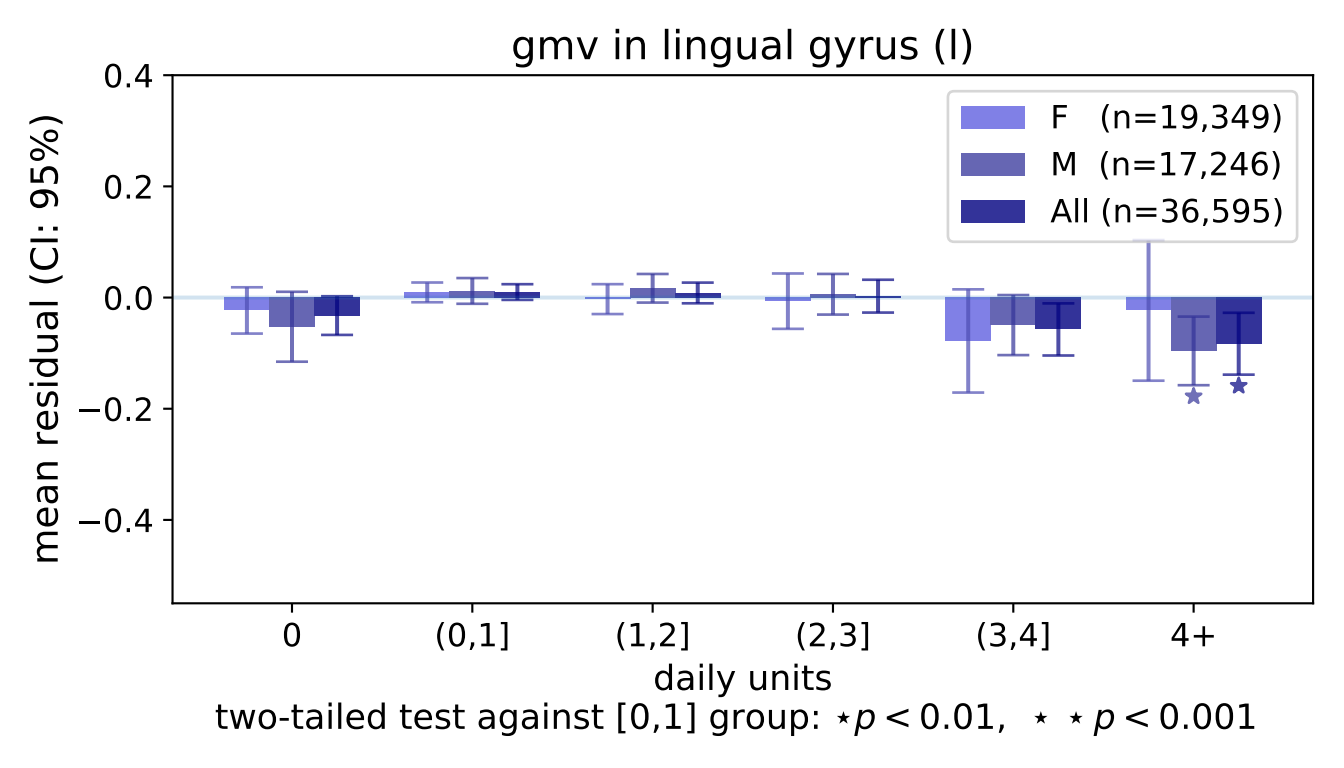

gmv in frontal orbital cortex (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,350)
M (n=17,253)
All (n=36,603)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

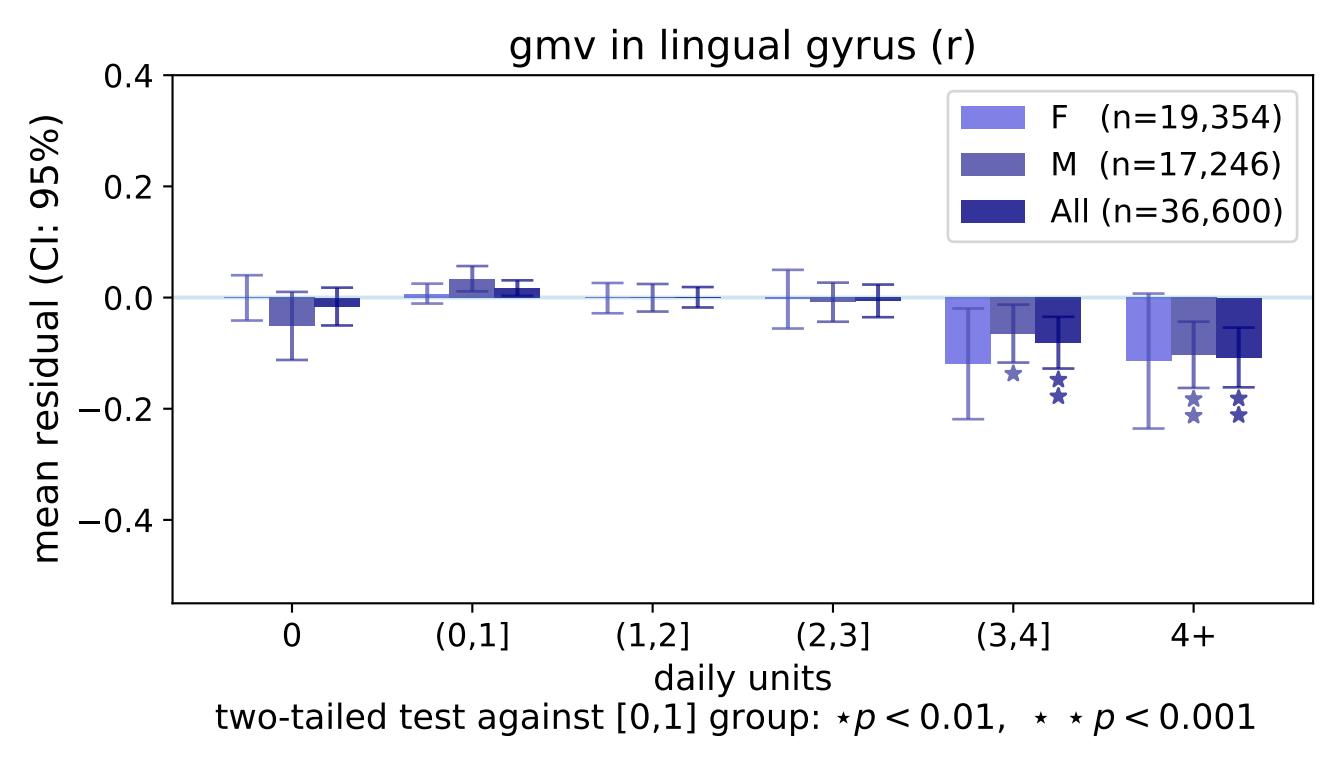

gmv in parahippocampal gyrus, anterior division (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,362)
M (n=17,252)
All (n=36,614)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆ $p < 0.01$, ⋆ ⋆ $p < 0.001$

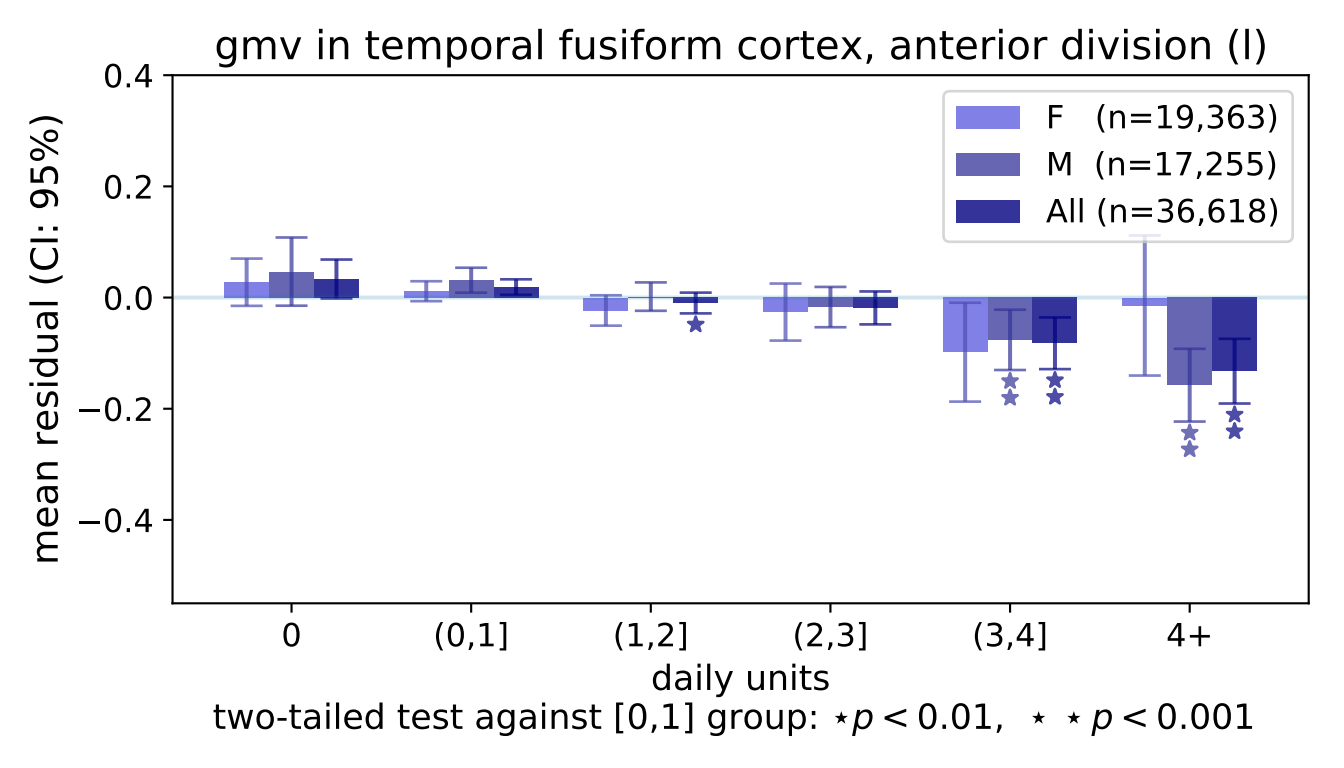

gmv in parahippocampal gyrus, anterior division (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,355)
M (n=17,254)
All (n=36,609)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

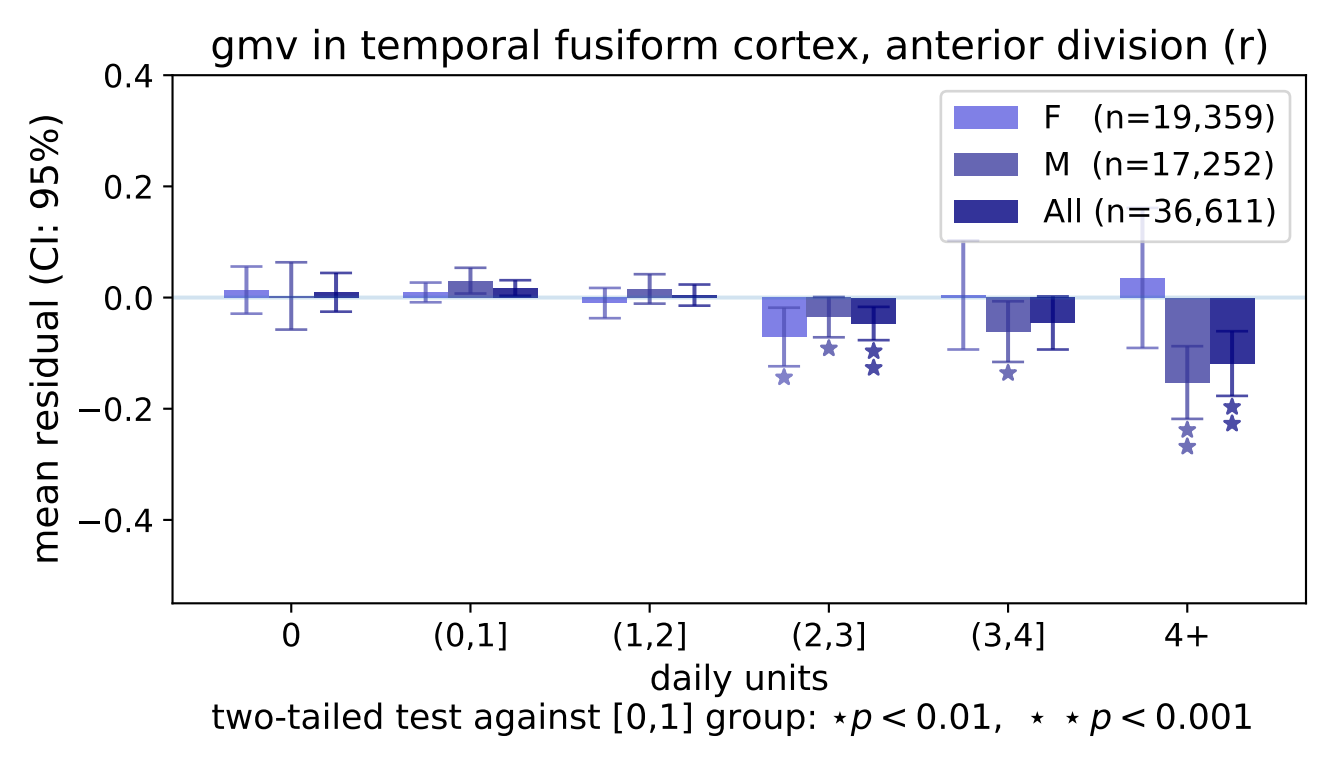

gmv in parahippocampal gyrus, posterior division (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,359)
M (n=17,253)
All (n=36,612)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

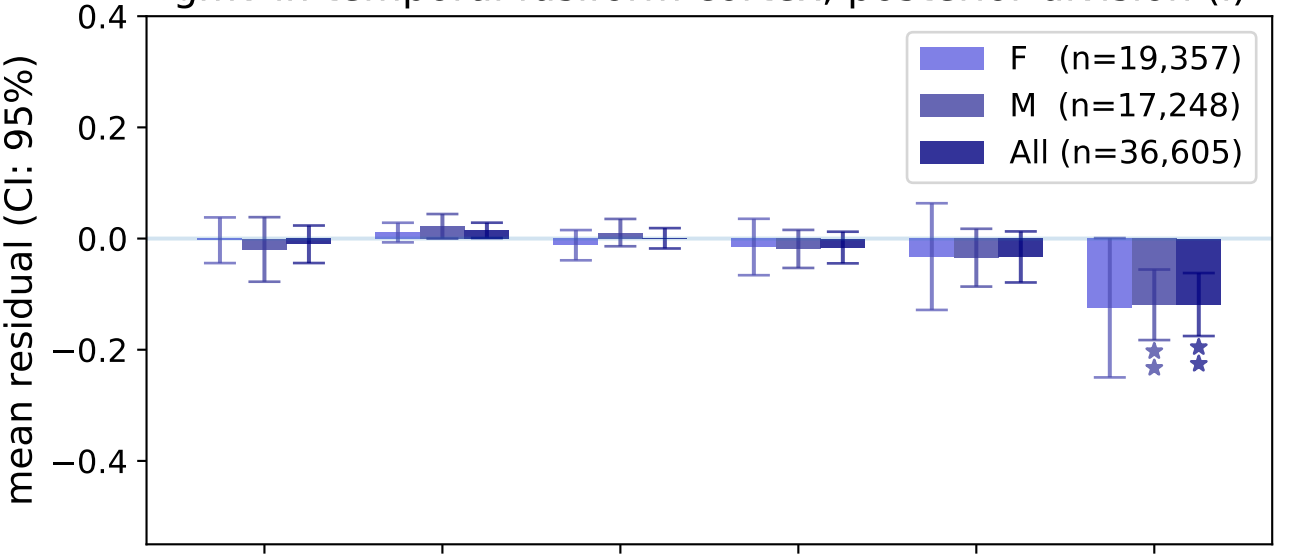

gmv in parahippocampal gyrus, posterior division (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,357)
M (n=17,255)
All (n=36,612)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆ $p < 0.001$

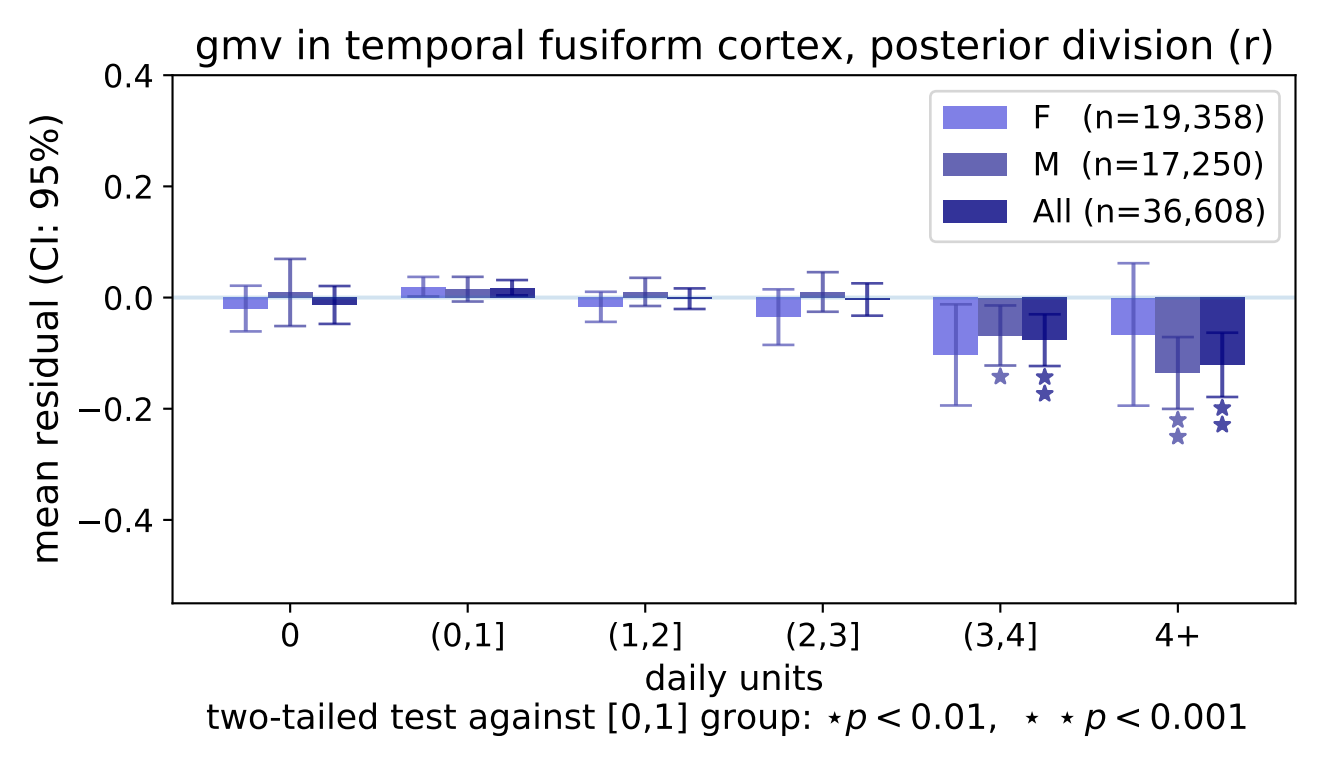

gmv in lingual gyrus (l)
F (n=19,349)
M (n=17,246)
All (n=36,595)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

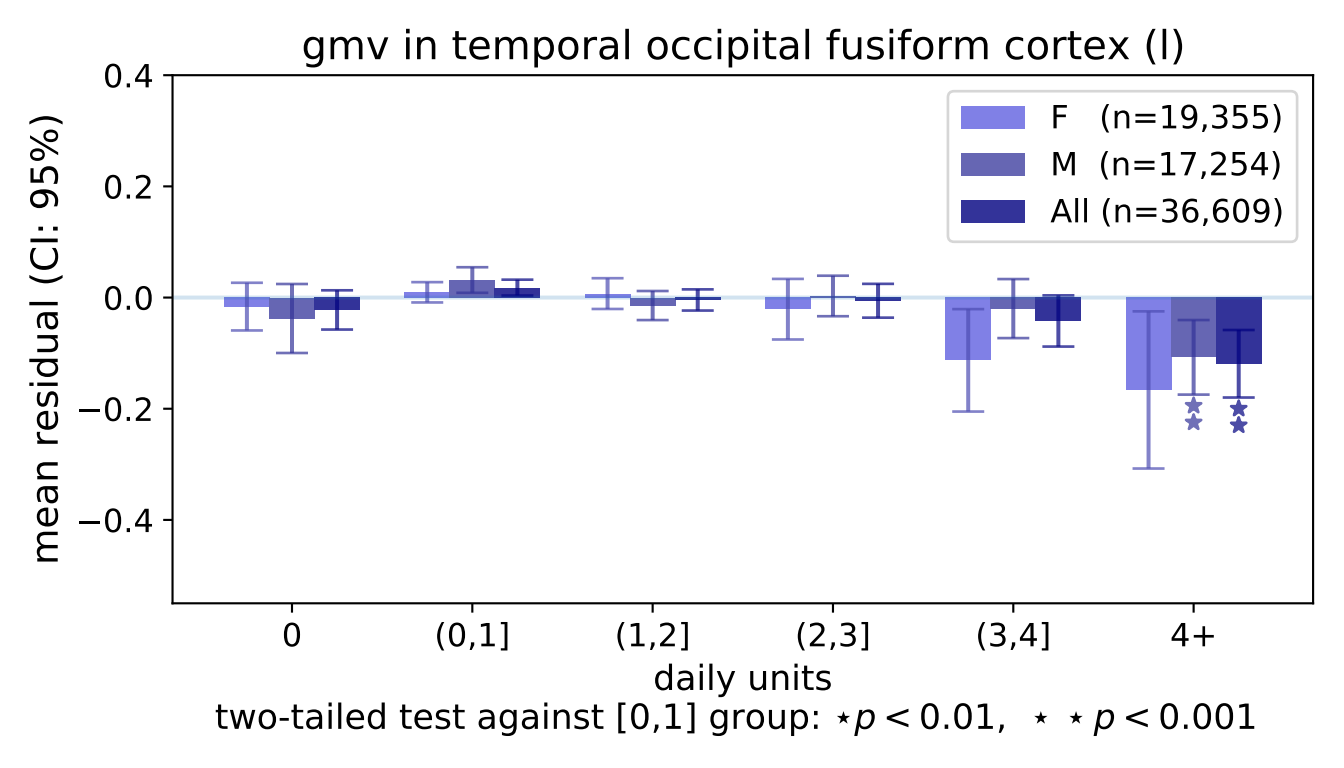

gmv in lingual gyrus (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,354)
M (n=17,246)
All (n=36,600)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

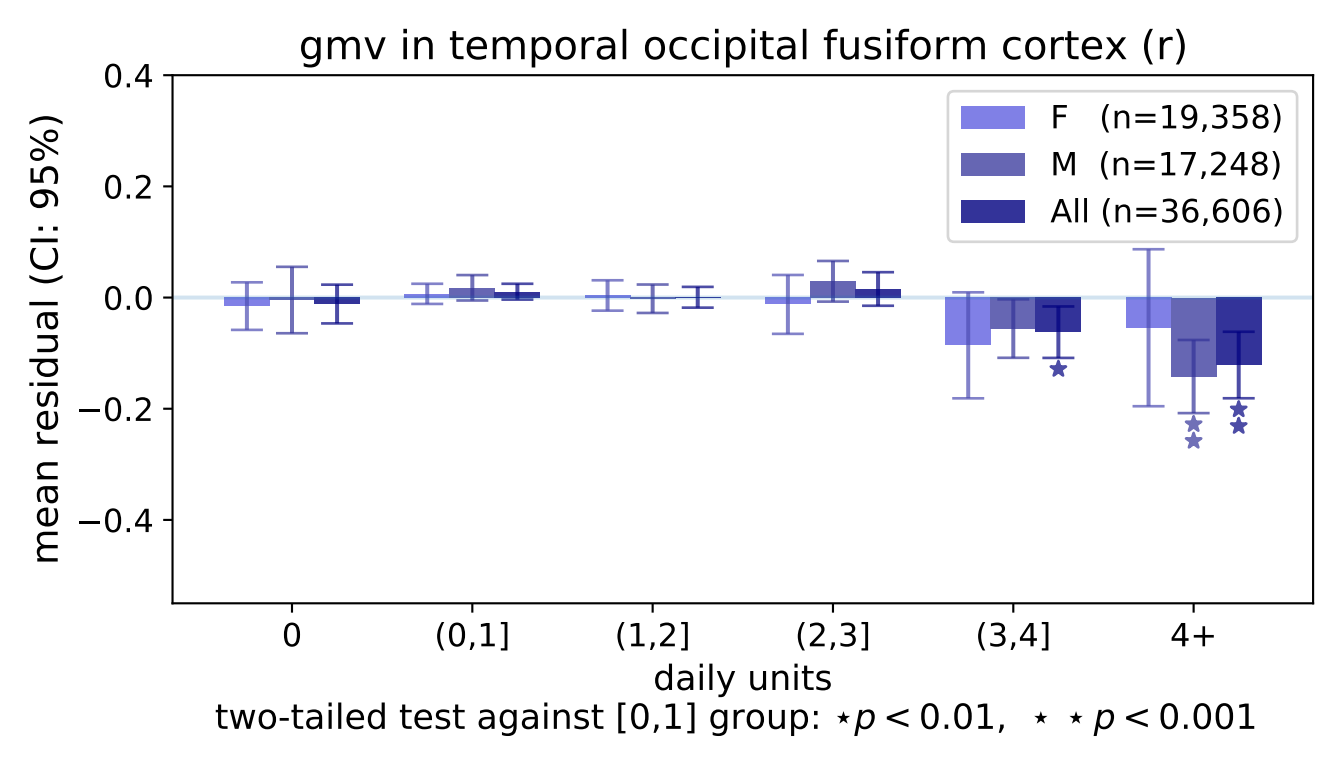

gmv in temporal fusiform cortex, anterior division (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,363)
M (n=17,255)
All (n=36,618)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆ $p < 0.001$

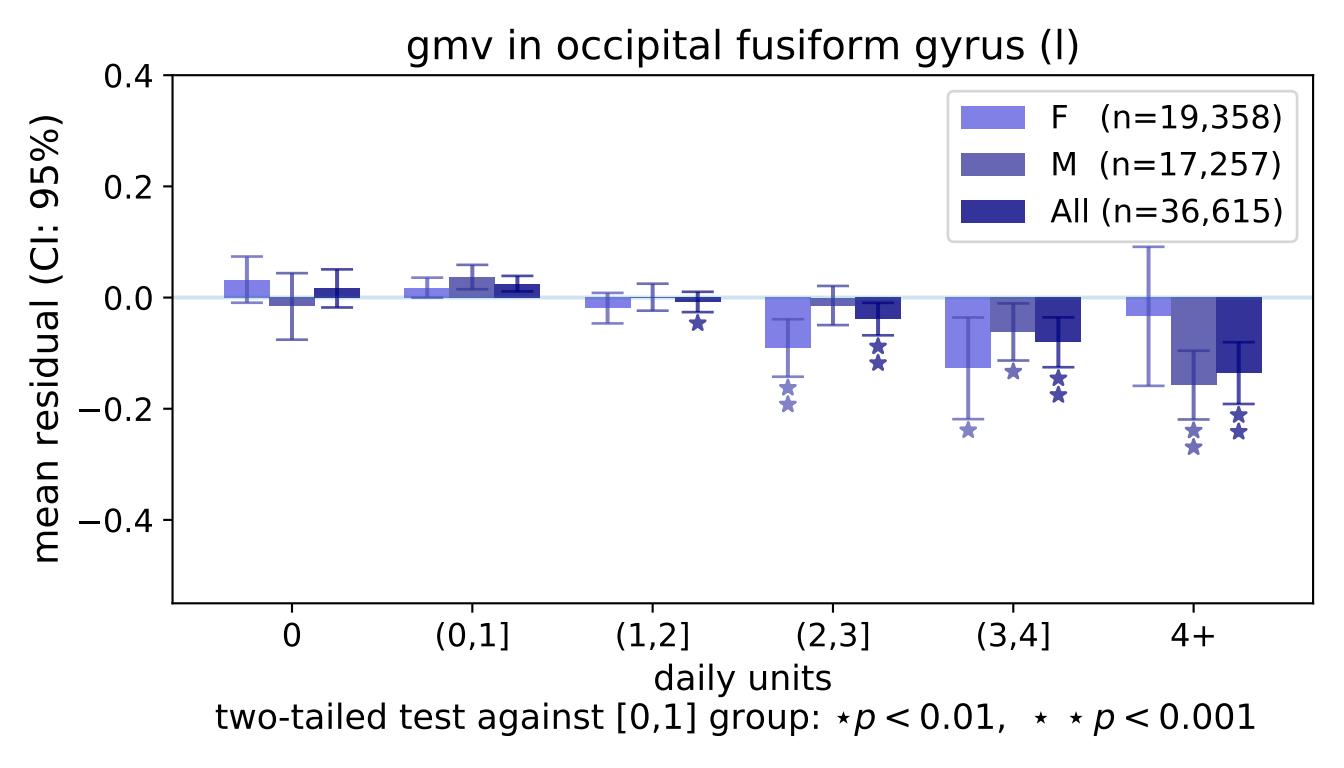

gmv in temporal fusiform cortex, anterior division (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,359)
M (n=17,252)
All (n=36,611)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆ $p < 0.001$

