



Published in final edited form as:

Biol Psychol. 2022 May ; 171: 108356. doi:10.1016/j.biopsycho.2022.108356.

Corrigendum to “Impact of serotonergic medication on interoception in major depressive disorder” [Biological Psychology 169 (2022),108286]

Kaiping Burrows^{a,*},
Danielle C. DeVille^a,
Kelly T. Cosgrove^a,
Rayus T. Kuplicki^a,
Tulsa 1000 Investigators,
Martin P. Paulus^{a,b},
Robin Aupperle^{a,b},
Sahib S. Khalsa^{a,b},
Jennifer L. Stewart^{a,b}

^a Laureate Institute for Brain Research, Tulsa, OK, United States

^b Department of Community Medicine, University of Tulsa, Tulsa, OK, United States

The authors regret they have identified an error in one of the analyses and associated results reported. The error specifically related to the ROI analysis results within neuroimaging assessments of interoception. In the original manuscript, the authors reported:

“Insular ROI analysis showed that there was a significant group difference during INT-EXT for left ($F_{2,130} = 3.73, p = .027$) and right ($F_{2,130} = 3.62, p = .029$) dorsal anterior insula, as well as left dorsal mid-insula ($F_{2,130} = 3.34, p = .038$). Post-hoc tests demonstrated that MDD-SSRI exhibited lower BOLD signal during INT-EXT than HC for left ($p = .037, d = .52, BF = 2.71$) and right ($p = .046, d = .50, BF = 2.19$) dorsal anterior insula and left dorsal mid-insula ($p = .034, d = .58, BF = 4.6$) (Table 4). MDD-UnMed exhibited trending lower BOLD signal during INT-EXT than HC for left ($p = .059, d = .48, BF = 1.98$) and right ($p = .056, d = .48, BF = 1.88$) dorsal anterior insula. In each ROI, there was moderate evidence for no difference between MDD-SSRI and MDD-UnMed (BFs between 0.22 and 0.28).”

An error was found in the R code that selected the incorrect column from a csv file. Instead of using the beta coefficients for group comparisons, the t statistic of each beta coefficient was used for group comparisons. The corrected report should be as follows:

“Insular ROI analysis showed that there was a significant group difference during INT-EXT for left dorsal anterior insula ($F_{2,130} = 3.99, p = .021$) and left dorsal mid-insula ($F_{2,130} =$

This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

* Correspondence to: Laureate Institute for Brain Research, 6655 South Yale Ave, Tulsa, OK 74136, USA.
kburrows@laureateinstitute.org (K. Burrows).

3.13, $p = .047$). Post-hoc tests demonstrated that MDD-SSRI exhibited lower BOLD signal during INT-EXT than HC for left dorsal anterior insula ($p = .025$, $d = .55$, $BF = 3.46$) and left dorsal mid-insula ($p = .046$, $d = .57$, $BF = 4.10$) (Table 4). MDD-UnMed exhibited trending lower BOLD signal during INT-EXT than HC for left dorsal anterior insula ($p = .063$, $d = .48$, $BF = 1.93$). For each ROI, there was moderate evidence for no difference between MDD-SSRI and MDD-UnMed (BFs between 0.23 and 0.59).”

Correcting this error results in minor changes to the statistical results but it does not alter our overall interpretation of the results. Specifically, the group difference on left dorsal anterior insula was strengthened, but the group difference on right dorsal anterior insula was no longer statistically significant ($p = 0.08$). The left dorsal mid-insula findings remain the same. This correction does not affect any additional results reported in this study. The corrected Table 4 is depicted below.

The authors would like to apologise for any inconvenience caused.

Table 4

Percent fMRI signal change for each group as a function of interoception-exteroception contrast and insula ROI.

Region	HC (n = 41)		MDD-SSRI (n = 47)		MDD-UnMed (n = 48)		MDD-SSRI vs. HC		UnMed vs. HC		MDD-SSRI vs. UnMed			
	Mean (sd)	Mean (sd)	Mean (sd)	Mean (sd)	p-value ^a	p	d ^b	BF ^c	p	d ^b	BF ^c	p	d ^b	BF ^c
Left dorsal anterior insula	-0.02 (0.17)	-0.10 (0.14)	-0.09 (0.13)	-0.09 (0.13)	0.021	0.025	0.549	3.46	0.063	0.481	1.93	0.908	0.093	0.24
Right dorsal anterior insula	-0.05 (0.24)	-0.14 (0.17)	-0.13 (0.18)	-0.13 (0.18)	0.080									
Left dorsal posterior insula	0.05 (0.13)	0.01 (0.10)	0.04 (0.11)	0.04 (0.11)	0.192									
Right dorsal posterior insula	0.08 (0.14)	0.04 (0.11)	0.05 (0.13)	0.05 (0.13)	0.252									
Left dorsal mid-insula	0.18 (0.17)	0.10 (0.12)	0.12 (0.17)	0.12 (0.17)	0.047	0.046	0.566	4.10	0.145	0.368	0.80	0.842	0.120	0.25
Right dorsal mid-insula	0.17 (0.17)	0.11 (0.14)	0.12 (0.17)	0.12 (0.17)	0.148									

Note. HC = healthy control. MDD = major depressive disorder. SSRI = Use of selective serotonin reuptake inhibitors. UnMed = unmedicated.

^aOne way ANOVA followed by Tukey's Honest Significant Difference' method;

^bCohen's d effect sizes computed with the *effsize* package in R.

^cBayes factors computed with the using the *ttestBF* function within the *BayesFactor* packages in R. Statistically significant p-values are indicated in bold font.