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Manuscript Number: NN-A52701-T

Manuscript Type: Article

Main Figures: 6

Supplementary Figures: 10

Supplementary Tables: 0

Supplementary Videos: 0

Reporting Checklist for Nature Neuroscience

This checklist is used to ensure good reporting standards and to improve the reproducibility of published results. For more information, please read [Reporting Life Sciences Research](#).

Please note that in the event of publication, it is mandatory that authors include all relevant methodological and statistical information in the manuscript.

► Statistics reporting, by figure

- Please specify the following information for each panel reporting quantitative data, and where each item is reported (section, e.g. Results, & paragraph number).
- Each figure legend should ideally contain an exact sample size (n) for each experimental group/condition, where n is an exact number and not a range, a clear definition of how n is defined (for example x cells from x slices from x animals from x litters, collected over x days), a description of the statistical test used, the results of the tests, any descriptive statistics and clearly defined error bars if applicable.
- For any experiments using custom statistics, please indicate the test used and stats obtained for each experiment.
- Each figure legend should include a statement of how many times the experiment shown was replicated in the lab; the details of sample collection should be sufficiently clear so that the replicability of the experiment is obvious to the reader.
- For experiments reported in the text but not in the figures, please use the paragraph number instead of the figure number.

Note: Mean and standard deviation are not appropriate on small samples, and plotting independent data points is usually more informative. When technical replicates are reported, error and significance measures reflect the experimental variability and not the variability of the biological process; it is misleading not to state this clearly.

		TEST USED		n			DESCRIPTIVE STATS (AVERAGE, VARIANCE)		P VALUE		DEGREES OF FREEDOM & F/t/z/R/ETC VALUE	
FIGURE NUMBER	WHICH TEST?	SECTION & PARAGRAPH #	EXACT VALUE	DEFINED?	SECTION & PARAGRAPH #	REPORTED?	SECTION & PARAGRAPH #	EXACT VALUE	SECTION & PARAGRAPH #	VALUE	SECTION & PARAGRAPH #	
example 1a	one-way ANOVA	Fig. legend	9, 9, 10, 15	mice from at least 3 litters/group	Methods para 8	error bars are mean +/- SEM	Fig. legend	p = 0.044	Fig. legend	F(3, 36) = 2.97	Fig. legend	
example results, para 6	unpaired t-test	Results para 6	15	slices from 10 mice	Results para 6	error bars are mean +/- SEM	Results para 6	p = 0.0006	Results para 6	t(28) = 2.808	Results para 6	
+ - 1d	Kruskal-Wallis test	Fig. legend	47	mice	Fig. legend	error bars are mean +/- SEM	Method	p = 3.01e-18	Fig. legend	H(3,184) = 84.7		

