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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.

FIGURE NUMBER	TEST USED		n			DESCRIPTIVE STATS (AVERAGE, VARIANCE)		P VALUE		DEGREES OF FREEDOM & F/t/z/R/ETC VALUE	
	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

	FIGURE NUMBER	TEST USED		n			DESCRIPTIVE STATS (AVERAGE, VARIANCE)		P VALUE		DEGREES OF FREEDOM & F/t/z/R/ETC VALUE	
		WHICH TEST?	SECTION & PARAGRAPH #	EXACT VALUE	DEFINED?	SECTION & PARAGRAPH #	REPORTED?	SECTION & PARAGRAPH #	EXACT VALUE	SECTION & PARAGRAPH #	VALUE	SECTION & PARAGRAPH #
+−	1b	N/A	N/A	PVH-GFP = 31 PVH non-GFP = 5 ARC = 30	n=cells One mouse per condition	Figure legend	N/A	N/A	N/A	N/A	N/A	N/A
+−	1h	Repeated measures ANOVA	Figure legend	ARCAgRP →PVH, n=7; ARCAgRP →PVH + PVHMC4R, n=10; ARCAgRP →PVH + PVHOXT, n=8	n=mice Within subject. Mice from multiple litters	Figure legend	mean±SEM	Figure legend	Interaction p<0.0001 Genotype p<0.0001 Treatment p<0.0001	Figure legend	Interaction F(1,22)=240.99 Genotype F(2,22)=16.88 Treatment F(2,22)=25.95	Figure legendy
+−	1i	One-way ANOVA	Figure legend	ARCAgRP →PVH, n=7; ARCAgRP →PVH + PVHMC4R, n=10; ARCAgRP →PVH + PVHOXT, n=8	n=mice Within subject. Mice from multiple litters	Figure legend	mean±SEM	Figure legend	p=0.66	Supplemental statistical summary	F(3,23)=0.41	Figure legend
+−	2d	Repeated measures ANOVA	Figure legend	ARCAgRP →BNST, n=5; ARCAgRP →BNST + BNSTMC4R, n=5	n=mice Within subject. Mice from multiple litters	Figure legend	mean±SEM	Figure legend	Treatment p<0.0001 Genotype P = 0.22 Interaction P=0.58	Figure legend	Treatment F(1,4)=1645 Genotype F(1,4)=2.132, Interaction F(1,4)=0.38,	Figure legend
+−	2e	Repeated measures ANOVA	Figure legend	ARCAgRP →LH n = 6; ARCAgRP →BNST + LHMC4R n = 6.	n=mice Within subject. Mice from multiple litters	Figure legend	mean±SEM	Figure legend	Treatment P<0.0001 Genotype P =0.58 Interaction P=0.70	Supplemental statistical summary	Treatment F(1,5)=359.9 Genotype F(1,5)=0.43 Interaction F(1,5)=0.16,	Figure legend
+−	3b	Unpaired two-tailed t-test	Figure legend	n = 3 per group	n=mice Mice from multiple litters	Figure legend	mean±SEM	Figure legend	p=0.02	Figure legend	t(4)=3.64	Figure legend
+−	3d	Repeated measures ANOVA	Figure legend	n=5	n=mice Within subject. Mice from multiple litters	Figure legend	mean±SEM	Figure legend	Treatment p<0.0001 Time p=0.001 Interaction p=0.0004	Figure legend	Treatment F(1,16)=79.30 Time F(3,16)=8.43 Interaction F(3,16)=10.57	Figure legend
+−	3e	Repeated measures ANOVA	Figure legend	n=5	n=mice Within subject. Mice from multiple litters	Figure legend	mean±SEM	Figure legend	Treatment p<0.0001 Time p<0.0001 Interaction p=0.002	Supplemental statistical summary	Treatment F(1,16)=71.90 Time F(3,16)=26.13 Interaction F(3,16)=8.04	Figure legend

