

**Table 1.****Four dimensions of mentalizing: Core functions and underlying neural circuits**

<b>Dimension</b>	<b>Features</b>	<b>Neural circuits</b>
<b>Automatic</b>	Unconscious, parallel, fast	amygdala
	processing of social	basal ganglia
	information that is reflexive	ventromedial prefrontal
	and requires little effort,	cortex (VMPFC)
	focused attention, or	
	intention; therefore prone to	lateral temporal cortex
	bias and distortions,	(LTC)
	particularly in complex	dorsal anterior cingulate
	interpersonal interactions	cortex (dACC)
	(i.e. when arousal is high)	
<b>Controlled</b>	Conscious, verbal, and	lateral prefrontal cortex
	reflective processing of	(LPFC)
	social information that	medial prefrontal cortex
	requires the capacity to	(MPFC)
	reflect consciously and	
	deliberately on and make	lateral parietal cortex
	accurate attributions about	(LPAC)
the emotions, thoughts, and	medial parietal cortex	
intentions of self and others.	(MPAC)	
Relies heavily on effortful		
control and language	medial temporal lobe (MTL)	

rostral anterior cingulate  
cortex (rACC)

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<b>Internal</b>	Understanding one's own mind and that of others through a direct focus on the mental interiors of both the self and others	Medial frontoparietal network (more controlled)
<b>External</b>	Understanding one's own mind and that of others based on external features (such as facial expressions, posture, and prosody)	Lateral frontotemporoparietal (more automatic)
<b>Self-Other</b>	Shared networks underpin the capacity to mentalize about the self and others	Shared Representation system (more automatic) versus Mental State Attribution system (more controlled)
<b>Cognitive-Affective</b>	Mentalizing may focus on more cognitive features (more controlled), such as belief-desire reasoning and perspective-taking versus more affective features	Cognitive mentalizing involves several areas in prefrontal cortex, affectively-oriented mentalizing seems

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(more automatic), including particularly related to the  
affective empathy and VMPFC  
mentalized affectivity (the  
feeling and thinking-about-  
the-feeling)

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