

	Left Hemisphere			Right Hemisphere		
	older age	younger age	<i>p</i>	older age	younger age	<i>P</i>
global	2.41 (.08)	2.58 (.13)	<.001	2.42 (.08)	2.54 (.12)	<.01
Caudal ACC	2.57 (.28)	2.76 (.28)	<.05	2.41 (.24)	2.49 (.32)	.39
Rostral ACC	2.74 (.27)	2.94 (.21)	<.05	2.55 (.43)	2.70 (.30)	.21
Caudal MFG	2.44 (.11)	2.59 (.19)	<.01	2.47 (.16)	2.49 (.21)	.81
Rostral MFG	2.23 (.13)	2.41 (.31)	<.05	2.22 (.18)	2.32 (.29)	.21
Lateral OFC	2.43 (.12)	2.53 (.35)	.26	2.49 (.19)	2.64 (.23)	<.05
Medial OFC	2.42 (.22)	2.59 (.35)	.09	2.37 (.22)	2.40 (.24)	.69
Pars opercularis	2.51 (.12)	2.72 (.35)	<.05	2.58 (.24)	2.66 (.18)	.27
Pars orbitalis	2.40 (.23)	2.56 (.53)	.22	2.50 (.23)	2.64 (.30)	.11
Pars triangularis	2.28 (.11)	2.60 (.35)	<.001	2.40 (.22)	2.58 (.26)	<.05
Superior frontal G.	2.55 (.11)	2.73 (.17)	<.01	2.53 (.12)	2.59 (.14)	.20
Frontal pole	2.39 (.36)	2.42 (.38)	.80	2.25 (.33)	2.45 (.45)	.14
Insula	2.96 (.22)	3.05 (.22)	.21	2.91 (.27)	3.02 (.28)	.21

S-Table 1: Mean Thickness of Global and ROI according to Age Group in Study 1; unit: mm(millimeters) ; p-values refer to group differences comparing subjects of younger and older age

	Left Hemisphere			Right Hemisphere		
	older age	younger age	<i>p</i>	older age	younger age	<i>P</i>
global	2.24 (.12)	2.47 (.14)	<.001	2.23 (.11)	2.45 (.13)	<.001
Caudal ACC	2.53 (.26)	2.65 (.22)	.09	2.32 (.25)	2.48 (.20)	<.05
Rostral ACC	2.63 (.25)	2.86 (.28)	<.01	2.55 (.30)	2.71 (.22)	<.05
Caudal MFG	2.34 (.16)	2.60 (.18)	<.001	2.32 (.17)	2.52 (.15)	<.001
Rostral MFG	2.04 (.13)	2.24 (.21)	<.001	1.96 (.16)	2.13 (.20)	<.01
Lateral OFC	2.31 (.16)	2.49 (.22)	<.01	2.32 (.16)	2.47 (.25)	<.05
Medial OFC	2.15 (.19)	2.30 (.18)	<.01	2.11 (.20)	2.25 (.22)	<.05
Pars opercularis	2.37 (.16)	2.59 (.16)	<.001	2.35 (.13)	2.58 (.16)	<.001
Pars orbitalis	2.13 (.28)	2.40 (.36)	<.01	2.19 (.20)	2.40 (.35)	<.05
Pars triangularis	2.17 (.19)	2.38 (.21)	<.01	2.10 (.15)	2.33 (.18)	<.001
Superior frontal G.	2.36 (.18)	2.70 (.21)	<.001	2.30 (.20)	2.61 (.23)	<.001
Frontal pole	1.82 (.58)	2.18 (.70)	.06	1.72 (.54)	2.09 (.61)	<.05
Insula	2.81 (.20)	3.10 (.16)	<.001	2.80 (.17)	3.04 (.15)	<.001

S-Table 2: Mean Thickness of Global and ROI According to Age Group in Study 2; unit: mm(millimeters) ; p-values refer to group differences comparing subjects of younger and older age