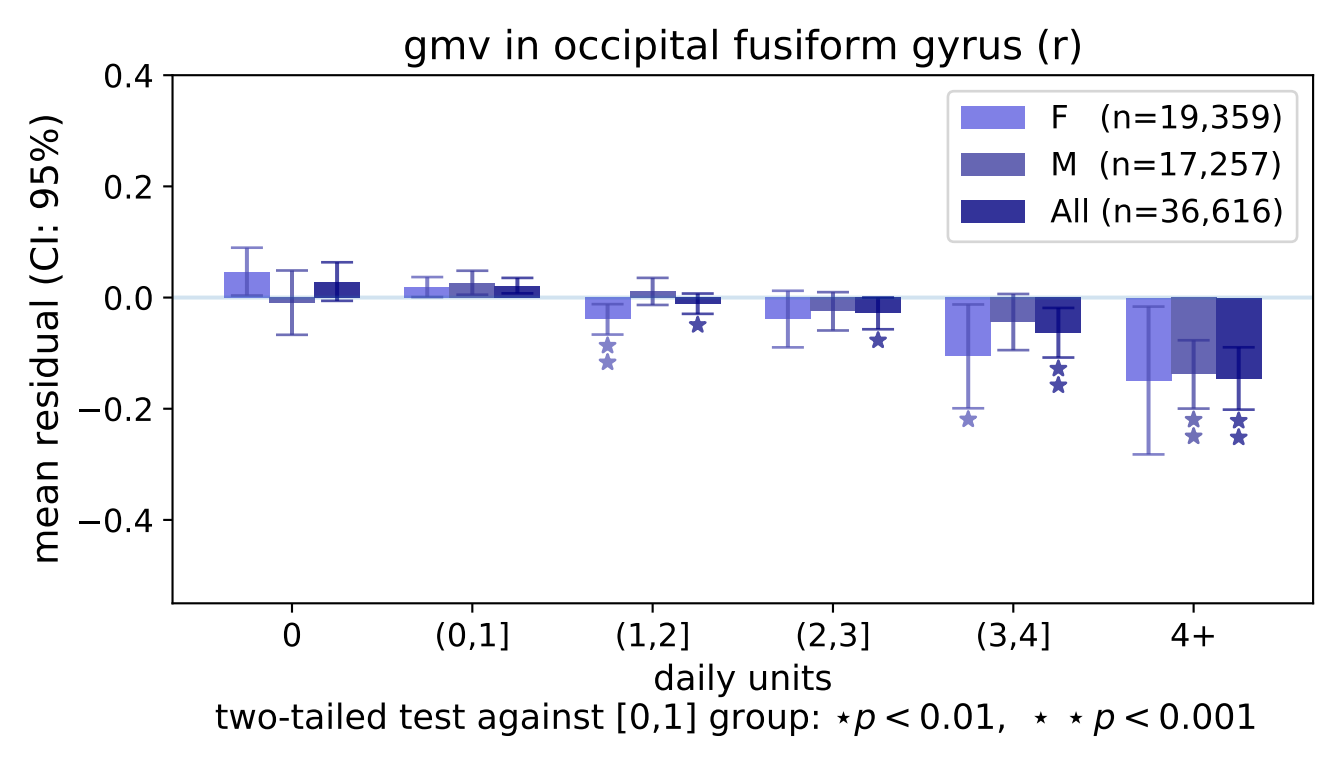

gmv in temporal fusiform cortex, posterior division (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,357)
M (n=17,248)
All (n=36,605)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆ $p < 0.001$

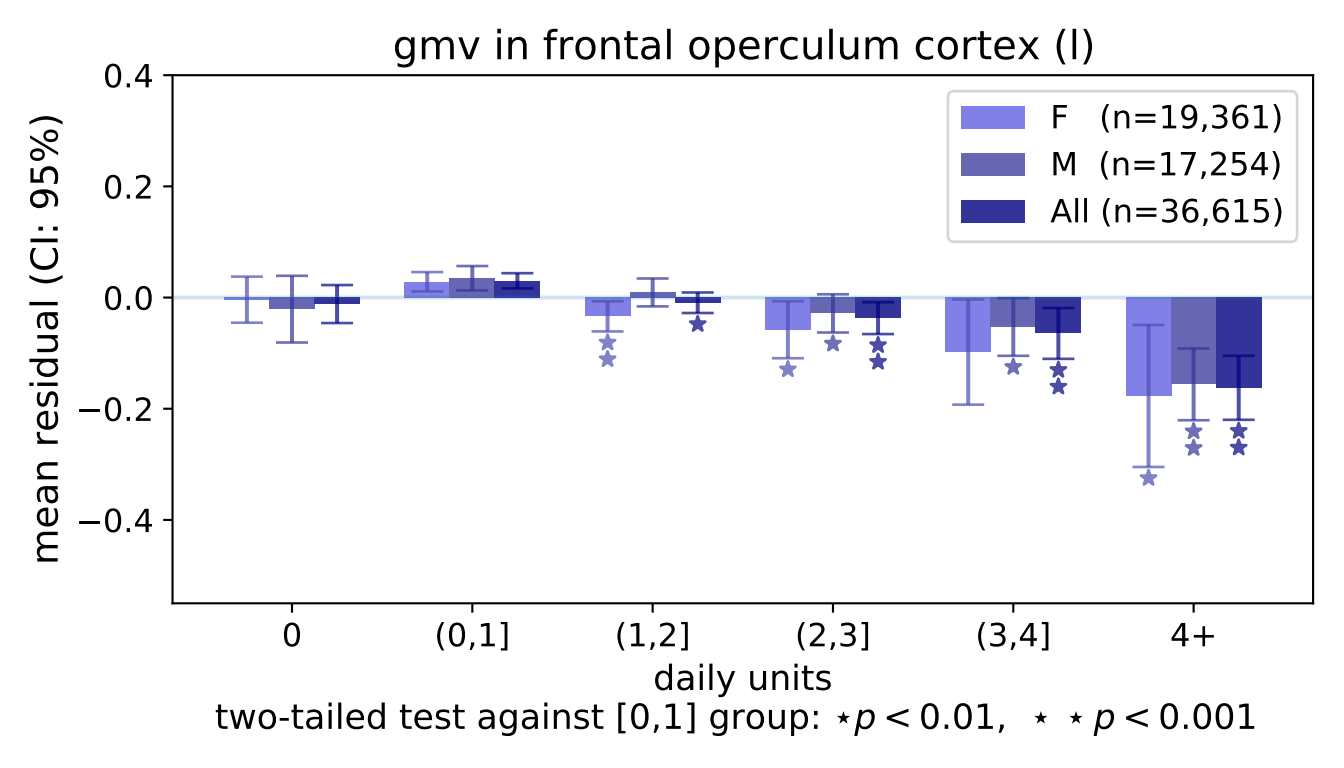

gmv in temporal fusiform cortex, posterior division (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,358)
M (n=17,250)
All (n=36,608)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆ $p < 0.001$

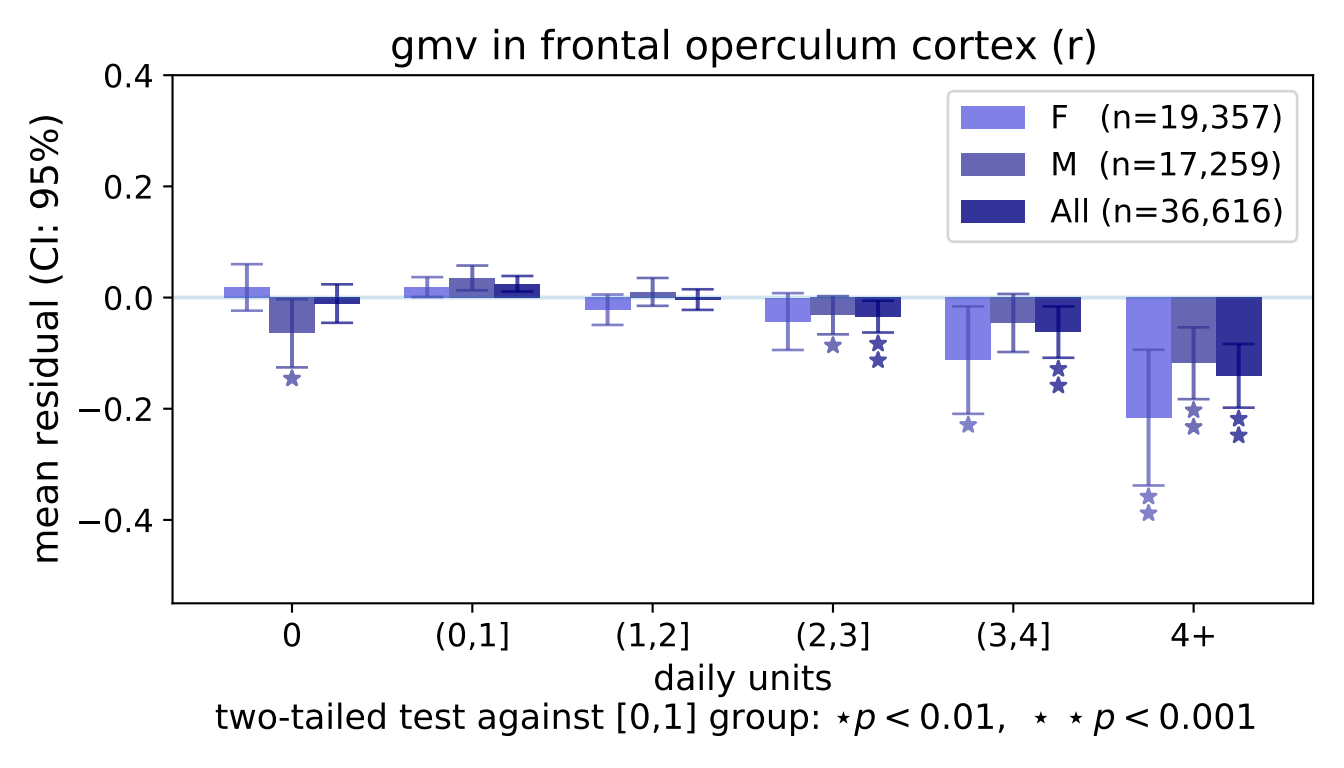

gmv in temporal occipital fusiform cortex (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,355)
M (n=17,254)
All (n=36,609)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆ $p < 0.01$, ⋆ ⋆ $p < 0.001$

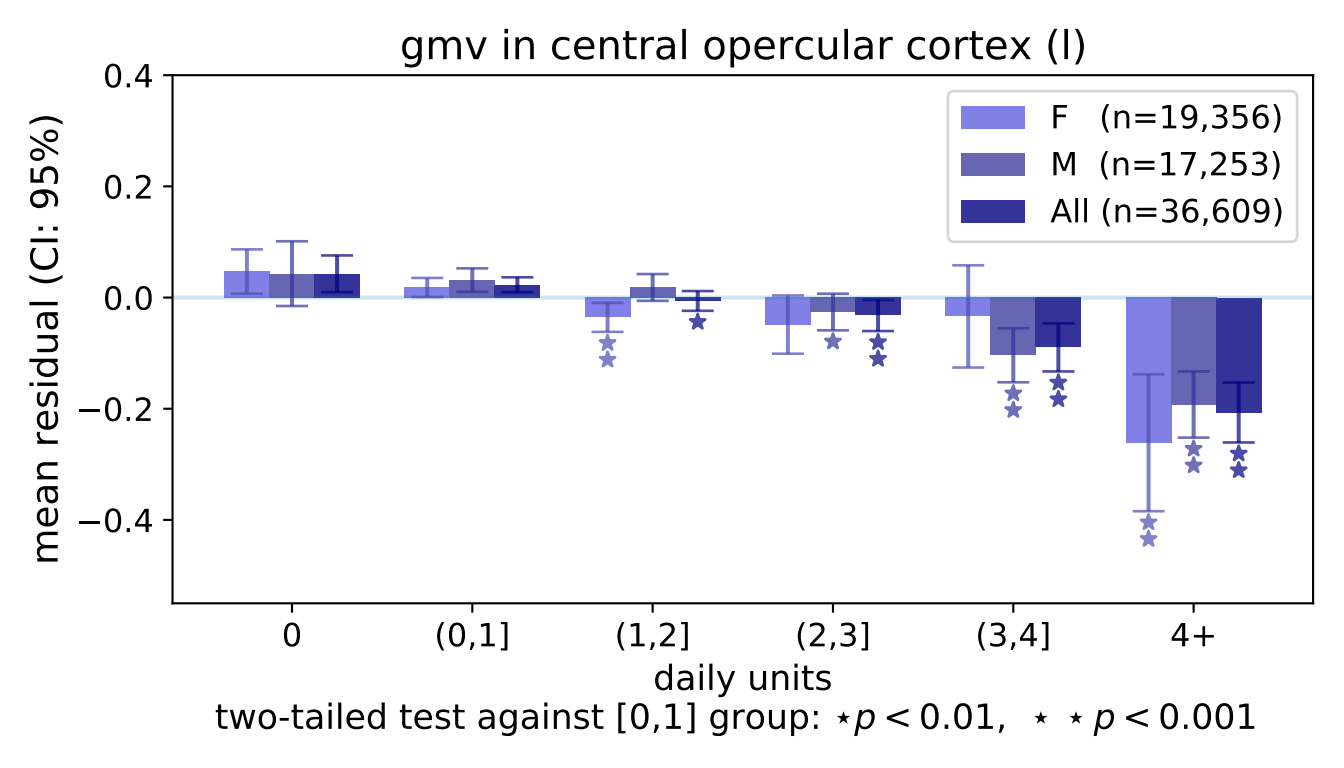

gmv in temporal occipital fusiform cortex (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,358)
M (n=17,248)
All (n=36,606)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

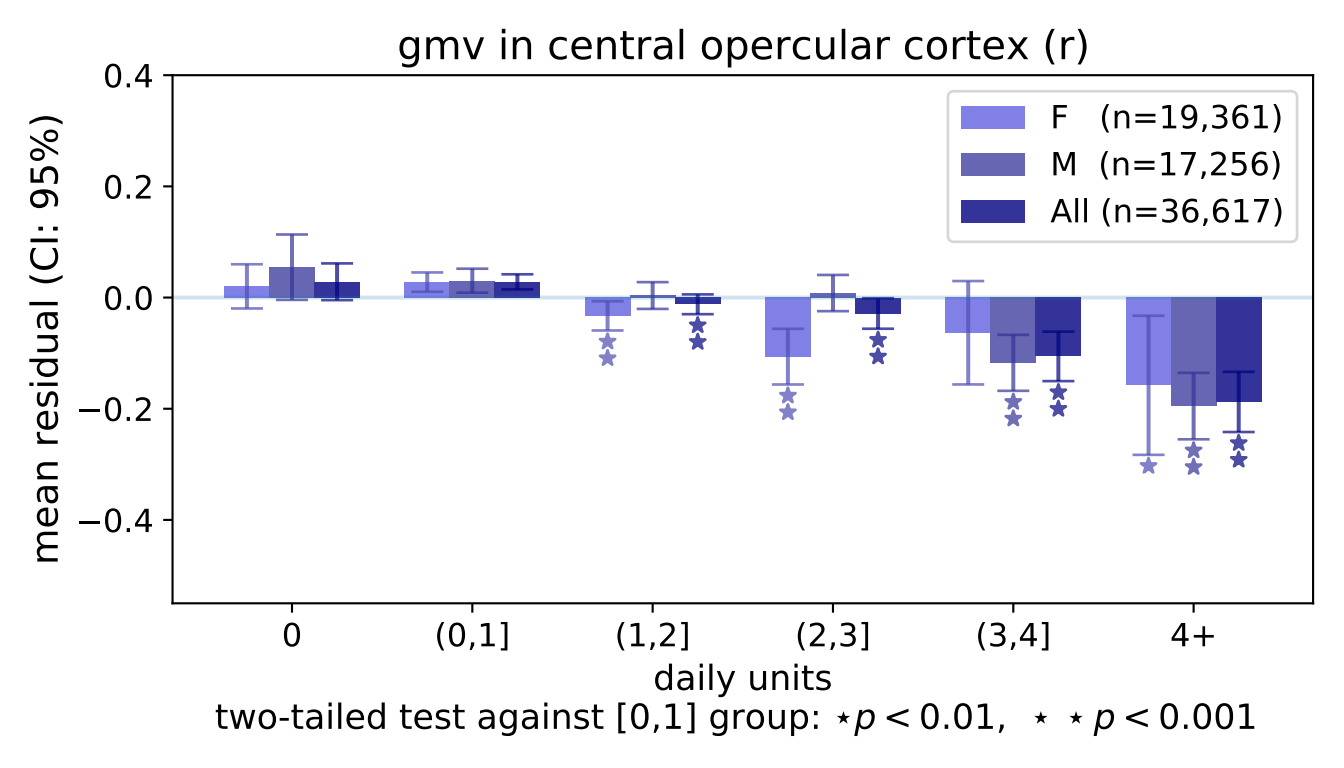

gmv in occipital fusiform gyrus (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,358)
M (n=17,257)
All (n=36,615)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

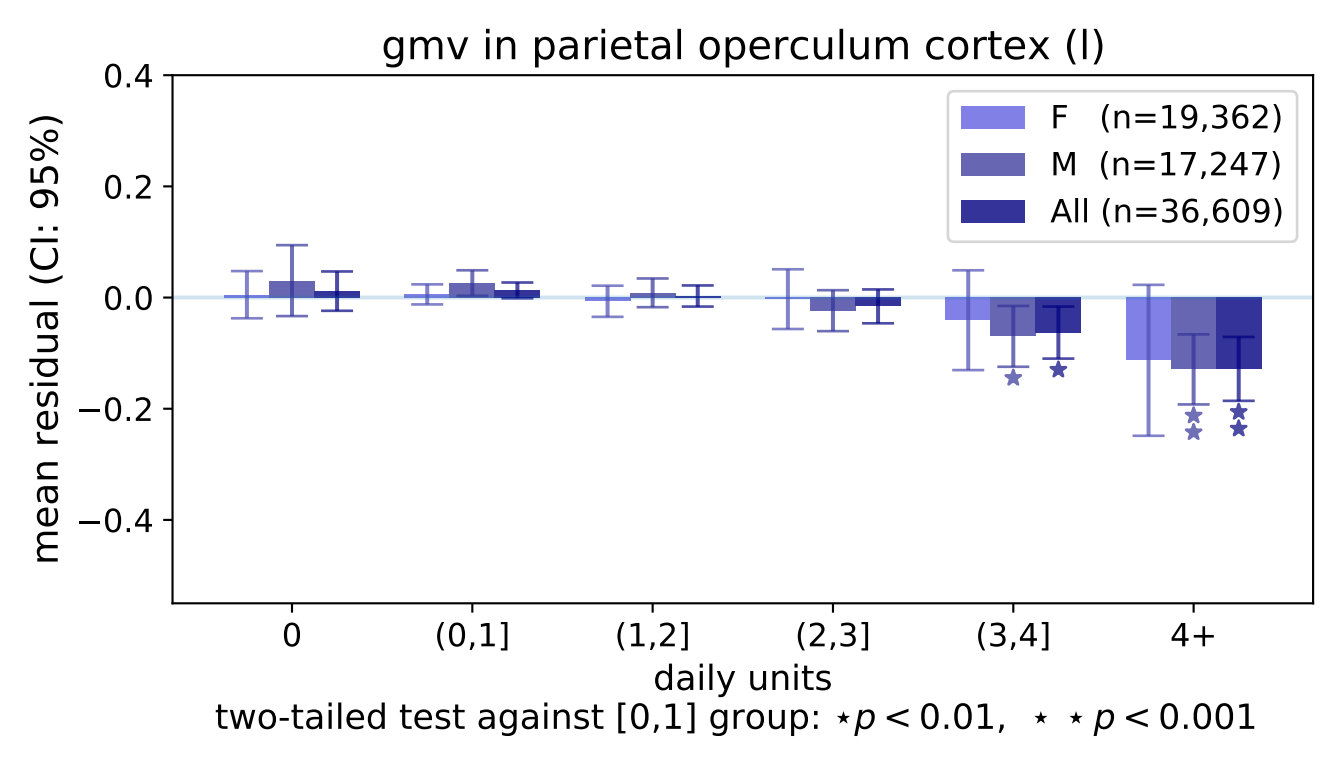

gmv in occipital fusiform gyrus (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,359)
M (n=17,257)
All (n=36,616)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

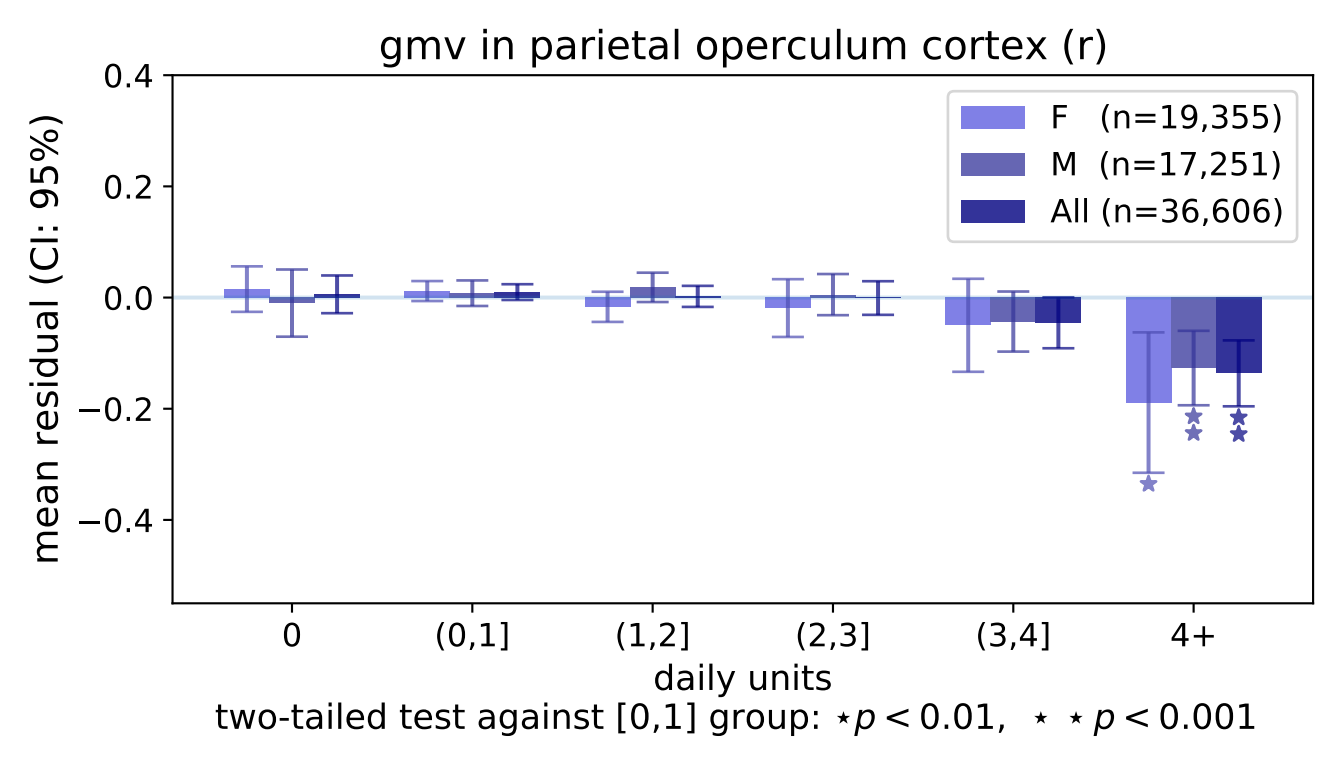

gmv in frontal operculum cortex (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,361)
M (n=17,254)
All (n=36,615)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

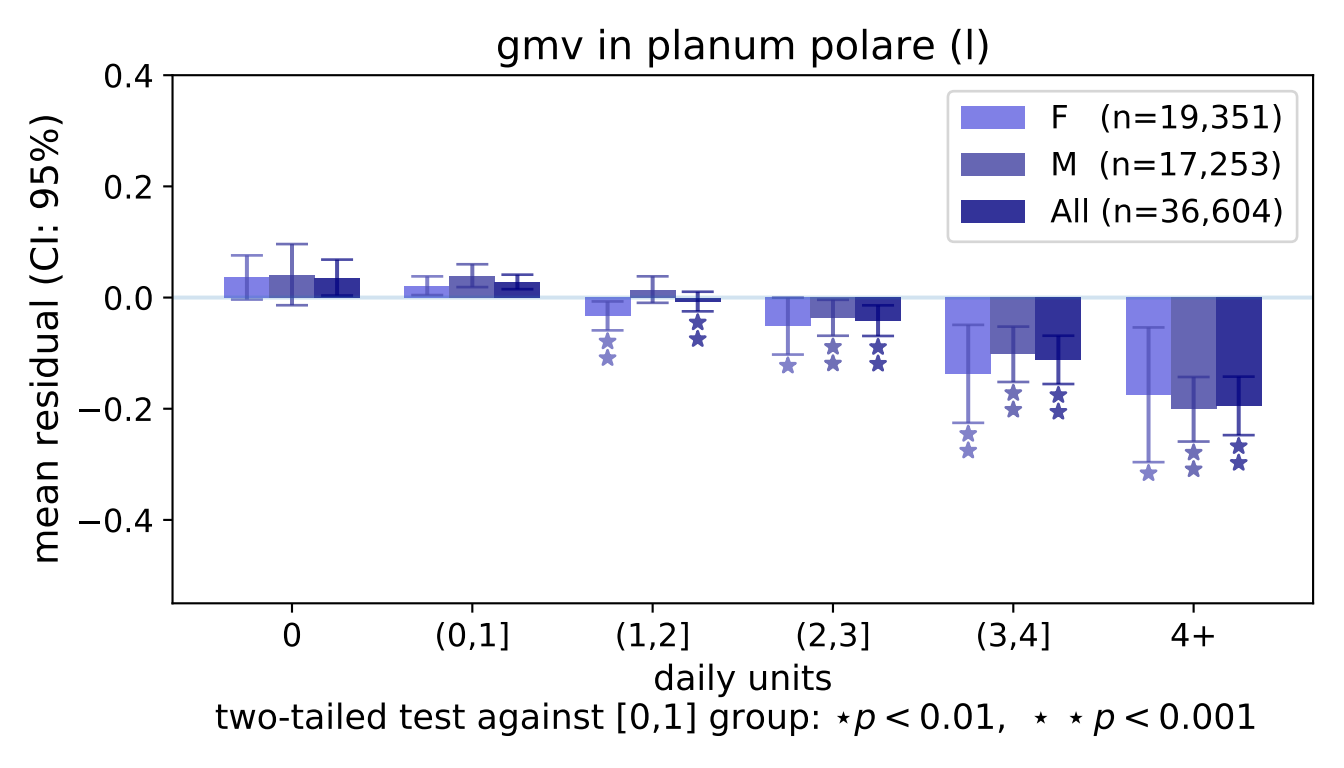

gmv in frontal operculum cortex (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,357)
M (n=17,259)
All (n=36,616)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

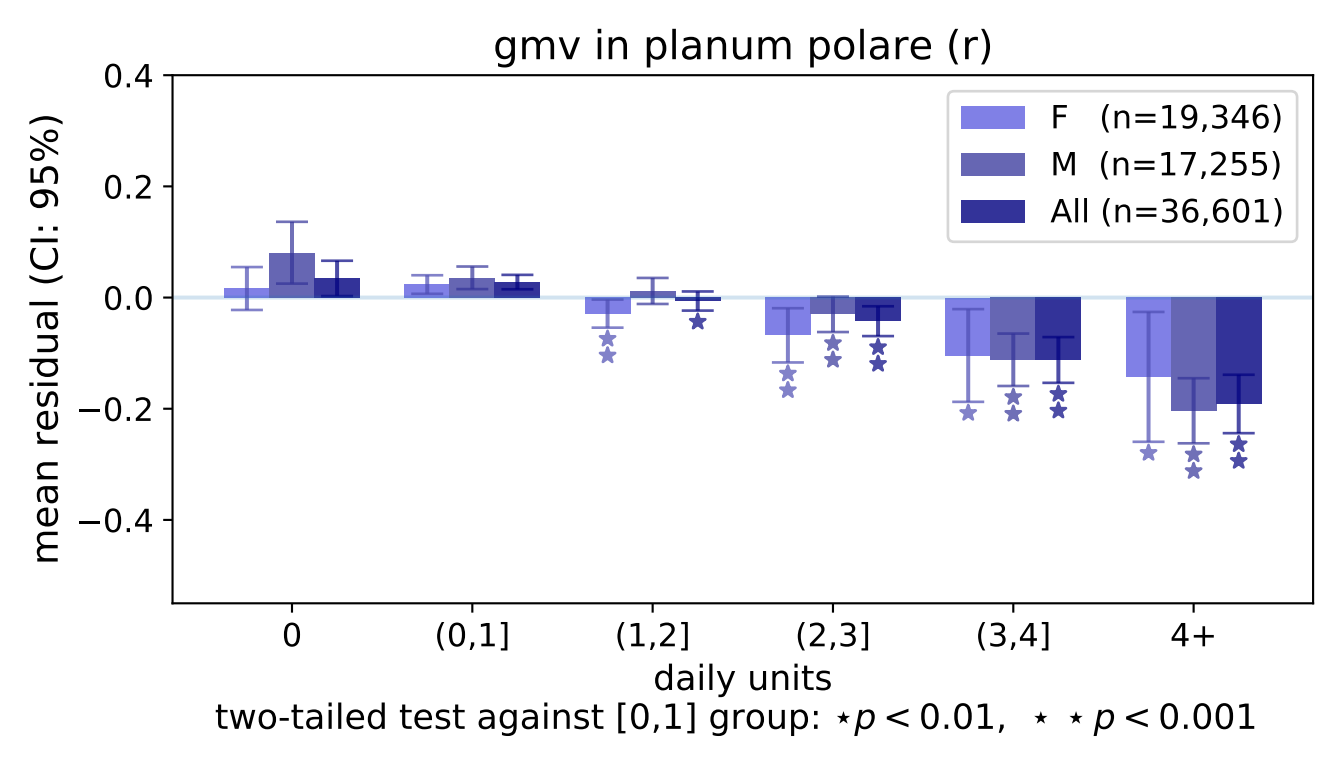

gmv in central opercular cortex (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,356)
M (n=17,253)
All (n=36,609)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