		TEST USED		n			DESCRIPTIVE STATS (AVERAGE, VARIANCE)		P VALUE		DEGREES OF FREEDOM & F/t/z/R/ETC VALUE	
FIGURE NUMBER	WHICH TEST?	SECTION & PARAGRAPH #	EXACT VALUE	DEFINED?	SECTION & PARAGRAPH #	REPORTED?	SECTION & PARAGRAPH #	EXACT VALUE	SECTION & PARAGRAPH #	VALUE	SECTION & PARAGRAPH #	
+ -	1d	one-tailed Bootstrap Bonferroni correction	Fig. legend	7	mice	Fig. legend	errorbars are mean +/- SEM	Meth od	***p < 0.0001 (session 4 vs. muscimol) **p = 0.0016 (muscimol vs. vehicle)	Fig. legend	n/a	n/a
+ -	3c left	one-way repeated measures ANOVA	Fig. legend	365 (passive) 227 (learning)	boutons from 6 mice (passive) boutons from 5 mice (learning)	Fig. legend	errorbars are mean +/- SEM	Meth od	p < 0.0001 (passive) p < 0.0001 (learning)	Fig. legend	F(8,2912) = 5.65 (passive) F(8,1808) = 39.49 (learning)	
+ -	3c middle	one-way repeated measures ANOVA	Fig. legend	6 (passive) 6 (learning)	mice	Fig. legend	errorbars are mean +/- SEM	Meth od	p = 0.98 (passive) p = 0.09 (learning)	Fig. legend	F(8,40) = 0.24 (passive) F(8,40) = 1.89 (learning)	
+ -	3c right	Kruskal-Wallis test	Fig. legend	121,122, 140,149, 140,143, 127,156, 162 (passive) 61,80,78, 137,108, 120,103, 132,104 (learning)	neurons from 6 mice (passive) neurons from 5 mice (learning)	Fig. legend	errorbars are mean +/- SEM	Meth od	p = 0.0051 (passive) p = 3.12e-9 (learning)	Fig. legend	H(8,1251) = 21.88 (passive) H(8,914) = 55.78 (learning)	
+ -	3f left	one-way repeated measures ANOVA	Fig. legend	88 (passive) 163 (learning)	neurons from 5 mice (passive) neurons from 7 mice (learning)	Fig. legend	errorbars are mean +/- SEM	Meth od	p < 0.0001 (passive) p < 0.0001 (learning)	Fig. legend	F(8,696) = 6.23 (passive) F(8,1296) = 20.95 (learning)	
+ -	3f middle	one-way repeated measures ANOVA	Fig. legend	5 (passive) 7 (learning)	mice	Fig. legend	errorbars are mean +/- SEM	Meth od	p = 7.31e-7 (passive) p = 4.94e-6 (learning)	Fig. legend	F(8,32) = 10.02 (passive) F(8,48) = 6.93 (learning)	
+ -	3f right	Kruskal-Wallis test	Fig. legend	61,37,27, 20,25,22, 25,23,26 (passive) 109,60, 47,42,42, 40,40,35, 46 (learning)	neurons from 5 mice (passive) neurons from 7 mice (learning)	Fig. legend	errorbars are mean +/- SEM	Meth od	p = 0.22 (passive) p = 0.57 (learning)	Fig. legend	H(8,257) = 10.77 (passive) H(8,452) = 6.71 (learning)	
+ -	3i left	one-way repeated measures ANOVA	Fig. legend	50 (passive) 81 (learning)	neurons from 5 mice (passive) neurons from 5 mice (learning)	Fig. legend	errorbars are mean +/- SEM	Meth od	p < 0.0001 (passive) p < 0.0001 (learning)	Fig. legend	F(8,392) = 18.64 (passive) F(8,640) = 7.69 (learning)	
+ -	3i middle	one-way repeated measures ANOVA	Fig. legend	5 (passive) 5 (learning)	mice	Fig. legend	errorbars are mean +/- SEM	Meth od	p = 0.0002 (passive) p = 0.03 (learning)	Fig. legend	F(8,32) = 5.58 (passive) F(8,32) = 2.52 (learning)	
+ -	3i right	Kruskal-Wallis test	Fig. legend	42,15,20, 10,11,12, 16,8,10 (passive) 49,35,29, 28,33,23, 29,20,24 (learning)	neurons from 5 mice (passive) neurons from 5 mice (learning)	Fig. legend	errorbars are mean +/- SEM	Meth od	p = 0.31 (passive) p = 0.50 (learning)	Fig. legend	H(8,135) = 9.4 (passive) H(8,261) = 7.31 (learning)	