		Left Hemisphere						Right Hemisphere					
		all subjects		<i>older age</i>		<i>younger age</i>		all subjects		<i>older age</i>		<i>younger age</i>	
		<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>
Study 1	Age	-.707**	<.001	-.725**	<.001	-.565*	.012	-.617**	<.001	-.427	.068	-.561*	.012
	RR	-.336*	.039	-.169	.490	-.136	.579	-.173	.298	.008	.973	.101	.680
	RMSSD	.228	.169	.184	.452	-.163	.504	.301	.066	.199	.415	.044	.857
Study 2	Age	-.707**	<.001	-.141	.522	-.492**	.009	-.705**	<.001	-.158	.472	-.499**	.008
	RR	.055	.703	.091	.680	-.066	.743	.057	.693	.140	.523	-.141	.483
	RMSSD	.328*	.020	.048	.827	.173	.388	.307*	.030	.072	.745	.093	.644

S-Table 3: Zero-Order Correlations of global Cortical Thickness with Age, Resting State Heart Rate (RR), and Resting State Heart Rate Variability (RMSSD) in Study 1 and Study 2; values represent correlation coefficients (*r*) and their respective *p*-values; * and bold: highlights a significant correlation on the $p < .05$ level; ** and bold: highlights a significant correlation on the $p < .01$ level

Study 1	Left Hemisphere		Right Hemisphere	
	r	p	r	p
Caudal ACC	-.099	.560	.060	.722
Rostral ACC	.004	.982	.150	.375
Caudal MFG	.052	.760	.076	.655
Rostral MFG	-.094	.579	.175	.301
Lateral OFC	.253	.131	.209	.215
Medial OFC	-.113	.504	-.029	.865
Pars opercularis	-.157	.355	.154	.363
Pars orbitalis	.179	.289	.151	.371
Pars triangularis	-.278	.096	.023	.893
Superior frontal G.	-.093	.585	-.028	.868
Frontal pole	.056	.746	-.022	.895
Insula	.174	.303	.035	.838

S-Table 4: Partial Correlations of Cortical Thickness in Selected Regions of Interest (ROI) with Resting State Heart Rate Variability when controlling age for each hemisphere (Study 1); values represent correlation coefficients (r) and their respective p-values; ACC: anterior cingulate cortex; MFG: middle frontal gyrus; OFC: orbital frontal cortex; * and bold: highlights a significant correlation on the $p < .05$ level; ** and bold: highlights a significant correlation on the $p < .01$ level

Study 2	Left Hemisphere		Right Hemisphere	
	r	p	r	p
Caudal ACC	.260	.072	.026	.859
Rostral ACC	.288	.045	.031	.834
Caudal MFG	.170	.242	.141	.334
Rostral MFG	.097	.507	.017	.909
Lateral OFC	.164	.261	.003	.982
Medial OFC	.051	.726	.087	.551
Pars opercularis	.197	.176	.091	.535
Pars orbitalis	.000	.999	.048	.741
Pars triangularis	.170	.243	.128	.381
Superior frontal G.	.104	.475	.078	.594
Frontal pole	-.023	.875	-.063	.669
Insula	.074	.613	.121	.408

S-Table 5: Partial Correlations of Cortical Thickness in Selected Regions of Interest (ROI) with Resting State Heart Rate Variability when controlling age for each hemisphere (Study 2); values represent correlation coefficients (r) and their respective p-values; ACC: anterior cingulate cortex; MFG: middle frontal gyrus; OFC: orbital frontal cortex; * and bold: highlights a significant correlation on the $p < .05$ level; ** and bold: highlights a significant correlation on the $p < .01$ level