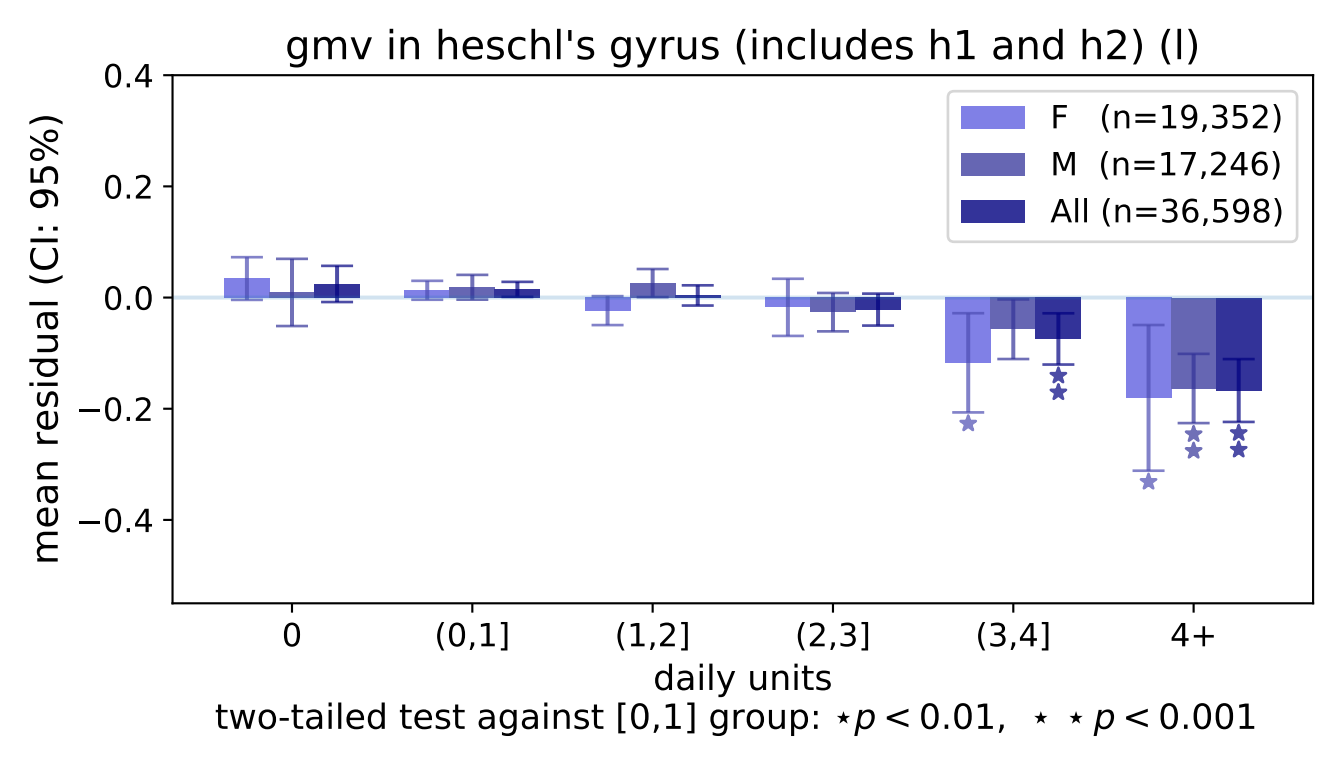

gmv in central opercular cortex (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,361)
M (n=17,256)
All (n=36,617)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

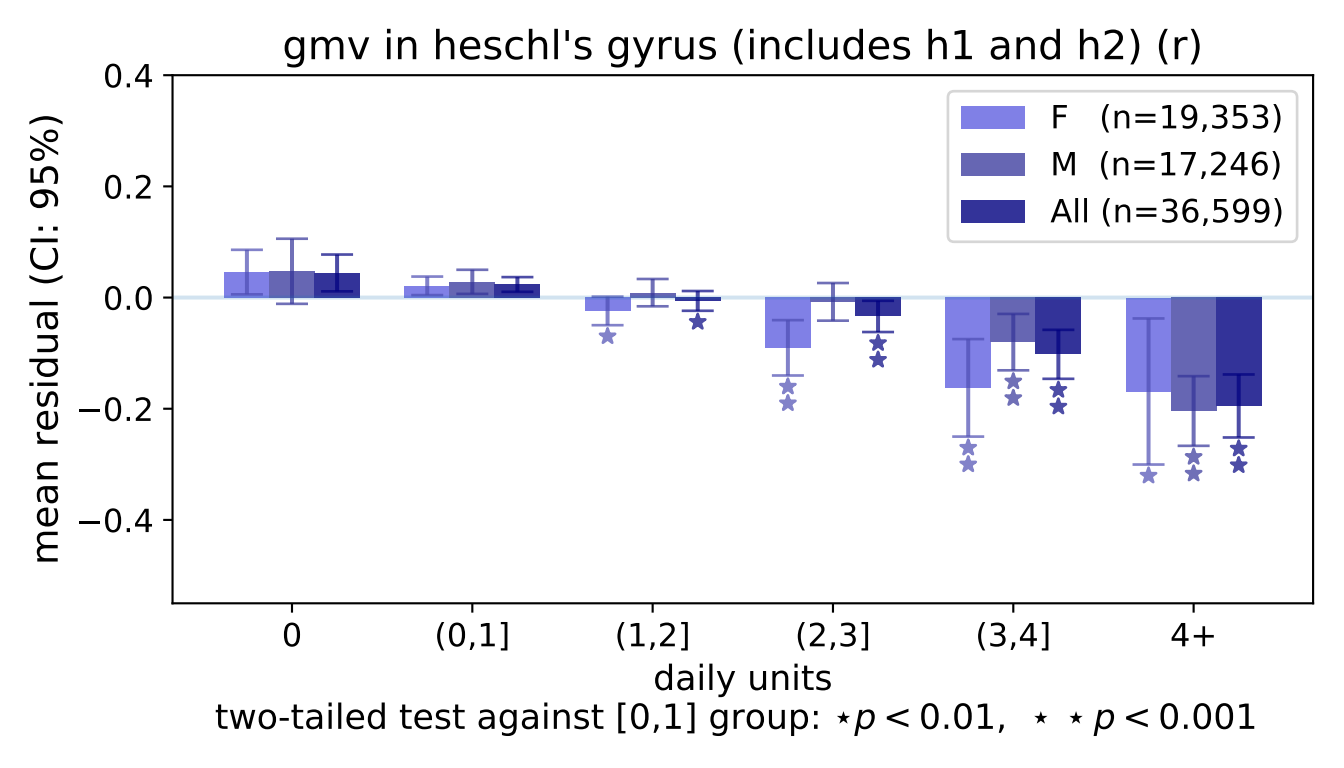

gmv in parietal operculum cortex (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,362)
M (n=17,247)
All (n=36,609)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆ $p < 0.01$, ⋆ ⋆ $p < 0.001$

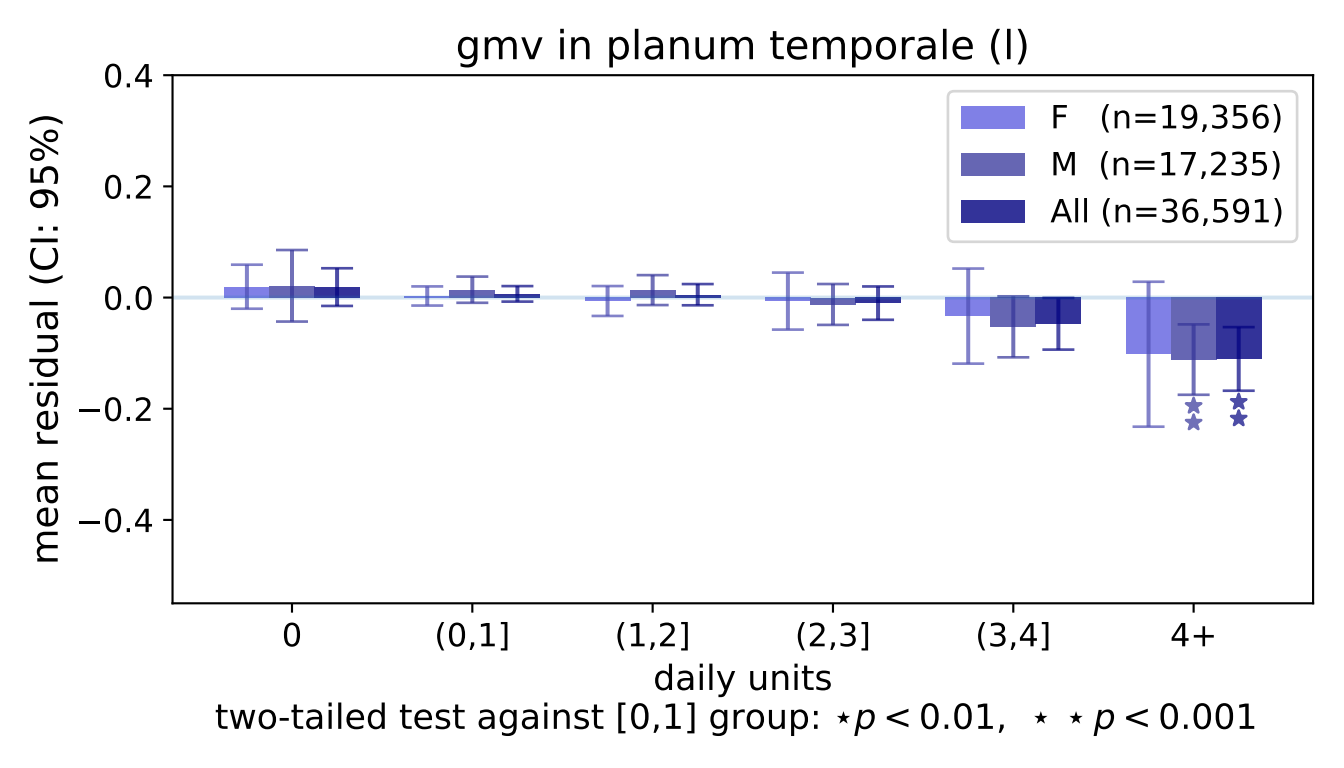

gmv in parietal operculum cortex (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,355)
M (n=17,251)
All (n=36,606)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

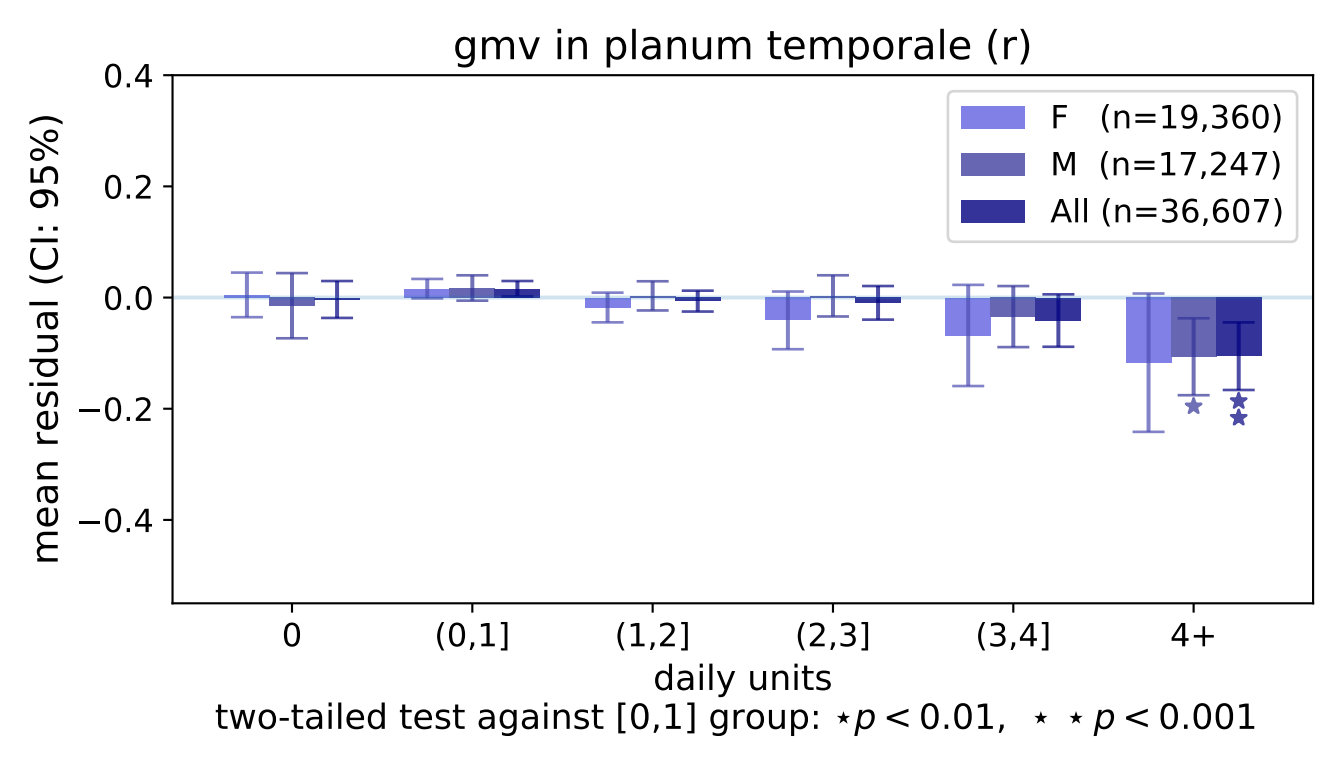

gmv in planum polare (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,351)
M (n=17,253)
All (n=36,604)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

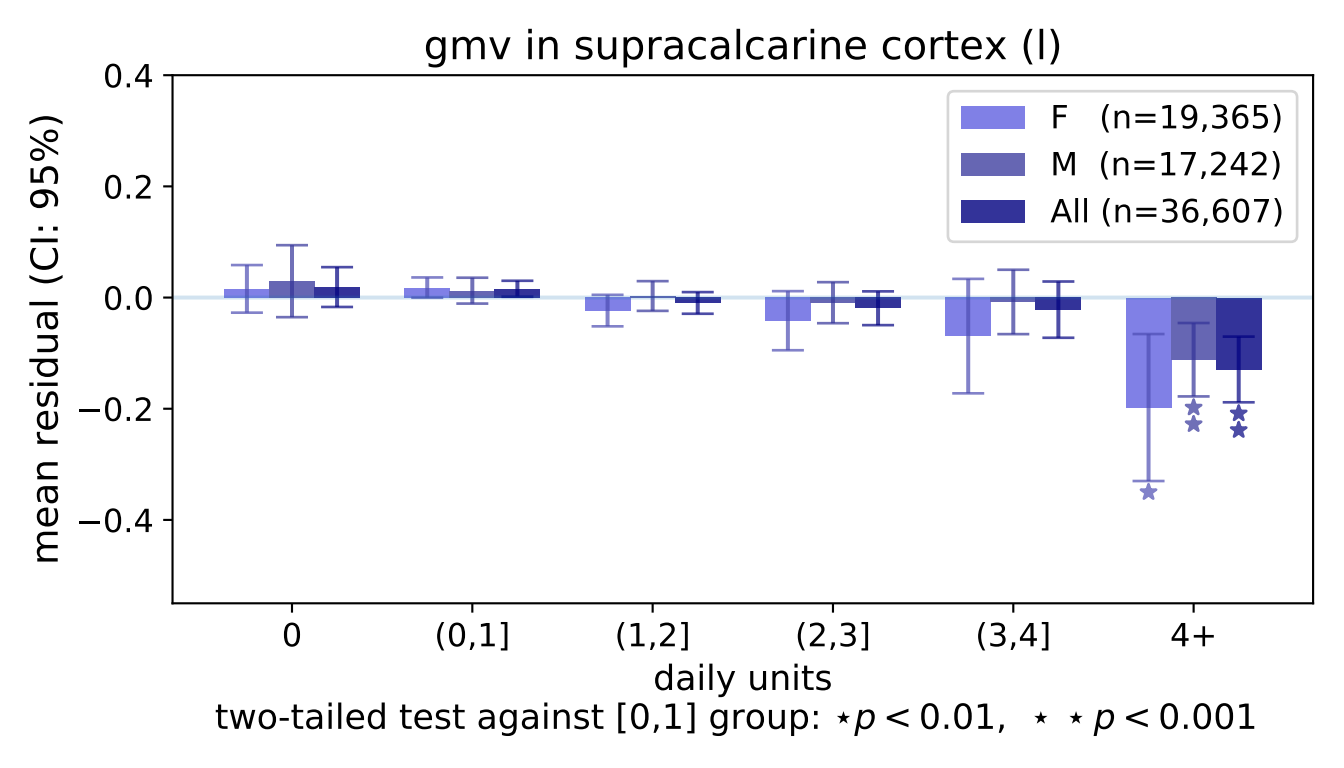

gmv in planum polare (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,346)
M (n=17,255)
All (n=36,601)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

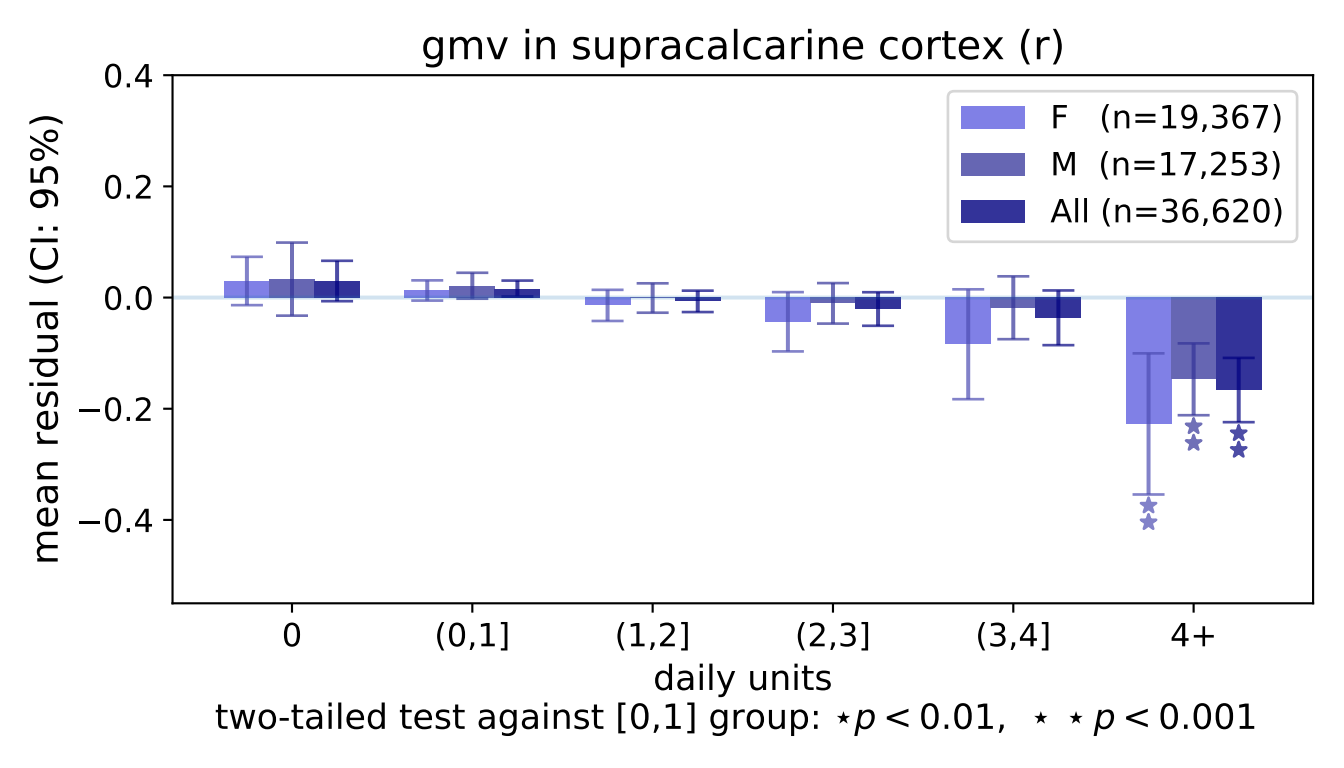

gmv in heschl's gyrus (includes h1 and h2) (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,352)
M (n=17,246)
All (n=36,598)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

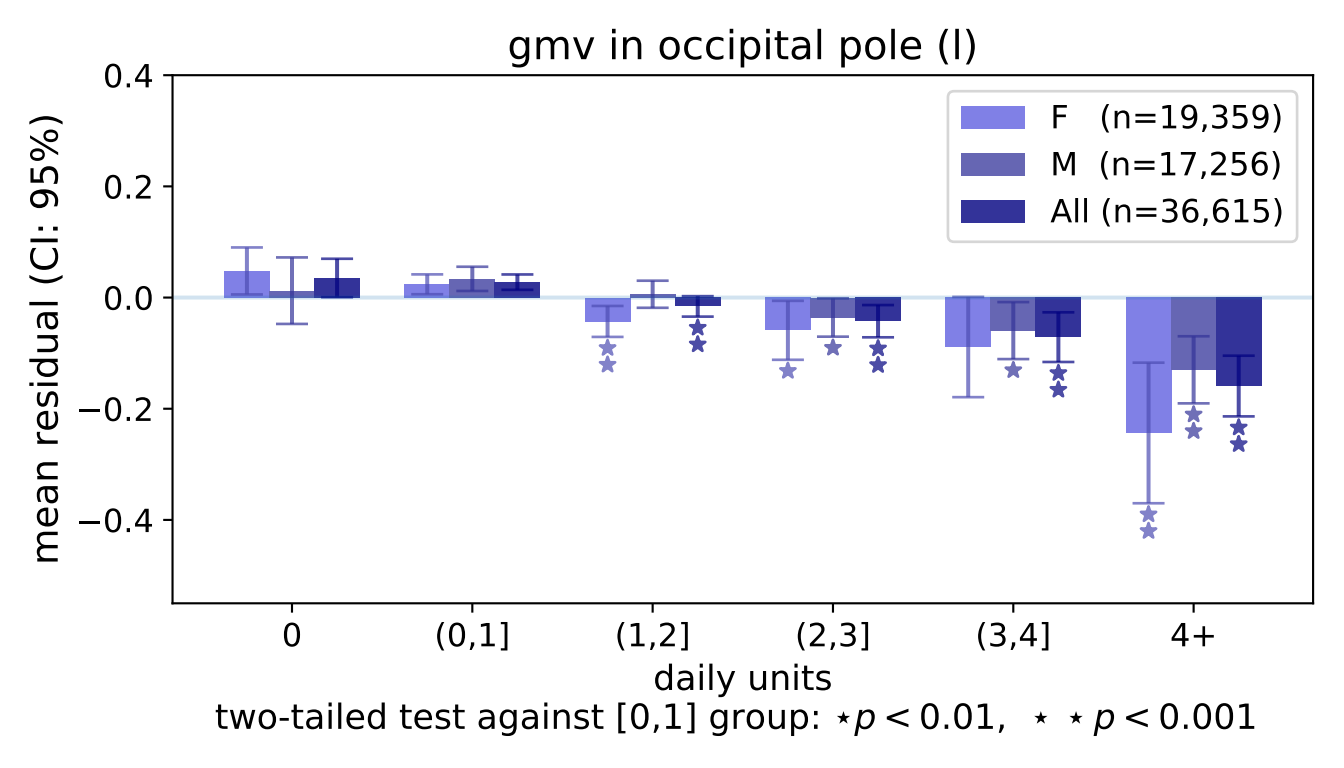

gmv in heschl's gyrus (includes h1 and h2) (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,353)
M (n=17,246)
All (n=36,599)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

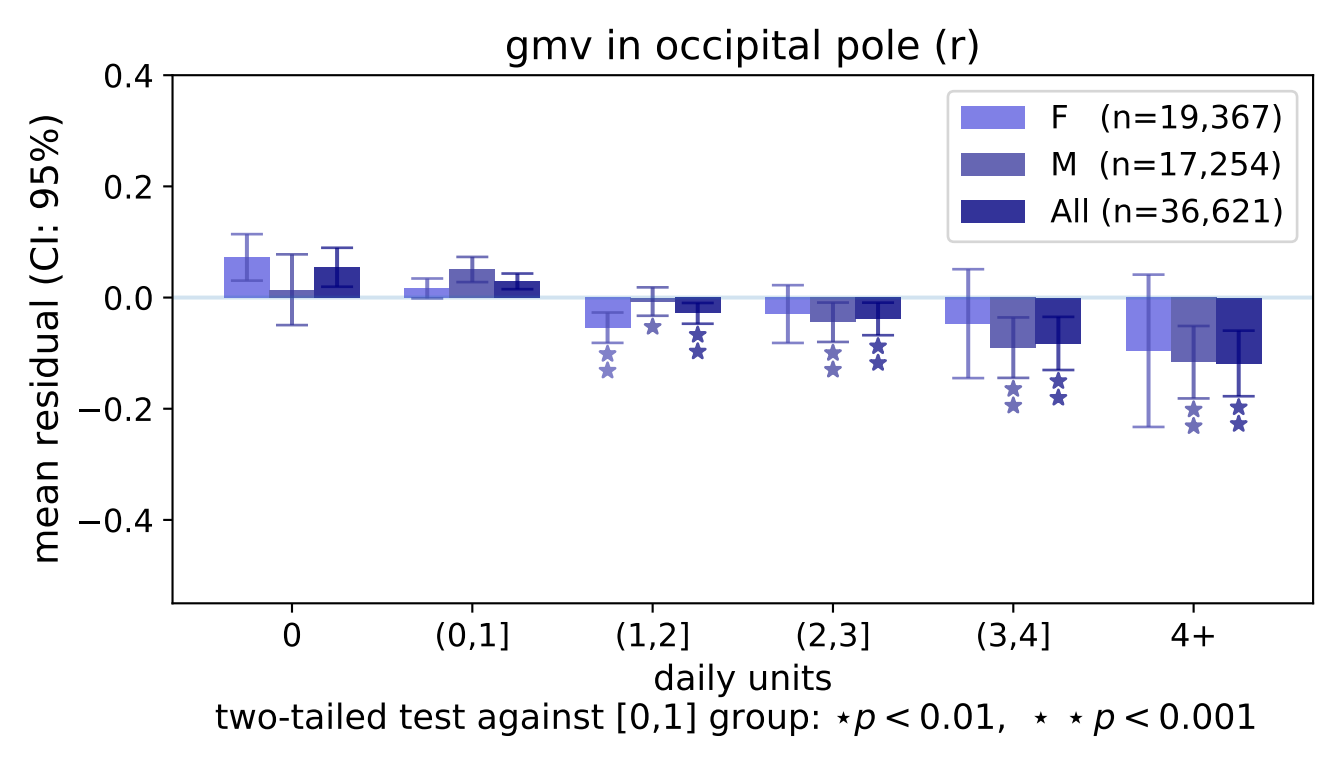

gmv in planum temporale (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,356)
M (n=17,235)
All (n=36,591)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

