Supplementary Tables

Supplementary Table 1

Ethnic group differences in post-trial pain rating

Measure	*t*	*df*	*p*	*b*	CI
Within-trial pain intensity					
Temperature	**17.02**	**84**	**< .001**	**6.68**	**5.92, 7.44**
AA - (HA + WA)	**2.79**	**84**	**.007**	**9.73**	**2.97, 16.49**
HA - WA	.09	84	.93	.18	-3.63, 3.98
[AA - (HA + WA)] * Temp	**2.50**	**84**	**.01**	**2.12**	**.47, 3.78**
[HA – WA] * Temp	.26	84	.80	.12	-.80, 1.04
Temp AA	10.27	26	**< .001**	8.15	6.60, 9.71
Temp HA	10.58	28	**< .001**	6.14	4.99, 7.30
Temp WA	12.39	28	**< .001**	5.90	4.96, 6.83
Post-trial pain intensity					
Temperature	**10.16**	**84**	**< .001**	**6.29**	**5.09, 7.49**
AA - (HA + WA)	1.72	84	.09	5.25	-.61, 11.10
HA - WA	-.42	84	.68	-.71	-3.99, 2.57
[AA - (HA + WA)] * Temp	**1.53**	**84**	**.13**	**2.06**	**-.56, 4.67**
[HA – WA] * Temp	.90	84	.37	.67	-.77, 2.10
Post-trial pain unpleasantness					
Temperature	**9.37**	**84**	**< .001**	**5.80**	**4.60, 7.01**
AA - (HA + WA)	**2.81**	**84**	**.01**	**9.04**	**2.81, 15.27**
HA - WA	-.98	84	.33	-1.77	-5.27, 1.72
[AA - (HA + WA)] * Temp	1.75	84	.08	2.36	-.26, 5.00
[HA – WA] * Temp	-.04	84	.97	-.03	-1.47, 1.41

Note: Statistics are from linear mixed effects models in R with single heat trial pain rating values as the dependent variable (only ¼ of heat trials per person (n = 9) had post-trial pain ratings). Participant gender, ethnicity contrasts, temperature, and the interaction of each ethnicity contrast with temperature were fixed factors and subject with a random slope for temperature were random factors. Temperature = linear temperature contrast (L(-1), M (0), H (1)); AA = African American, HA = Hispanic American, WA = non-Hispanic White American. Temp AA, Temp HA, and Temp HA refer to temperature effects from parallel models in each ethnic group separately. Bold: $p \leq .05$.

Supplementary Table 2

Self-report measures of sociocultural variables hypothesized to influence pain report by ethnic group