+ -	4d	one-way ANOVA post-hoc Tukey test	Fig. legend	155,152, 121,0	boutons from 11,6,6,3 mice	Fig. legend	errorbars are mean +/- SEM	Method	p = 2.35e-10 ***p < 0.0001 (naive vs. learning) ***p < 0.0001 (passive vs. learning) p > 0.05 for all other comparisons	Fig. legend	F(2,425) = 23.37	
+ -	4h	one-way ANOVA post-hoc Tukey test	Fig. legend	146,21, 45,15	neurons from 13,5,7,3 mice	Fig. legend	errorbars are mean +/- SEM	Method	p = 8.30e-6 ***p < 0.0001 (naive vs. learning) *p = 0.038 (passive vs. learning) ***p < 0.001 (learning vs. anesthesia) p > 0.05 for all other comparisons	Fig. legend	F(3,223) = 9.28	
+ -	4l	one-way ANOVA	Fig. legend	72,9,23, 10	neurons from 10,5,5,3 mice	Fig. legend	errorbars are mean +/- SEM	Method	p = 0.63	Fig. legend	F(3,110) = 0.58	
+ -	5b	one-tailed Bootstrap Bonferroni correction	Fig. legend	9	mice	Fig. legend	errorbars are mean +/- SEM	Methods	***p < 0.0001 (session 4 vs. muscimol) ***p < 0.0001 (muscimol vs. vehicle)	Fig. legend	n/a	n/a
+ -	5e	Wilcoxon signed-rank test Bonferroni correction	Fig. legend	27	neurons from 7 mice	Fig. legend	no (all data points shown)	n/a	p = 0.005 (left) p = 6.27e-04 (right)	Fig. legend	Z = -3.03 (left) Z = -3.60 (right)	
+ -	6c left	one-way repeated measures ANOVA	Fig. legend	42 (passive) 40 (learning)	neurons from 6 mice (passive) neurons from 7 mice (learning)	Fig. legend	errorbars are mean +/- SEM	Methods	p < 0.0001 (passive) p < 0.0001 (learning)	Fig. legend	F(8,328) = 10.07 (passive) F(8,312) = 7.64 (learning)	
+ -	6c middle	one-way repeated measures ANOVA	Fig. legend	7 (passive) 7 (learning)	mice	Fig. legend	errorbars are mean +/- SEM	Methods	p = 0.41 (passive) p = 0.0005 (learning)	Fig. legend	F(8,48) = 1.06 (passive) F(8,48) = 4.42 (learning)	
+ -	6c right	Kruskal-Wallis test	Fig. legend	34,36,34, 39,39,37, 41,18,27 (passive) 24,27,20, 23,13,19, 15,14,11 (learning)	neurons from 7 mice (passive) neurons from 7 mice (learning)	Fig. legend	errorbars are mean +/- SEM	Methods	p = 0.09 (passive) p = 0.24 (learning)	Fig. legend	H(8,296) = 13.6 (passive) H(8,157) = 10.36 (learning)	
+ -	6g	Wilcoxon signed-rank test Bonferroni correction	Fig. legend	58 (left) 32 (right)	neurons from 6 mice (left) neurons from 4 mice (right)	Fig. legend	no (all data points shown)	n/a	p = 6.65e-04 (left) p = 0.024 (right)	Fig. legend	Z = -3.59 (left) Z = -2.51 (right)	
+ -	S3g	one-tailed Bootstrap	Fig. legend	146 (naive) 11 (naive muscimol)	neurons from 13 mice (naive) neurons from 3 mice (muscimol)	Fig. legend	errorbars are mean +/- SEM	Methods	p = 0.43	Fig. legend	n/a	n/a

+ -	S4b	one-way ANOVA	Fig. legend	106,122, 135,146, 132,139, 120,148, 152 (passive) 49,92,90, 153,120, 128,114, 146,121 (learning)	neurons from 6 mice (passive) neurons from 6 mice (learning)	Fig. legend	errorbars are mean +/- SEM	Meth ods	p = 0.12 (passive) *p = 0.019 (learning)	Fig. legend	F(8,1191) = 1.59 (passive) F(8,1004) = 2.3 (learning)	
+ -	S4e	one-way ANOVA	Fig. legend	60,37,26, 20,23,20, 24,23,21 (passive) 89,56,43, 39,39,37, 39,34,45 (learning)	neurons from 5 mice (passive) neurons from 7 mice (learning)	Fig. legend	errorbars are mean +/- SEM	Meth ods	p = 0.39 (passive) p = 6.63e-6 (learning)	Fig. legend	F(8,245) = 1.06 (passive) F(8,412) = 4.98 (learning)	
+ -	S4h	one-way ANOVA	Fig. legend	30,14,18, 9,11,11, 16,8,9 (passive) 42,33,29, 25,27,22, 28,20,23 (learning)	neurons from 5 mice (passive) neurons from 5 mice (learning)	Fig. legend	errorbars are mean +/- SEM	Meth ods	p = 0.60 (passive) p = 0.98 (learning)	Fig. legend	F(8,117) = 0.81 (passive) F(8,240) = 0.25 (learning)	
+ -	S5c	Wilcoxon signed-rank test	Fig. legend	167 (naive) 37 (passive) 70 (learning)	neurons from 12 mice (naive) neurons from 6 mice (passive) neurons from 7 mice (learning)	Fig. legend	errorbars are mean +/- SEM	Meth ods	***p = 3.62e-12 (naive) ***p = 3.46e-05 (passive) p = 0.34 (learning)	Fig. legend	Z = -6.95 (naive) Z = -4.14 (passive) Z = -0.95 (learning)	
+ -	S6b	one-tailed Bootstrap	Fig. legend	22 (RSC naive), 66 (RSC conditioning) 38 (L2/3 naive), 16 (L2/3 conditioning)	boutons from 3 mice (RSC) neurons from 7 mice (L2/3)	Fig. legend	errorbars are mean +/- SEM	Meth ods	*p = 0.017 (RSC) **p = 0.001 (L2/3)	Fig. legend	n/a	n/a
+ -	S8c left	one-way repeated measures ANOVA	Fig. legend	31 (passive) 34 (learning)	neurons from 6 mice (passive) neurons from 5 mice (learning)	Fig. legend	errorbars are mean +/- SEM	Meth ods	p < 0.0001 (passive) p < 0.0001 (learning)	Fig. legend	F(8,240) = 11.07 (passive) F(8,264) = 42.79 (learning)	
+ -	S8c middle	one-way repeated measures ANOVA	Fig. legend	6 (passive) 5 (learning)	mice	Fig. legend	errorbars are mean +/- SEM	Meth ods	p < 0.0001 (passive) p < 0.0001 (learning)	Fig. legend	F(8,40) = 29.42 (passive) F(8,32) = 34.69 (learning)	
+ -	S8f left	one-way repeated measures ANOVA	Fig. legend	28 (passive) 31 (learning)	neurons from 5 mice (passive) neurons from 4 mice (learning)	Fig. legend	errorbars are mean +/- SEM	Meth ods	p < 0.0001 (passive) p < 0.0001 (learning)	Fig. legend	F(8,216) = 34.75 (passive) F(8,240) = 10.62 (learning)	
+ -	S8f middle	one-way repeated measures ANOVA	Fig. legend	5 (passive) 4 (learning)	mice	Fig. legend	errorbars are mean +/- SEM	Meth ods	p < 0.0001 (passive) p < 0.0001 (learning)	Fig. legend	F(8,32) = 893.5 (passive) F(8,24) = inf (learning)	