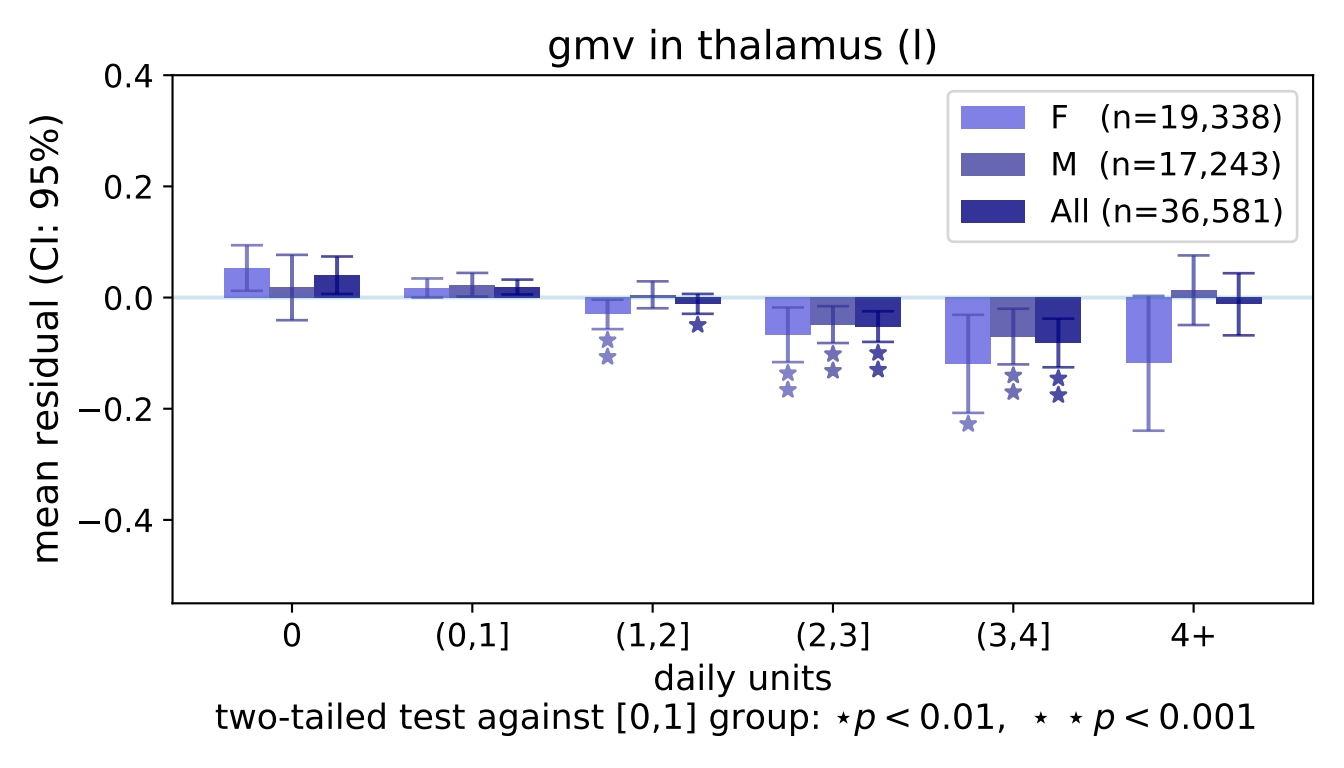

gmv in planum temporale (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,360)
M (n=17,247)
All (n=36,607)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

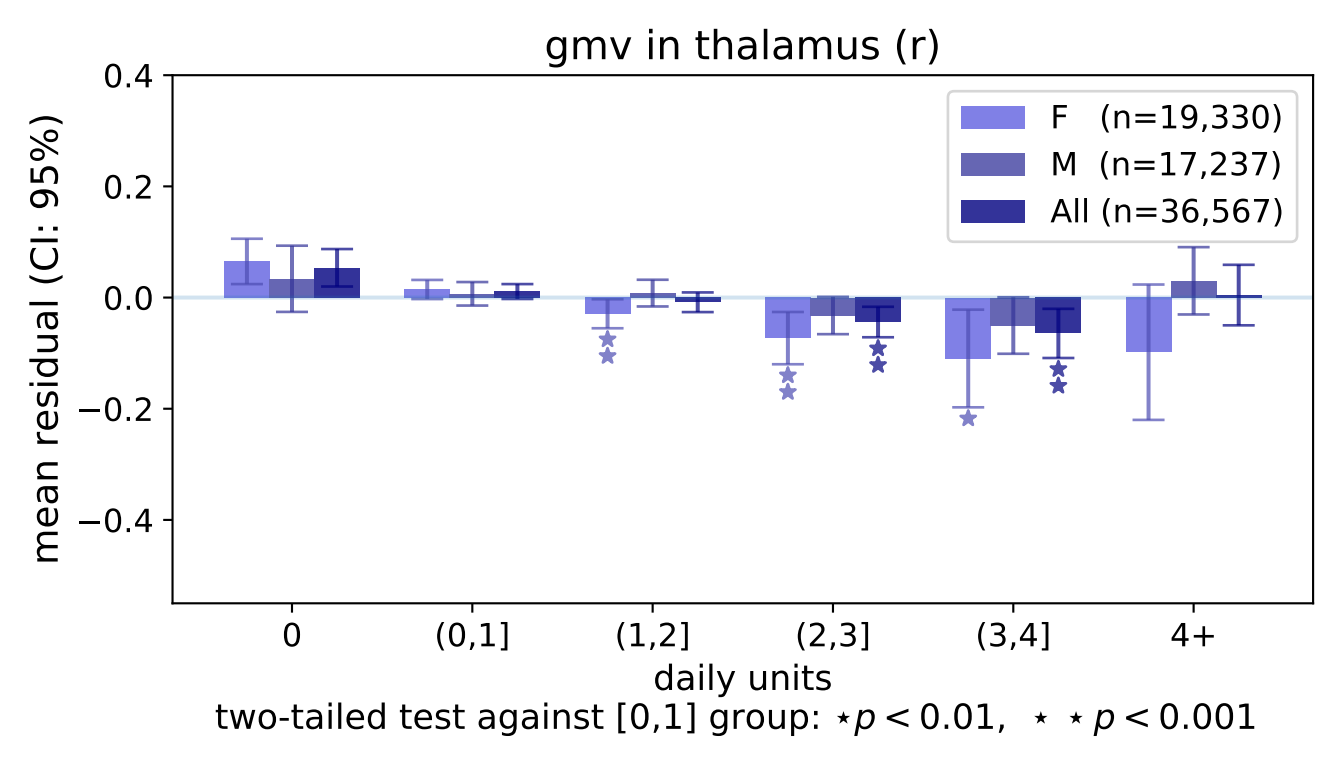

gmv in supracalcarine cortex (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,365)
M (n=17,242)
All (n=36,607)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

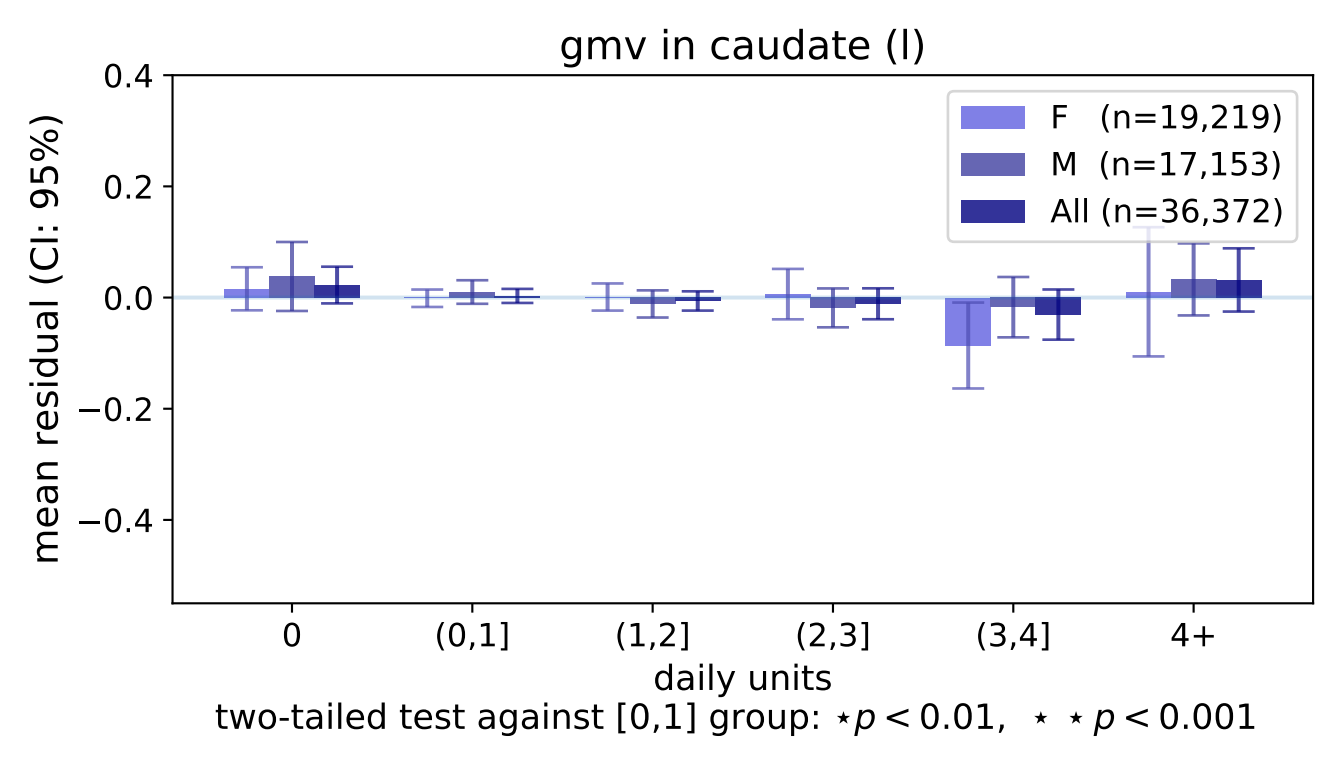

gmv in supracalcarine cortex (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,367)
M (n=17,253)
All (n=36,620)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

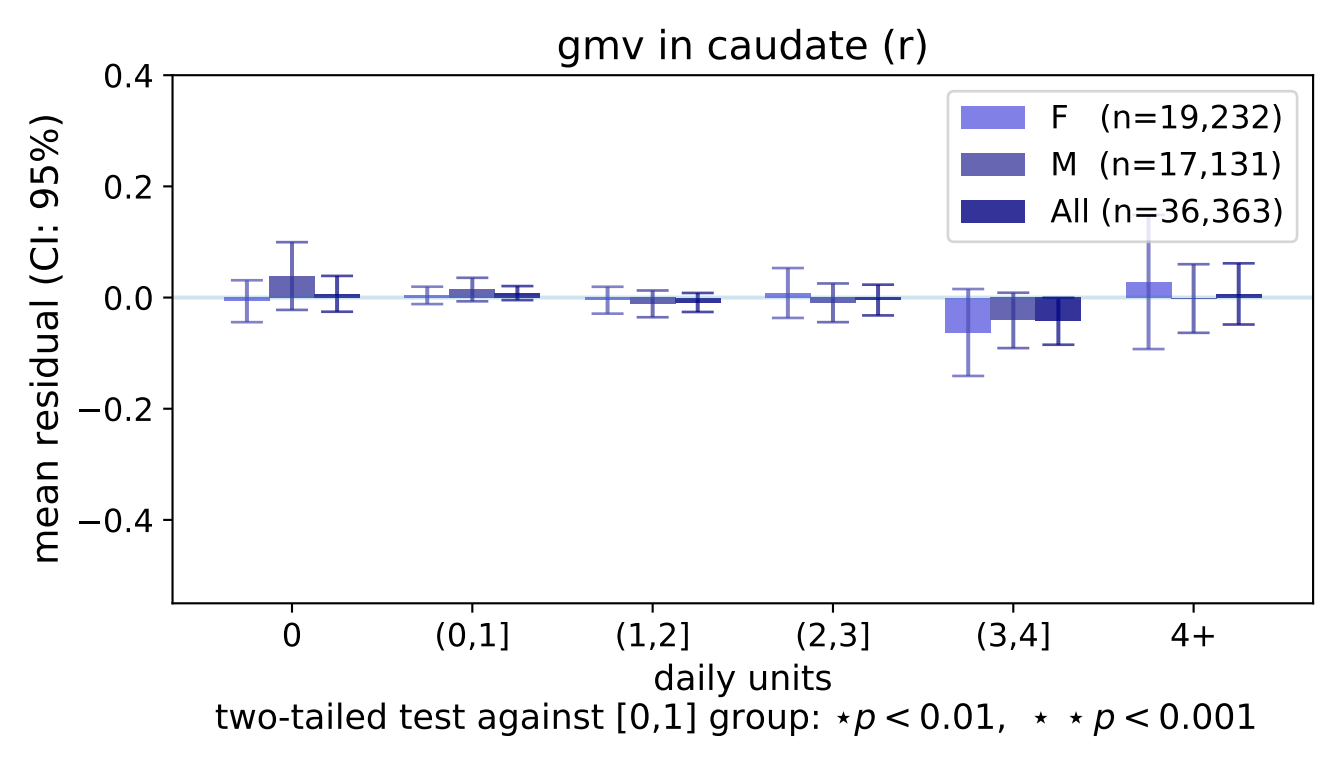

gmv in occipital pole (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,359)
M (n=17,256)
All (n=36,615)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

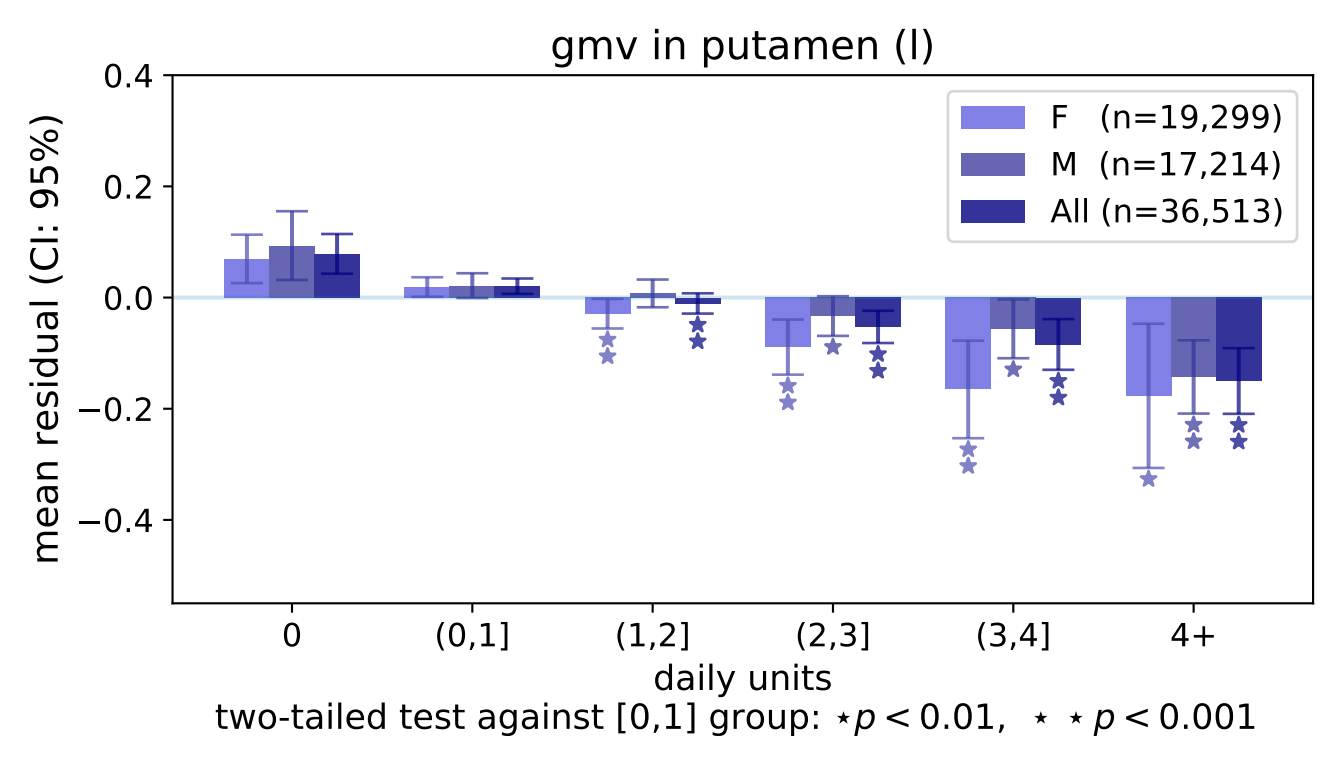

gmv in occipital pole (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,367)
M (n=17,254)
All (n=36,621)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆ $p < 0.01$, ⋆ ⋆ $p < 0.001$

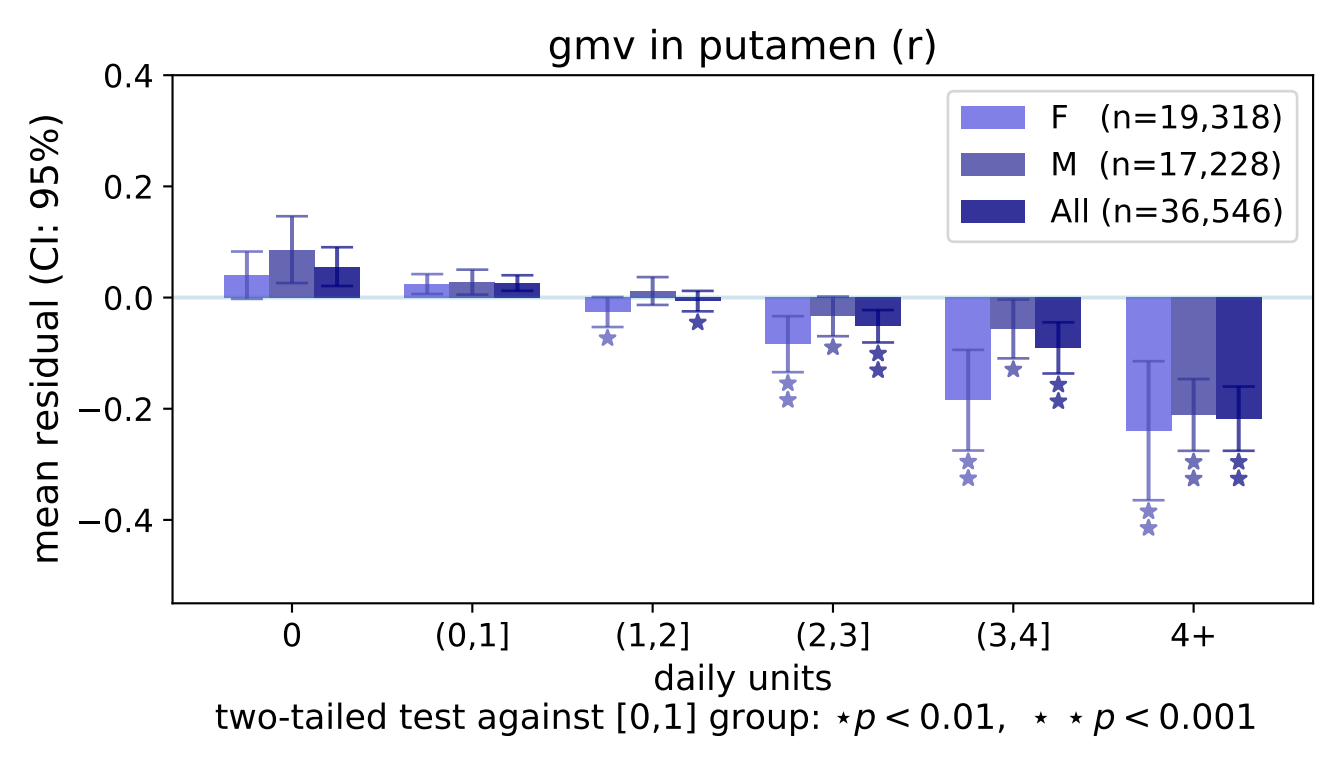

gmv in thalamus (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,338)
M (n=17,243)
All (n=36,581)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆ $p < 0.01$, ⋆ ⋆ $p < 0.001$

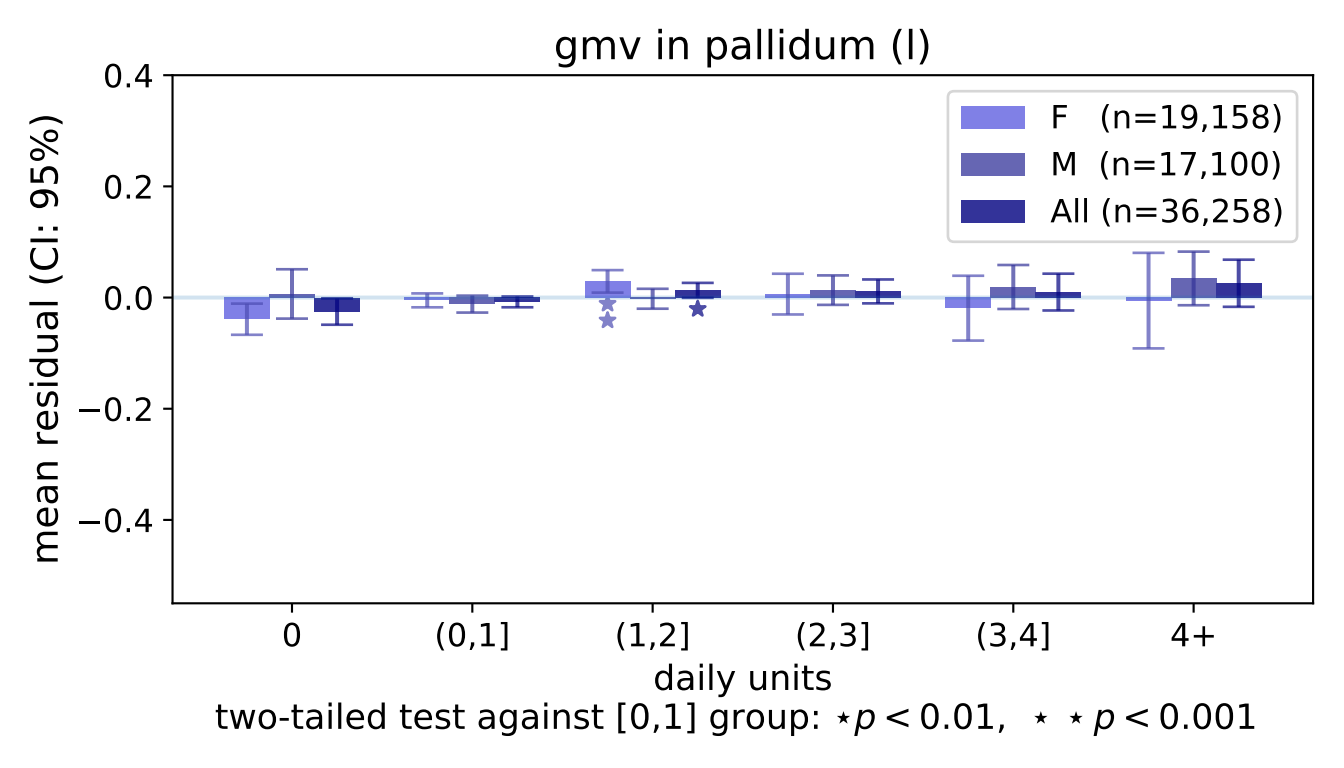

gmv in thalamus (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,330)
M (n=17,237)
All (n=36,567)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

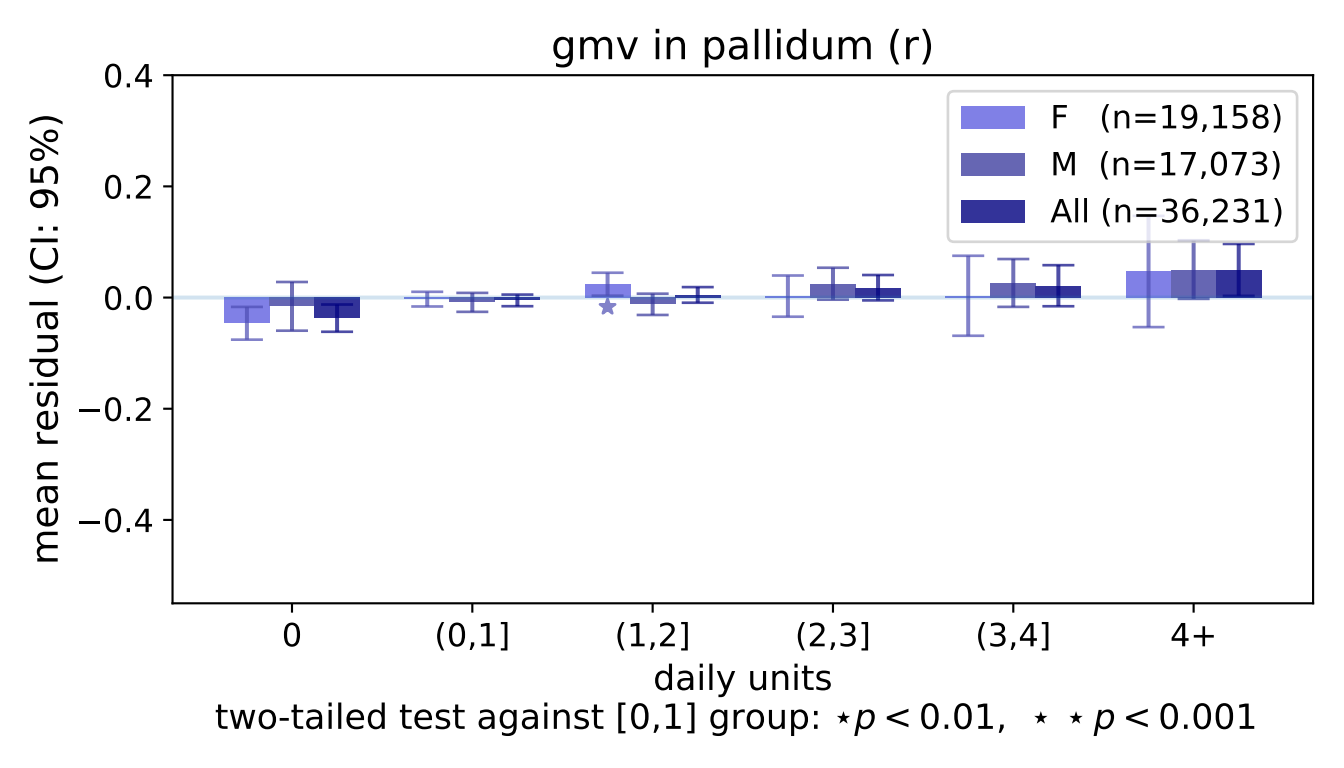

gmv in caudate (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,219)
M (n=17,153)
All (n=36,372)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

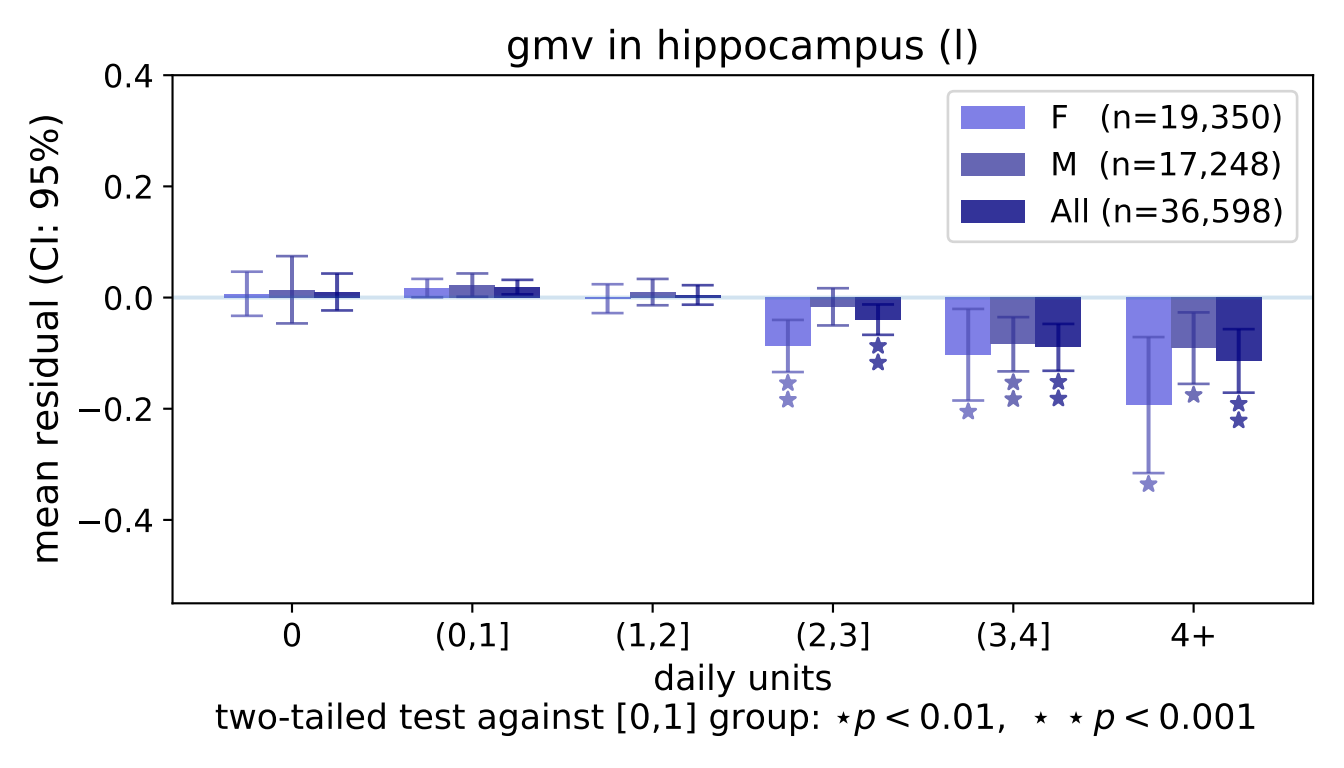

gmv in caudate (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,232)
M (n=17,131)
All (n=36,363)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

