

SUPPLEMENTARY MATERIALS

Supplementary methods A: Details concerning the Relationships Scales Questionnaire (RSQ)

The RSQ has previously been successfully employed in adolescents aged 17 and older (Scharfe & Eldredge, 2001), as well as in young adults (Ognibene & Collins, 1998; Scharfe & Bartholomew, 1994). According to the available literature, the attachment measures provided by the RSQ appear to be rather stable among younger and older adults (Segal et al., 2009; albeit using a different method that includes scores for secure, preoccupied, dismissive, and avoidant attachment). Since some age effects have, however, been reported on preoccupied attachment (Segal et al., 2009) and we find an according significant negative association between AX and age in our sample (see Supplementary Table S3), we control for potential age effects in our analyses by including age as an essential covariate of interest in all analyses. No associations between age and AV were identified in our sample.

Supplementary methods B: MRI data preprocessing and cortical thickness calculation

Preprocessing was conducted using FreeSurfer software version 6 (<http://surfer.nmr.mgh.harvard.edu>) following the pipeline for fully automated preparation for three-dimensional cortical model images. These steps included resampling of the surface into cubic voxels, skull-stripping, intensity normalization, white matter segmentation, surface atlas registration, surface extraction and gyrus labelling, as previously described in detail (Dale et al., 1999; Fischl et al., 1999). Surface deformation was performed along intensity gradients, placing the inner border between grey matter/white matter (white-matter surface) and outer border between grey matter/cerebrospinal fluid (pial surface) at the location where the greatest intensity shift indicated the transition to the other tissue class. For each participant, white matter and pial surfaces were visually checked and manually corrected if necessary. A longitudinal

methodological step was added to reduce within-subject variability using FreeSurfer (version 6) by creating a within-subject unbiased template and an average image using inverse consistent registration. This step reduces the potential over-regularization of longitudinal image processing (Reuter & Fischl, 2011) and increases repeatability and statistical power (Reuter et al., 2012). All scans were processed using this longitudinal procedure, including participants with a single timepoint, to ensure consistent treatment of all scans (Bernal-Rusiel et al., 2013).

Supplementary methods C: Covariate inclusion

The neurodevelopmental trajectories may have different cadences depending on participant age at baseline, which spanned a relatively large range in this sample. We therefore included participant age at baseline as a covariate of interest. Because brain developmental trajectories have shown sex differences (Giedd et al., 1999; Herting et al., 2018), and adult attachment has also partly shown sex differences in association with different behavioral and (psycho-)physiological measures (Scharfe, 2016), all models included sex as a covariate of no interest. Due to complexity of our design and a lack of specific hypotheses, we did not include any interactions between sex and the other variables in our statistical model. As other essential covariates of no interest we included in all models MRI scanner location (see Supplementary analysis 2 regarding potential confounds between location of MRI image acquisition and attachment measures), and, for subcortical volumes, total intracranial volume (ICV), which in CT analyses is implicitly controlled for.

Supplementary Table S1. Exclusions and drop-outs at all four timepoints

Measure	T0	T1	T2	T3
Excluded (n)	11 n=8 no RSQ at T0 n=3 bad FreeSurfer segmentation	3 n=2 no MRI at T1 n=1 missing questionnaires		
Drop-out (n)		n=21 dropped out	n=7 dropped out n=8 did not come for T2 evaluation	n=4 dropped out n=2 did not come for T3 evaluation

Note: “Dropped out” represents participants who completely dropped out of the longitudinal study. “did not come for T (timepoint) evaluation” represents participants that missed one of the 4 timepoints.

Supplementary Table S2. Spearman correlation matrix between demographic variables and attachment dimensions (AX, AV) at baseline.

	Externalizing	Internalizing	Age	Wechsler_av (Block Design & Vocabulary)	Mean Total Gray Matter	AV	AX
Externalizing	—						
Internalizing	0.472***	—					
Age	-0.015	-0.056	—				
Wechsler_av (Block Design & Vocabulary)	-0.026	0.110	-0.245*	—			
Mean Total Gray Matter	-0.094	-0.017	-0.204*	0.327**	—		
AV	0.020	-0.055	0.037*	-0.155	0.073	—	
AX	0.133	0.224*	-0.272**	-0.009	0.066	0.142	—

Note. The Correlation matrix was calculated using baseline raw values for all variables. AV denotes attachment avoidance; AX, attachment anxiety; Wechsler_av, average between Wechsler's WISC/WAIS-IV Block Design and Vocabulary subtests

* $p < .05$, ** $p < .01$, *** $p < .001$

Supplementary Table S3. Voxel size of subcortical anatomic measures across all timepoints.