+ -	3f	Paired two-tailed t-test	Figure legend	n=11	n=mice Within subject. Mice from multiple litters	Figure legend	mean±SEM	Figure legend	p=0.94	Figure legend	t(10)=0.08	Figure legend
+ -	3g	Repeated measures ANOVA	Figure legend	n=6	n=mice Within subject. Mice from multiple litters	Figure legend	mean±SEM	Figure legend	Treatment p = 0.1260 Time p<0.0001 Interaction p = 0.6926	Supplemental statistical summary	Treatment F (1, 20) = 2.550 Time F (3, 20) = 92.26 Interaction F (3, 20) = 0.4909	Figure legend
+ -	3h	Repeated measures ANOVA	Figure legend	n=8	n=mice Within subject. Mice from multiple litters	Figure legend	mean±SEM	Figure legend	Treatment p = 0.03 Time p<0.0001 Interaction p = 0.5688	Figure legend	Treatment F (1, 28) = 5.106 Time F (3, 28) = 64.09 Interaction F (3, 28) = 0.6849	Figure legend
+ -	3i	Repeated measures ANOVA	Figure legend	n=9	n=mice Within subject. Mice from multiple litters	Figure legend	mean±SEM	Figure legend	Treatment p<0.0001 Time p<0.0001 Interaction p<0.0001	Figure legend	Treatment F(1,32)=77.49 Time F(3,32)=25.70 Interaction F(3,32)=10.06	Figure legend
+ -	3j	Repeated measures ANOVA	Figure legend	n=5	n=mice Within subject. Mice from multiple litters	Figure legend	mean±SEM	Figure legend	Treatment P = 0.5446 Time P = 0.0029 Interaction P = 0.4173	Figure legend	Treatment F (1, 16) = 0.3833 Time F (3, 16) = 7.185 Interaction F (3, 16) = 1.002	Figure legend
+ -	3k	Repeated measures ANOVA	Figure legend	n=6	n=mice Within subject. Mice from multiple litters	Figure legend	mean±SEM	Figure legend	Treatment P = 0.1244 Time P = 0.1532 Interaction P = 0.6086	Figure legend	Treatment F (1, 20) = 2.572 Time F (3, 20) = 1.956 Interaction F (3, 20) = 0.6226	Figure legend
+ -	3l	Paired two-tail t-test	Figure legend	n=6	n=mice Within subject. Mice from multiple litters	Figure legend	mean±SEM	Figure legend	p=0.01	Figure legend	t(5)=4.04	Figure legend
+ -	5d	Unpaired two-tail t-test	Figure legend	Fasted n=8 Fed n=6	Fasted = slices from 2 mice Fed = slices from 4 mice	Figure legend	mean±SEM	Figure legend	p=0.008	Figure legend	t(12)=3.19	Figure legend
+ -	5f	Paired two-tail t-test	Figure legend	n=6	Slices from 3 mice	Figure legend	mean±SEM	Figure legend	p=0.01	Figure legend	t(5)=3.50	Figure legend
+ -	5g	Paired two-tail t-test	Figure legend	n=6	Slices from 3 mice	Figure legend	mean±SEM	Figure legend	p=0.0004	Figure legend	t(5)=8.40	Figure legend
+ -	5i	Repeated measures ANOVA	Figure legend	n=4	n=mice Within subject. Mice from multiple litters	Figure legend	mean±SEM	Figure legend	Treatment p<0.0001 Time p<0.0001 Interaction p=0.0068	Figure legend	Treatment F(1,12)=58.89 Time F(3,12)=49.95 Interaction F(3,12)=3.12	Figure legend
+ -	6c	Repeated measures ANOVA	Figure legend	n=11	n=mice Within subject. Mice from multiple litters	Figure legend	mean±SEM	Figure legend	Treatment p<0.0001 Time p<0.0001 Interaction p<0.0001	Figure legend	Treatment F(1,40)=185.4 Time F(3,40)=74.88 Interaction F(3,40)=32.92	Figure legend
+ -	6d	Repeated measures ANOVA	Figure legend	n=7	n=mice Within subject. Mice from multiple litters	Figure legend	mean±SEM	Figure legend	Treatment p<0.0001 Time p<0.0001 Interaction p<0.0001	Figure legend	Treatment F(1,24)=117.4 Time F(3,24)=174.6 Interaction F(3,24)=13.21	Figure legend
+ -	6e	Paired two-tail t-test	Figure legend	n=6	n=mice Within subject. Mice from multiple litters	Figure legend	mean±SEM	Figure legend	p=0.05	Figure legend	t(5)=1.82	Supplemental statistical summary