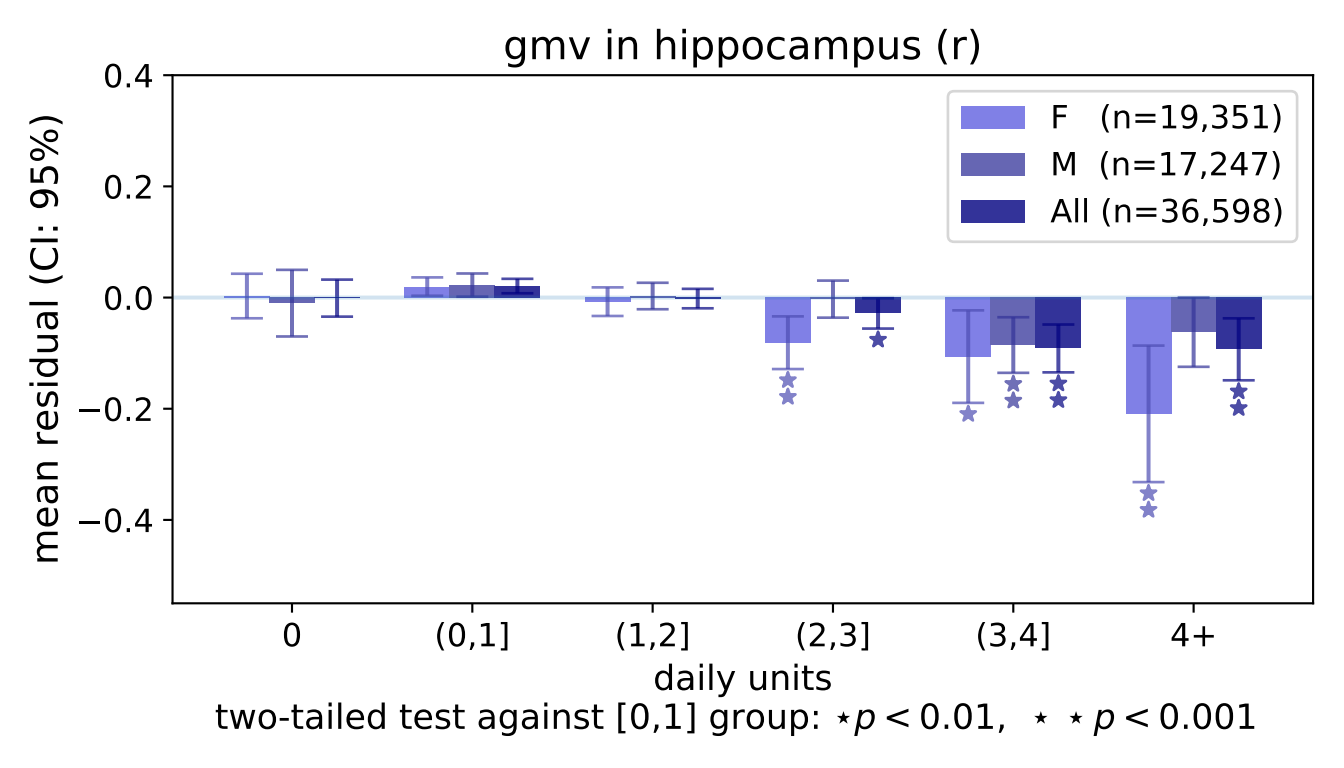

gmv in putamen (l)
F (n=19,299)
M (n=17,214)
All (n=36,513)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

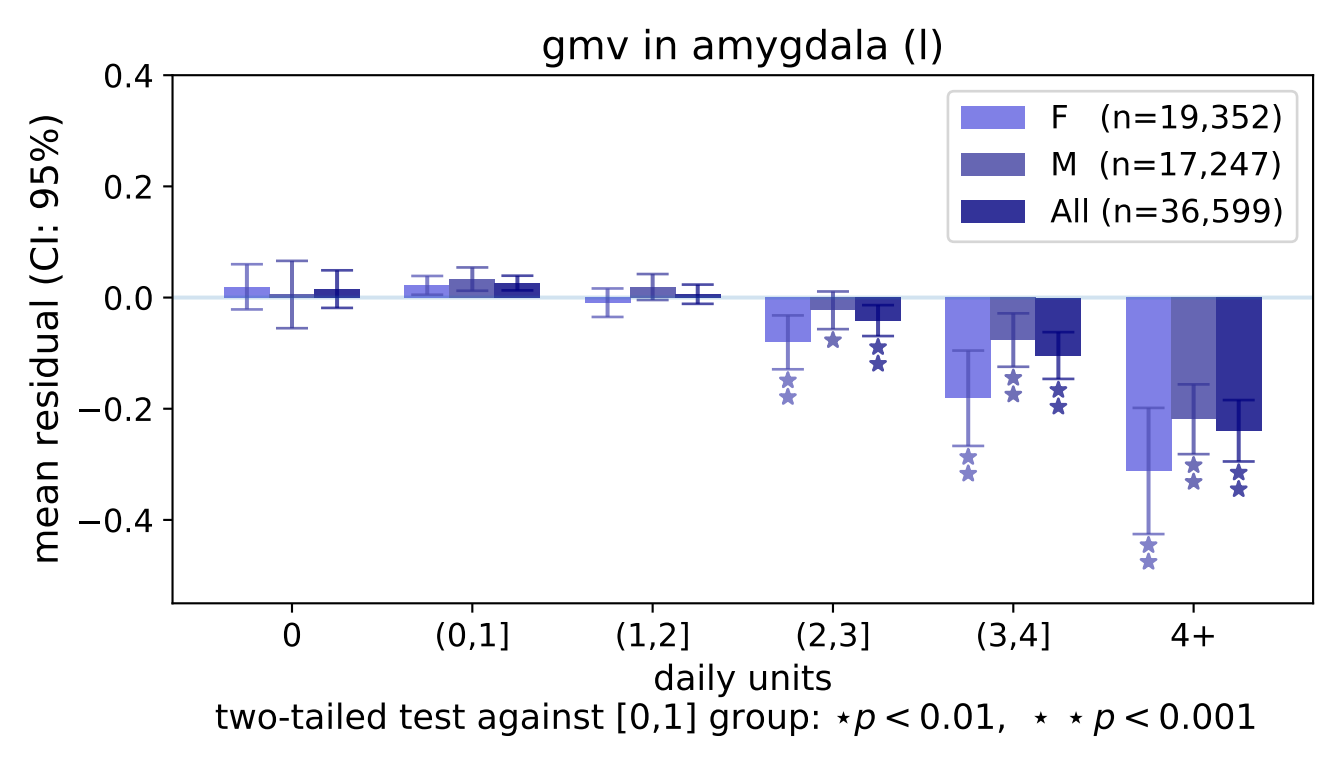

gmv in putamen (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,318)
M (n=17,228)
All (n=36,546)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆ $p < 0.01$, ⋆ ⋆ $p < 0.001$

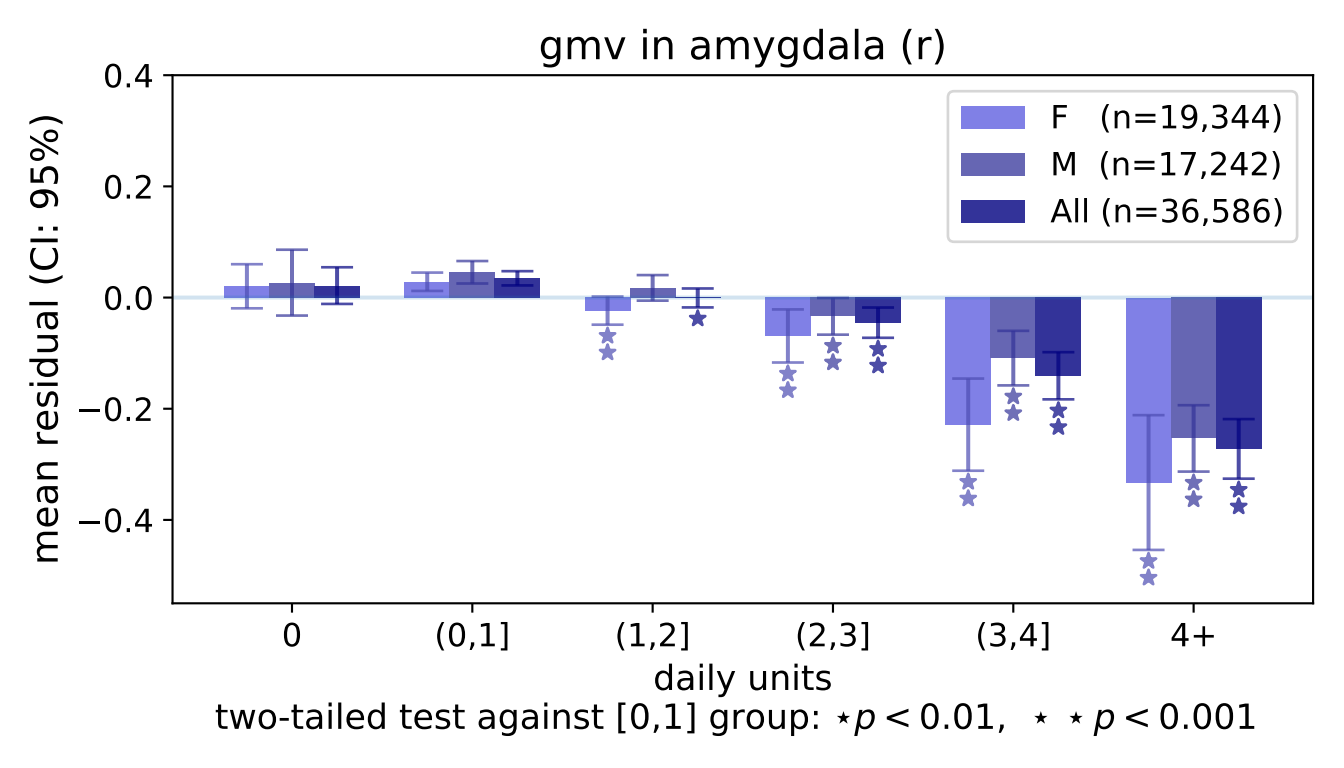

gmv in pallidum (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,158)
M (n=17,100)
All (n=36,258)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

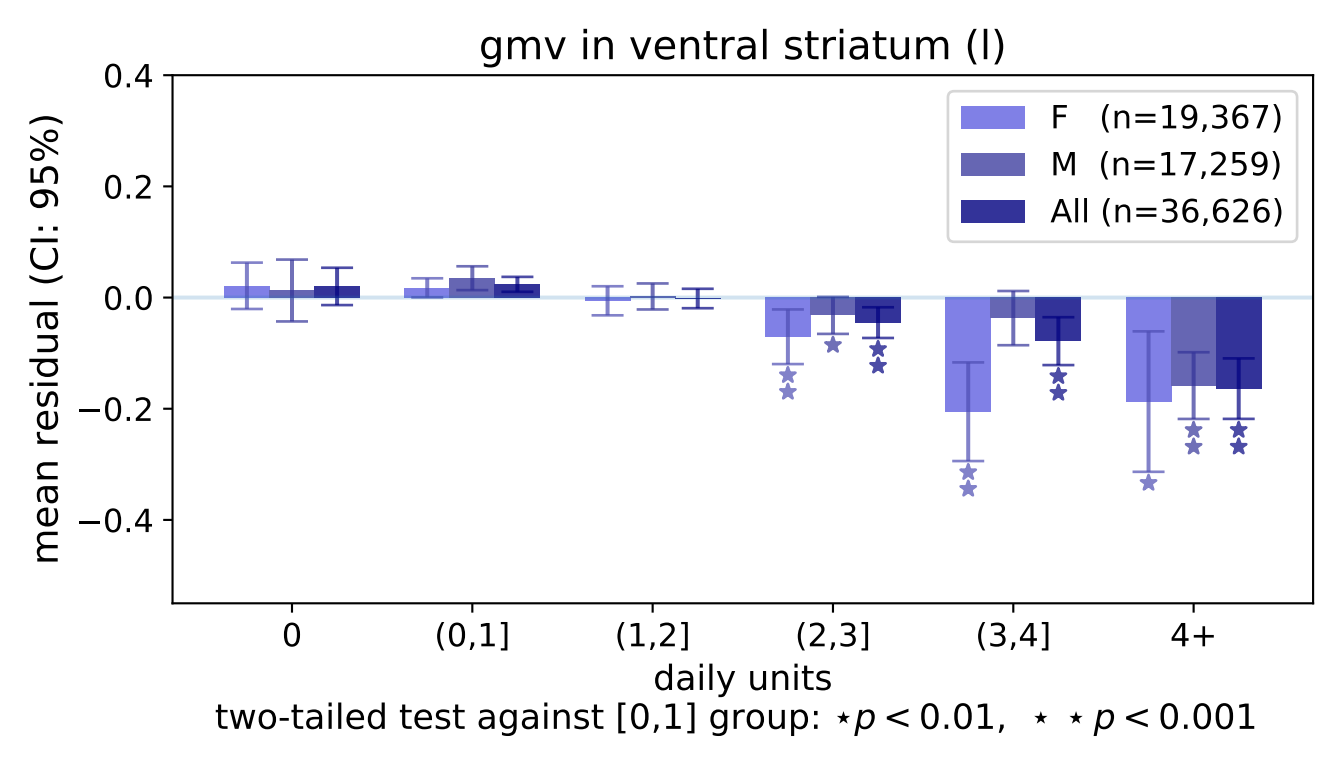

gmv in pallidum (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,158)
M (n=17,073)
All (n=36,231)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆ $p < 0.01$, ⋆ ⋆ $p < 0.001$

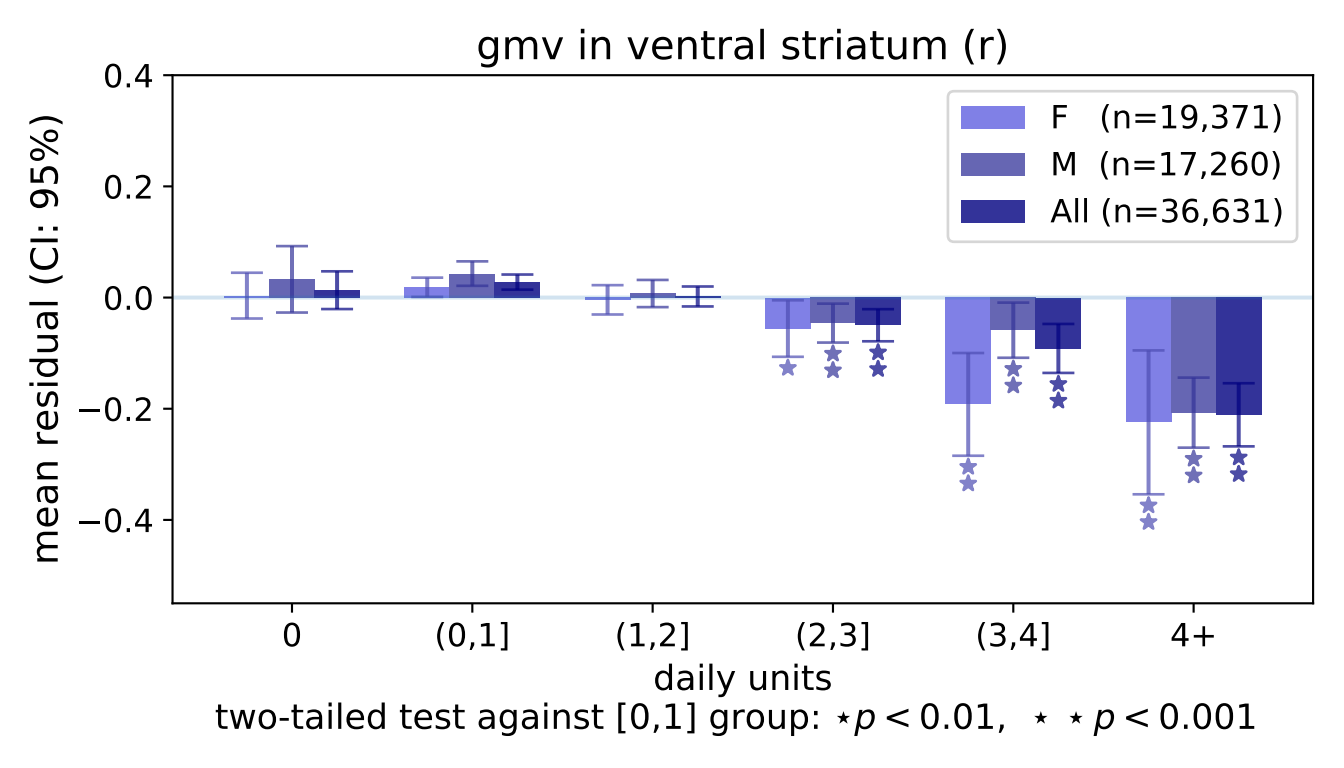

gmv in hippocampus (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,350)
M (n=17,248)
All (n=36,598)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

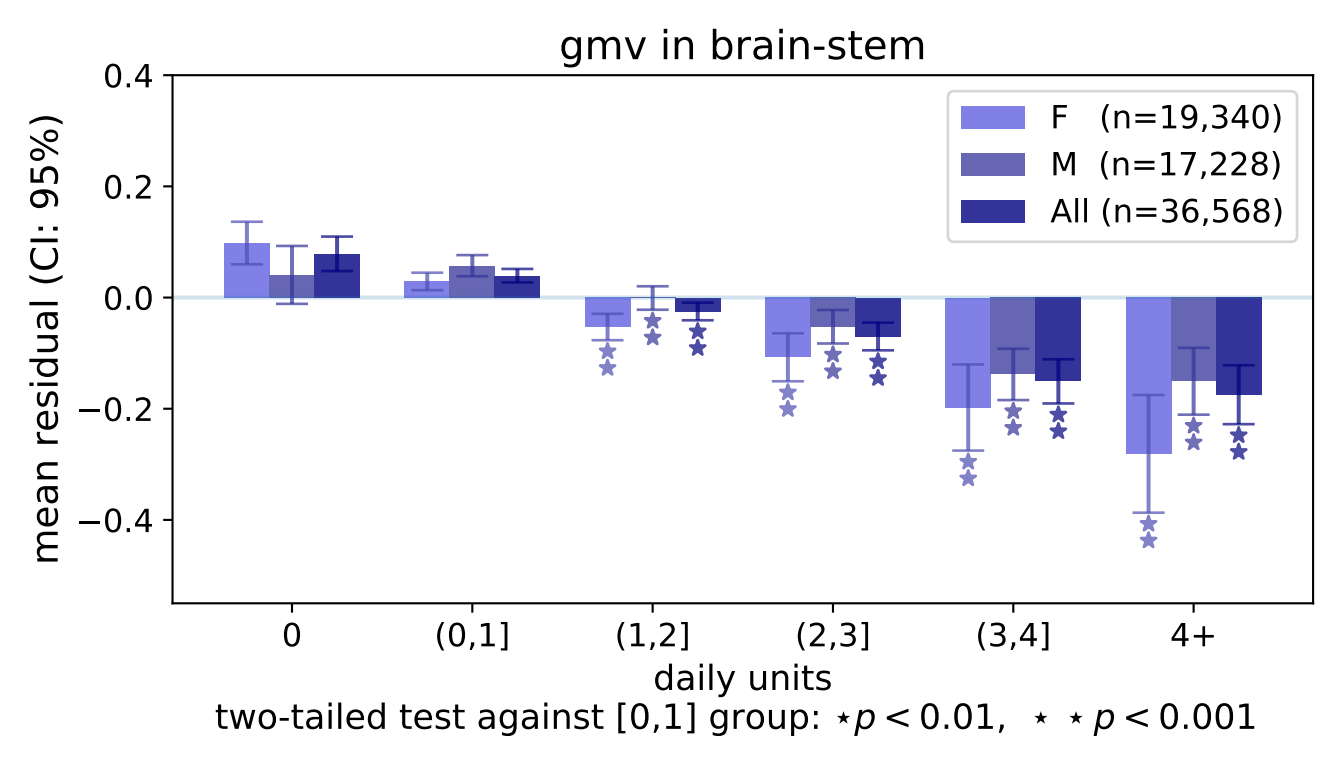

gmv in hippocampus (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,351)
M (n=17,247)
All (n=36,598)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆ $p < 0.01$, ⋆ ⋆ $p < 0.001$

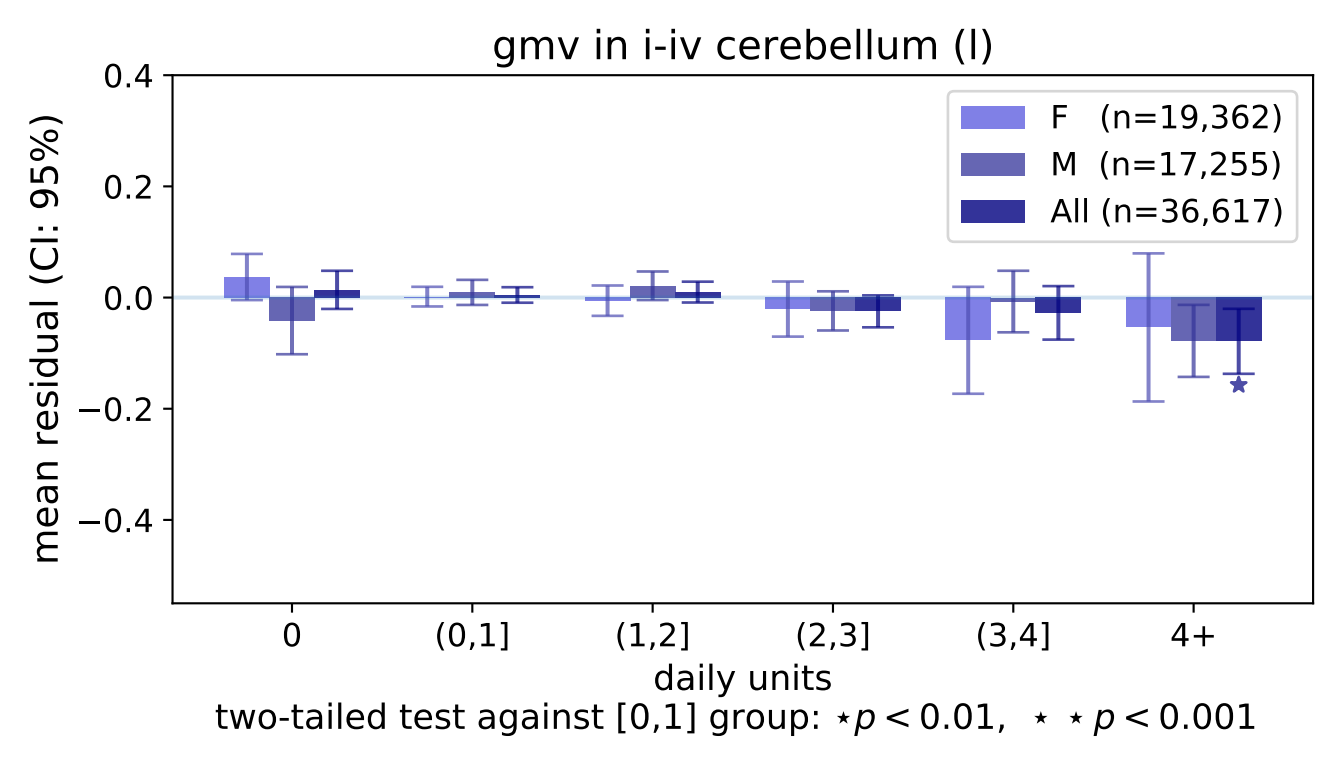

gmv in amygdala (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,352)
M (n=17,247)
All (n=36,599)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

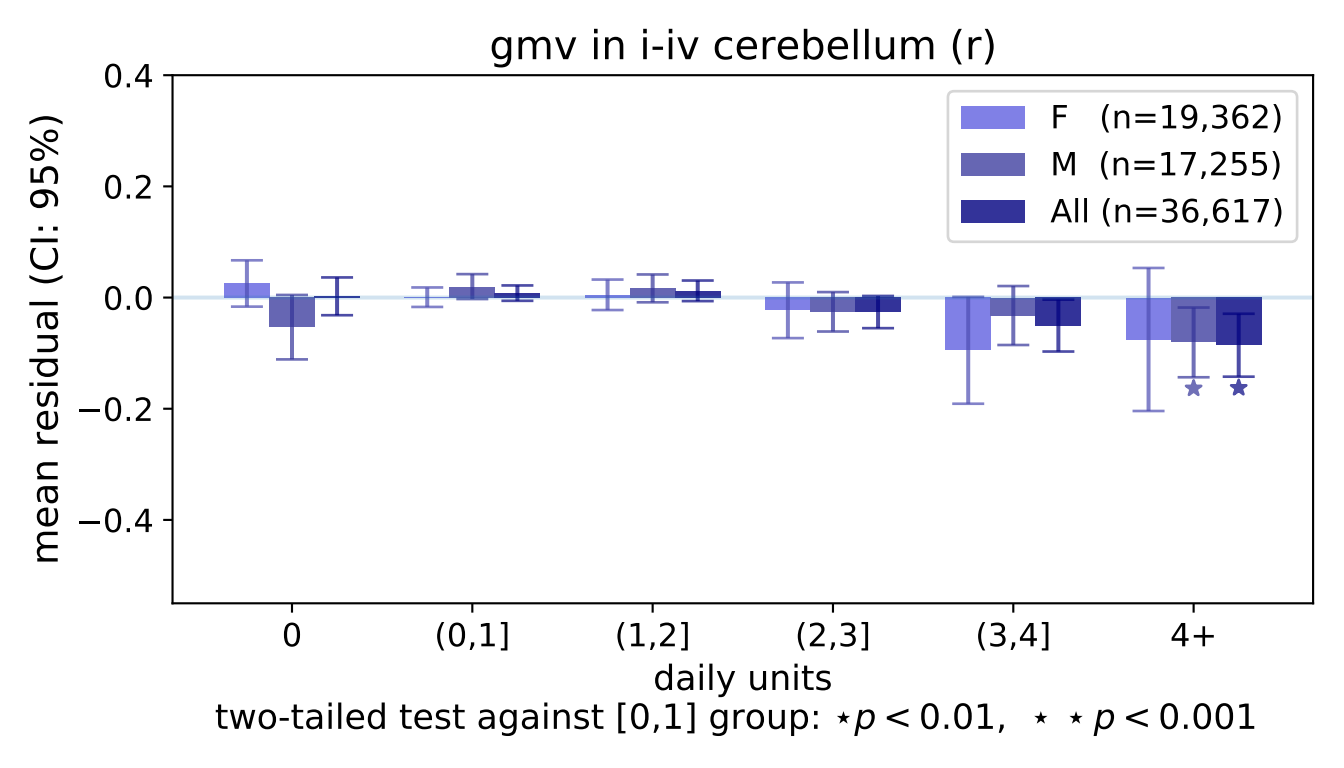

gmv in amygdala (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,344)
M (n=17,242)
All (n=36,586)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆ $p < 0.01$, ⋆ ⋆ $p < 0.001$

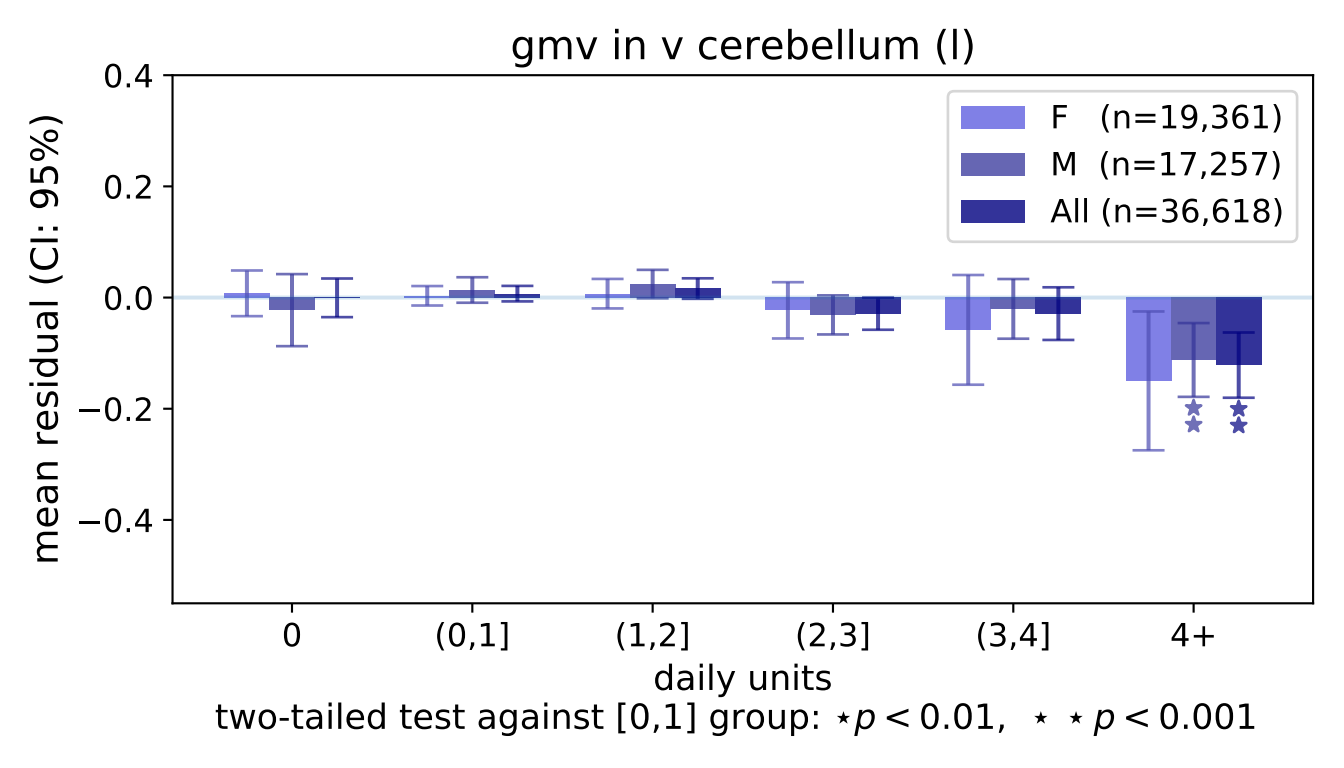

gmv in ventral striatum (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,367)
M (n=17,259)
All (n=36,626)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