Measure	T0	T1	T2	T3
Subcortical grey matter	60370 (4892)	60181(5058)	60202(4968)	60366(5354)
Total grey matter volume	711479(68098)	709412(71391)	705130(65853)	696394(65516)
Intracranial volume (ICV)	1.56 ^{e+6} (152587)	1.57 ^{e+6} (168141)	1.55 ^{e+6} (157860)	1.57 ^{e+6} (162219)
Lateral ventricle	10916 (4900)	12081(5896)	11835(5205)	12950(6032)
Thalamus	15568 (1477)	15459(1526)	15339(1487)	15401(1410)
Caudate	8462(1017)	8503(973)	8343(930)	8601(939)
Putamen	11379(1149)	11270(1195)	11184(1159)	11256(1195)
Pallidum	3915(416)	3895(461)	3910(476)	4006(491)
Hippocampus	8363(795)	8394(897)	8294(833)	8482(924)
Amygdala	3611(376)	3641(390)	3586(384)	3676(415)
Accumbens	1351(172)	1347(174)	1332(178)	1382(171)

Note: Sample mean (SD) voxel size of subcortical anatomic regions of interest (ROIs). Subcortical grey matter and total grey matter are shown for context, intracranial volume (ICV) was included as a covariate in all analyses of subcortical volume, all other measures present ROIs.

Supplementary Table S4. Tests for linear trajectories (time) in subcortical volumes (controlling for age, sex, scanning site, and total ICV).

Dependent Variable	Intercept	Time	Age	Sex	Scanning site	ICV
<i>Lateral ventricle</i>	-.06 (-.24;.11)	<i>1.03 (.71;1.34)***</i>	.23 (.08;.39)**	.0001 (-.03;.03)	.04 (.01;.07)**	.29 (.12;.46)***
<i>Thalamus</i>	.02 (-.09;.14)	-.52 (-.80;-.23)***	-.13 (-.24;-.03)*	.004 (-.03;.03)	-.02 (-.05;.01)	.77 (.66;.89)***
<i>Caudate</i>	-.06 (-.23;.12)	-.54 (-.82;-.27)***	-.20 (-.36;-.04)*	-.01 (-.04;.03)	-.02 (-.05;.02)	.47 (.29;.65)***
<i>Putamen</i>	.05 (-.08;.19)	-.93 (-1.17;-.69)***	-.03 (-.15;.10)	.03 (-.002;.06)	.02 (-.01;.05)	.74 (.61;.88)***
<i>Pallidum</i>	.05 (-.09;.19)	<i>1.90 (1.46;2.35)***</i>	-.13 (-.26;.01)	.04 (-.01;.08)	.02 (-.03;.06)	.64 (.49;.78)***
<i>Hippocampus</i>	.04 (-.10;.17)	.92 (.62;1.21)***	-.03 (-.15;.10)	.01 (-.02;.05)	-.02 (-.05;.02)	.69 (.55;.82)***
<i>Amygdala</i>	.002 (-.13;.14)	.54 (.20;.89)**	.001 (-.12;.12)	-.02 (-.05;.02)	-.01 (-.04;.03)	.75 (.62;.88)***
<i>Accumbens area</i>	.02 (-.15;.20)	.69 (.12;1.27)*	.01 (-.15;.17)	-.01 (-.09;.06)	.03 (-.04;.10)	.54 (.37;.72)***

Note: Each row represents results of one linear mixed model analysis. Italics highlight models with significant influence of timepoint. *p<0.05; **p<0.01; ***p<0.001; 95% CI in parentheses. All betas are standardized. ICV denotes intracranial volume.

Supplementary Table S5. Tests for interactions between linear trajectories (time) and baseline age in predicting subcortical volumes (controlling for age, sex, scanning site, and total ICV).