	African American		White American		Hispanic American		t-test: AA > (HA + WA)					
Measure	N	M(SD)	N	M(SD)	N	M(SD)	*t*	*df*	*p*	p_{corr}	*b*	CI
Pain precursors: Stressful experiences												
SES	27	40.36 (7.01)	30	44.1 (9.26)	29	38.21 (11.23)	-.37	83	.72	1	-0.8	-5.13, 3.54
Discrimination response	**24**	**4.53 (1.5)**	**28**	**3.29 (1.7)**	**29**	**2.86 (1.75)**	**3.6**	**78**	**<.001**	**.01**	**1.45**	**.65, 2.26**
Discrimination frequency	**25**	**16.4 (5.89)**	**29**	**7.24 (6.32)**	**29**	**8.08 (7.27)**	**5.58**	**80**	**<.001**	**<.001**	**8.74**	**5.62, 11.86**
Traumatic life events	28	5.68 (5.91)	30	6.37 (4.28)	29	5.76 (3.83)	-.35	84	.73	1	-.38	-2.55, 1.78
History of pain incidents	28	0.29 (.53)	30	0.93 (1.20)	30	0.97 (1.40)	-2.59	85	.01	.21	-.66	-1.17, -.15
History of pain severity	28	9.5 (17.81)	30	22.26 (23.95)	30	16.69 (21.23)	-2.05	85	.04	.82	-9.98	-19.63, -.32
Pain precursors: Mood												
General positive mood	28	39.84 (7.34)	30	37.07 (6.8)	30	35.99 (7.37)	2.02	85	.05	.89	3.31	.05, 6.58
Positive mood day of scan	28	34.75 (6.66)	30	31.03 (6.6)	30	31.37 (7.73)	2.21	85	.03	.57	3.55	.35, 6.75
General negative mood	28	16.04 (5.85)	30	16.2 (4.29)	30	17.06 (7.21)	-.44	85	.66	1	-0.6	-3.28, 2.09
Negative mood day of scan	28	16.18 (4.85)	30	14.93 (2.84)	30	15.53 (2.94)	1.14	85	.26	1	0.95	-.71, 2.60
State anxiety day of scan	28	31 (8.43)	30	33.77 (8.72)	30	33.03 (8.18)	-1.24	85	.22	1	-2.40	-6.24, 1.44
Worry	25	37.52 (14.06)	29	41.34 (15.07)	28	46.07 (13.47)	-1.81	79	.07	1	-6.19	-12.98, .61
Pain precursors: Beliefs and expectations												
Fear of Pain	28	68.74 (23.08)	30	69.13 (19.45)	30	70.97 (15.83)	-.29	85	.77	1	-1.31	-10.22, 7.61
Pain beliefs physical	25	27.49 (6.03)	29	25.28 (6.89)	29	24.09 (7.86)	1.67	80	.10	1	2.8	-.54, 6.14
Pain beliefs psychological	25	18.04 (3.4)	29	17.83 (4.04)	29	16.93 (4.22)	0.7	80	.48	1	0.66	-1.21, 2.53
Pain responses												
Pain catastrophizing trait	26	8.35 (9.83)	30	10.73 (6.96)	29	14.17 (9.26)	-2.00	82	.05	.92	-4.11	-8.18, -.03
Physiological reactivity	27	66.97 (11.38)	30	64.76 (11.75)	30	65.2 (12.75)	.72	84	.48	1	1.99	-3.53, 7.52
Pain context and communication												
Trust in experimenter	**28**	**41.55 (5.4)**	**28**	**45.43 (4.37)**	**30**	**45.44 (4.73)**	**-3.49**	**83**	**<.001**	**.01**	**-3.89**	**-6.11, -1.67**
Similarity to experimenter	26	22.44 (4.96)	27	21.69 (5.12)	28	22.54 (4.25)	.28	78	.78	1	0.32	-1.94, 2.59

Note: Ethnicity differences in sociocultural self-report measures. Statistics are from linear models in R (command lm) with each self-report measure listed as the dependent variable and the two orthogonal ethnicity contrasts used in the pain rating analyses as the predictors. Only the AA - (HA + WA) contrast is

reported here. *P* values are corrected by multiplying by 19 statistical tests using Bonferroni correction (p_{corr} in table). AA = African American, HA = Hispanic American, WA = non-Hispanic White American. Bold: $p_{corr} \leq .05$.

Supplementary Table 3

Results of ethnicity-discrimination-pain mediation analyses

	a	b	c'	c	ab
	stim-discr.	discr.-pain	ethnicity-pain	ethnicity-pain	eth.-discr.-pain
			Y = Average pain (AUC)		
z	**2.92**	**2.00**	1.37	1.89	**2.12**
p	**.004**	**.05**	.17	.06	**.03**
b	**1.26**	**1.67**	5.00	7.18	**2.17**
CI	**.98, 1.54**	**1.07, 2.30**	2.69, 8.34	4.60, 10.79	**1.34, 3.42**
			Y = H vs. L pain (AUC)		
z	**3.46**	**2.35**	1.07	1.91	**2.55**
p	**< .001**	**.02**	.28	.06	**.01**
b	**1.42**	**.94**	1.77	3.10	**1.34**
CI	**1.16, 1.69**	**.61, 1.19**	.63, 2.92	1.89, 4.42	**.90, 1.89**

Note: Statistics are from two single-level mediation analyses between participant ethnicity (AA – [HA + WA]), response to discrimination scores from the William's Questionnaire, and pain rating either averaged across all three levels of painful stimulus intensity (Y = Average pain (AUC)) or the difference between high and low stimulus intensity (Y = H vs. L pain (AUC)). Participant gender, and the [HA – WA] contrast were controlled for as second level covariates. Bootstrapping was used for significance testing and two-tailed *p*-values were calculated from the bootstrap confidence interval. Path c = statistical relationship between X and Y. Path c' = statistical relationship between X and Y controlling for mediator. Bold: $p \leq .05$.