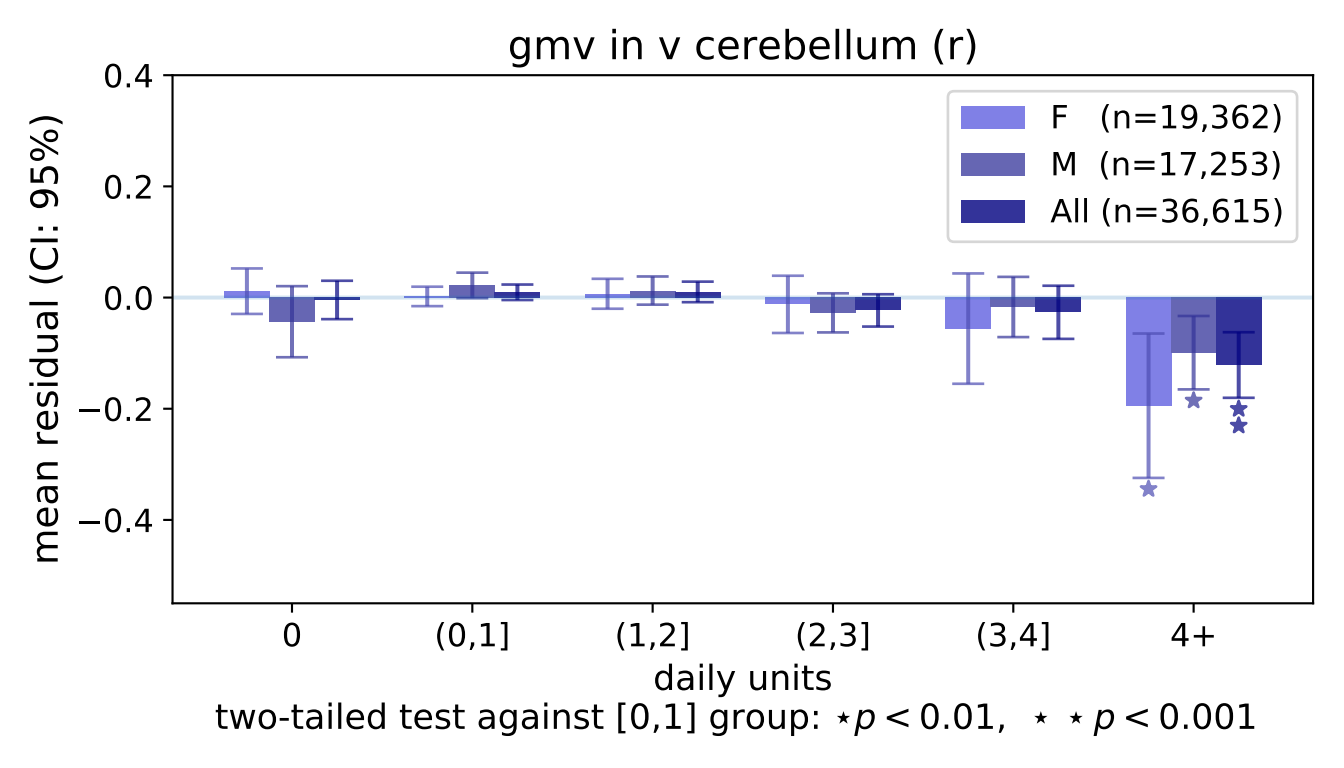

gmv in ventral striatum (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,371)
M (n=17,260)
All (n=36,631)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

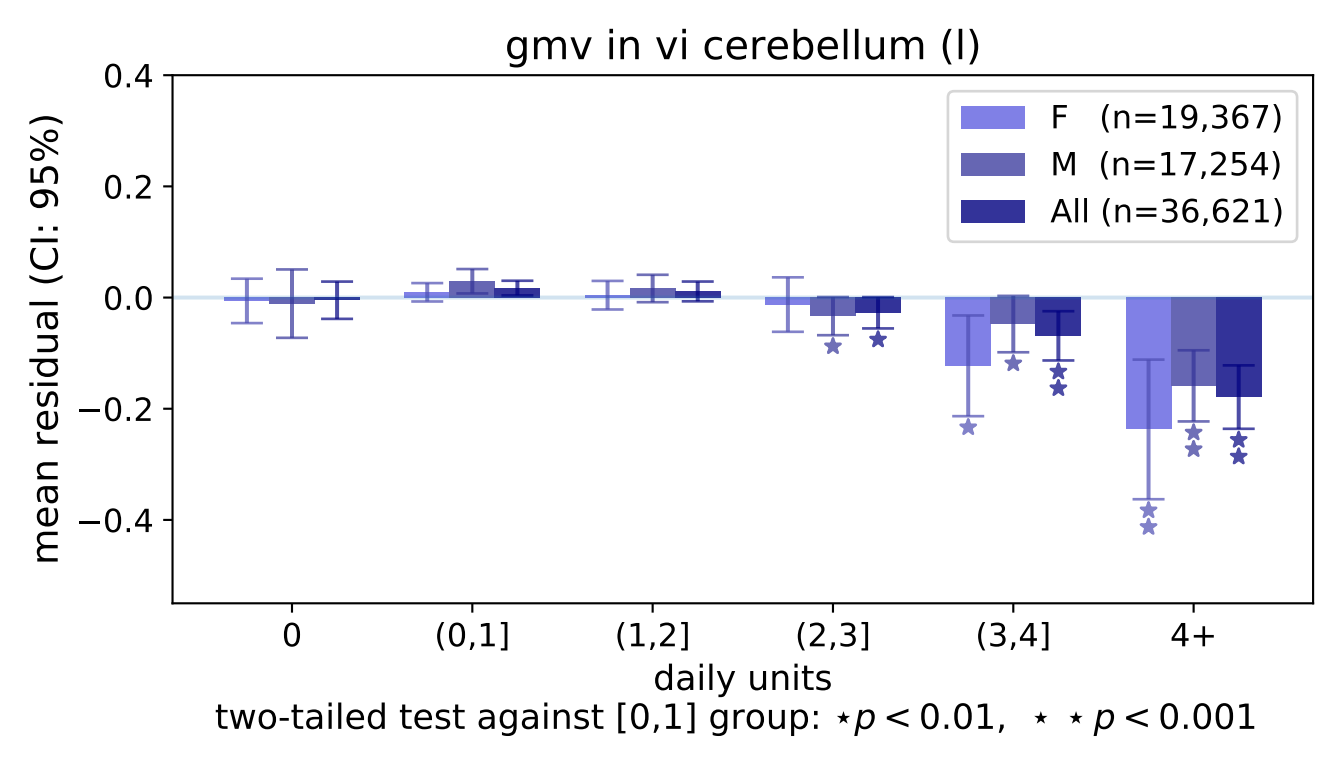

gmv in brain-stem
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,340)
M (n=17,228)
All (n=36,568)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

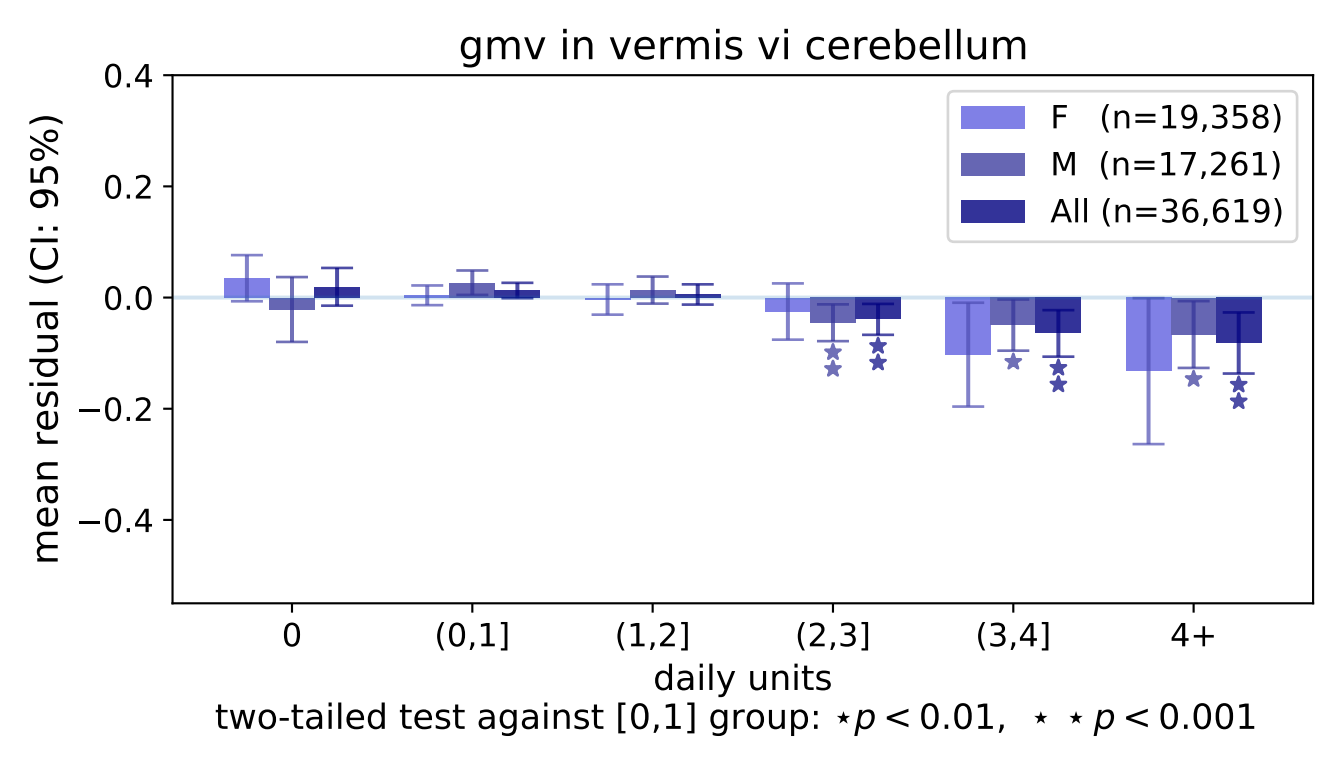

gmv in i-iv cerebellum (l)
F (n=19,362)
M (n=17,255)
All (n=36,617)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

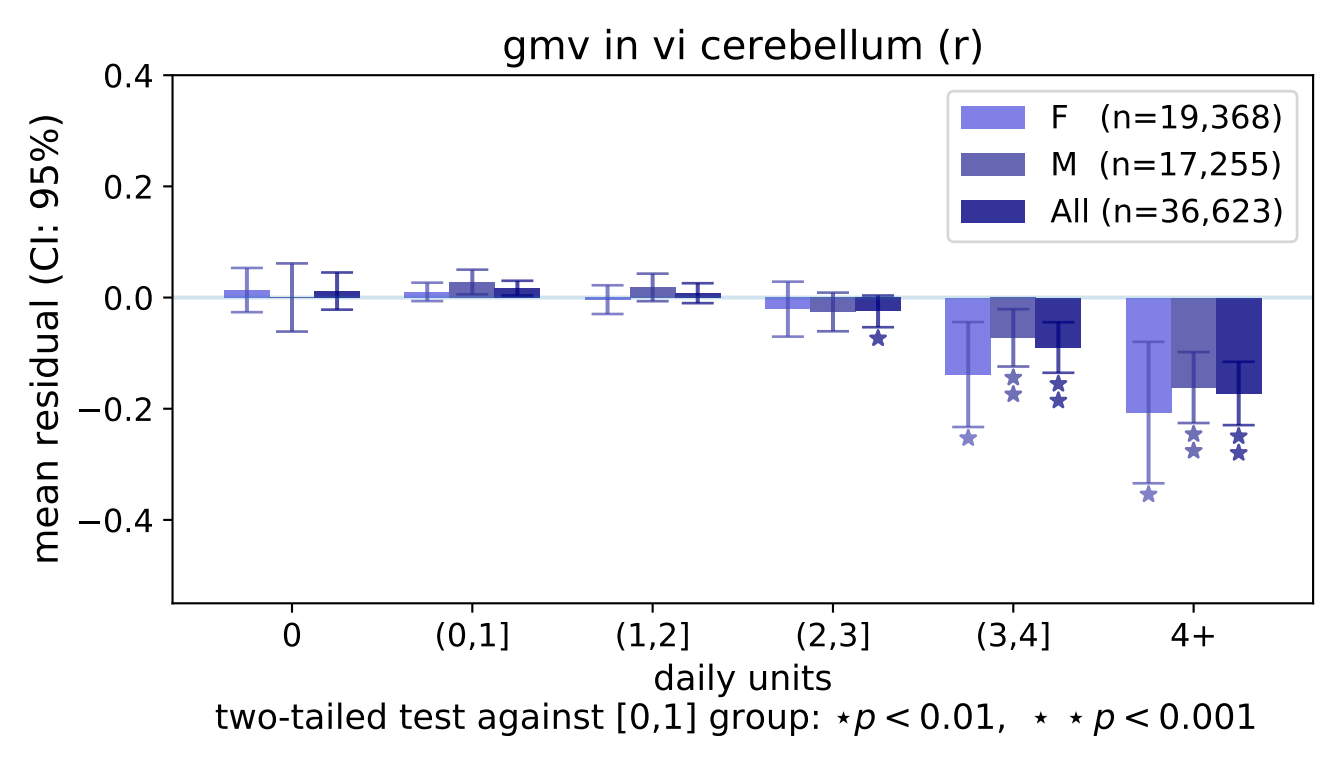

gmv in i-iv cerebellum (r)
F (n=19,362)
M (n=17,255)
All (n=36,617)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

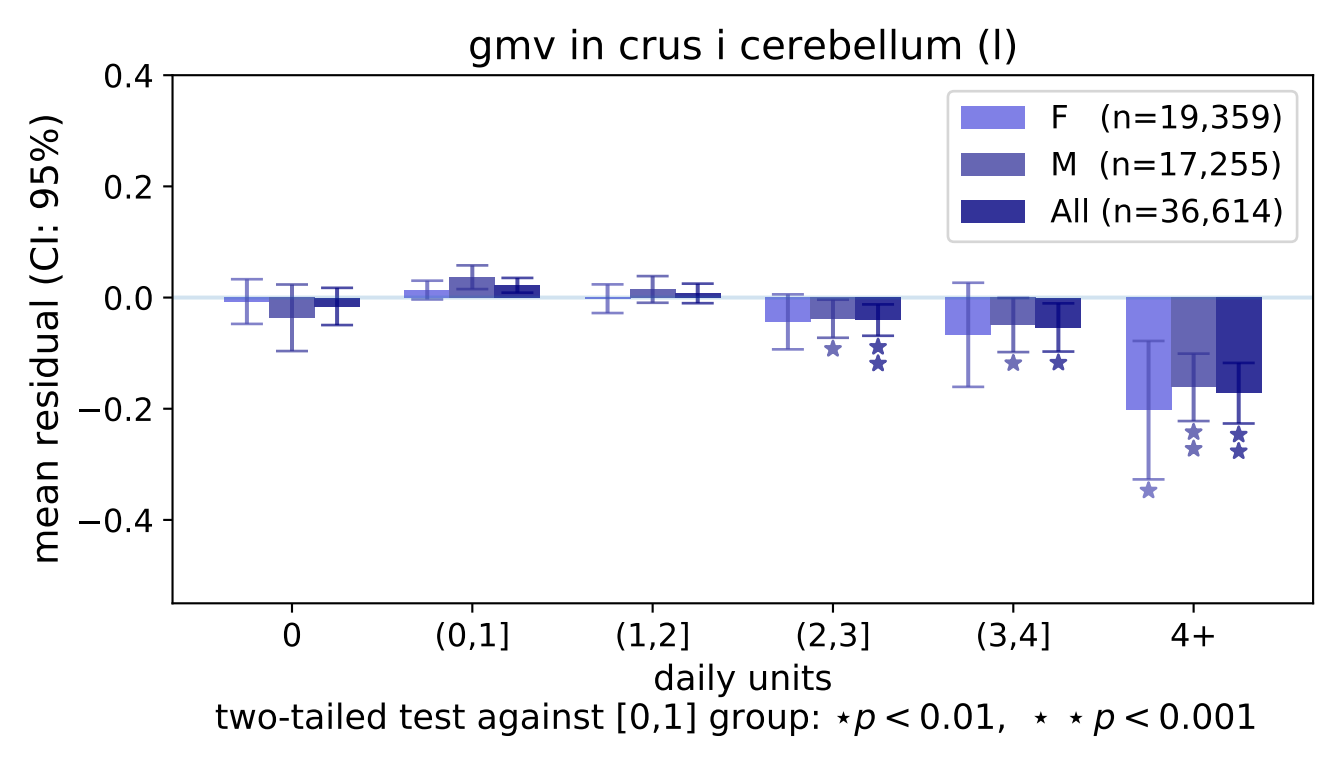

gmv in v cerebellum (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,361)
M (n=17,257)
All (n=36,618)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

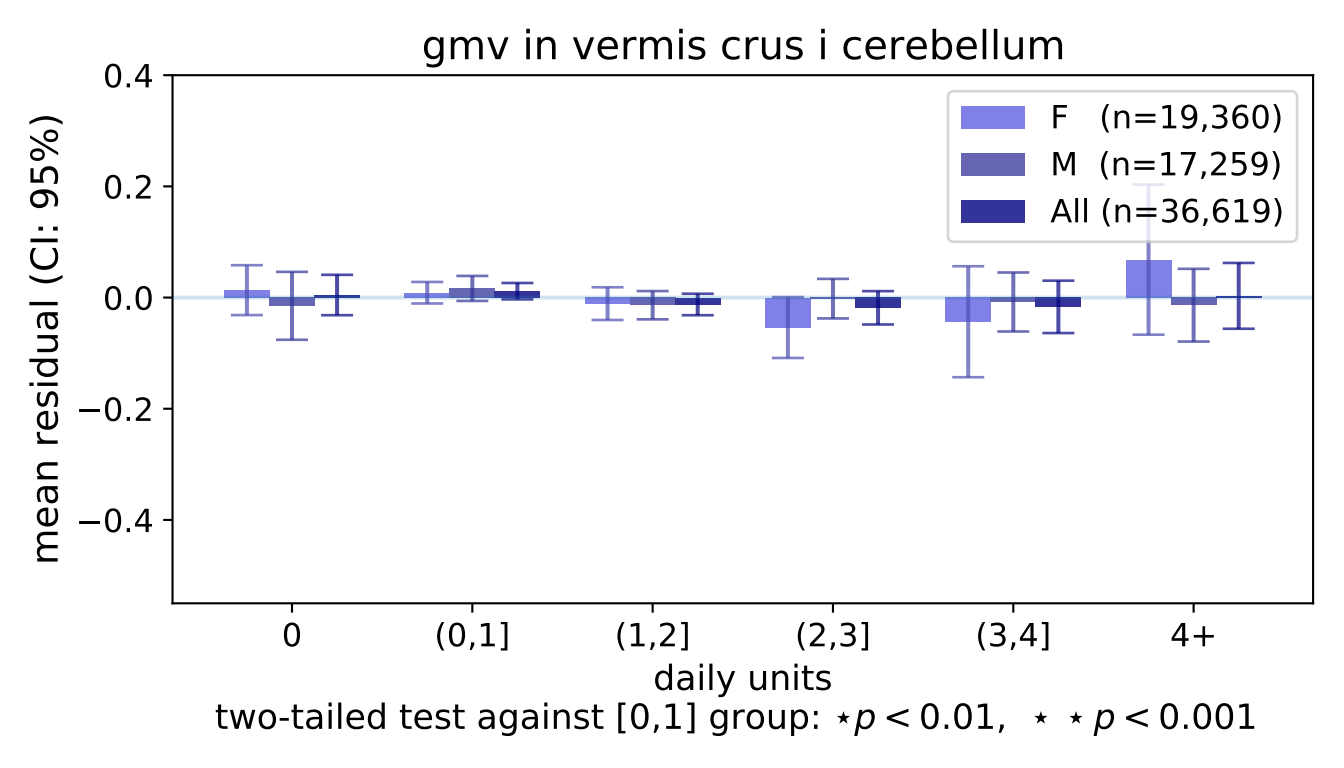

gmv in v cerebellum (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,362)
M (n=17,253)
All (n=36,615)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

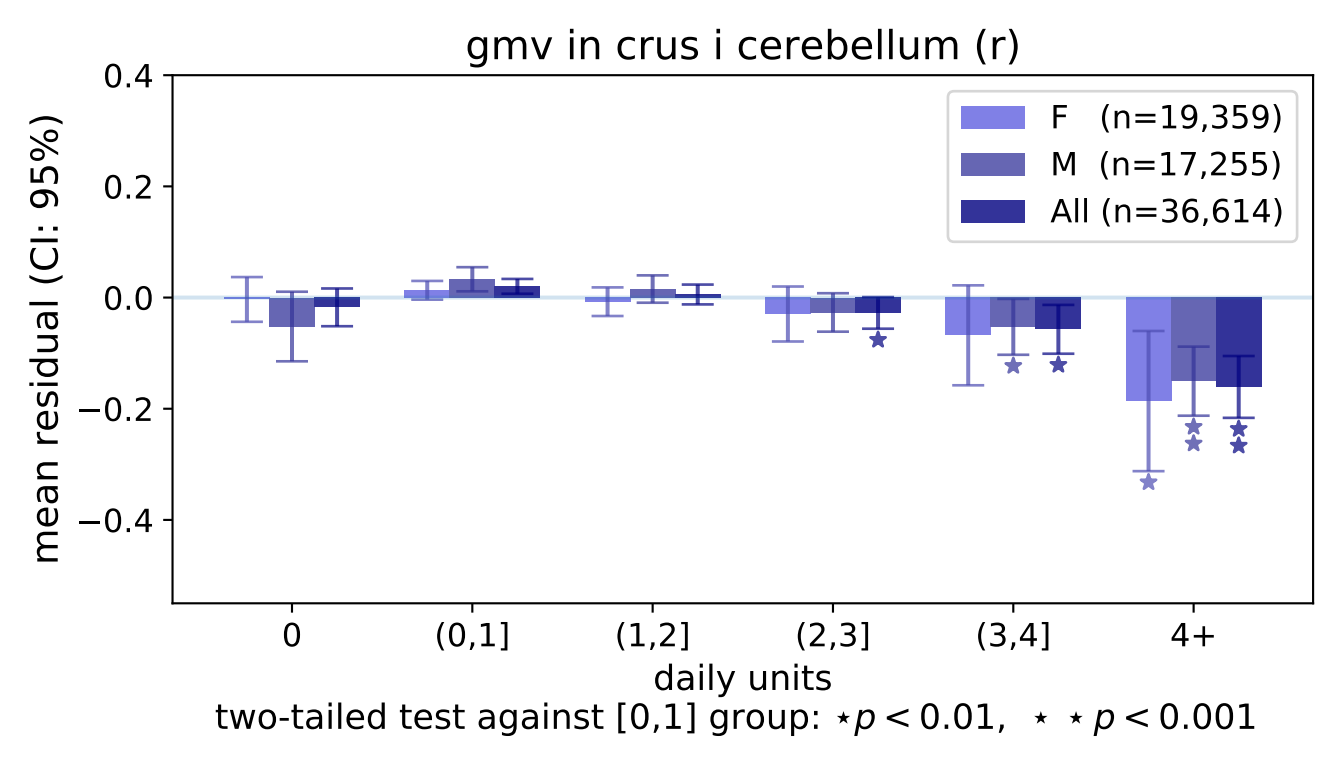

gmv in vi cerebellum (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,367)
M (n=17,254)
All (n=36,621)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

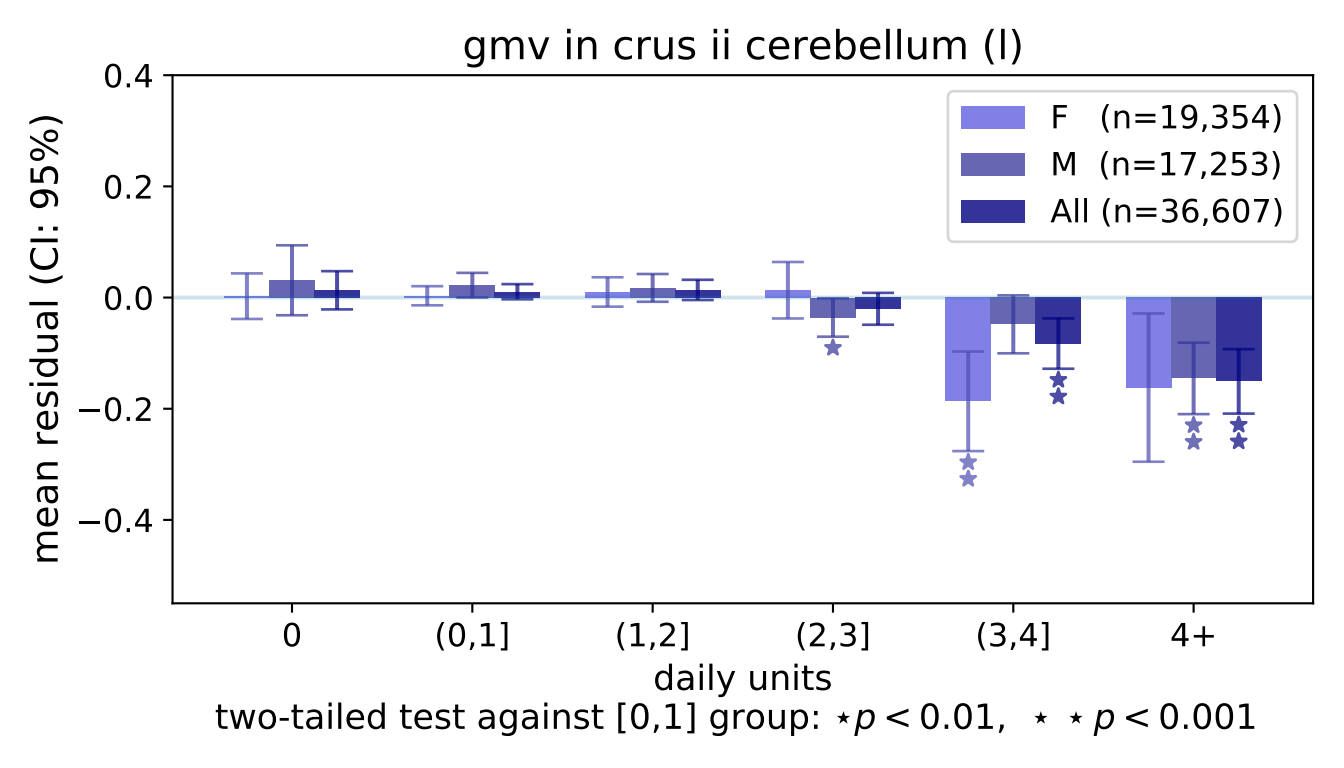

gmv in vermis vi cerebellum
F (n=19,358)
M (n=17,261)
All (n=36,619)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

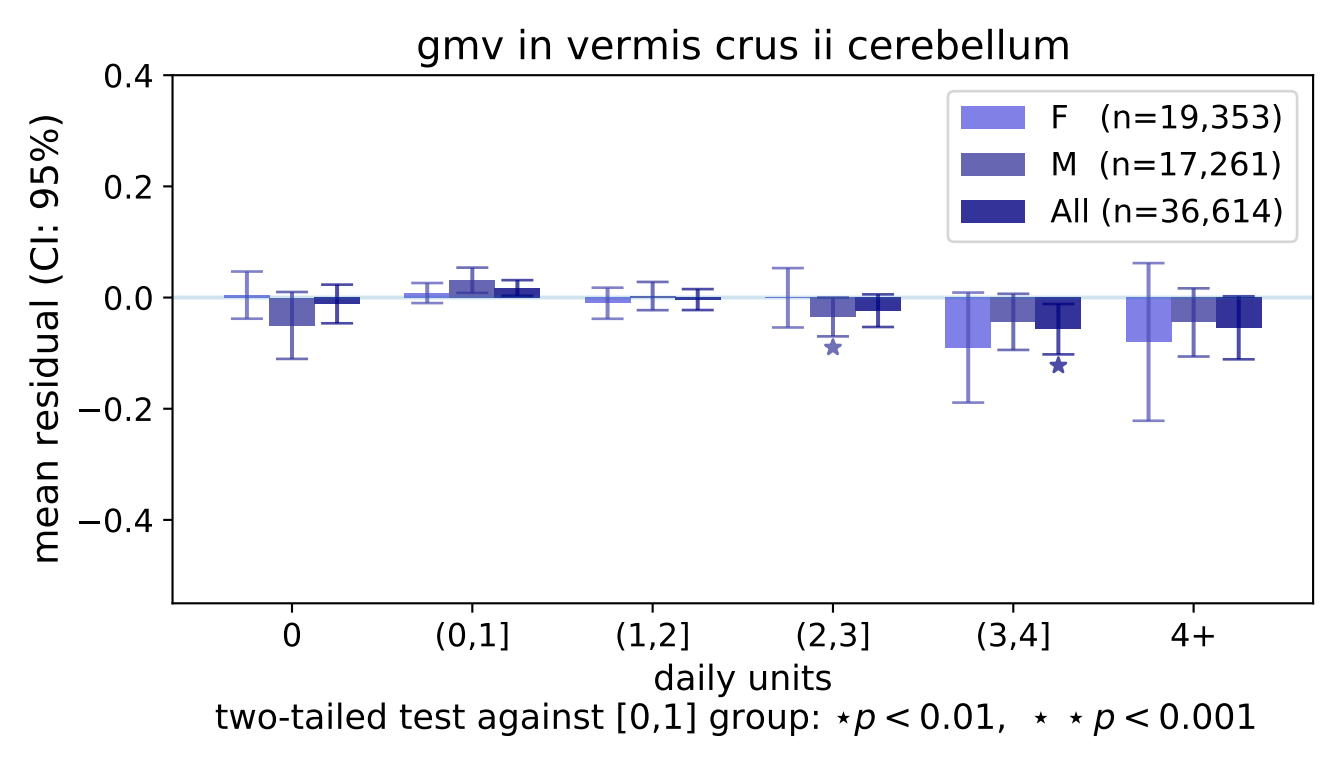

gmv in vi cerebellum (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,368)
M (n=17,255)
All (n=36,623)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