+ -	6f	Paired two-tail t-test	Figure legend	n=6	n=mice Within subject. Mice from multiple litters	Figure legend	mean±SEM	Figure legend	p=0.003	Figure legend	t(5)=5.38	Figure legend
+ -	6g	Paired two-tail t-test	Figure legend	n=6	n=mice Within subject. Mice from multiple litters	Figure legend	mean±SEM	Figure legend	p=0.03	Figure legend	t(5)=2.98	Figure legend
+ -	6h	Paired two-tail t-test	Figure legend	n=6	n=mice Within subject. Mice from multiple litters	Figure legend	mean±SEM	Figure legend	p=0.02	Figure legend	t(5)=3.63	Figure legend
+ -	6k	Repeated measures ANOVA	Figure legend	mCherry, n=6; ChR2-mCherry, n=7.	n=mice Mice from multiple litters	Figure legend	mean±SEM	Figure legend	Treatment p=0.01 Genotype p= 0.1137 Interaction p=0.005	Figure legend	State $F_{(1,11)}=9.47$ Genotype $F_{(1,11)} = 2.954$ Interaction $F_{(1,11)}=12.52$	Figure legend
+ -	S6a	Paired two-tail t-test	Figure legend	n=11	n=mice Within subject. Mice from multiple litters	Figure legend	mean±SEM	Figure legend	p=0.67	Figure legend	t(10)=0.43	Figure legend
+ -	S6b	Paired two-tail t-test	Figure legend	n=11	n=mice Within subject. Mice from multiple litters	Figure legend	mean±SEM	Supplemental statistical summary	p=0.85	Figure legend	t(10)=0.20	Figure legend
+ -	S6c	Paired two-tail t-test	Figure legend	n=11	n=mice Within subject. Mice from multiple litters	Figure legend	mean±SEM	Supplemental statistical summary	p=0.79	Figure legend	t(10)=0.35	Figure legend
+ -	S6d	Repeated measures ANOVA	Figure legend	n=6	n=mice Within subject. Mice from multiple litters	Figure legend	mean±SEM	Supplemental statistical summary	Treatment $P = 0.6702$ Time $P < 0.0001$ Interaction $P = 0.9947$	Figure legend	Treatment $F_{(1, 25)} = 0.186$ Time $F_{(4, 25)} = 70.31$ Interaction $F_{(4, 25)} = 0.051$	Figure legend
+ -	S6e	Repeated measures ANOVA	Figure legend	n=5	n=mice Within subject. Mice from multiple litters	Figure legend	mean±SEM	Supplemental statistical summary	Treatment $P = 0.9497$ Time $P < 0.0001$ Interaction $P = 0.9999$	Figure legend	Treatment $F_{(1, 20)} = 0.004$ Time $F_{(4, 20)} = 89.29$ Interaction $F_{(4, 20)} = 0.008$	Figure legend
+ -	S9a	Repeated measures ANOVA	Figure legend	n=4	n=mice Within subject. Mice from multiple litters	Figure legend	mean±SEM	Supplemental statistical summary	Treatment $P = 0.05$ Time $P < 0.0001$ Interaction $P = 0.4132$	Figure legendv	Treatment $F_{(3, 12)} = 1.0$ Time $F_{(3, 12)} = 76$ Interaction $F_{(3, 12)} = 1.0$	Figure legend
+ -	S9b	Repeated measures ANOVA	Figure legend	n=5	n=mice Within subject. Mice from multiple litters	Figure legend	mean±SEM	Supplemental statistical summary	Treatment $P = 0.5204$ Time $P < 0.0001$ Interaction $P = 0.2042$	Figure legend	Treatment $F_{(1, 16)} = 0.4319$ Time $F_{(3, 16)} = 20.61$ Interaction $F_{(3, 16)} = 1.715$	Figure legend