Supplementary Table 4

Regions showing stronger dose-response effects of painful heat in AA participants

Region	x	y	z	Volume (mm^3)	Maxstat
L parahippocampal gyrus	-14	-10	-26	248	5.81
R amygdala	12	-6	-18	1144	10.17
R frontal orbital cortex	16	10	-16	656	9.31
L subcallosal cortex	-6	24	-20	2072	11.94
R subcallosal cortex	2	18	-20	496	7.63
L frontal medial cortex	-4	38	-18	2776	14.04
L frontal orbital cortex	-14	4	-18	1456	14.60
R frontal medial cortex	6	40	-14	1616	12.01
L putamen	-20	14	-12	1296	9.20
L accumbens	-6	0	-8	912	10.09
R accumbens	10	4	-8	2136	15.98
R anterior cingulate gyrus	8	32	-6	240	6.37
R paracingulate gyrus	6	50	-2	1720	13.20
L paracingulate gyrus	-6	50	2	960	7.30
R caudate	22	14	12	872	7.83
R thalamus	18	-18	16	256	8.93
L frontal pole	-44	42	4	1848	11.8
L middle frontal gyrus	-34	20	42	792	8.49
R frontal pole	36	54	18	1672	11.28

Note: Significant positive clusters and subclusters from an interaction contrast from a second-level GLM analysis comparing AA with other participants [AA - (HA + WA)] on the high vs. low painful stimulus intensity contrast. Covariates were participant gender, fMRI sequence (multiband or standard), and the [HA - WA] contrast. Clusters are labeled using the highest probability region from the Harvard-Oxford probabilistic cortical atlas. Only the cluster/subcluster with the highest Maxstat from each region and side of the brain are included. Maxstat = log(1/p). Statistical threshold: FDR corrected $q < .05$ ($p < .000047$). AA = African American, HA = Hispanic American, WA = Non-Hispanic White American.

Supplementary Table 5

Results of stimulus-brain-pain mediation analyses with whole-brain GLM ROIs

	a	b	c'	c	ab
	stim-brain	brain-pain	stim-pain	stim-pain	stim-brain-pain
			vmPFC		
z	**2.30**	1.17	**3.54**	**3.58**	.76
p	**0.02**	0.24	**< .001**	**< .001**	0.45
b	**0.04**	46.69	**546.38**	**555.57**	2.75
CI	**.01, .07**	-29.33, 121.29	**492.42, 599.49**	**504.64, 606.63**	-3.72, 10.03
			vmPFC x Race [AA – (HA + WA)]		
z	**2.98**	.03	.46	.36	-.99
p	**0.003**	0.98	0.65	0.72	0.32
b	**0.10**	2.16	28.77	20.53	-8.16
CI	**.03, .16**	-149.75, 146.60	-88.11, 155.57	-89.63, 143.81	-22.60, 7.35
			mFG		
z	**3.67**	.75	**3.58**	**3.59**	**2.87**
p	**< .001**	.45	**< .001**	**< .001**	**.004**
b	**.05**	28.54	**537.21**	**555.57**	**9.12**
CI	**.02, .08**	-46.38, 106.63	**485.51, 587.93**	**504.25, 606.85**	**2.62, 15.39**
			mFG x Race [AA – (HA + WA)]		
z	**2.59**	.24	.24	.36	.41
p	**.01**	.81	.81	.72	.68
b	**0.08**	21.80	12.33	20.53	3.39
CI	**.02, .15**	-142.26, 178.56	-100.05, 135.06	-89.80, 144.60	-12.96, 19.50
			NAc		
z	**3.36**	1.55	**3.64**	**3.63**	**2.20**
p	**< .001**	0.12	**< .001**	**< .001**	**0.03**
b	**.09**	64.61	**539.83**	**555.57**	**7.67**
CI	**.05, .11**	-15.98, 144.82	**48.99, 591.63**	**504.41, 607.06**	**.61, 14.29**
			NAc x Race [AA – (HA + WA)]		
z	1.35	-.97	.36	.35	.30
p	.18	.33	.72	.73	.76
b	.06	-78.68	21.24	20.53	2.51
CI	-.03, .14	-232.16, 70.44	-90.74, 139.14	-91.55, 144.10	-14.22, 20.24
			mPFC		
z	**3.49**	1.29	**3.62**	**3.59**	**3.31**
p	**< .001**	.20	**< .001**	**< .001**	**< .001**
b	**.08**	44.01	**537.09**	**555.57**	**10.47**
CI	**.04, .11**	-22.75, 112.90	**482.37, 590.85**	**505.15, 606.70**	**3.93, 17.55**
			mPFC x Race [AA – (HA + WA)]		
z	1.67	.85	-.05	.34	**2.00**
p	.10	.40	.96	.73	**.046**
b	.07	62.01	-4.16	20.53	**17.88**
CI	-.02, .15	-66.03, 207.42	-122.59, 122.71	-89.24, 145.77	**1.22, 43.33**