Study 1	Left Hemisphere						Right Hemisphere					
	all subjects		<i>older age</i>		<i>younger age</i>		all subjects		<i>older age</i>		<i>younger age</i>	
	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>
Caudal ACC	.042	.805	-.099	.697	-.133	.600	.111	.513	-.153	.544	.173	.492
Rostral ACC	.151	.373	-.101	.691	.119	.637	.157	.352	-.173	.493	.450	.061
Caudal MFG	.152	.368	.329	.183	-.033	.897	.047	.782	.067	.791	.163	.519
Rostral MFG	-.024	.886	.356	.147	-.201	.423	.202	.229	.343	.163	.159	.530
Lateral OFC	.313	.059	.426	.078	.254	.309	.257	.125	.595*	.009	.009	.972
Medial OFC	-.037	.826	.169	.503	-.212	.399	-.022	.896	-.043	.866	.022	.931
Pars opercularis	-.136	.422	.274	.271	-.290	.243	.187	.268	.280	.260	.153	.544
Pars orbitalis	.217	.197	.233	.352	.226	.366	.162	.337	.513*	.030	-.028	.913
Pars triangularis	-.122	.472	-.143	.570	-.335	.174	.114	.503	.285	.251	-.094	.711
Superior frontal G.	.098	.565	-.182	.469	-.024	.925	-.023	.894	-.083	.742	.092	.715
Frontal pole	.047	.783	.164	.515	.039	.881	.027	.874	.036	.888	.014	.957
Insula	.230	.172	-.098	.700	.376	.124	-.017	.922	-.024	.925	.028	.912

S-Table 6: Partial Correlations of Cortical Thickness in Selected Regions of Interest (ROI) with Resting State Heart Rate Variability when controlling thickness of non-ROI regions for each hemisphere (Study 1); values represent correlation coefficients (*r*) and their respective *p*-values; ACC: anterior cingulate cortex; MFG: middle frontal gyrus; OFC: orbital frontal cortex; * and bold: highlights a significant correlation on the $p < .05$ level; ** and bold: highlights a significant correlation on the $p < .01$ level

Study 2	Left Hemisphere						Right Hemisphere					
	all subjects		<i>older age</i>		<i>younger age</i>		all subjects		<i>older age</i>		<i>younger age</i>	
	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>
Caudal ACC	.239	.098	.377	.084	.139	.499	.015	.917	.091	.689	-.106	.607
Rostral ACC	.315*	.028	.298	.178	.322	.109	.003	.985	-.033	.884	.068	.740
Caudal MFG	.247	.087	.282	.204	.253	.213	.129	.376	.082	.716	.205	.315
Rostral MFG	.075	.609	-.021	.926	.223	.273	-.043	.772	-.233	.297	.263	.195
Lateral OFC	.133	.363	.236	.290	.157	.443	-.098	.504	.010	.964	-.069	.739
Medial OFC	.082	.575	-.117	.604	.358	.073	.071	.628	.045	.842	.131	.522
Pars opercularis	.250	.083	.223	.318	.341	.088	.100	.493	.144	.523	.011	.958
Pars orbitalis	-.070	.633	-.350	.111	.284	.160	-.004	.979	-.180	.424	.244	.230
Pars triangularis	.167	.252	.378	.083	.148	.470	.164	.259	.154	.494	.123	.549
Superior frontal G.	.175	.228	.004	.987	.254	.211	.077	.600	-.103	.649	.214	.293
Frontal pole	-.116	.429	-.298	.178	.264	.193	-.158	.279	-.463*	.030	.348	.082
Insula	.091	.536	.180	.423	-.095	.643	.131	.370	.236	.290	-.092	.653

S-Table 7: Partial Correlations of Cortical Thickness in Selected Regions of Interest (ROI) with Resting State Heart Rate Variability when controlling thickness of non-ROI regions for each hemisphere (Study 2); values represent correlation coefficients (*r*) and their respective *p*-values; ACC: anterior cingulate cortex; MFG: middle frontal gyrus; OFC: orbital frontal cortex; * and bold: highlights a significant correlation on the $p < .05$ level; ** and bold: highlights a significant correlation on the $p < .01$ level

