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ABSTRACT

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Introduction

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- ., 2010; ., 2011), ▼ (., 2013;
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J ., 2005; ., 2007; , 2007; .,
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/ _ , , (, 2011)
(., 2009; - ., 2013) fl (
(, 2012; ., ., 2008).
2013, 2014) . fi

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E-mail address: . . (.).
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1053-8119/ 2015 ▼ . .

(., 2005) (., 2010). (
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2011), fi , 1992). / _
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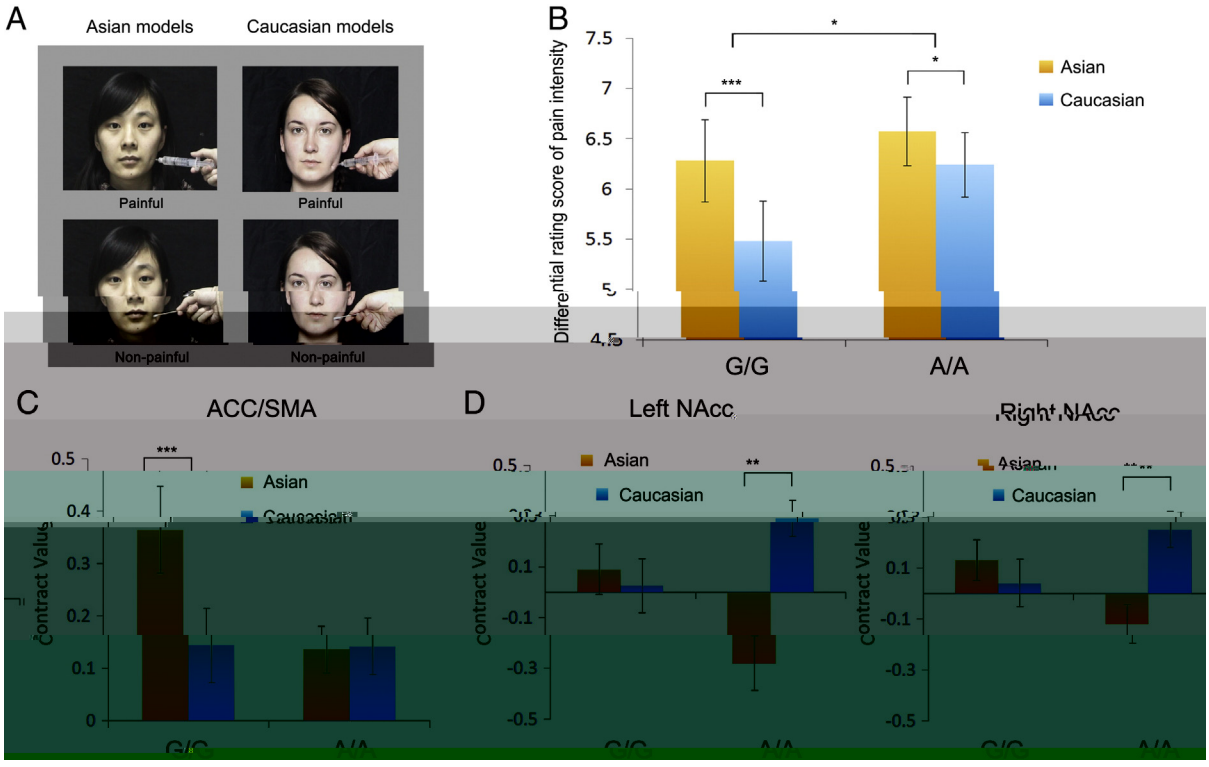

Fig. 1. ( ) - .( )
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/ / .( ) (. -) / /
. * < 0.05; ** < 0.01; *** < 0.001.

Materials and methods

Participants

1532 j . 30 / 30 / .

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(, 2009). ,

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Genotyping

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2.5 μ , 0.25 μ

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480 (, j ,).

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(688 / , 683 / , 161 / , $\chi^2(2, = 1532) = 0.20$,

$= 0.66$).

Stimuli and procedure

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Table 1

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(., 2010; , 2012).

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(., 2003), ,

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fMRI imaging data acquisition

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j . -

12- (64 64 32

3.44 3.44 5.0 ,

( ) = 2000 , ( ) = 30 , fl = 90 , fi

= 24 24). - 1-

(256 256 144 1 1 1.33 ,

= 2530 , = 3.37 , ( ) = 1100 , fl = 7) .

fMRI data analysis

- 8 (, ,). - , fi - . fi . ( ) 2 2 2 . fi - / - ( ) 8 . - . fi - - ( ) / . ., 2009), fi / (: / / = 4/40/38, ., 2009). fi (: / / = −6/5/−5 6/2/−2, ., 2013). fi 5 8. j ( ) (. -) (.) - j (/ . /) - j . ( ) (, 2014) . , fi . - . fi :

$$d_{RBE} = (M_{Asian} - M_{Caucasian})/S_{Caucasian}$$

M_{Asian} . - , $M_{Caucasian}$. - , . - (, 2014). fi ( ) 95% .