Note: Statistics are from four moderated, multi-level mediation analyses between painful stimulus intensity, regions showing steeper dose-response effects of painful heat in AA participants (mPFC, vmPFC, mFG, and NAc ROIs), and trial-by-trial pain rating, moderated by participant ethnicity [AA – (HA + WA)] and controlling for participant gender, fMRI pulse sequence, and the [HA – WA] contrast. Path c = statistical relationship between X and Y. Path c' = statistical relationship between X and Y controlling for mediator. Bold: $p \leq .05$.

Supplementary Table 6

Results of stimulus-vmPFC-NAc-pain mediation analyses

	b1	b2	b3	c'	c	ab
	stim-vmPFC	vmPFC-NAc	NAc-Pain	stim-pain	stim-pain	stim-brain-pain
			All Participants			
z	1.63	**3.76**	1.33	**4.27**	**3.73**	-1.66
p	.10	**< .001**	.18	**< .001**	**< .001**	.10
b	.02	**.46**	60.52	**549.38**	**549.89**	-.83
CI	.01, .03	**.44, .48**	29.47, 91.39	**520.42, 584.38**	**528.29, 570.48**	-1.17, -.50
			AA Participants Only			
z	3.11	**3.93**	.56	**4.75**	**3.95**	**-2.11**
p	.002	**< .001**	.58	**< .001**	**< .001**	**.035**
b	.09	**.37**	45.65	**651.04**	**565.31**	**-1.72**
CI	.07, .12	**.33, .42**	-9.21, 103.15	**590.35, 728.49**	**521.81, 611.08**	**-2.28, -1.23**
			Non-AA (HA + WA) Participants Only			
z	.19	**3.80**	1.23	**4.19**	**3.73**	-.51
p	.85	**< .001**	.22	**< .001**	**< .001**	.61
b	.003	**.49**	71.77	**499.05**	**544.34**	-.34
CI	-.007, .01	**.47, .52**	33.48, 108.72	**468.37, 534.73**	**520.98, 566.94**	-.77, .10

Note: Statistics are from three-path multi-level mediation analyses between painful stimulus intensity, the vmPFC-NAc pathway, and trial-by-trial pain rating. Path c = statistical relationship between X and Y. Path c' = statistical relationship between X and Y controlling for mediators. Bold: $p \leq .05$.

Supplementary Table 7

NPS regression analyses

Measure	*t*	*df*	*p*	*b*	CI
Ethnic group differences in NPS response and its relationship with painful stimulus intensity					
Temp	**8.11**	**84**	**< .001**	**4.01**	**3.05, 4.97**
AA - (HA + WA)[a]	-.92	83	.36	-2.93	-9.02, 3.17
HA - WA[a]	.70	83	.49	1.25	-2.17, 4.66
[AA - (HA + WA)] * Temp[a]	-.07	84	.94	-.08	-2.19, 2.03
[HA – WA] * Temp[a]	.09	84	.93	.05	-1.09, 1.20
Temp AA	**3.07**	**26**	**.005**	**4.01**	**1.41, 6.63**
Temp HA	**5.04**	**28**	**< .001**	**4.10**	**2.48, 5.73**
Temp WA	**7.11**	**28**	**< .001**	**3.99**	**2.88, 5.08**

Note: Statistics are from a linear mixed effects model in R with single heat trial (n = 36) NPS pattern expression values as the dependent variable, participant gender, fMRI sequence, the two ethnicity contrasts and their interaction with painful stimulus intensity as fixed factors, and subject as a random factor with a random slope for temperature. Contrasts marked with the same letter ([a]) are from the same statistical model. Temp AA, Temp HA, and Temp HA refer to temperature effects from parallel models in each ethnic group separately. Temp = linear temperature contrast (L (-1), M (0), H (1)); AA = African American, HA = Hispanic American, WA = Non-Hispanic White American. Bold: $p \leq .05$.