Dependent Variable	Constant	Time	Age*Time	Age	Sex	Scanning Site	ICV
<i>Lateral ventricle</i>	-.06 (-.24;.12)	1.02 (.71;1.33)***	-.13 (-.45;.18)	.21 (.05;.37)**	.001 (-.03;.03)	.04 (.01;.07)**	.29 (.12;.45)***
<i>Thalamus</i>	.02 (-.09;.14)	-.51 (-.80;-.23)***	.08 (-.21;.38)	-.13 (-.24;-.03)*	.003 (-.03;.03)	-.02 (-.05;.01)	.77 (.66;.89)***
<i>Caudate</i>	-.06 (-.24;.12)	-.57 (-.84;-.29)***	-.29 (-.57;-.01)*	-.19 (-.35;-.03)*	-.005 (-.04;.03)	-.02 (-.05;.02)	.47 (.29;.65)***
<i>Putamen</i>	.05 (-.08;.19)	-.94 (-1.18;-.70)***	-.14 (-.39;.10)	-.02 (-.14;.10)	.03 (-.001;.06)	.02 (-.01;.05)	.74 (.61;.88)***
<i>Pallidum</i>	.05 (-.09;.19)	1.88 (1.45;2.31)***	-.57 (-1.01;-.12)*	-.12 (-.25;.01)	.04 (-.01;.08)	.02 (-.03;.06)	.64 (.50;.78)***
<i>Hippocampus</i>	.04 (-.10;.17)	.92 (.63;1.21)***	.12 (-.18;.41)	-.02 (-.15;.10)	.01 (-.03;.05)	-.02 (-.05;.02)	.69 (.55;.82)***
<i>Amygdala</i>	.01 (-.13;.14)	.52 (.19;.86)**	-.43 (-.76;-.09)*	-.03 (-.16;.09)	-.01 (-.05;.02)	-.01 (-.04;.03)	.74 (.62;.87)***
<i>Accumbens area</i>	.02 (-.15;.20)	.69 (.12;1.27)*	-.40 (-.95;.16)	.01 (-.15;.17)	-.01 (-.09;.06)	.03 (-.04;.10)	.54 (.37;.72)***

Note: Each row represents results of one linear mixed model analysis. Italics highlight models with significant age x time interactions. *p<0.05; **p<0.01; ***p<0.001; 95% CI in parentheses. All betas are standardized. ICV denotes intracranial volume.

Supplementary Table S6. Tests for main effect of attachment (AX and AV) across time on subcortical volumes (controlling for age, sex, scanning site, and total ICV).

Predictor variables	<i>Lateral Ventricle</i>	<i>Thalamus</i>	<i>Caudate</i>	<i>Putamen</i>	<i>Palidum</i>	<i>Hippocampus</i>	<i>Amygdala</i>	<i>Accumbens area</i>
AV	-0.06 (-.22;.11)	.05 (-.07;.16)	.06 (-.12;.23)	-.02 (-.16;.11)	-.02 (-.17;.12)	.03 (-.10;.17)	-.07 (-.20;.06)	-.001 (-.18;.17)
AX	.16 (-.01;.33)	-.02 (-.14;.11)	-.24 (-.42;-.06)*	-.01 (-.15;.13)	-.01 (-.16;.14)	-.02 (-.16;.12)	-.10 (-.24;.03)	-.06 (-.24;.12)
Time	.04 (.03;.06)** *	-.02 (-.03;-.01)***	-.02 (-.03;-.01)***	-.04 (-.05;-.03)***	.08 (.06;.10)** *	.04 (.03;.05)** *	.02 (.01;.04)**	.03 (.01;.05)*
Age	.27 (.11;.42)** *	-.14 (-.25;-.03)*	-.25 (-.42;-.09)**	-.03 (-.15;.10)	-.13 (-.26;.01)	-.03 (-.16;.09)	-.01 (-.13;.11)	-.001 (-.16;.16)
Sex	-.0004 (-.03;.03)	.004 (-.03;.03)	-.01 (-.04;.03)	.03 (-.002;.06)	.04 (-.01;.08)	.01 (-.02;.05)	-.02 (-.05;.02)	-.01 (-.08;.06)
Scanning site	.04 (.01;.07)**	-.02 (-.05;.01)	-.02 (-.06;.02)	.02 (-.01;.05)	.02 (-.03;.06)	-.02 (-.05;.02)	-.01 (-.04;.03)	.03 (-.05;.10)
ICV	.26 (.09;.43)**	.77 (.65;.89)** *	.50 (.33;.68)** *	.74 (.61;.88)** *	.64 (.49;.79)** *	.69 (.55;.83)** *	.77 (.64;.90)** *	.56 (.38;.74)** *
Constant	-.12 (-.29;.05)	.05 (-.06;.17)	-.03 (-.20;.15)	.11 (-.03;.25)	-.06 (-.21;.08)	-.02 (-.15;.12)	-.03 (-.16;.10)	-.02 (-.20;.16)

Note: Each column represents results of one linear mixed model analysis. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; 95% CI in parentheses. All betas are standardized. AV denotes attachment avoidance; AX, attachment anxiety; ICV, total intracranial volume.