, :

$$d_{OXTR} = (M_{GG} - M_{AA})/S_{Pooled} \qquad S_{Pooled}\sqrt{\frac{df_{GG}SS_{GG} + df_{AA}SS_{AA}}{df_{GG} + df_{AA}}}$$

M_{GG} / , M_{AA} / , SS_{GG} / , SS_{AA} / .

, . fi fi . fi fi , . - .

. fi fi $p < 0.001$ ( ) < 0.05 ( ).

/ - - . / “ . (2009) ”. fi - . “ . (2013) ”. fi (2.1). / ( ) - ( ) ( ) ( ) . (/) ( ) . - / ( ) (, 1991). / ( ), - . fi / ( ) ( ).

Results

Behavioral results

fi - (1). j ( ) (. -) (.) - j (/ . /) - j . - (6.84 . 0.70, (1,58) = 565.41, < 0.001, = 6.14, 95% : 5.88, 6.40 , = 7.51), / / ((1,58) = 1.01, = 0.32, = −0.26). fi ((1,58) = 37.49, < 0.001, = 0.57, 95% : 0.47, 0.66 , = 0.28), j . fi (7.13 . 6.55, (59) = 6.30, < 0.001, = 0.58, 95% : 0.48, 0.67 , = 0.29) - (0.71 . 0.70, (59) = 0.15, = 0.88, = 0.01, 95% : −0.04, 0.06 , = 0.01). , j / / - fi ((1,58) = 6.53, <

Table 2
j - .

/ -		/ -	
6.92	0.38	7.33	0.35	6.59	0.40
0.64	0.17	0.77	0.14	1.48	0.30
6.14	0.40	6.96	0.33	6.10	0.40
0.67	0.18	0.73	0.13	1.30	0.29

= 0.23 0.09). , - fi / / (_(1,58) = 2.05, = 0.16, = 0.37). fi (>0.1, 1).

Neuroimaging results

fi / _ 53576. / _ (., 2009). / _ fi - ($F(1,58) = 23.04$, $p < 0.001$) ($F(1,58) = 5.11$, $p < 0.03$). _ , / _ (fi (. -) (. -)) fi j (= 0.33, < 0.02, _ 1), fi j . _ , fi ($F(1,58) = 9.78$, $p < 0.005$), / _ / / . - fi / _ / (_(1,29) = 15.71, < 0.001) / (_(1,29) = 0.35, = 0.56, _ . 1). ( ) 0.22 95% : 0.16, 0.28 0.57 / , −0.04 −0.10, 0.02 −0.12 / (3). / , / / _ (= 0.81).

(fi (. -) (. -)) 53576. “ . (2013)” fi (: _(1,58) = 11.29, = 0.001; : _(1,58) = 7.03, = 0.01). - fi / (: _(1,29) = 14.03, = 0.001; : _(1,29) = 8.46, < 0.01) / (: _(1,29) = 0.59, = 0.45; : _(1,29) = 0.64, = 0.43, _ . 1), / (. -) / . ( ) −0.51 (, 95% : −0.65, −0.37 , : −0.95) −0.38 (, 95% : −0.51, −0.25 , : −0.94) / , 0.09 (, 95% : −0.03, 0.20 , : 0.24) 0.10 (, 95% : −0.03, 0.23 , : 0.24) / (3). / , / - (: = 0.87; : = 0.68). - . fi / _ , , ( ), . - (_ . 2, 2). / , - , / - . , . - fi / _ , / - . , , , / / . - fi / _ . ((– -) (– -)) fi / _ (/ / = 0/36/42) / / (_ . 3). - . - (/ / = −4/12/−8) / / (_ . 4). - fi / _ .