Supplementary Table 8

Results of stimulus-brain-pain mediation analyses with the NPS

	a	b	c'	c	ab
	stim-brain	brain-pain	stim-pain	stim-pain	stim-brain-pain
			NPS		
z	**3.85**	**3.59**	**3.60**	**3.60**	**3.38**
p	**< .001**	**< .001**	**< .001**	**< .001**	**< .001**
b	**3.69**	**6.55**	**510.81**	**555.57**	**20.03**
CI	**2.94, 4.49**	**3.04, 10.46**	**458.25, 562.65**	**504.15, 605.75**	**9.31, 31.42**
			NPS x Race (AA > HA + WA)		
z	-.67	-.94	.43	.34	-.14
p	.50	.35	.67	.74	.89
b	-.65	-3.70	24.77	20.53	-1.76
CI	-2.50, 1.35	-11.19, 2.80	-92.88, 146.15	-92.34, 143.02	-24.61, 23.04

Note: Statistics are from a moderated, multi-level mediation analyses between painful stimulus intensity, NPS pattern expression, and trial-by-trial pain rating, moderated by participant ethnicity (AA – [HA + WA]) and controlling for participant gender, fMRI pulse sequence, and the [HA – WA] contrast. Bold: $p \leq .05$.

Supplementary Table 9

Whole-brain ROI activity vs pain rating controlling for trial-by-trial head movement (geometric displacement)

Measure	*t*	*df*	*p*	*b*	CI
vmPFC relationships with pain rating and moderation by ethnicity					
Pain Rating[a]	-1.61	84	.11	-.002	-.004, .004
[AA - (HA + WA)] * Pain[a]	.56	84	.58	.001	-.003, .005
[HA – WA] * Pain[a]	.22	84	.82	.0003	-.003, .003
mPFC relationships with pain rating and moderation by ethnicity					
Pain Rating[b]	1.44	84	.15	.002	-.0006, .004
[AA - (HA + WA)] * Pain[b]	.51	84	.61	.001	-.004, .006
[HA – WA] * Pain[b]	.25	84	.80	.0004	-.003, .004
mFG relationships with pain rating and moderation by ethnicity					
Pain Rating[c]	**2.12**	**84**	**.04**	**.002**	**.0002, .004**
[AA - (HA + WA)] * Pain[c]	**2.24**	**84**	**.03**	**.004**	**.0004, .008**
[HA – WA] * Pain[c]	.62	84	.54	.0008	-.002, .003
NAc relationships with pain rating and moderation by ethnicity					
Pain Rating[d]	**3.43**	**84**	**< .001**	**.003**	**.001, .005**
[AA - (HA + WA)] * Pain[d]	-1.16	84	.25	-.002	-.006, .001
[HA – WA] * Pain[d]	.62	84	.54	.0008	-.002, .003

Note: Results mirror those reported in main text with the addition of a covariate for trial-by-trial head movement (geometric displacement in mm, see Methods for formula). Statistics are from linear mixed effects models in R with single heat trial (n = 36) average values from each of the 4 ROIs (separate models) identified in the whole-brain GLM analysis comparing the strength of the dose-response relationship with painful heat in AA vs HA and WA participants as the dependent variable, participant gender and fMRI sequence as fixed factors, and subject as a random factor. Contrasts marked with the same letter ([a-d]) are from the same statistical model. Pain = area under the curve of single-trial, within-trial continuous pain intensity rating / 100; AA = African American, HA = Hispanic American, WA = Non-Hispanic White American. Bold: $p \leq .05$.

Supplementary Table 10

Average activity in GLM ROIs vs candidate sociocultural mediators controlling for trial-by-trial head movement (geometric displacement)