+ -	S10b	Repeated measures ANOVA	Figure legend	n=10	n=mice Within subject. Mice from multiple litters	Figure legend	mean±SEM	Figure legend	Treatment P = 0.3863 Time P < 0.0001 Interaction P = 0.7947	Figure legend	Treatment F (1, 36) = 0.7690 Time F (3, 36) = 95.38 Interaction F (3, 36) = 0.3425	Figure legend
+ -	S10c	Repeated measures ANOVA	Figure legend	n=10	n=mice Within subject. Mice from multiple litters	Figure legend	mean±SEM	Figure legend	Treatment P = 0.3933 Time P < 0.0001 Interaction P = 0.4863	Figure legend	Treatment F (1, 20) = 0.7612 Time F (3, 20) = 132.6 Interaction F (3, 20) = 0.8432	Figure legend
+ -	1c	N/A	N/A	n=30	n=MC4R PVH cells 4 mice	Figure and methods	N/A	N/A	N/A	N/A	N/A	N/A
+ -	1d	N/A	N/A	n=10	n=non-MC4R PVH cells 4 mice	Figure and methods	N/A	N/A	N/A	N/A	N/A	N/A
+ -	1e	N/A	N/A	n=22	n=OXT PVH cells 3 mice	Figure and methods	N/A	N/A	N/A	N/A	N/A	N/A
+ -	1f	N/A	N/A	n=9	n=CRH PVH cells 2 mice	Figure and methods	N/A	N/A	N/A	N/A	N/A	N/A
+ -	2a	N/A	N/A	n=10	n=MC4R BNST cells 2 mice	Figure and methods	N/A	N/A	N/A	N/A	N/A	N/A
+ -	2b	N/A	N/A	n=7	n=MC4R LH cells 3 mice	Figure and methods	N/A	N/A	N/A	N/A	N/A	N/A
+ -	4e	N/A	N/A	n=19	n=LPBN cells 3 mice	Figure and methods	N/A	N/A	N/A	N/A	N/A	N/A
+ -	4f	N/A	N/A	n=20	n=DMV cells 3 mice	Figure and methods	N/A	N/A	N/A	N/A	N/A	N/A
+ -	4g	N/A	N/A	n=30	n=vlPAG cells 3 mice	Figure and methods	N/A	N/A	N/A	N/A	N/A	N/A
+ -	4h	N/A	N/A	n=39	n=NTS cells 3 mice	Figure and methods	N/A	N/A	N/A	N/A	N/A	N/A
+ -	6j	N/A	N/A	n=20	n=CGRP LPBN cells 2 mice	Figure and methods	N/A	N/A	N/A	N/A	N/A	N/A
+ -	S10d	N/A	N/A	n=10	n=MC4R LPBN cells 2 mice	Figure and methods	N/A	N/A	N/A	N/A	N/A	N/A

▶ Representative figures

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

   If so, what figure(s)?

   Figure 6a

2. 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 #)?

   Yes

   Figure legend 6.

▸ Statistics and general methods

1. 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.

   > Power analyses were calculated to estimate sample size using statistical conventions for 80% power, assuming a standard deviation of change of 1.0, a difference between the means of 1.5-fold and alpha level of 0.05. For a two-tailed paired analysis a sample size of 6 was indicated.

2. Are statistical tests justified as appropriate for every figure?

   Where (section, paragraph #)?

   > Yes

   a. If there is a section summarizing the statistical methods in the methods, is the statistical test for each experiment clearly defined?

   > Yes

   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 #)?

   > Yes
   > Data was normally distributed as determined by Shapiro-Wilk normality test.

   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.
   >
   > Material and methods -Statistical analysis

   d. Are tests specified as one- or two-sided?

   > Yes.

   e. Are there adjustments for multiple comparisons?

   > Yes.

3. Are criteria for excluding data points reported?

   Was this criterion established prior to data collection?

   Where is this described (section, paragraph #)?

   > Exclusion criteria for experimental animals were a) sickness or death during the testing period or b) if histological validation of the injection site demonstrated an absence of reporter gene expression. These criteria were established prior to data collection.
   >
   > Material and methods - Statistical 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 #)?

   > Due to the within subject design of most studies no randomization was employed.
   >
   > Material and methods - Statistical analysis

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 #)?

   For cFOS counts the experimenter was blinded to the treatment groups until after quantification was completed.

   Material and methods - FOS analysis

   Experimenters were not blinded to treatment (saline vs. CNO) but the requirement for post-hoc validation of injection accuracy and viral transgene expression ensures blinding with regard to genotype.

   Material and methods - Feeding studies

6. For experiments in live vertebrates, is a statement of compliance with ethical guidelines/regulations included?

   Where (section, paragraph #)?

   Yes.

   Material and methods - Animals

7. Is the species of the animals used reported?

   Where (section, paragraph #)?

   Yes.

   Material and methods - Animals

8. Is the strain of the animals (including background strains of KO/transgenic animals used) reported?

   Where (section, paragraph #)?

   Yes.

   Material and methods - Animals

9. Is the sex of the animals/subjects used reported?

   Where (section, paragraph #)?

   Yes

   Material and methods - Animals

10. Is the age of the animals/subjects reported?

    Where (section, paragraph #)?

    Yes.

    Material and methods - Animals

11. For animals housed in a vivarium, is the light/dark cycle reported?

    Where (section, paragraph #)?

    Yes.

    Material and methods - Animals

12. For animals housed in a vivarium, is the housing group (i.e. number of animals per cage) reported?

    Where (section, paragraph #)?