+ -	S8h	Wilcoxon signed-rank test Bonferroni correction	Fig. legend	117 (passive) 105 (learning)	neurons from 5 mice (passive) neurons from 4 mice (learning)	Fig. legend	errorbars are mean +/- SEM	Meth ods	***p = 6.45e-17 (passive left) ***p = 5.03e-20 (passive right) ***p = 5.03e-20 (learning left) ***p = 1.60e-18 (learning right)	Fig. legend	Z = -8.44 (passive left) Z = -9.24 (passive right) Z = -4.39 (learning left) Z = -8.86 (learning right)	
+ -	S9c	one-way repeated measures ANOVA post-hoc Tukey test	Fig. legend	5	neurons from 3 mice	Fig. legend	errorbars are mean +/- SEM	Meth ods	p < 0.0001 ***p < 0.0001 (left) ***p < 0.0001 (right) p > 0.05 for all other comparisons	Fig. legend	F(2,8) = 49.47	
+ -	S9g	Wilcoxon signed-rank test Bonferroni correction	Fig. legend	47	neurons from 3 mice	Fig. legend	errorbars are mean +/- SEM	Meth ods	***p = 2.78e-05 (left) **p = 0.001 (right) p > 0.05 for all other comparisons	Fig. legend	Z = -4.43 (left) Z = -3.59 (right) Z = -2.21 (n.s.)	
+ -	S9h	Wilcoxon signed-rank test	Fig. legend	26	neurons from 5 mice	Fig. legend	no (all data points shown)	n/a	p = 0.23 (left) p = 0.32 (right)	Fig. legend	Z = -1.21 (left) Z = -1.00	

► Representative figures

- Are any representative images shown (including Western blots and immunohistochemistry/staining) in the paper?

If so, what figure(s)?

Yes. Fig. 2a-b, d, Fig. 3a-b, d-e, g-h, Fig. 5c, Fig. 6a-b, e, Supplementary Fig. 2a-b, Supplementary Fig. 8a-b, d-e, Supplementary Fig. 9f.

- For each representative image, is there a clear statement of how many times this experiment was successfully repeated and a discussion of any limitations in repeatability?

If so, where is this reported (section, paragraph #)?

All representative images are highly reproducible and this is reported in each figure legend.

► Statistics and general methods

- Is there a justification of the sample size?

If so, how was it justified?

Where (section, paragraph #)?

Even if no sample size calculation was performed, authors should report why the sample size is adequate to measure their effect size.

No statistical methods were used to predetermine sample sizes but our sample sizes are similar to those generally employed in the field. This is described in Methods section "Data analysis".

- Are statistical tests justified as appropriate for every figure?

Where (section, paragraph #)?

Yes. We describe all the statistical tests in each figure legend and they are justified based on the type of data.