Measure	*t*	*df*	*p*	p_{corr}	*b*	CI
Candidate mediator relationships with average NAc activity						
Discrimination Frequency[a]	3.09	74	.003	.09	.02	.008, .04
[AA - (HA + WA)] * Disc. Fr.[a]	2.04	74	.04	1	.04	.0008, .07
[HA – WA] * Disc. Fr.[a]	.31	74	.76	1	.003	-.01, .02
AA Disc. Fr.	**2.67**	**20**	**.01**		**.05**	**.01, .09**
HA Disc. Fr.	1.59	24	.12		.01	-.004, .03
WA Disc. Fr.	.73	24	.47		.006	-.01, .02
Experimenter Trust[b]	1.02	77	.31	1	.01	-.01, .03
[AA - (HA + WA)] * Trust[b]	**-3.50**	**77**	**< .001**	**.02**	**-.08**	**-.12, -.03**
[HA – WA] * Trust[b]	.17	77	.86	1	.002	-.02, .03
AA Trust	**-1.88**	**23**	**.07**		**-.04**	**-.09, .005**
HA Trust	**2.11**	**25**	**.04**		**.03**	**.0006, .05**
WA Trust	.29	23	.77		.004	-.02, .03
Candidate mediator relationships with average mPFC activity						
Experimenter Trust[c]	.29	77	.78	1	.004	-.03, .03
[AA - (HA + WA)] * Trust[c]	**-3.34**	**77**	**.001**	**.04**	**-.10**	**-.16, -.04**
[HA – WA] * Trust[c]	.25	77	.81	1	.005	-.03, .04
Trust AA	**-2.42**	**23**	**.02**		**-.07**	**-.13, -.01**
Trust HA	.94	25	.36		.02	-.02, .06
Trust WA	-.78	23	.44		-.02	-.07, .03

Note: Results mirror those reported in main text with the addition of a covariate for average head movement (geometric displacement in mm, see Online Methods for formula). Head movement covariate was averaged across all three temperatures to match the outcome variable. Only models with main effects or interactions with candidate mediators surviving correction for multiple comparisons (Bonferroni, $p < .05$) are reported in table. Statistics are from linear models in R with average values from the brain regions showing a steeper dose-response relationship with painful stimulus intensity from whole-brain GLM analysis as the dependent variable. Separate models were run with activity within each ROI averaged across all three temperatures and average activity from the high minus the low temperature. Participant gender, fMRI sequence, each ethnicity contrast, the candidate sociocultural mediator (discrimination frequency, discrimination response, or experimenter trust demeaned within ethnic group), and the interaction between the sociocultural mediator and each ethnicity contrast were predictors. Contrasts marked with the same letter ([a-c]) are from the same statistical model. Rows ending in ethnicity abbreviations, e.g., "Trust AA" are parallel models in each ethnic group separately. Disc Fr. = Discrimination frequency, Trust = Experimenter Trust; AA = African American, HA = Hispanic American, WA = Non-Hispanic White American. *P* values for tests across groups are corrected by multiplying by 30 statistical tests using Bonferroni correction ($p_{corr)}$. Bold: $p_{corr} \leq .05$.

Supplementary Table 11

NPS regression analyses controlling for trial-by-trial head movement (geometric displacement)

Measure	*t*	*df*	*p*	*b*	CI
Ethnic group differences in NPS response and its relationship with painful stimulus intensity					
Temp	**8.44**	**84**	**< .001**	**4.14**	**3.18, 5.09**
AA - (HA + WA)[a]	-.78	82	.44	-2.51	-8.70, 3.69
HA - WA[a]	.71	82	.48	1.28	-2.19, 4.74
[AA - (HA + WA)] * Temp[a]	.06	84	.95	.07	-2.02, 2.15
[HA – WA] * Temp[a]	.15	84	.88	.08	-1.04, 1.21
NPS relationships with pain rating and moderation by ethnicity					
Pain Rating[b]	**6.27**	**84**	**< .0001**	**.15**	**.11, .20**
[AA - (HA + WA)] * Pain[b]	**-2.90**	**84**	**.005**	**-.13**	**-.22, -.04**
[HA – WA] * Pain[b]	-1.16	84	.25	-.04	-.1, .03

Note: Results mirror those reported in main text with the addition of a covariate for trial-by-trial head movement (geometric displacement in mm, see Methods for formula). Statistics are from linear mixed effects models in R with single heat trial (*n* = 36) NPS pattern expression values as the dependent variable, participant gender, fMRI sequence, geometric displacement, the two ethnicity contrasts and their interaction with stimulus temperature and pain rating (model [b]) as fixed factors, and subject as a random factor. Contrasts marked with the same letter ([a-b]) are from the same statistical model. Model [a] also had a random slope for temperature by subject. Temp = linear temperature contrast (L (-1), M (0), H (1)); Pain = area under the curve of single-trial, within-trial continuous pain intensity rating / 100; AA = African American, HA = Hispanic American, WA = Non-Hispanic White American. Bold: $p \leq .05$.