Study 1	Left Hemisphere						Right Hemisphere					
	all subjects		<i>older age</i>		<i>younger age</i>		all subjects		<i>older age</i>		<i>younger age</i>	
	r	p	r	p	r	p	r	p	r	p	r	p
Caudal ACC	-.349*	.032	-.211	.387	-.358	.132	-.085	.611	.067	.786	-.177	.468
Rostral ACC	-.313	.055	-.239	.325	-.092	.709	.022	.895	.150	.540	.021	.932
Caudal MFG	-.125	.454	.149	.542	-.029	.905	.063	.709	-.087	.723	.356	.134
Rostral MFG	-.278	.091	-.188	.442	-.214	.380	-.139	.406	-.239	.325	.119	.627
Lateral OFC	-.028	.867	.156	.523	.007	.977	.002	.990	.206	.396	.101	.681
Medial OFC	-.222	.180	-.090	.715	-.213	.382	-.036	.828	.130	.595	-.263	.276
Pars opercularis	-.184	.268	.157	.520	-.198	.415	-.143	.393	-.211	.387	.240	.323
Pars orbitalis	.065	.697	.308	.200	.117	.635	-.045	.790	.211	.385	-.130	.597
Pars triangularis	-.263	.110	.098	.689	-.204	.402	-.273	.097	-.249	.305	-.038	.876
Superior frontal G.	-.319	.051	-.192	.430	-.125	.609	-.184	.270	-.236	.330	.054	.825
Frontal pole	-.065	.703	-.070	.775	-.028	.913	-.166	.319	-.198	.416	.061	.803
Insula	-.027	.874	-.031	.901	.232	.339	.078	.643	.241	.320	.081	.741

S-Table 8: Zero-Order Correlations of Cortical Thickness in Selected Regions of Interest (ROI) with Resting State Heart Rate (RR) (Study 1); values represent correlation coefficients (r) and their respective p-values; ACC: anterior cingulate cortex; MFG: middle frontal gyrus; OFC: orbital frontal cortex; * and bold: highlights a significant correlation on the $p < .05$ level; ** and bold: highlights a significant correlation on the $p < .01$ level

Study 2	Left Hemisphere						Right Hemisphere					
	all subjects		<i>older age</i>		<i>younger age</i>		all subjects		<i>older age</i>		<i>younger age</i>	
	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>
Caudal ACC	.160	.267	.205	.347	.055	.785	.120	.405	.214	.326	-.115	.568
Rostral ACC	.176	.220	.178	.417	.194	.332	.142	.326	.264	.224	-.180	.368
Caudal MFG	.097	.502	.176	.422	-.058	.773	.029	.842	.063	.776	-.126	.532
Rostral MFG	-.003	.985	.004	.987	-.087	.666	.025	.865	.035	.874	-.045	.824
Lateral OFC	.070	.628	.094	.670	.017	.935	.006	.967	.177	.420	-.236	.236
Medial OFC	.079	.585	-.005	.983	.197	.325	.215	.134	.336	.117	.039	.846
Pars opercularis	.169	.241	.204	.351	.136	.498	.151	.296	.376	.077	-.140	.488
Pars orbitalis	.043	.769	-.120	.587	.229	.251	.057	.694	.126	.567	-.028	.888
Pars triangularis	.150	.297	.188	.390	.101	.617	.126	.385	.305	.157	-.120	.552
Superior frontal G.	.041	.777	.030	.893	-.028	.889	.041	.775	.043	.846	-.033	.869
Frontal pole	.026	.859	-.002	.991	.034	.866	-.089	.538	-.144	.512	-.085	.672
Insula	.086	.553	.137	.533	-.090	.655	.133	.356	.282	.192	-.181	.366

S-Table 9: Zero-Order Correlations of Cortical Thickness in Selected Regions of Interest (ROI) with Resting State Heart Rate (RR) (Study 2); values represent correlation coefficients (*r*) and their respective *p*-values; ACC: anterior cingulate cortex; MFG: middle frontal gyrus; OFC: orbital frontal cortex; * and bold: highlights a significant correlation on the $p < .05$ level; ** and bold: highlights a significant correlation on the $p < .01$ level