

Supporting Information

Savic and Lindström 10.1073/pnas.0801566105

SI Text

Description of the PET Method. The individual MRI and PET images were reformatted into a common space (standard brain), and filtered with a 10-mm Gaussian kernel (1, 2). Regional cerebral blood flow was normalized to 50 ml/min per100 g and was calculated in two separate volumes of interest (VOIs), the right and left amygdala, using SPM2 software package (Wellcome Department of Cognitive Neurology, London, www.fil.ion.ucl.ac.uk/spm), and the MarsBaR program (<http://marsbar.sourceforge.net/>) installed on a Unix-based system. To ensure that the two VOIs did not cover systematically different regions

in the investigated populations, each seed VOI was coregistered with each individual reformatted MRI. No systematic shift between the groups, and no coverage of regions outside the amygdala, was observed.

Respiratory movements were recorded continuously during each scan, by using a strain gauge around the lower thorax connected to a graph recorder (Comair). Respiratory frequency and amplitude were calculated during each scan, and differences between groups were tested by a separate one-factor ANOVA for each variable.

1. Savic I, Berglund H, Lindström P (2005) Brain response to putative pheromones in homosexual men. *Proc Natl Acad Sci USA* 102:7356–7361.

2. Berglund H, Lindström P, Savic I (2006) Brain response to putative pheromones in lesbian women. *Proc Natl Acad Sci USA* 103:8269–8274.

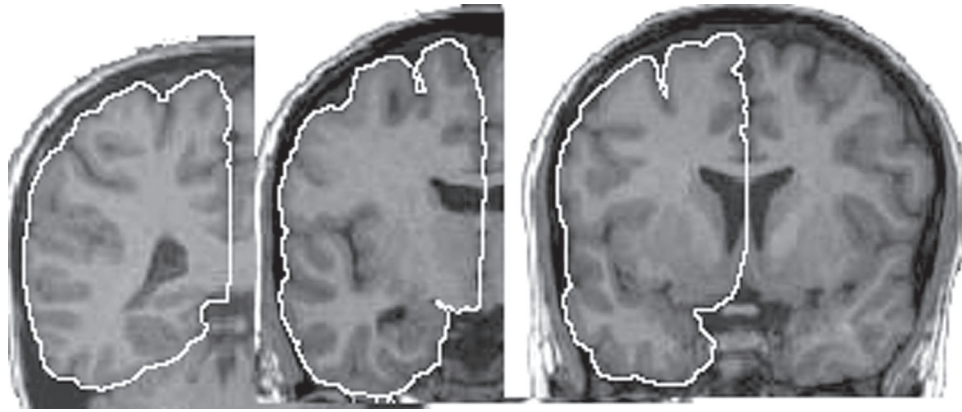


Fig. S1. Part of the left cerebral hemisphere VOI in a male heterosexual subject. Subject's right side is to the right in the image.