- a. If there is a section summarizing the statistical methods in the methods, is the statistical test for each experiment clearly defined?
Where is this described (section, paragraph #)?
- Yes, in Method section "Data analysis". All the statistical tests are described in each figure legend.
- b. Do the data meet the assumptions of the specific statistical test you chose (e.g. normality for a parametric test)?
Where is this described (section, paragraph #)?
- For parametric tests, normal data distributions were assumed based on histograms without formal statistical tests. Where data distributions were not normal, non-parametric tests were used. This is described in Method section "Data analysis".
- c. Is there any estimate of variance within each group of data?
Is the variance similar between groups that are being statistically compared?
Where is this described (section, paragraph #)?
- Yes. Data are presented with standard error of the mean and sample size where appropriate. The variance is similar between groups. This is described in Method section "Data analysis".
- d. Are tests specified as one- or two-sided?
- Two-tailed tests were used unless noted otherwise.
- e. Are there adjustments for multiple comparisons?
- Yes, either by Bonferroni correction or Tukey test.
3. Are criteria for excluding data points reported?
Was this criterion established prior to data collection?
Where is this described (section, paragraph #)?
- Yes. They are predetermined and described in Methods section "Data analysis".
4. Define the method of randomization used to assign subjects (or samples) to the experimental groups and to collect and process data.
If no randomization was used, state so.
Where does this appear (section, paragraph #)?
- Each animal was randomly assigned to either experimental groups. This is described in Method section "Animals".
5. Is a statement of the extent to which investigator knew the group allocation during the experiment and in assessing outcome included?
If no blinding was done, state so.
Where (section, paragraph #)?
- No blinding was done and this is described in Method section "Data analysis".
6. For experiments in live vertebrates, is a statement of compliance with ethical guidelines/regulations included?
Where (section, paragraph #)?
- Yes, in Method section "Animals".
7. Is the species of the animals used reported?
Where (section, paragraph #)?
- Yes, in Method section "Animals".
8. Is the strain of the animals (including background strains of KO/transgenic animals used) reported?
Where (section, paragraph #)?
- Yes, in Method section "Animals".
9. Is the sex of the animals/subjects used reported?
Where (section, paragraph #)?
- Yes, in Method section "Animals".

10. Is the age of the animals/subjects reported?
Where (section, paragraph #)?
- Yes, in Method section "Surgery for in vivo imaging experiments".
11. For animals housed in a vivarium, is the light/dark cycle reported?
Where (section, paragraph #)?
- Yes, in Method section "Animals".
12. For animals housed in a vivarium, is the housing group (i.e. number of animals per cage) reported?
Where (section, paragraph #)?
- Yes, in Method section "Animals".
13. For behavioral experiments, is the time of day reported (e.g. light or dark cycle)?
Where (section, paragraph #)?
- Yes, in Method section "Animals".
14. Is the previous history of the animals/subjects (e.g. prior drug administration, surgery, behavioral testing) reported?
Where (section, paragraph #)?
- There is no previous history of the mice that could affect the results. This is described in Method section "Animals".
- a. If multiple behavioral tests were conducted in the same group of animals, is this reported?
Where (section, paragraph #)?
15. If any animals/subjects were excluded from analysis, is this reported?
Where (section, paragraph #)?
- Yes, in Method section "Imaging".
- a. How were the criteria for exclusion defined?
Where is this described (section, paragraph #)?
- When surgery was performed unsatisfactorily. This is described in Method section "Imaging".
- b. Specify reasons for any discrepancy between the number of animals at the beginning and end of the study.
Where is this described (section, paragraph #)?

► Reagents

1. Have antibodies been validated for use in the system under study (assay and species)?
- a. Is antibody catalog number given?
Where does this appear (section, paragraph #)?

- b. Where were the validation data reported (citation, supplementary information, Antibodypedia)?

Where does this appear (section, paragraph #)?

2. Cell line identity

- a. Are any cell lines used in this paper listed in the database of commonly misidentified cell lines maintained by [ICLAC](#) and [NCBI Biosample](#)?

Where (section, paragraph #)?

- b. If yes, include in the Methods section a scientific justification of their use--indicate here in which section and paragraph the justification can be found.

- c. For each cell line, include in the Methods section a statement that specifies:

- the source of the cell lines
- have the cell lines been authenticated? If so, by which method?
- have the cell lines been tested for mycoplasma contamination?