Table 3
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/ _				
/				
	0.22	0.01	−0.03	0.09	0.10
95%	0.16, 0.28	−0.06, 0.08	−0.07, 0.02	−0.03, 0.20	−0.03, 0.23
	0.57	0.02	−0.13	0.24	0.24
/					
	−0.04	0.01	−0.02	−0.51	−0.38
95%	−0.10, 0.02	−0.04, 0.06	−0.06, 0.02	−0.65, 0.37	−0.51, −0.25
	−0.12	0.04	−0.10	−0.95	−0.94

((– -)
(– -))
/ _ (/ / = 0/36/42) /
(/ / = −4/8/−6) /
< 0.05 (- _).
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fi (0.24 0.47, (59) = 3.06,

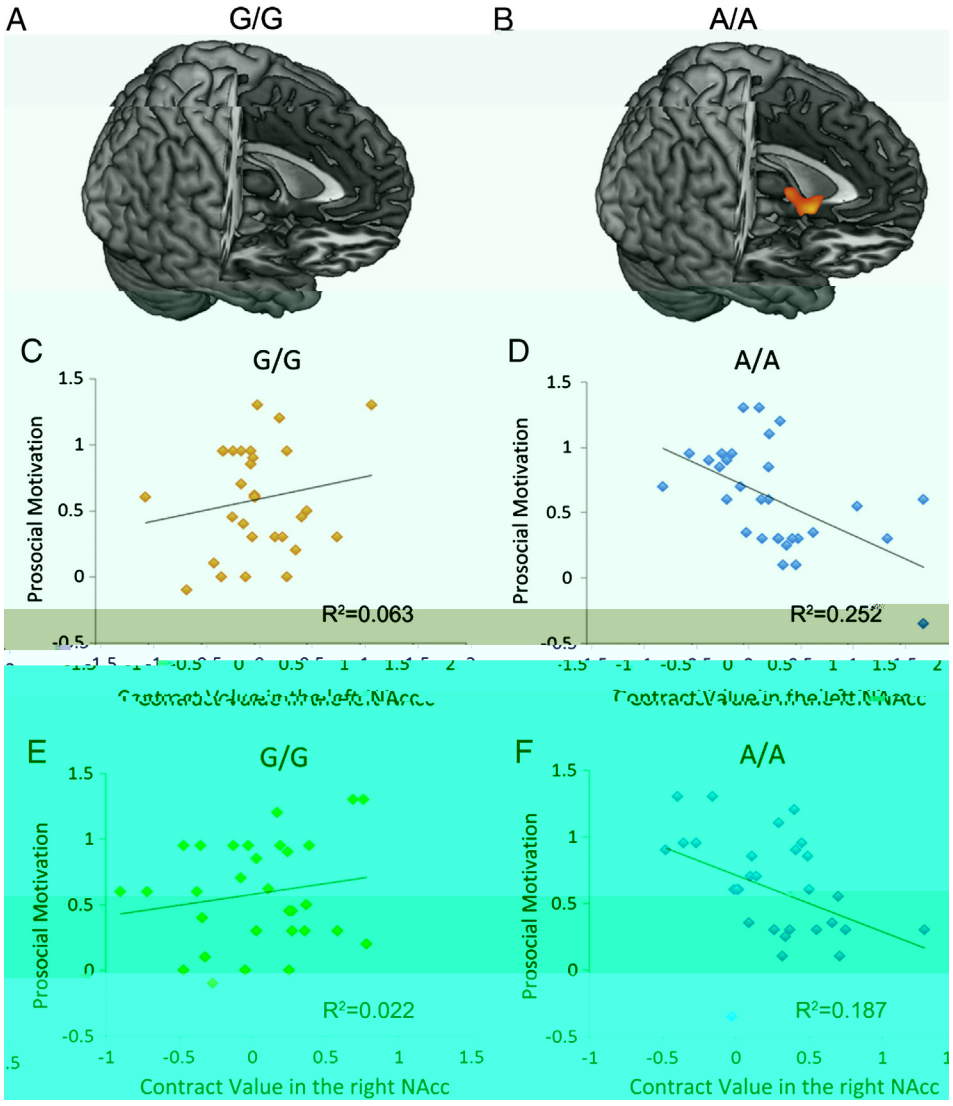

Fig. 4. - .( ) ( ) (– -) (– -)) / / .(–) -
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/ - = −0.43, < 0.05, . 4) / (
(3). : = 0.25, = 0.18, : = 0.15, = 0.43, . 4
_). fi
fi 53576
(> 0.05).
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(4 5). fi
, fi

. (> 0.05).
fi -
(. - **Discussion**
: 0.67 . 0.60, (59) = 2.35, < 0.05). ,
fi -
((58) = 0.20 & 0.47, > 0.6). 53576
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/ (: = −0.50, < 0.005, : j .▾ ,

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, ., , ., , ., , ., 2015. ( )J 5( )-296624,7714(01)96 23(. .*)-9 (66(97103-)36(8710)28( )34( )30(5(8733(.)30(,)-28 10 J/ (148(.,)-271(0 0-19( )18-