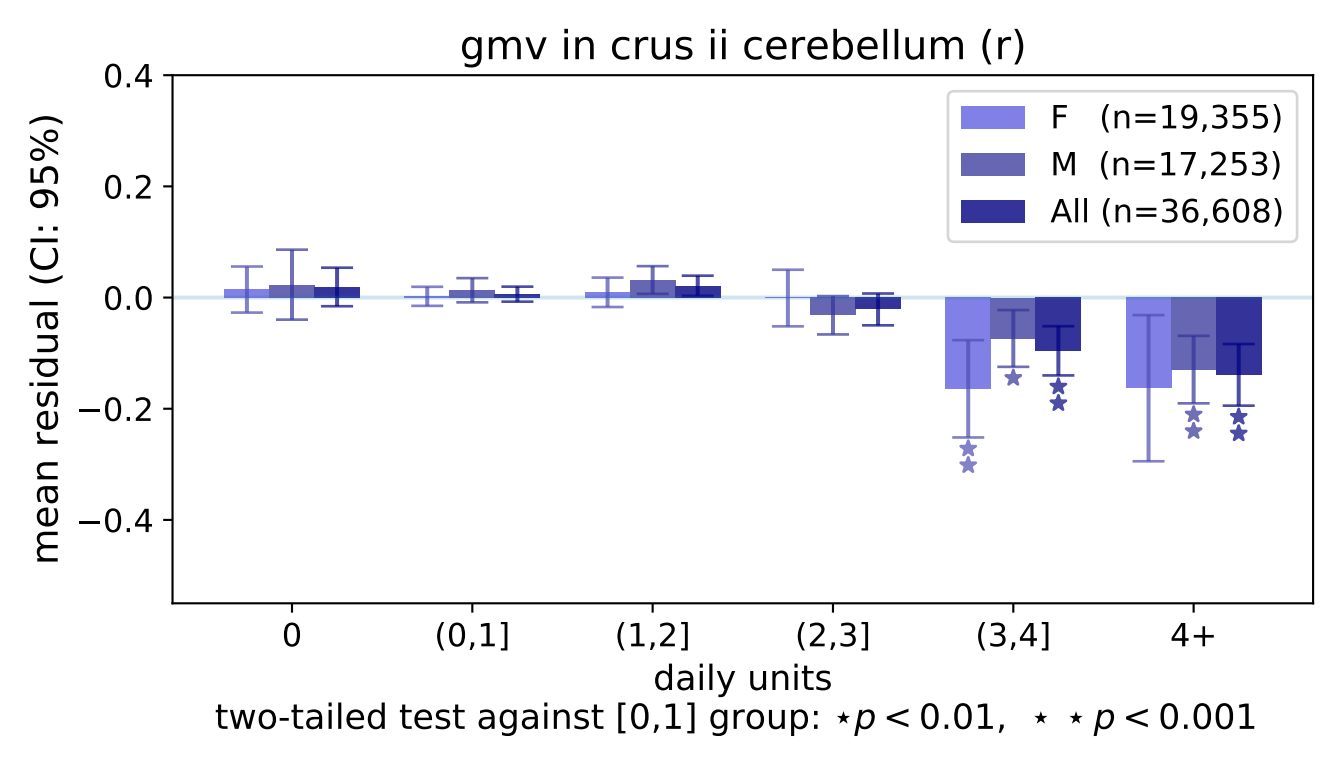

gmv in crus i cerebellum (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,359)
M (n=17,255)
All (n=36,614)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

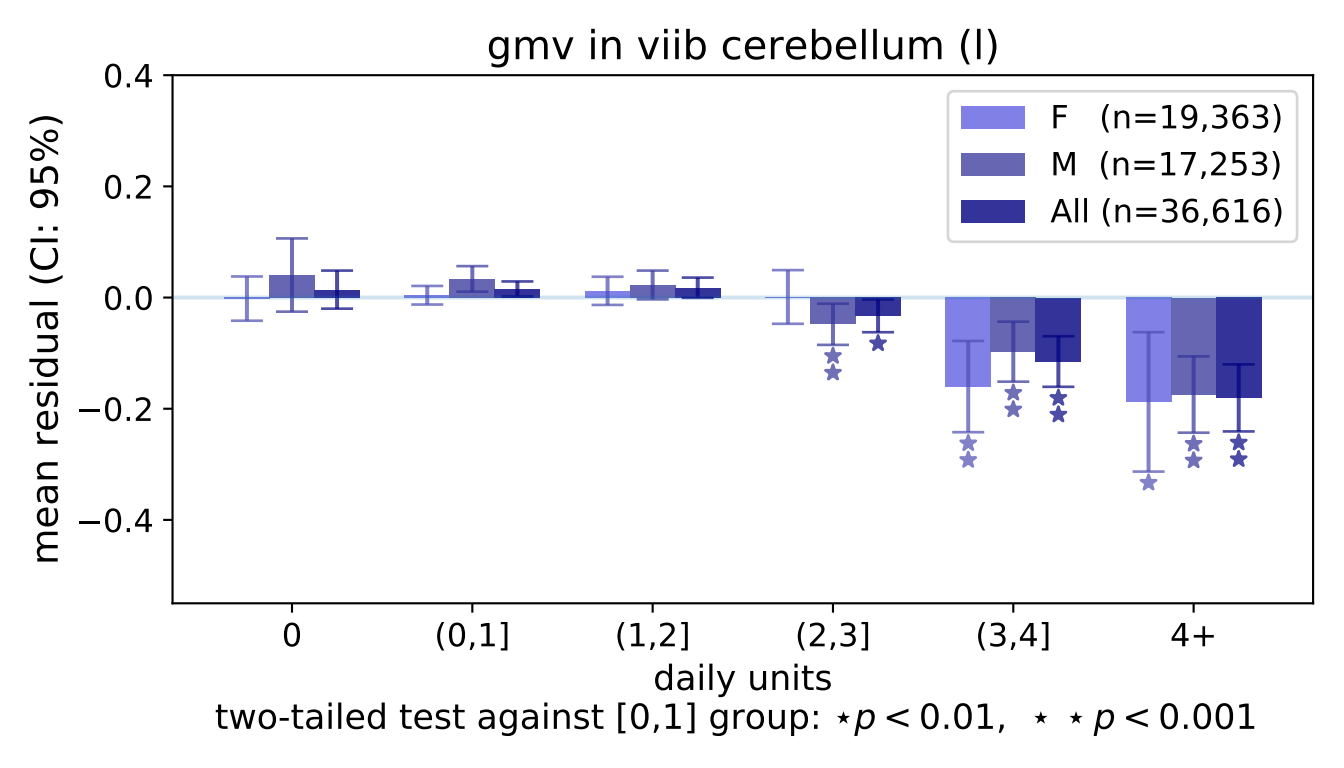

gmv in vermis crus i cerebellum
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,360)
M (n=17,259)
All (n=36,619)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

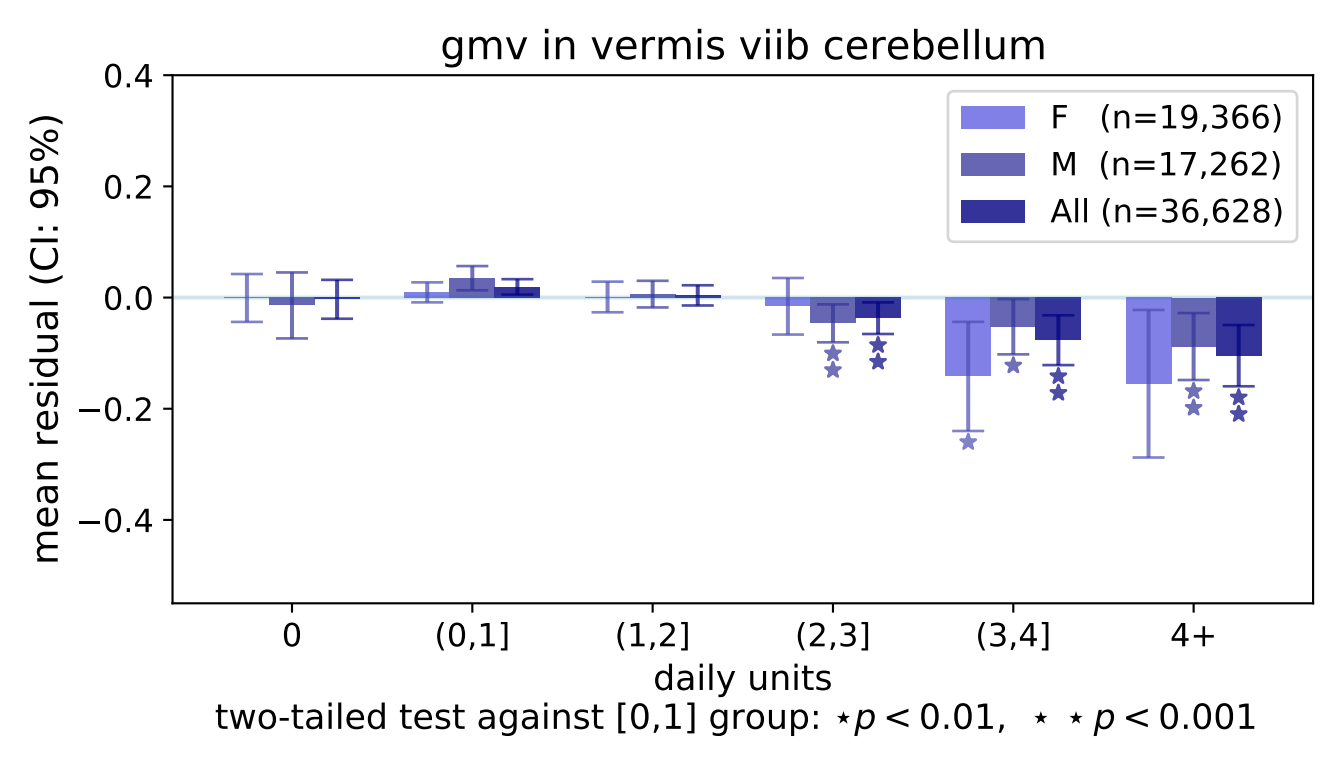

gmv in crus i cerebellum (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,359)
M (n=17,255)
All (n=36,614)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

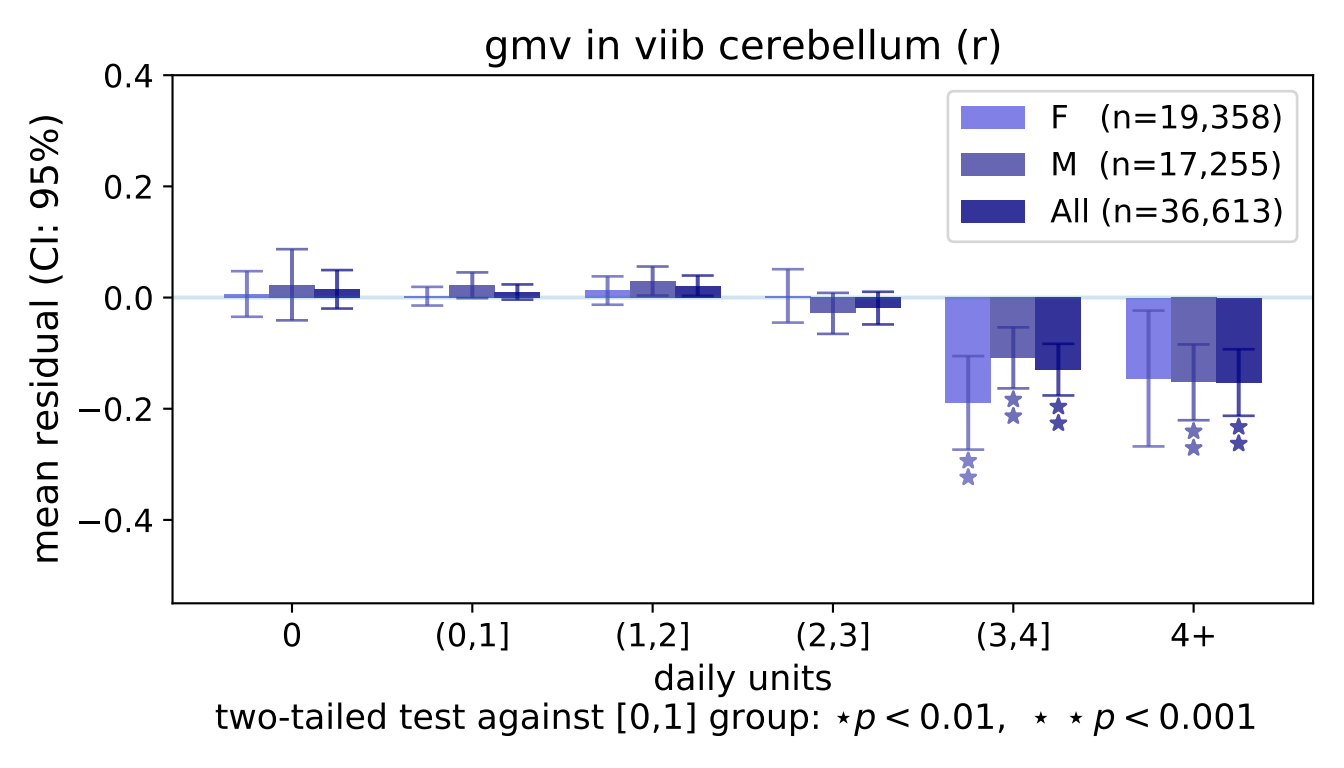

gmv in crus ii cerebellum (l)
F (n=19,354)
M (n=17,253)
All (n=36,607)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

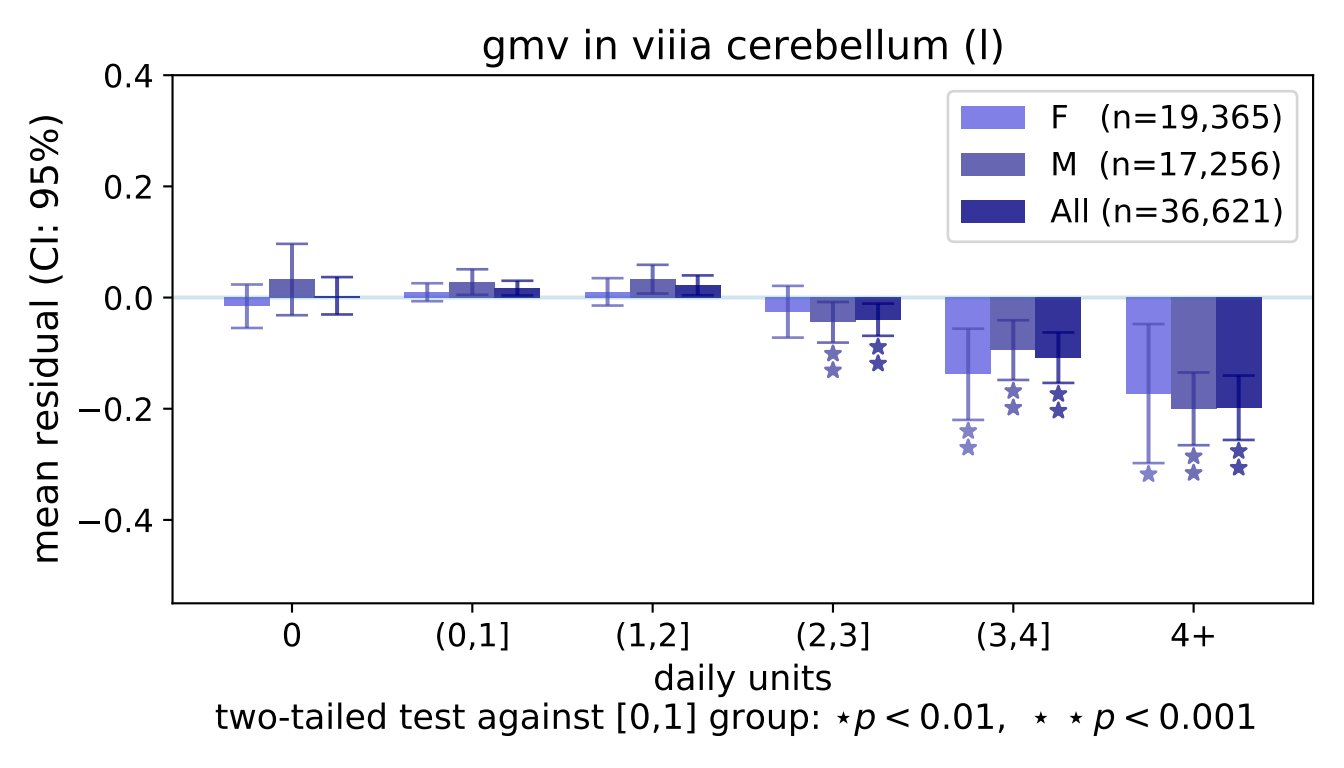

gmv in vermis crus ii cerebellum
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,353)
M (n=17,261)
All (n=36,614)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

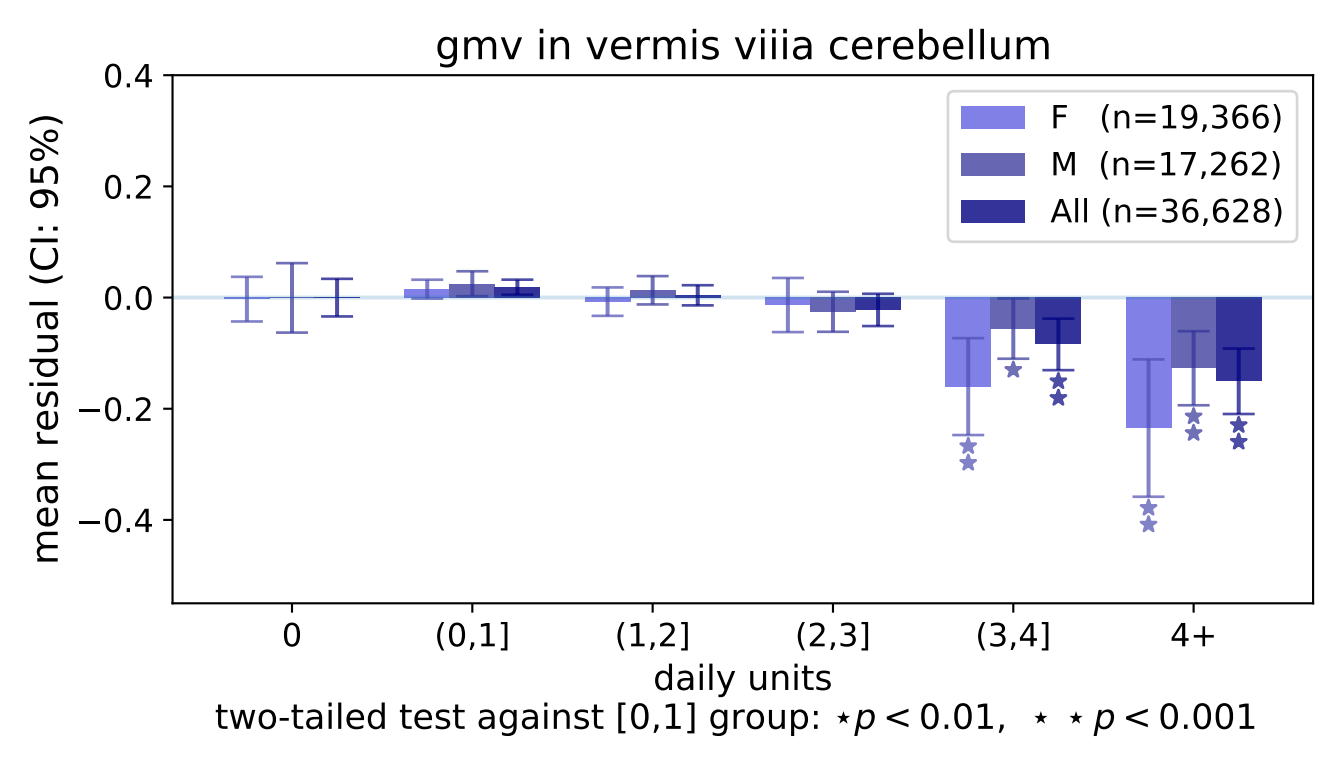

gmv in crus ii cerebellum (r)
F (n=19,355)
M (n=17,253)
All (n=36,608)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

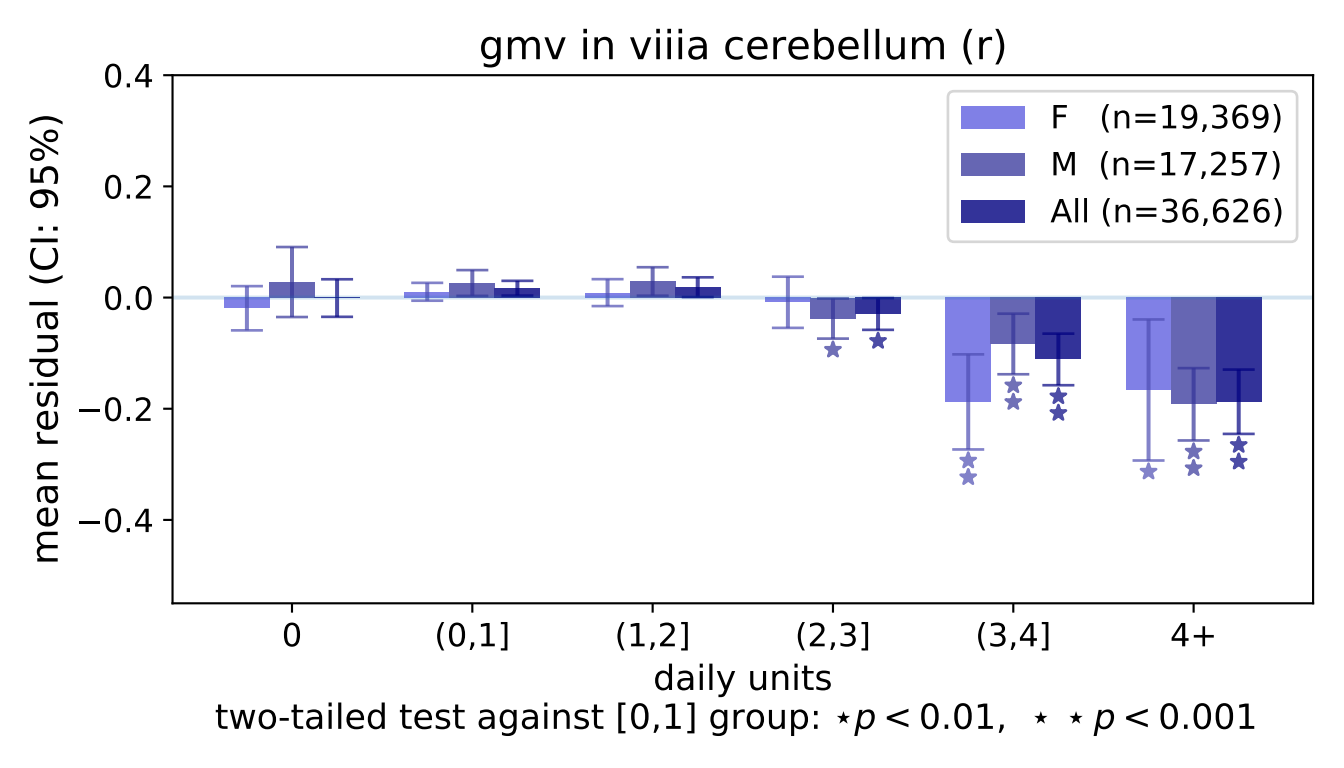

gmv in viib cerebellum (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,363)
M (n=17,253)
All (n=36,616)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

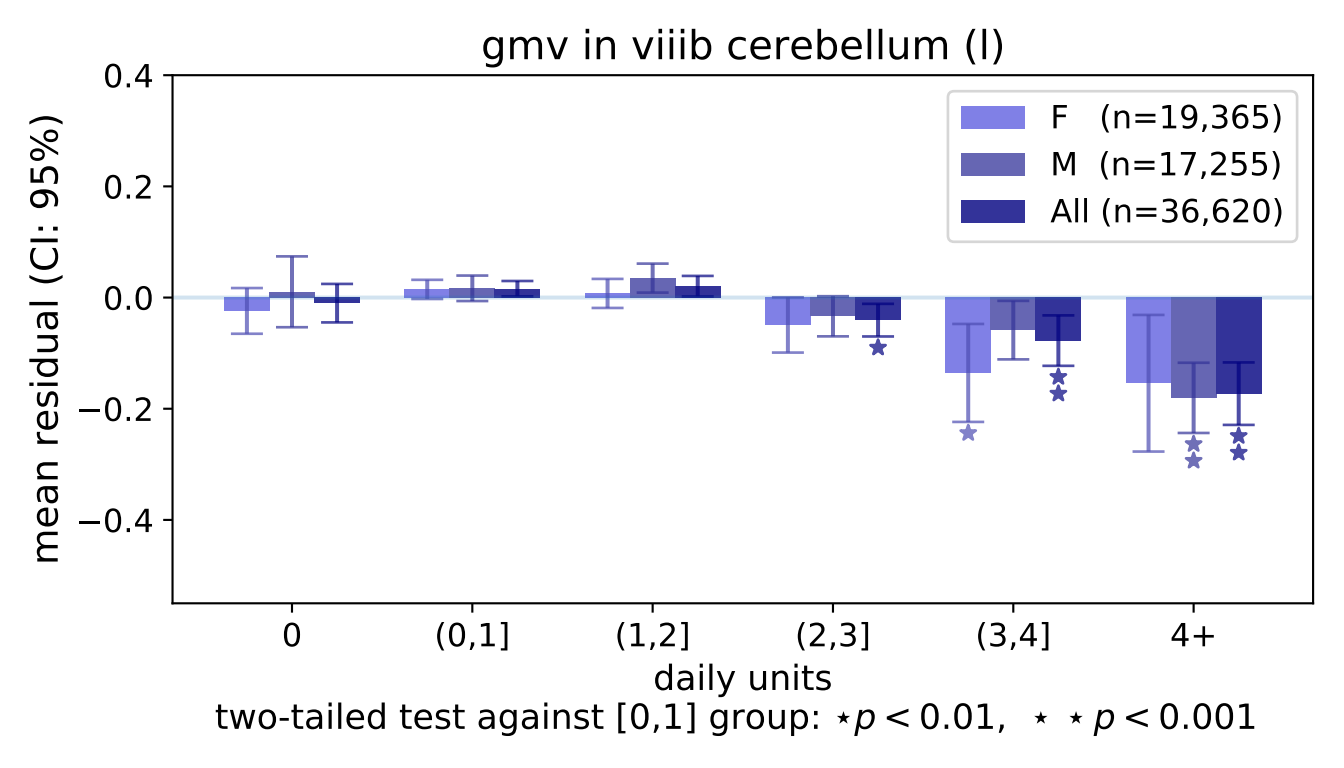

gmv in vermis viib cerebellum
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,366)
M (n=17,262)
All (n=36,628)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