Where (section, paragraph #)?

▶ Data deposition

Data deposition in a public repository is mandatory for:

- a. Protein, DNA and RNA sequences
- b. Macromolecular structures
- c. Crystallographic data for small molecules
- d. Microarray data

Deposition is strongly recommended for many other datasets for which structured public repositories exist; more details on our data policy are available [here](#). We encourage the provision of other source data in supplementary information or in unstructured repositories such as [Figshare](#) and [Dryad](#).

We encourage publication of Data Descriptors (see [Scientific Data](#)) to maximize data reuse.

1. Are accession codes for deposit dates provided?

Where (section, paragraph #)?

▶ Computer code/software

Any custom algorithm/software that is central to the methods must be supplied by the authors in a usable and readable form for readers at the time of publication. However, referees may ask for this information at any time during the review process.

1. Identify all custom software or scripts that were required to conduct the study and where in the procedures each was used.

2. If computer code was used to generate results that are central to the paper's conclusions, include a statement in the Methods section under "**Code availability**" to indicate whether and how the code can be accessed. Include version information as necessary and any restrictions on availability.

▶ Human subjects

1. Which IRB approved the protocol?

Where is this stated (section, paragraph #)?

2. Is demographic information on all subjects provided?

Where (section, paragraph #)?

3. Is the number of human subjects, their age and sex clearly defined?

Where (section, paragraph #)?

4. Are the inclusion and exclusion criteria (if any) clearly specified?

Where (section, paragraph #)?

5. How well were the groups matched?

Where is this information described (section, paragraph #)?

6. Is a statement included confirming that informed consent was obtained from all subjects?

Where (section, paragraph #)?

7. For publication of patient photos, is a statement included confirming that consent to publish was obtained?

Where (section, paragraph #)?

▶ fMRI studies

For papers reporting functional imaging (fMRI) results please ensure that these minimal reporting guidelines are met and that all this information is clearly provided in the methods:

1. Were any subjects scanned but then rejected for the analysis after the data was collected?

- a. If yes, is the number rejected and reasons for rejection described?

Where (section, paragraph #)?

2. Is the number of blocks, trials or experimental units per session and/or subjects specified?
Where (section, paragraph #)?
3. Is the length of each trial and interval between trials specified?
4. Is a blocked, event-related, or mixed design being used? If applicable, please specify the block length or how the event-related or mixed design was optimized.
5. Is the task design clearly described?
Where (section, paragraph #)?
6. How was behavioral performance measured?
7. Is an ANOVA or factorial design being used?
8. For data acquisition, is a whole brain scan used?
If not, state area of acquisition.
 - a. How was this region determined?
9. Is the field strength (in Tesla) of the MRI system stated?
 - a. Is the pulse sequence type (gradient/spin echo, EPI/spiral) stated?
 - b. Are the field-of-view, matrix size, slice thickness, and TE/TR/flip angle clearly stated?
10. Are the software and specific parameters (model/functions, smoothing kernel size if applicable, etc.) used for data processing and pre-processing clearly stated?
11. Is the coordinate space for the anatomical/functional imaging data clearly defined as subject/native space or standardized stereotaxic space, e.g., original Talairach, MNI305, ICBM152, etc? Where (section, paragraph #)?
12. If there was data normalization/standardization to a specific space template, are the type of transformation (linear vs. nonlinear) used and image types being transformed clearly described? Where (section, paragraph #)?
13. How were anatomical locations determined, e.g., via an automated labeling algorithm (AAL), standardized coordinate database (Talairach daemon), probabilistic atlases, etc.?

14. Were any additional regressors (behavioral covariates, motion etc) used?
15. Is the contrast construction clearly defined?
16. Is a mixed/random effects or fixed inference used?
- a. If fixed effects inference used, is this justified?
17. Were repeated measures used (multiple measurements per subject)?
- a. If so, are the method to account for within subject correlation and the assumptions made about variance clearly stated?
18. If the threshold used for inference and visualization in figures varies, is this clearly stated?
19. Are statistical inferences corrected for multiple comparisons?
- a. If not, is this labeled as uncorrected?
20. Are the results based on an ROI (region of interest) analysis?
- a. If so, is the rationale clearly described?
- b. How were the ROI's defined (functional vs anatomical localization)?
21. Is there correction for multiple comparisons within each voxel?
22. For cluster-wise significance, is the cluster-defining threshold and the corrected significance level defined?

► Additional comments

Additional Comments