Supplementary Table S7. Tests for interactions between linear trajectories (time) and attachment (AX and AV) in predicting subcortical volumes (controlling for sex, scanning site, and total ICV).

Predictor variables	Lateral Ventricle	Thalamus	Caudate	Putamen	Palidum	Hippocampus	Amygdala	Accumbens area
AV	-.06 (-.22;.11)	.05 (-.07;.16)	.06 (-.11;.23)	-.02 (-.16;.11)	-.02 (-.17;.12)	.03 (-.10;.17)	-.07 (-.20;.06)	-.002 (-.18;.17)
AX	.15 (-.03;.33)	-.02 (-.15;.10)	-.22 (-.41;-.04)*	-.01 (-.15;.14)	-.02 (-.17;.13)	-.02 (-.16;.12)	-.11 (-.24;.03)	-.01 (-.20;.17)
AV*time	.01 (-.01;.02)	.01 (-.01;.02)	.01 (-.002;.02)	.001 (-.01;.01)	-.01 (-.03;.01)	-.002 (-.01;.01)	.01 (-.01;.02)	.004 (-.02;.03)
AX*time	-.002 (-.02;.01)	.01 (-.01;.02)	-.005 (-.02;.01)	-.002 (-.01;.01)	.01 (-.01;.03)	.0001 (-.01;.01)	-.004 (-.02;.01)	-.02 (-.05;-.0005)*
Age	.27 (.11;.43)**	-.14 (-.25;-.03)*	-.26 (-.42;-.10)**	-.03 (-.15;.10)	-.13 (-.26;.01)	-.03 (-.16;.09)	-.01 (-.13;.11)	.002 (-.16;.17)
Sex	-.001 (-.03;.03)	.004 (-.03;.03)	-.01 (-.04;.03)	.03 (-.002;.06)	.04 (-.01;.08)	.01 (-.02;.05)	-.02 (-.05;.02)	-.01 (-.09;.06)
Scanning site	.04 (.01;.06)*	-.01 (-.04;.02)	-.02 (-.06;.02)	.02 (-.01;.05)	.02 (-.03;.07)	-.02 (-.05;.02)	-.01 (-.04;.03)	.02 (-.05;.09)
ICV	.26 (.09;.43)**	.77 (.65;.89)**	.50 (.33;.68)**	.74 (.61;.88)**	.64 (.49;.79)**	.69 (.55;.83)**	.77 (.64;.90)**	.55 (.38;.73)**
Time	.04 (.03;.06)**	-.02 (-.03;-.01)***	-.02 (-.03;-.01)***	-.04 (-.05;-.03)***	.08 (.06;.10)**	.04 (.03;.05)***	.02 (.01;.04)**	.03 (.01;.05)*
Constant	-.12 (-.29;.05)	.05 (-.06;.17)	-.03 (-.20;.15)	.11 (-.03;.25)	-.06 (-.21;.08)	-.02 (-.15;.12)	-.03 (-.16;.10)	-.02 (-.20;.16)

