

**Table 2****Findings from previous neuroimaging studies in pedophilia.**

<b>Author (year)</b>	<b>Method</b>	<b>Structural/function al</b>	<b>PPT groups (n)</b>	<b>Paradigm/software</b>	<b>Correction</b>	<b>Threshold/Sig</b>	<b>Findings</b>
Schiffer et al. (2007)	MRI	Frontostriatal and cerebellum structure	Heterosexual (9) and homosexual pedophiles (9) Heterosexual (12) and homosexual (12) controls	VBM-whole brain/SPM 2	FDR (whole brain)/FWE corrected within ROIs	$p < 0.05$	GM volume reductions in pedophiles: PHc L/R, IFG L/R, OFC L/R, Ins L/R, Cer L/R; Cin L/R, Posterior Cin L, STG L/R, MiTG R, Pcu L/R, Put L/R (Amy L/R in unpublished re-analysis)
Schiltz et al. (2007)	MRI	Amygdala structure	Pedophilic (15) Community controls (15)	VBM/manual morphometry/SP M2 ROIs/MRIcro	FWE/corrected for multiple comparisons within ROIs	$p < 0.05$	GM reductions in pedophiles: Amy R, Hyp L/R, SI L/R, Septal Region R, Bed Nucleus Striae Terminalis L/R Enlargement of Temporal Horn R
Poepl et al. (2013)	MRI	Prefrontal cortex and amygdala structure	Heterosexual (2) and homosexual (7) pedophiles	VBM 8 toolbox/SPM 8	FWE corrected within ROIs	$p < 0.05$	GM volume decreases in pedophiles: only in Amy R; pedosexual interest and sexual

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			Heterosexual (11) controls				recidivism associated with GM volume decreases in insular cortex and DLPFC L, preference for younger children associated with GM decreases in the OFC and Ang L/R
Cantor et al. (2008)	MRI	White matter structure	Pedophiles (44) Teleiophilic sexual offenders (21) Non-sexual Offender (53)	VBM whole brain/SPM 2 Parcelation with ANIMAL	FDR	$p < 0.05$	Reduced WM volumes in pedophiles in Superior Fronto-Occipital Fasciculus L, Arcuate Fasciculus R No differences in GM
Cantor and Blanchard (2012)	MRI	White matter structure	Pedophiles (19) Hebephiles (49) Teleiophiles (47)	VBM Whole brain/SPM 2	Not specified	$p < 0.05$	Reduced WM volumes in Temporal Lobe L/R and Parietal Lobe L/R in pedophiles/hebephiles compared to teleiophiles
Cohen et al. (2002)	PET	Frontal and temporal function	Heterosexual pedophiles (7) Community controls (7)	Auditory stimulus/software not specified	Bonferroni	$p < 0.05$	No differences seen in glucose metabolism after an erotic auditory paradigm; lower

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							metabolism in ITC and in Superior VFG during neutral auditory condition in pedophiles compared to controls; no survival after correction
Dressing et al. ( <a href="#">2001</a> )	fMRI	Orbitofrontal function	Homosexual pedophiles (1) Controls (2)	Visual stimuli block design/brain voyager	Not specified	Not specified	Stronger recruitment in pedophiles in response to erotic pedohomosexual stimuli: ACC, Brain Stem R, PFC R, Basal Ganglia R, OFC R
Walter et al. ( <a href="#">2007</a> )	fMRI	Hypothalamus and lateral prefrontal cortex function	Pedophiles (13) Controls (14)	Visual stimuli/SPM2	Uncorrected	$p < 0.005$	Decreased activations in pedophiles to sexual > emotional arousal contrast: DLPFC R (Precentral), DLPFC R (MFG/SFG), DLPFC L (SFG), Occipital Cortex L