    Yes.

    Material and methods - Feeding studies

13. For behavioral experiments, is the time of day reported (e.g. light or dark cycle)?

    Where (section, paragraph #)?

    Yes.

    Throughout manuscript.

14. Is the previous history of the animals/subjects (e.g. prior drug administration, surgery, behavioral testing) reported?

    Where (section, paragraph #)?

    Yes.

    Material and methods - Viral injections
    Material and methods - Food intake studies

a. If multiple behavioral tests were conducted in the same group of animals, is this reported?

Where (section, paragraph #)?

> Yes
>
> Material and methods - Food intake studies

15. If any animals/subjects were excluded from analysis, is this reported?

Where (section, paragraph #)?

> No. Exclusion of mice is detailed above (Box 3). n-numbers reported reflect final numbers after exclusion.

a. How were the criteria for exclusion defined?

Where is this described (section, paragraph #)?

> See Box 3

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 #)?

> n-numbers reported reflect final numbers after exclusion.

▶ Reagents

1. Have antibodies been validated for use in the system under study (assay and species)?

> Yes

a. Is antibody catalog number given?

Where does this appear (section, paragraph #)?

> Yes.
> Material and methods - Immunohistochemistry

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

Where does this appear (section, paragraph #)?

> All antibodies are validated and represented on the Journal of Comparative Neurology Antibody Database v14.2

2. If cell lines were used to reflect the properties of a particular tissue or disease state, is their source identified?

Where (section, paragraph #)?

> N/A

a. Were they recently authenticated?

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

> N/A

▶ 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 #)?

N/A

▶ 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.

N/A

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.

N/A

▶ Human subjects

1. Which IRB approved the protocol?

    Where is this stated (section, paragraph #)?

N/A

2. Is demographic information on all subjects provided?

    Where (section, paragraph #)?

N/A

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

    Where (section, paragraph #)?

N/A

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

    Where (section, paragraph #)?

N/A

5. How well were the groups matched?

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

   N/A

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

   Where (section, paragraph #)?

   N/A

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

   Where (section, paragraph #)?

   N/A

▶ 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?

   N/A

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

      Where (section, paragraph #)?

      N/A

2. Is the number of blocks, trials or experimental units per session and/ or subjects specified?

   Where (section, paragraph #)?

   N/A

3. Is the length of each trial and interval between trials specified?

   N/A

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.

   N/A

5. Is the task design clearly described?

   Where (section, paragraph #)?

   N/A

6. How was behavioral performance measured?

   N/A

7. Is an ANOVA or factorial design being used?

   N/A

8. For data acquisition, is a whole brain scan used?

   If not, state area of acquisition.

   N/A

   a. How was this region determined?

      N/A

9. Is the field strength (in Tesla) of the MRI system stated?

    N/A

    a. Is the pulse sequence type (gradient/spin echo, EPI/spiral) stated?

    N/A

    b. Are the field-of-view, matrix size, slice thickness, and TE/TR/ flip angle clearly stated?

    N/A

10. Are the software and specific parameters (model/functions, smoothing kernel size if applicable, etc.) used for data processing and pre-processing clearly stated?

    N/A

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 #)?

    N/A

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 #)?

    N/A

13. How were anatomical locations determined, e.g., via an automated labeling algorithm (AAL), standardized coordinate database (Talairach daemon), probabilistic atlases, etc.?

    N/A

14. Were any additional regressors (behavioral covariates, motion etc) used?

    N/A

15. Is the contrast construction clearly defined?

    N/A

16. Is a mixed/random effects or fixed inference used?

    N/A

    a. If fixed effects inference used, is this justified?

    N/A

17. Were repeated measures used (multiple measurements per subject)?

    N/A

    a. If so, are the method to account for within subject correlation and the assumptions made about variance clearly stated?

    N/A

18. If the threshold used for inference and visualization in figures varies, is this clearly stated?

    N/A

19. Are statistical inferences corrected for multiple comparisons?

    N/A

    a. If not, is this labeled as uncorrected?

    N/A

20. Are the results based on an ROI (region of interest) analysis?

N/A

    a. If so, is the rationale clearly described?

N/A

    b. How were the ROI's defined (functional vs anatomical localization)?

N/A

21. Is there correction for multiple comparisons within each voxel?

N/A

22. For cluster-wise significance, is the cluster-defining threshold and the corrected significance level defined?

N/A

▶ Additional comments

Additional Comments