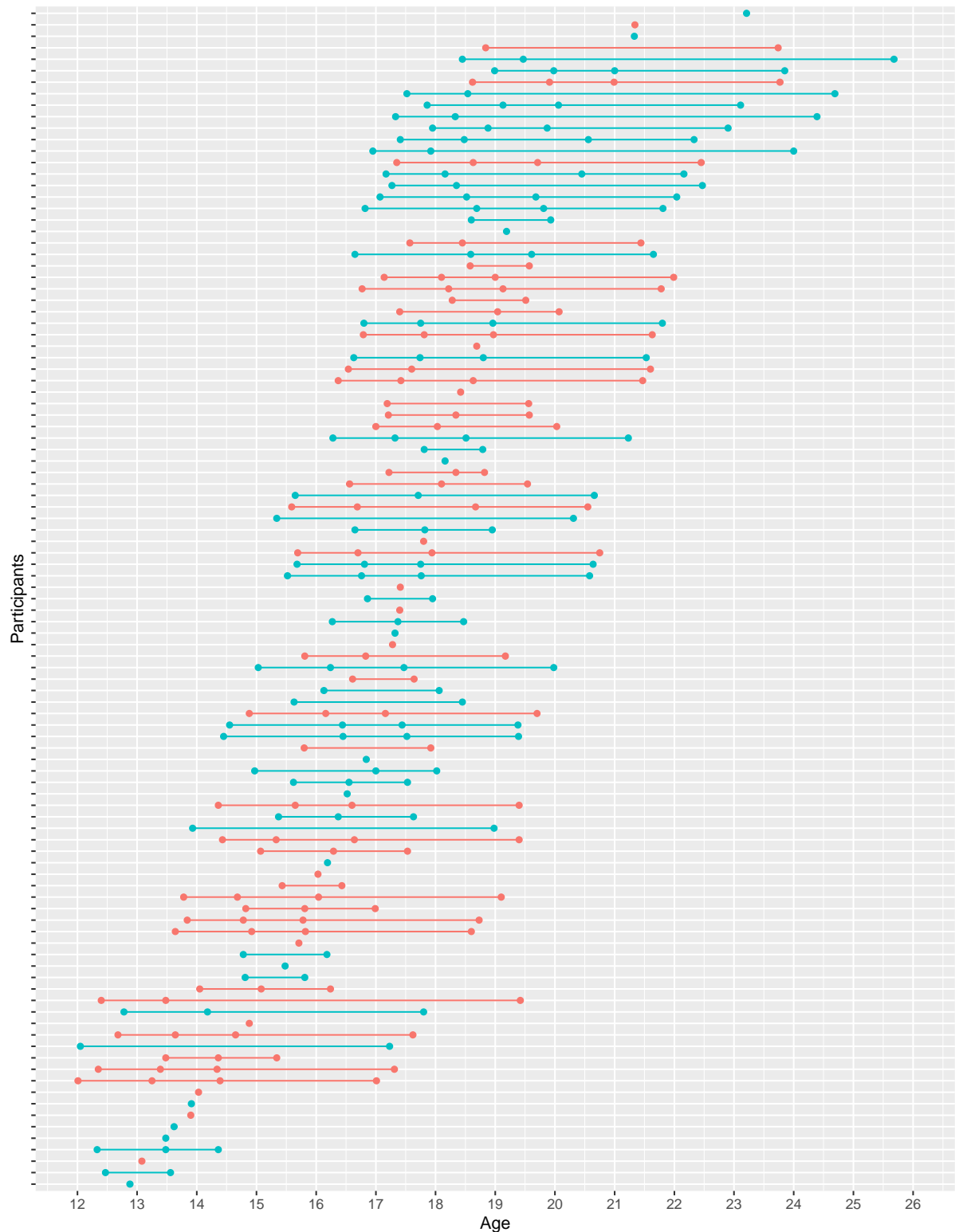
Note: Each column represents results of one linear mixed model analysis. *p<0.05; **p<0.01; ***p<0.001; 95% CI in parentheses. All betas are standardized. AV denotes attachment avoidance; AX, attachment anxiety; ICV, intracranial volume.

Supplementary Table S8. Tests for interactions between linear trajectories (time), age, and attachment (AX and AV) in predicting subcortical volumes (controlling for sex, scanning site, and total ICV).