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Schiffer et al. (2008a)	fMRI	Frontal and temporal function	Homosexual pedophiles (11) Homosexual matched controls (10)	Visual stimuli/SPM2	Whole brain analysis uncorrected/false discovery rate	$p < 0.001/p < 0.05$	Stronger Activations in pedophiles compared to controls in contrast nude children/adults > dressed children/adults: Fus L/R, HC L/R, Tha R
Schiffer et al. (2008b)	fMRI	Amygdala function	Heterosexual pedophiles (8) Heterosexual matched controls (12)	Visual sexual stimuli/SPM2	Whole brain analysis uncorrected/FDR	$p < 0.001/p < 0.05$	Activations seen in pedophiles compared to controls in contrast nude children/adults > dressed children/adults: MFG R, ACC L/R
Sartorius et al. (2008)	fMRI	Amygdala function	Homosexual pedophiles (10) Heterosexual controls (10)	Visual stimuli/SPM2	Uncorrected	$p < 0.005$	Activation in pedophiles to children (Boys/girls) < neutral geometric stimuli contrasts in Amy R
Poeppl et al. (2011)	fMRI	Cortical and subcortical function	Heterosexual (2) and homosexual (7) pedophiles Heterosexual non-sexual	Visual sexual stimuli/SPM5	Whole brain analysis uncorrected/FWE/FDR	$p < 0.001/p < 0.05$	Activations in pedophiles compared to controls in contrast nude children > scrambled images of children:

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			offender controls (11)				MFG R, Ins L/R, MTG R, IPL L, Pos R, MCC R, PCC R, HC R, Tha L, Cer R
Ponseti et al. (2012)	fMRI	Pattern classification function	Heterosexual (11) and homosexual (13) pedophiles Heterosexual (18) and homosexual (14) controls	Visual stimuli; pattern classification/SPM 8	Uncorrected	$p < 0.001/p < 0.001$	Deactivations in homosexual pedophiles compared to controls in boys < men contrast: Cer L/R, Lin L/R, Anterior Tha L, HC R, Occ L, Fus L, ITG R, Ang R Deactivations in heterosexual pedophiles compared to controls in girls < women contrast: NC L/R, SPG L/R, ITG L/R, Fus L/R, Cin L, Occ L, Amy L, Ins L, IFG R, Tha L, Cer R
Habermeyer et al. (2013a)	fMRI	Function	Heterosexual pedophiles (8) Heterosexual controls (8)	Erotic sexual stimuli/brain voyager 2.3.0	Uncorrected/cluster-level threshold correction	$p < 0.005/p < 0.05$	Activations in pedophiles in sex $\times$ age $\times$ group

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Kärgel et al. (2015)	rsfMRI	Function	Pedophiles + CSA (12) Pedophiles – CSA (14) Healthy Controls (14)	SPM8 and rsfMRI toolkit REST	Uncorrected at voxel level; Family wise error corrected at cluster level	$p < 0.005/p < 0.05$	voxel-wise ANOVA analysis in MiFG R  DMN: (P-CSA > P + CSA) Diminished connectivity to left MSF, left OFC. No differences in opposite contrast (P + CSA > P-CSA). (HC > P + CSA): VM PFC, OFC. No differences in P + CSA > HC contrast Limbic Network: (P-CSA > P + CSA) diminished connectivity between L Amy and VM PFC, ACC, OFC, anterior PFC. No differences in P + CSA > P-CSA. In HC > P + CSA contrast: increased connectivity between L Amy and L anterior/inferior PFC, L Lin. No differences

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Poeppel et al. (2015)	rsfMRI	Function	Heterosexual (2) and homosexual (7) pedophiles Heterosexual (11) controls	Meta-analytic connectivity modeling (MACM) and ALE	FEW at cluster level	$p < 0.05$	in P + CSA > HC contrast  Seed area: R Amy connected to HC, R ventral striatum, R Tha, L Amy, L Cla, L hyp, L Put, L HC, L Mid, L Tha for psychosexual arousal L DLPFC: L Ant Ins, DMPFC, L Per, L SPL, L VLPFC for cognition and perception, spec. working memory L Ins: L PaO, L Ant Ins, L Pos, L STG, L Put, R PaO, R STG, R DLPFC/Ant Ins, R Put, R pMC, L Tha, R Tha, L Ext for perception and cognition