Supplementary Material

Methods

Stimuli

The paradigm included three narratives, each representing either secure-autonomous, insecure-dismissing or insecure-preoccupied attachment narratives, which were excerpts of the semi-structured Adult Attachment Interview (AAI, George et al. 1984, 1985, 1996). This assessment of attachment representations in adulthood explores essential early attachment-related childhood experiences with caretakers such as separation, loss or trauma, and the impact of these experiences on development and mental functioning (Hesse, 2008). The excerpts chosen consisted of answers to question 3 and 4 of the AAI which probe the relationship of the interviewee to father and mother and ask for concrete memories with the parent in early childhood. The interviews chosen for this study were categorized as dismissing (Ds1/2), preoccupied (E2) and secure-autonomous (F3). To prevent the influence of different speakers and to guarantee the anonymity of the interviewee, interview excerpts were authentically recited by Anna Buchheim who had conducted the AAIs. Additionally, they were chosen as prototypically reflecting the three main categorical classification types of attachment as outlined above.

Two previous studies have validated these stimuli and studied the effect of listening to them (Kirchmann, Thomas, Brüderle, & Strauß, 2011; Martin, Buchheim, Berger, & Strauss, 2007). In order to control for length of the auditory input, the original narratives, which differed in duration, were adapted to have an approximate equal length. For our study, the two longer narratives were shortened to 4:58 min (insecure-preoccupied) and 4:08 min (secure-autonomous) to approximately match the length of

the dismissing narrative (3:46 min), which is naturally shorter due to fragmented speech patterns. Attachment-specific speech patterns, prosody, and content were retained. This process was validated by a reliable and experienced AAI rater.

MRI Data Acquisition, Preprocessing and Functional Connectivity Analysis

Table 1: post-hoc paired t-test with the median of the Framewise discplacement (FD) values of every subject and over all four conditions

Condition	**Bonferroni corrected p-value**
baseline vs insecure-preoccupied	**p=0.277**
baseline vs insecure-dismissing	**p=0.682**
baseline vs secure	**p=0.077**
insecure-preoccupied vs insecure-dismissing	**p=1.000**
insecure-preoccupied vs secure	**p=1.000**
Insecure-dismissing vs secure	**p=1.000**

Results

Table 2: Functional Connectivity of left CN in the main contrasts between the different attachment-specific narratives and baseline, listed with peak coordinates and best estimate of brain region.

	Brain region	**X**	**Y**	**Z**	**Number of Voxel (k)**	**T-Value**	**Z-Value**	**P-Value, corrected**
Baseline > dismissing	TPJ R	54	-26	24	679	6.17	5.57	0.0017
	TPJ L	-52	-30	26	75	4.19	3.97	0.0150
	dorsal PCC R	14	-32	42	151	5.00	4.63	0.0059

	IPL R	54	4	12	699	5.35	4.93	0.0031
	"DLPFC" L	-56	2	18	309	5.28	4.88	0.0036
	Middle frontal Gyrus R	54	0	44	16	4.17	3.95	0.0154
	Superior temporal lobe L	-44	-26	12	142	4.58	4.30	0.0090
	SMA R	2	-8	58	112	4.57	4.30	0.0090
	Thalamus L	-18	-30	6	42	4.52	4.25	0.0092
	Thalamus R	12	-18	2	22	4.17	3.96	0.0153
	Precuneus R	8	-44	52	19	4.04	3.85	0.0185
	Calcarine R	6	-74	18	15	3.68	3.53	0.0313
Dismissing > preoccupied	superior frontal gyrus R	18	36	46	130	6.02	5.45	0.0018

Coordinates are indicated in MNI space. R = right, L = left, DLPFC = dorsolateral prefrontal cortex, IFG = inferior frontal gyrus, TPJ = temporo-parietal junction, IPL = Inferior parietal lobule, PCC = posterior cingulate cortex, SMA = supplementary motor area

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