Predictor variables	Caudate		Pallidum		Amygdala	
	Age*AV*time	Age*AX*time	Age*AV*time	Age*AX*time	Age*AV*time	Age*AX*time
AV	.02 (-.15;.20)	.04 (-.14;.21)	-.01 (-.16;.13)	-.02 (-.17;.13)	-.06 (-.19;.06)	-.07 (-.19;.06)
AX	-.22 (-.40;-.03)*	-.19 (-.38;-.01)*	-.001 (-.15;.15)	-.01 (-.16;.15)	-.08 (-.21;.05)	-.11 (-.25;.02)
Age	-.20 (-.36;-.03)*	-.21 (-.37;-.04)*	-.08 (-.22;.05)	-.09 (-.23;.05)	-.01 (-.13;.11)	-.01 (-.13;.11)
Sex	-.004 (-.04;.03)	-.003 (-.04;.03)	.04 (-.01;.09)	.04 (-.01;.08)	-.01 (-.05;.02)	-.01 (-.05;.02)
Scanning site	-.02 (-.05;.02)	-.02 (-.06;.02)	.01 (-.03;.06)	.02 (-.03;.07)	-.01 (-.04;.03)	-.01 (-.04;.03)
ICV	.51 (.33;.68)***	.48 (.30;.66)***	.64 (.50;.79)***	.64 (.49;.80)***	.76 (.63;.89)***	.78 (.65;.91)***
Time	-.02 (-.04;-.01)***	-.03 (-.04;-.01)***	.08 (.06;.10)***	.08 (.06;.10)***	.02 (.01;.04)**	.02 (.01;.04)**
AV*time	.01 (-.004;.02)		-.01 (-.03;.01)		.01 (-.01;.02)	
AX*time		-.01 (-.02;.001)		-.001 (-.02;.02)		-.01 (-.03;.004)
Age*time	-.02 (-.03;-.005)**	-.02 (-.03;-.003)*	-.02 (-.05;-.005)*	-.02 (-.04;-.004)*	-.02 (-.03;-.003)*	-.02 (-.03;-.005)**
Age*AV	-.04 (-.20;.12)		-.07 (-.21;.06)		-.08 (-.19;.04)	
Age*AV*time	-.01 (-.03;-.001)*		-.003 (-.02;.02)		-.01 (-.02;.01)	
Age*AX		.11 (-.06;.29)		.001 (-.14;.14)		-.06 (-.19;.06)
Age*AX*time		-.01 (-.02;.003)		-.01 (-.02;.01)		-.01 (-.02;.01)
Constant	-.02 (-.20;.16)	-.001 (-.18;.18)	-.05 (-.20;.09)	-.06 (-.21;.09)	-.02 (-.14;.11)	-.04 (-.17;.09)

Note: Each column represents results of one linear mixed model analysis. *p<0.05; **p<0.01; ***p<0.001; 95% CI in parentheses. All betas are standardized. AV denotes attachment avoidance; AX, attachment anxiety; ICV, total intracranial volume.

Supplementary Figure S1. Age repartition of participants.



Note: Blue represents males; red represents females. First points of a continuous line represent the age of participants at study baseline (T0). Continuous lines show the longitudinal age of participants, with bullet points representing the timepoint they attended. Single bullet points represent participants who came for only one timepoint.

Supplementary Figure S2. Non-linear (quadratic) normative neurodevelopmental trajectories in CT.

A time², neg association



B time², pos association



Note: Regions with significant quadratic trajectories of time also showed significant negative linear trajectories (Figure 1). Accordingly, **A** corresponds to regions with increasing cortical thinning over time (i.e., negative linear trend becoming steeper); and **B** corresponds to regions with flattened cortical thinning over time (i.e., a negative linear trend flattening out).

Supplementary analysis 1: Normative ageing-related trajectories

Cortical Thickness:

The first LMM revealed an overall negative linear neurodevelopmental trajectory of CT. In most parts of the cortex, as expected, aging (modelled as passing of time since baseline) was associated with reduced CT (mean values across all significant clusters: $t(267)=-6.55$, $p<.001$, $r=.372$); an opposite trajectory (i.e., increase in CT with aging) was only found in the occipital lobe (mean $t(267)=3.61$, $p<.001$, $r=.216$) (**Figure 1, A1**). Evidence for a non-linear (quadratic) neurodevelopmental trajectory of CT was also present but less pronounced (positive: mean $t(266)=2.27$, $p=.012$, $r=.138$; negative: mean $t(266)=-2.23$, $p=.013$, $r=.136$; **Supplementary Figure S2**). The follow-up LMMs showed that in almost all parts of the cortex, the negative linear neurodevelopmental trajectory of CT was interacting with participant age (mean $t(266)=3.19$, $p<.001$, $r=.192$), and, as expected, older participants (age at baseline) displayed a flattening of the linear trajectory – i.e., less pronounced decrease in CT with aging (**Figure 1, A2**).

