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Dynamic bicultural brains: fMRI study of their flexible neural representation of self and significant others in response to culture primes

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Key words: culture priming, independent self-construal, interdependent self-construal, functional magnetic resonance imaging (fMRI), medial prefrontal cortex, self-inclusiveness.

Introduction

[illegible]

Self-inclusiveness and self-other differentiation: Evidence from social and cultural psychology

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Self-inclusiveness and self-other differentiation: Evidence from cultural neuroscience

[illegible]

Self-inclusiveness and self-other differentiation in the bicultural brain: Bicultural frame switching model

[illegible]

Method

[illegible]

Bicultural participants

Western and Chinese culture primes

Scanning procedure

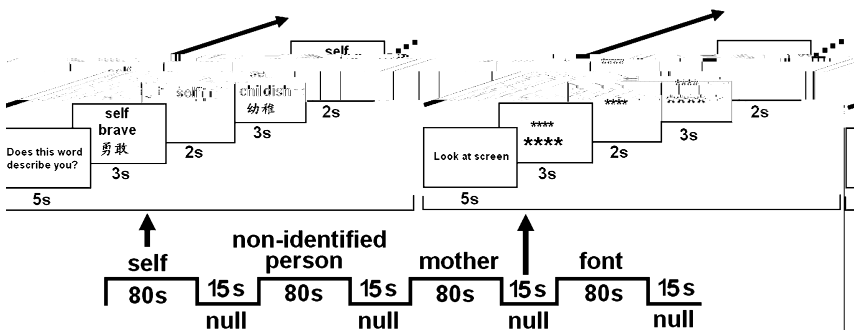

Figure 1 Illustration of the stimuli and procedure.

[illegible]

Results

Brain imaging

[illegible]

Table 1 Regions of significant increased activation in comparison between self, mother and NIP with font judgments (corrected, $p < 0.05$)

[illegible]	[illegible]	[illegible]	X	Y	[illegible]	Z-[illegible]
[illegible]						
[illegible]						
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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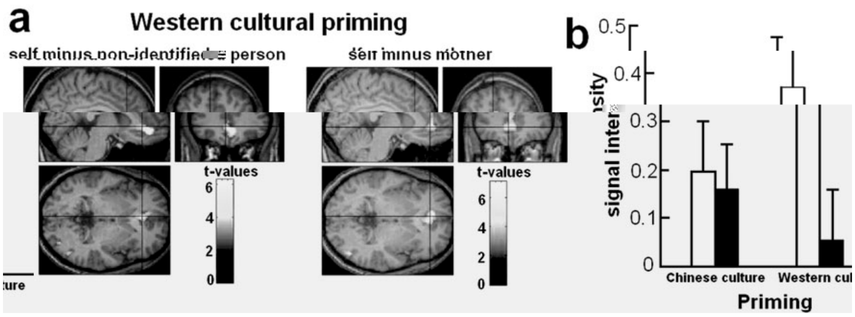

Figure 2 (a) Brain activation observed in the contrasts between self *vs* non-identified person and between self *vs* mother after Western cultural priming. (b) Results of region-of-interest analysis of the parameter estimates of signal intensity in the ventral medial prefrontal cortex. ■, non-identified person; □, self.

Table 2 Mean behavioural performances (*SD*) during the scanning procedure

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible] (%)				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] .1 (10.1)	[illegible]	1.1 (0.) [illegible]	[illegible]
[illegible] ( )				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible] (*F*(, 1) = [illegible], *p* < 0.001) [illegible]

[illegible] (*F*(1,) = [illegible], *p* < 0.0 , *MSE* = 0.). [illegible] ANOVA [illegible]

Behavioural performance

[illegible]

[illegible] ANOVA [illegible] (*P* > 0.1). [illegible] ANOVA [illegible] *F*(, 1) = [illegible], *p* < 0.0001. [illegible]

Discussion

[illegible] *et al.*' (00) [illegible]

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[illegible] (2010).

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