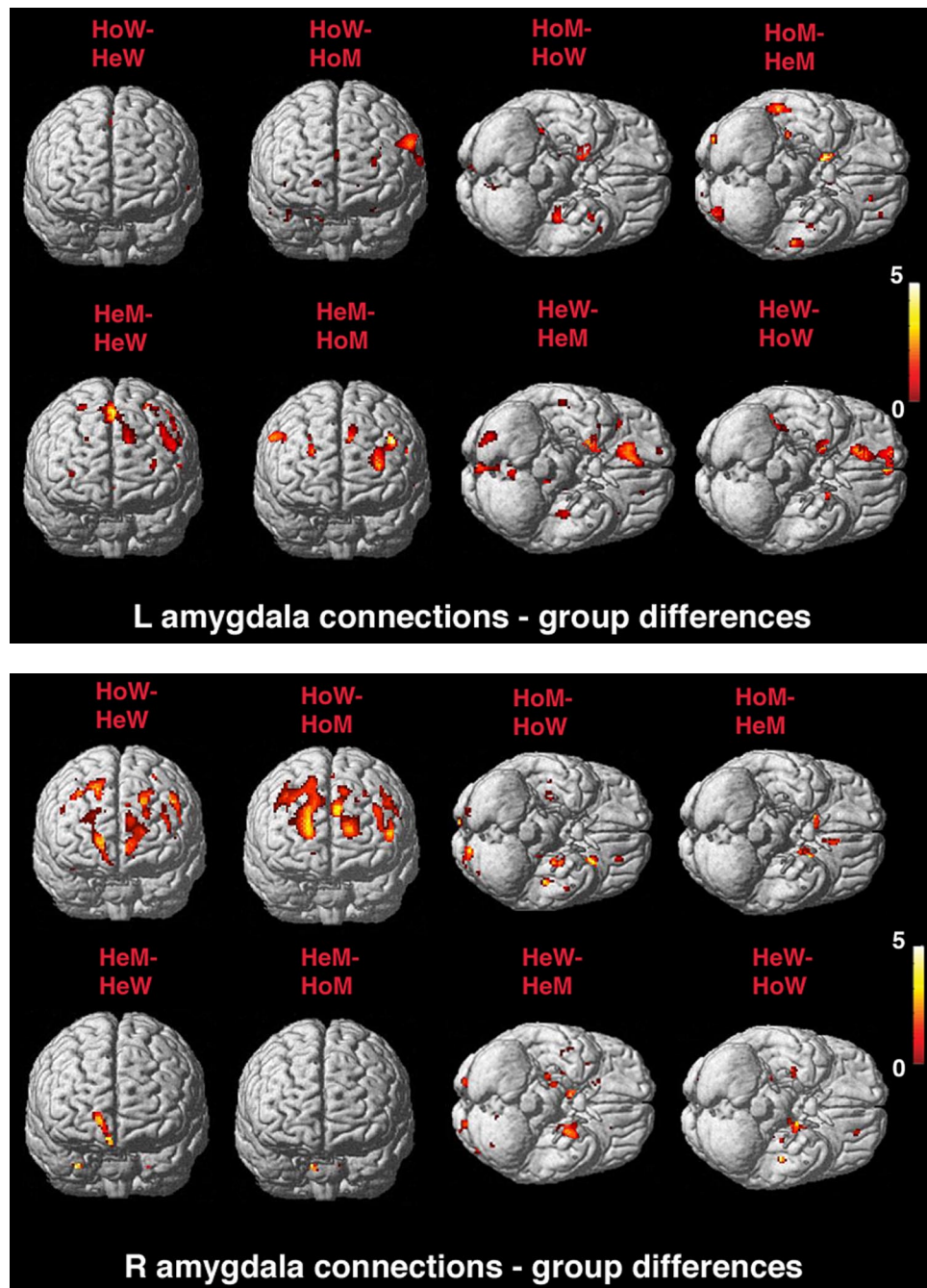


Fig. S2. Group differences in covariations with the left (a) and right (b) amygdala seed region. The Sokoloff scale indicates T values. Clusters detected at $T = 3.0$ are superimposed on the standard MR image of the brain. Brain views illustrating typical group differences are shown.

Table S1. Respiration frequency and amplitude

Group	Frequency, breaths/min	Amplitude, mm
Heterosexual women	14.0 ± 2.8	16.6 ± 4.5
Heterosexual men	13.3 ± 2.1	24.1 ± 10.1
Homosexual women	12.9 ± 2.5	19.7 ± 5.5
Homosexual men	12.2 ± 2.6	24.5 ± 12.1

Respiratory movements were recorded by use of a strain gauge around the lower thorax. Data were tested for differences between groups by separate one-factor ANOVA for each variable. There were no significant interactions for frequency (df 3, $F = 1.0$, $P = 0.39$) or amplitude (df 3, $F = 2.1$, $P = 0.11$). Numbers indicate means and standard deviations.