Subcortical volume (SVs):

LMM analyses with SVs revealed significant linear neurodevelopmental trajectories in all ROIs. Both positive (lateral ventricle, pallidum, hippocampus, amygdala, accumbens) and negative (thalamus, caudate, putamen) main effects were found, suggesting increased and decreased SV with aging (time since baseline), respectively. We furthermore identified significant interactions between time and baseline age in the caudate, pallidum, and amygdala (see **Figure 2** and **Supplementary Tables S4 and S5**). No evidence for quadratic (non-linear) neurodevelopmental trajectories was found.

Discussion of the results obtained: Cortical thickness and subcortical volume across development

Although we were mainly interested in associations between CT and subcortical volume with adolescents' self-reported attachment, we first inspected the neurodevelopmental trajectories as such and as a function of adolescent age at study baseline. CT findings showed an overall decrease over the four measurement years and displayed a steeper CT decline in younger participants. For SV, we observed an increase in the pallidum, accumbens, hippocampus and amygdala, but a decrease in the caudate, putamen, and thalamus over the four measurement years. Furthermore, in the caudate, pallidum, and amygdala, there was an interaction with adolescents' age at study baseline, with strongest subcortical volume increase observed in younger and strongest volume decrease in older participants.

Overall, these findings dovetail with previous reports from a multisample neuroimaging study including four independent longitudinal samples (Tamnes et al., 2017). Findings showed that the cerebral cortex underwent widespread decreases in cortical volume and CT with increasing age. Additionally, results suggested that cortical volume is at its highest in early childhood and decreases in late childhood and throughout adolescence. Such findings were also supported by other studies (Aubert-Broche et al., 2013; Mills et al., 2014; Tamnes et al., 2013; Wierenga et al., 2014). The observed increase in occipital CT is consistent with the linearly increase over the age range showed in Giedd and colleagues' study (Giedd et al., 1999). However, in the same study, a peak of CT was found in the temporal lobe between ages 16 to 18, which is not consistent with the overall decrease trajectory observed in our study. This discrepancy could be explained by the fact that we did not find quadratic trajectories in the temporal lobe – which could be attributed to the smaller sample available to us. That said, in another study, the observed a peak of CT was in the temporal cortex around 8 years old (Ducharme et al., 2016), suggesting that there remain inconsistencies concerning the temporal

lobe within existing literature. Regarding subcortical structure development throughout adolescence, our CT results are in accordance with increases and decreases in volumes observed for particular subcortical structures in another multisample study (Herting et al., 2018).

Supplementary analysis 2: Scanner differences.

We conducted a non-parametric ANOVA (Kruskal-Wallis), with AV and AX as dependent variables and the scanning group as grouping factor (Group 1= participants scanned in BBL / Group 2= Participants scanned in HUG / Group 3= participants scanned at both sites). We did not find significant differences between the 3 groups, neither for AX or AV. Results of this analysis are presented below, first the results of the ANOVA, and then pairwise comparisons for AX and AV.

Kruskal-Wallis

	χ^2	df	p	ϵ^2
AV	4.713	2	0.095	0.05013
AX	0.663	2	0.718	0.00706

Pairwise comparisons - AV

		W	p
Scanner 1	Scanner 2	2.890	0.102
Scanner 1	Both Scanners	2.552	0.168
Scanner 2	Both Scanners	0.702	0.873

Pairwise comparisons - AX

		W	p
Scanner 1	Scanner 2	0.330	0.971
Scanner 1	Both Scanners	-0.379	0.961
Scanner 2	Both Scanners	-1.193	0.676

Supplementary analysis 3: Attrition differences

Out of the 95 participants that were included at T0, 21 dropped out of the longitudinal study (meaning they never came back at any other timepoint), while 74 of them came back for at least 1 of the longitudinal timepoints. We used a non-parametric ANOVA to compare the two groups (Group 1: participants with return visits vs Group 2: drop outs) on AV and AX scores and global MRI measures (total subcortical GM and total GM volumes). The variable sex was compared with chi square analysis. The two attrition groups did not significantly differ on any of the variables of interest.

Kruskal-Wallis

	χ^2	df	p
Sex	0.0912	1	0.763
Age	0.0219	1	0.822
Subcortical GM vol	0.2092	1	0.647
Total GM vol	0.0544	1	0.816
ICV	0.1594	1	0.690
AV	0.0993	1	0.753
AX	0.1912	1	0.662

Supplementary References

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