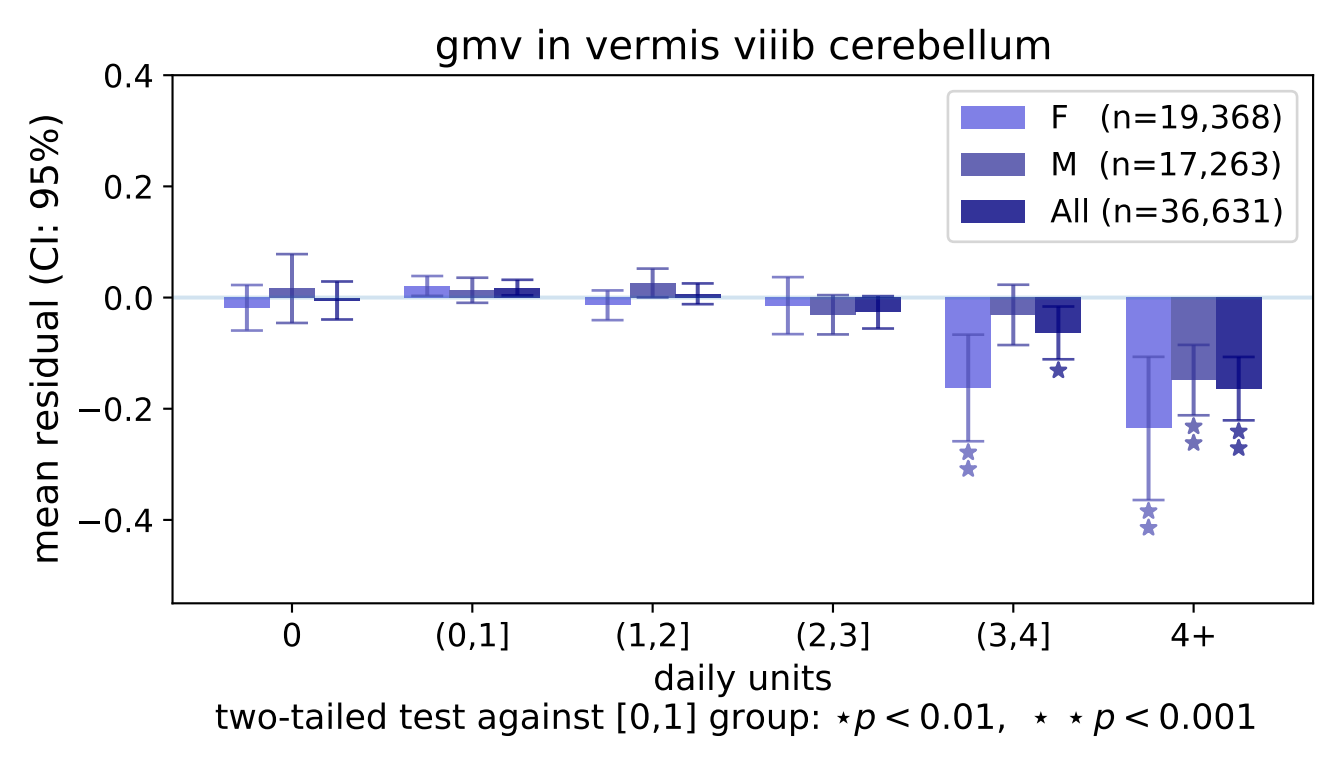

gmv in viib cerebellum (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,358)
M (n=17,255)
All (n=36,613)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

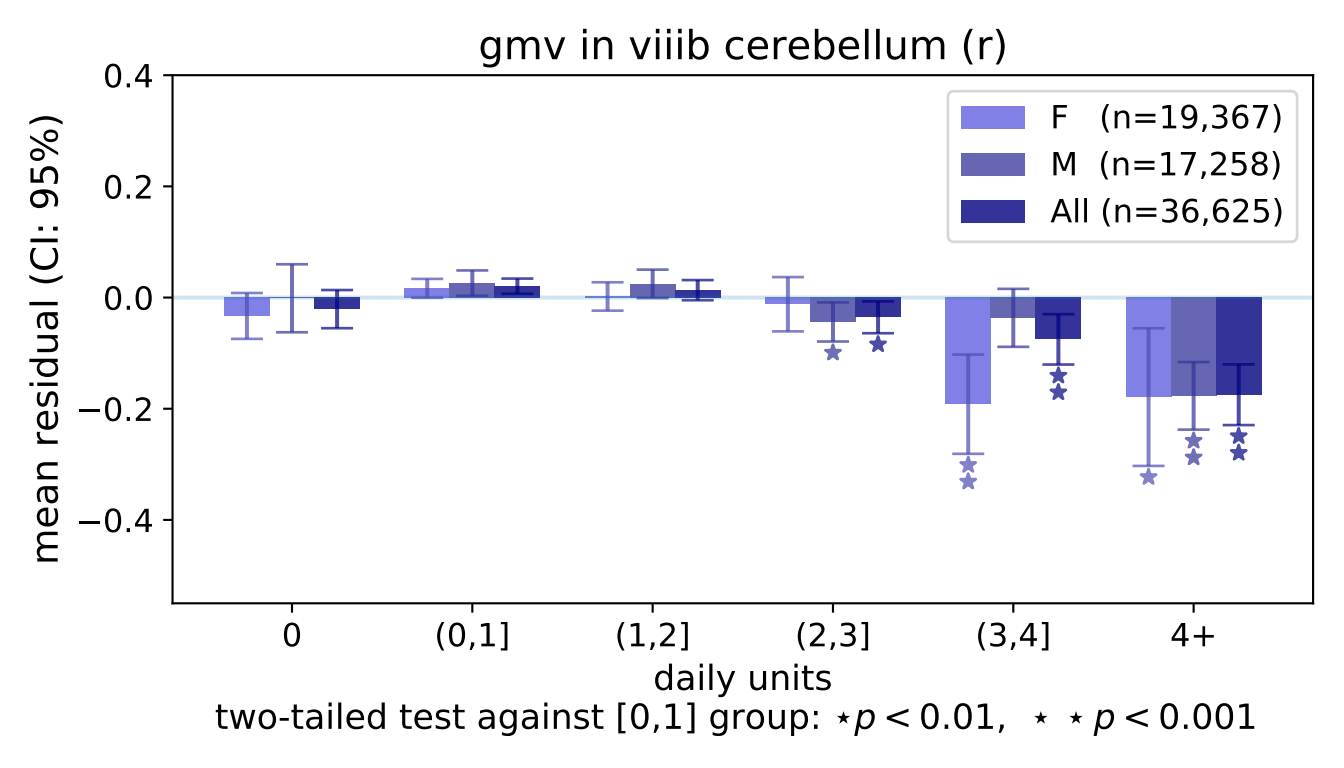

gmv in viiia cerebellum (l)
F (n=19,365)
M (n=17,256)
All (n=36,621)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

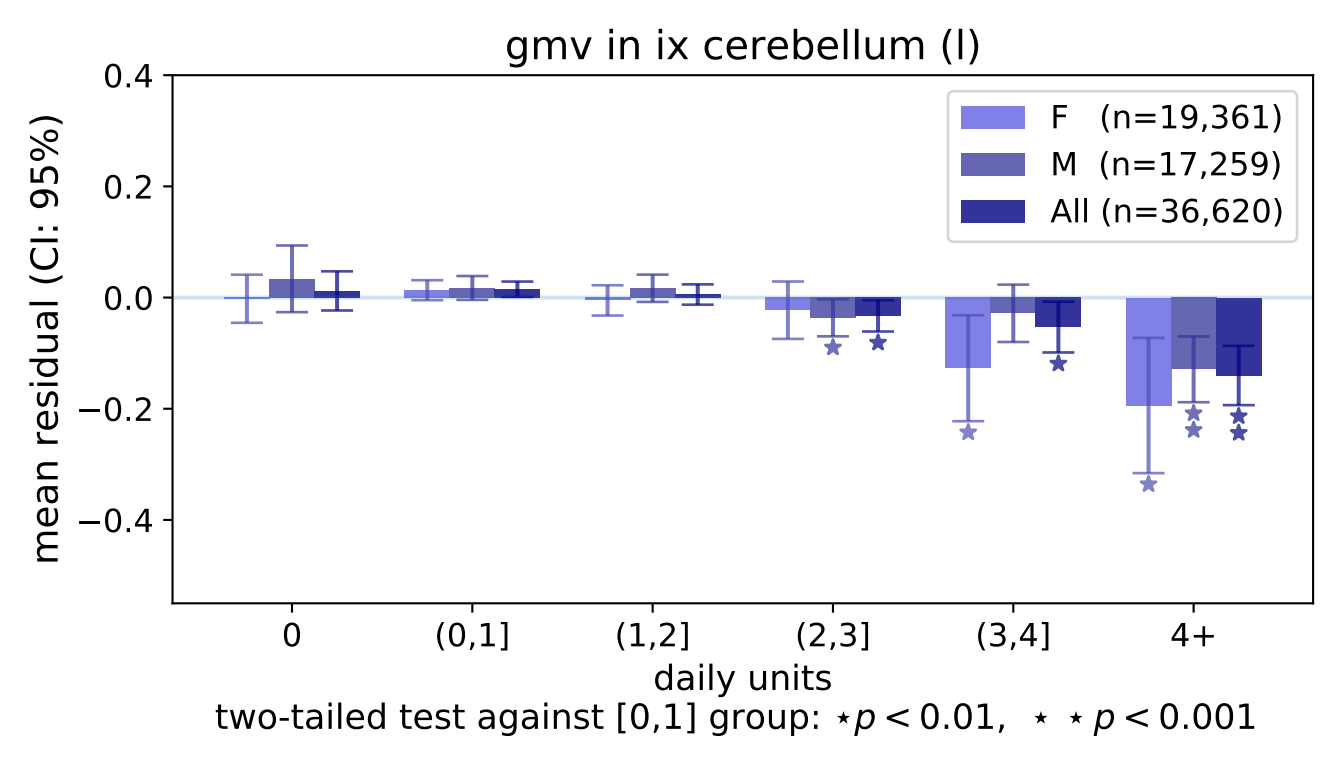

gmv in vermis viiia cerebellum
F (n=19,366)
M (n=17,262)
All (n=36,628)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

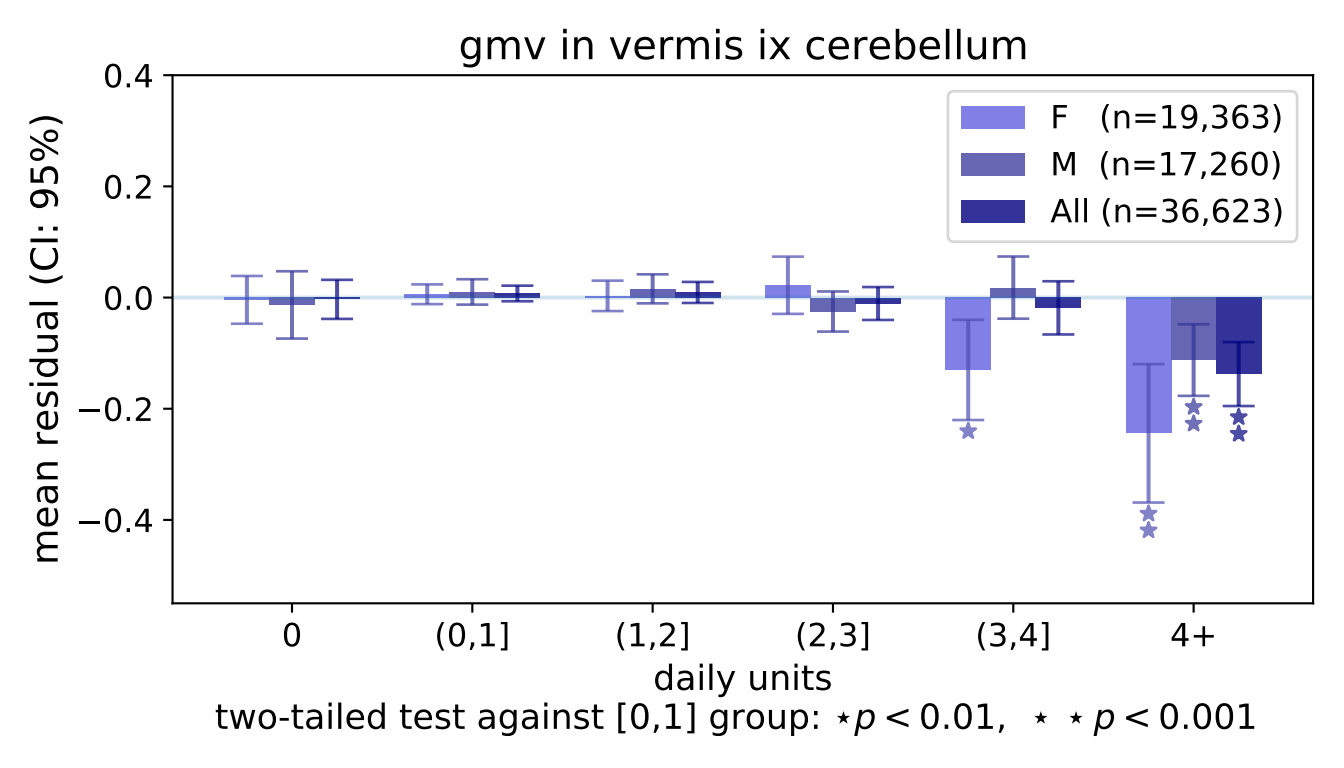

gmv in viiia cerebellum (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,369)
M (n=17,257)
All (n=36,626)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

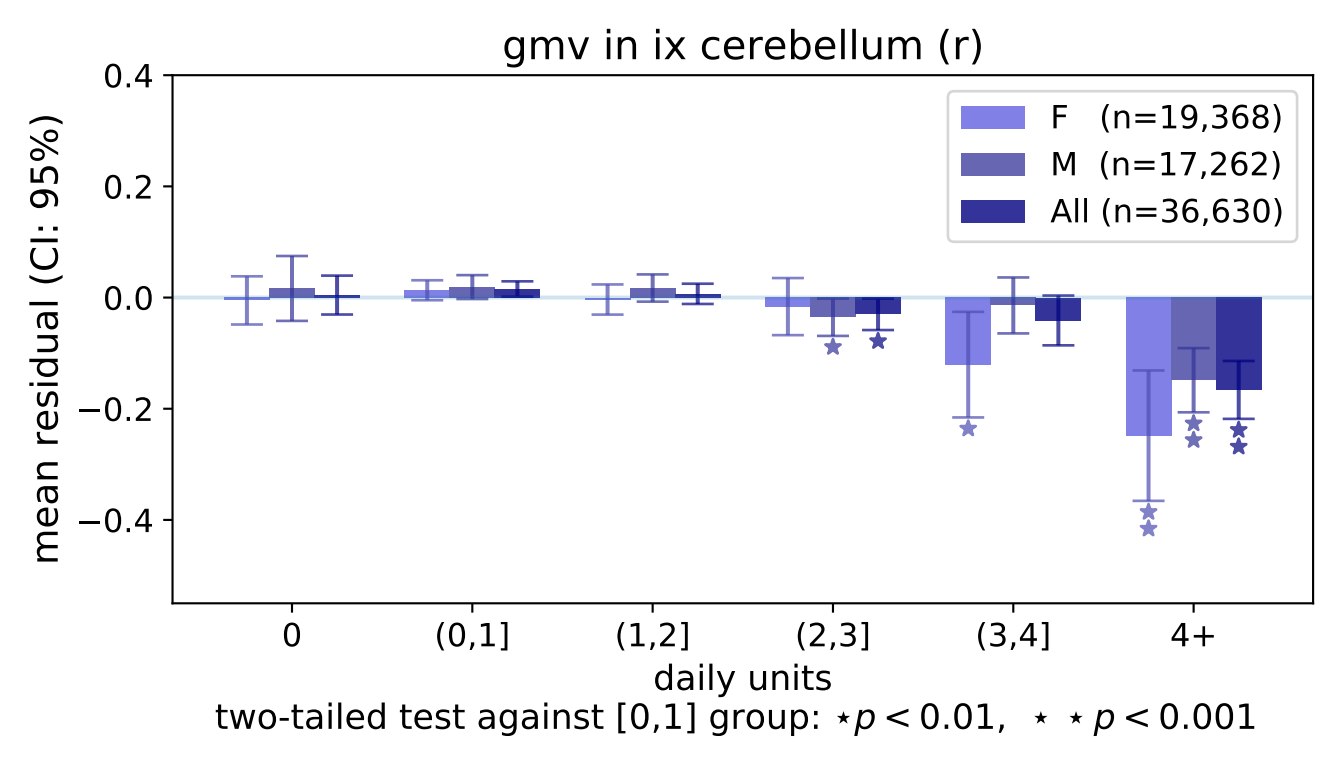

gmv in viiib cerebellum (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,365)
M (n=17,255)
All (n=36,620)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

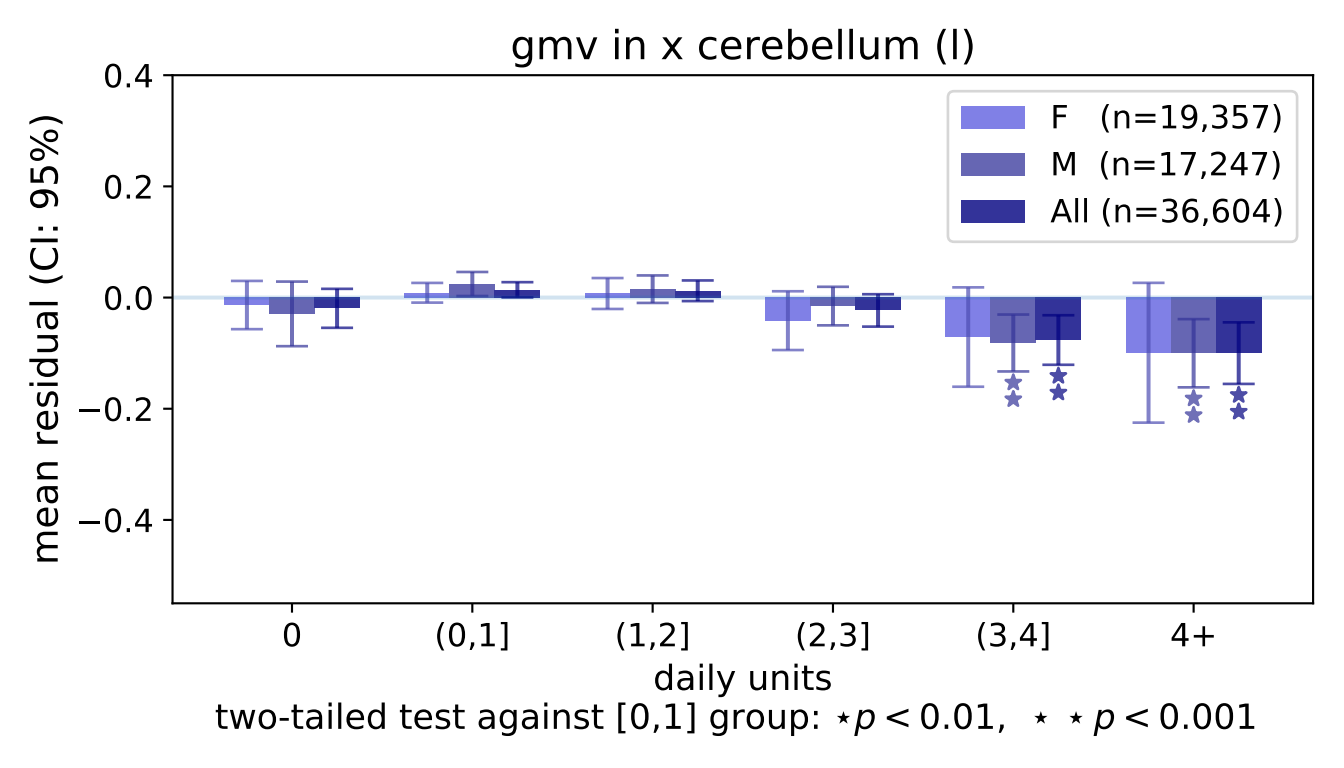

gmv in vermis viiib cerebellum
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,368)
M (n=17,263)
All (n=36,631)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

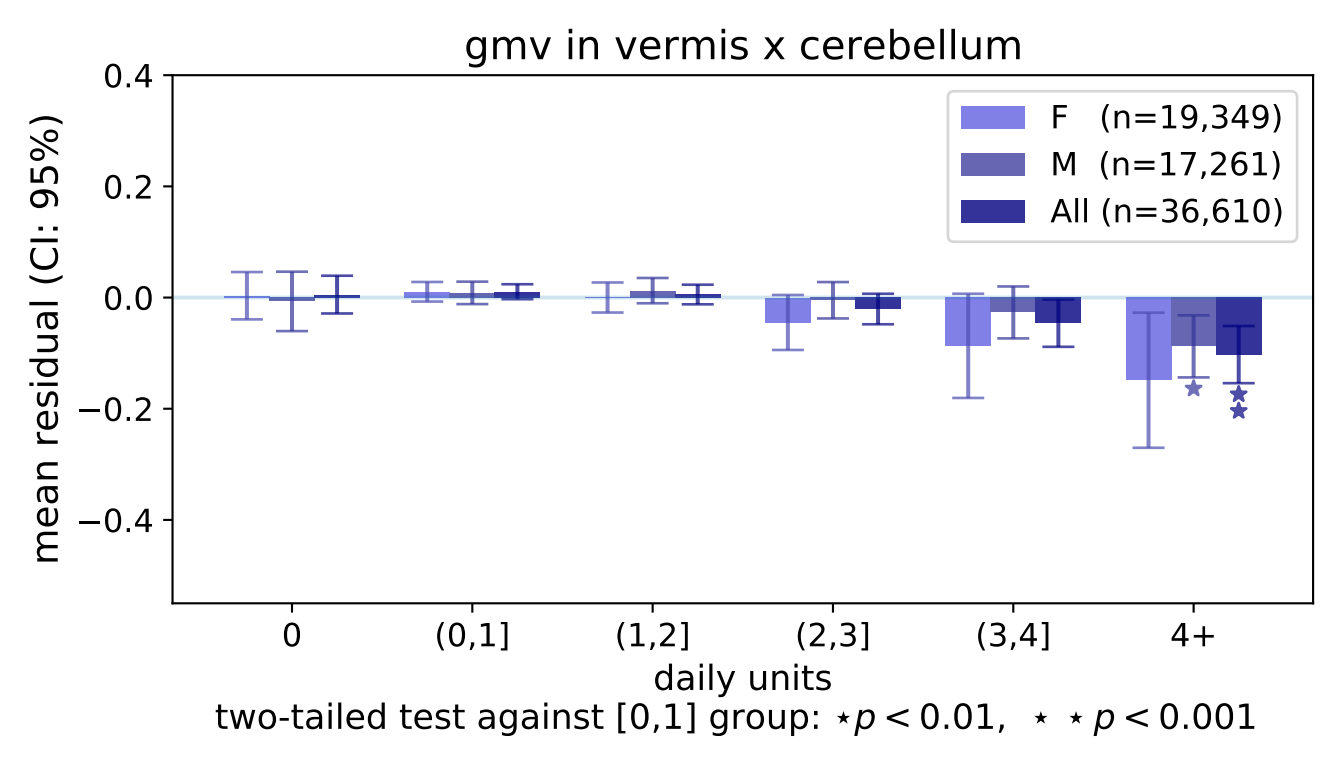

gmv in viiib cerebellum (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,367)
M (n=17,258)
All (n=36,625)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

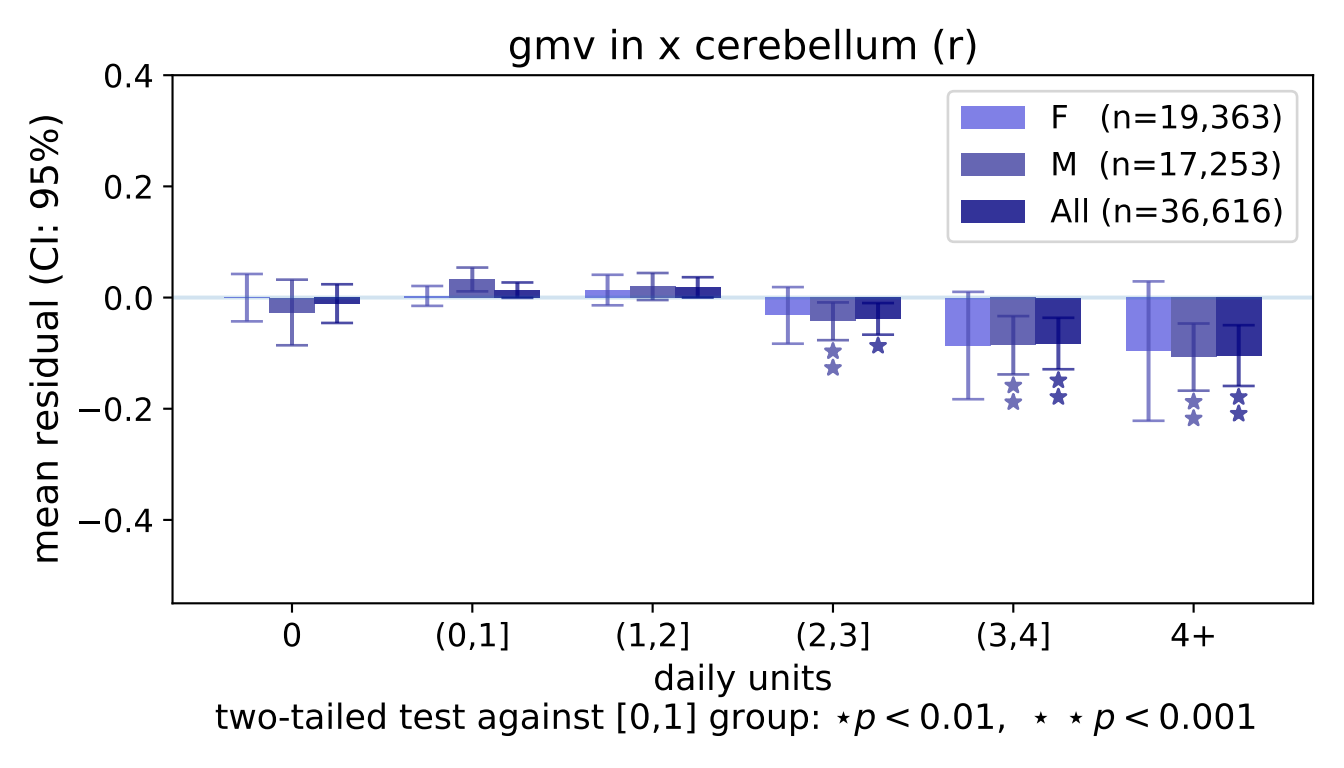

gmv in ix cerebellum (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,361)
M (n=17,259)
All (n=36,620)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$


gmv in vermis ix cerebellum
F (n=19,363)
M (n=17,260)
All (n=36,623)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$


gmv in ix cerebellum (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,368)
M (n=17,262)
All (n=36,630)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$


gmv in x cerebellum (l)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,357)
M (n=17,247)
All (n=36,604)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$


gmv in vermis x cerebellum
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,349)
M (n=17,261)
All (n=36,610)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$


gmv in x cerebellum (r)
mean residual (CI: 95%)
0.4
0.2
0.0
−0.2
−0.4
F (n=19,363)
M (n=17,253)
All (n=36,616)
0
(0,1]
(1,2]
(2,3]
(3,4]
4+
daily units
two-tailed test against [0,1] group: ⋆$p < 0.01$, ⋆ ⋆$p < 0.001$

Supplementary Figure 4. Associations between daily alcohol units and white matter microstructure indices of interest across white matter tract regions. Asterisks denote statistically significant effects in F-test, corrected for multiple hypothesis testing (Holm method), $p < 1.64 \times 10^{-4}$. Colors represent the expected change in each imaging derived phenotype resulting from the increase in daily consumption from 2 to 3 units, based on the regression model. FA = fractional anisotropy, ICVF = intracellular volume fraction, ISOVF = isotropic volume fraction, MD = mean diffusivity, OD = orientation dispersion, r = right, l = left


FA
ICVF
ISOVF
MD
OD
anterior corona radiata (l)
anterior corona radiata (r)
anterior limb of internal capsule (l)
anterior limb of internal capsule (r)
body of corpus callosum
cerebral peduncle (l)
cerebral peduncle (r)
cingulum cingulate gyrus (l)
cingulum cingulate gyrus (r)
cingulum hippocampus (l)
cingulum hippocampus (r)
corticospinal tract (l)
corticospinal tract (r)
external capsule (l)
external capsule (r)
fornix cres+stria terminalis (l)
fornix cres+stria terminalis (r)
fornix
genu of corpus callosum
inferior cerebellar peduncle (l)
inferior cerebellar peduncle (r)
medial lemniscus (l)
medial lemniscus (r)
middle cerebellar peduncle
pontine crossing tract
posterior corona radiata (l)
posterior corona radiata (r)
posterior limb of internal capsule (l)
posterior limb of internal capsule (r)
posterior thalamic radiation (l)
posterior thalamic radiation (r)
retrolenticular part of internal capsule (l)
retrolenticular part of internal capsule (r)
sagittal stratum (l)
sagittal stratum (r)
splenium of corpus callosum
superior cerebellar peduncle (l)
superior cerebellar peduncle (r)
superior corona radiata (l)
superior corona radiata (r)
superior fronto-occipital fasciculus (l)
superior fronto-occipital fasciculus (r)
superior longitudinal fasciculus (l)
superior longitudinal fasciculus (r)
tapetum (l)
tapetum (r)
uncinate fasciculus (l)
uncinate fasciculus (r)
* FWER-corrected significance: p < 1.64 × 10−04
effect from 2 to 3 units (in SD)
−0.10
−0.05
0.00
0.05
0.10


FA
ICVF
ISOVF
MD
OD
corticospinal tract (l)
corticospinal tract (r)
medial lemniscus (l)
medial lemniscus (r)
middle cerebellar peduncle
posterior thalamic radiation (l)
posterior thalamic radiation (r)
superior longitudinal fasciculus (l)
superior longitudinal fasciculus (r)
uncinate fasciculus (l)
uncinate fasciculus (r)
acoustic radiation (l)
acoustic radiation (r)
anterior thalamic radiation (l)
anterior thalamic radiation (r)
cingulate gyrus part of cingulum (l)
cingulate gyrus part of cingulum (r)
forceps major
forceps minor
inferior fronto
inferior longitudinal fasciculus (l)
inferior longitudinal fasciculus (r)
parahippocampal part of cingulum (l)
parahippocampal part of cingulum (r)
superior thalamic radiation (l)
superior thalamic radiation (r)
* FWER-corrected significance: p < 1.64 × 10−04
effect from 2 to 3 units (in SD)
−0.10
−0.05
0.00
0.05
0.10