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## Alternative historic slave population analyses for Project Implicit dataset

**Historic slavery population hypothesis additional analyses**

Within this supplemental, we include the original variables of Payne and colleagues (2019) paper that examined implicit bias as a consequence of historic slave population. Here, we include two separate analyses for white Project Implicit participants: slave percentage (of state) and slave population (of state). As discussed in the main paper, we did not include these variables in our original models as only 42 states (8 territories and 34 states) existed in 1860 and thus this variable would not effectively answer our research question of examining the most important predictors of racial bias across the entirety of the US. However, some critics may argue that we have diluted the original hypothesised variable by replacing it with confederate state in our main paper. Thus, we have included two versions of it in this paper. The rationale for only including it for white participants is that the original paper theoretically and methodologically rationalised that this variable was solely important for white participants implicit bias against black citizens. The slave populations and slave percentage variables were from Acharya and colleagues (2016) dataverse repository. Overall, these supplementals confirm the main papers findings; the historic slave population hypothesis has no support throughout the supplementals and main paper regardless of variable.

Table 1

*Linear mixed-effect results of White participant d score model with slave percentage replacing confederate state*

Term	$\hat{\beta}$	95% CI	$t$	$df$	$p$
Intercept	0.12	[0.04, 0.20]	3.00	30.47	.005
Disease rates	0.04	[0.01, 0.07]	2.74	30.77	.010
Race exposure	0.00	[-0.01, 0.02]	0.24	30.53	.812
Gini coefficient	0.01	[0.00, 0.03]	1.56	30.13	.130
Median income	0.02	[0.00, 0.04]	2.04	30.91	.050
Slave percentage	-0.01	[-0.03, 0.01]	-0.87	30.16	.393
Pop dens	0.02	[0.00, 0.03]	2.57	30.80	.015
Nonwhite exposure	0.05	[0.02, 0.09]	3.01	30.81	.005
Percentage citizens	0.02	[-0.02, 0.06]	1.03	30.26	.309
Unemployment	0.00	[-0.02, 0.01]	-0.41	30.27	.684
Sex	-0.08	[-0.08, -0.07]	-59.23	2723255.05	< .001
Age	0.03	[0.03, 0.03]	45.83	2722078.26	< .001
Education	-0.03	[-0.03, -0.03]	-40.16	2723229.99	< .001
Political orientation	-0.14	[-0.14, -0.14]	-205.92	2722091.48	< .001
Religion	0.01	[0.00, 0.01]	8.49	2709117.75	< .001

Table 2

*Linear mixed-effects results of White participant attitude model with slave percentage replacing confederate state*

Term	$\hat{\beta}$	95% CI	$t$	$df$	$p$
Intercept	4.45	[4.37, 4.54]	100.71	30.05	< .001
Disease rates	0.03	[0.00, 0.06]	1.97	30.22	.058
Race exposure	-0.02	[-0.03, 0.00]	-1.81	30.08	.080
Gini coefficient	0.00	[-0.02, 0.02]	-0.08	29.85	.936
Median income	0.03	[0.01, 0.05]	3.00	30.29	.005
Slave percentage	0.00	[-0.02, 0.03]	0.29	29.87	.775
Pop dens	-0.01	[-0.03, 0.01]	-1.20	30.23	.240
Nonwhite exposure	0.02	[-0.02, 0.06]	1.03	30.24	.310
Percentage citizens	-0.01	[-0.05, 0.03]	-0.39	29.92	.699
Unemployment	0.00	[-0.01, 0.02]	0.29	29.93	.774
Sex	-0.08	[-0.09, -0.08]	-79.09	2530316.17	< .001
Age	0.01	[0.01, 0.02]	23.99	2530083.34	< .001
Education	0.03	[0.03, 0.03]	48.75	2530319.00	< .001
Political orientation	-0.16	[-0.16, -0.16]	-280.06	2530071.28	< .001
Religion	0.00	[0.00, 0.00]	3.55	2526666.10	< .001

Table 3

*Linear mixed-effect results of White participant Bayesian racism model  
with slave percentage replacing confederate state*

Term	$\hat{\beta}$	95% CI	$t$	$df$	$p$
Intercept	0.16	[0.08, 0.24]	3.96	30.13	< .001
Disease rates	0.04	[0.01, 0.07]	2.66	30.90	.012
Race exposure	0.00	[-0.02, 0.02]	-0.14	30.55	.889
Gini coefficient	0.00	[-0.02, 0.02]	-0.11	27.80	.917
Median income	-0.01	[-0.03, 0.01]	-0.77	34.71	.446
Slave percentage	0.00	[-0.02, 0.02]	0.03	27.71	.978
Pop dens	0.01	[0.00, 0.03]	1.42	32.49	.165
Nonwhite exposure	0.02	[-0.01, 0.06]	1.22	33.32	.232
Percentage citizens	0.02	[-0.02, 0.06]	0.92	28.84	.364
Unemployment	0.00	[-0.02, 0.01]	-0.64	28.62	.530
Sex	-0.11	[-0.12, -0.10]	-30.64	400454.60	< .001
Age	-0.02	[-0.02, -0.01]	-8.21	399039.89	< .001
Education	-0.06	[-0.07, -0.06]	-27.82	400114.10	< .001
Political orientation	-0.19	[-0.20, -0.19]	-96.62	398860.70	< .001
Religion	-0.02	[-0.03, -0.02]	-10.61	383239.44	< .001

Table 4

*Linear mixed-effect results of White participant thermometer model with slave percentage replacing confederate state*

Term	$\hat{\beta}$	95% CI	$t$	$df$	$p$
Intercept	0.28	[0.18, 0.38]	5.60	30.11	< .001
Disease rates	0.03	[-0.01, 0.06]	1.39	30.26	.176
Race exposure	-0.02	[-0.04, 0.00]	-1.85	30.13	.074
Gini coefficient	0.00	[-0.02, 0.02]	0.00	29.95	.998
Median income	0.03	[0.01, 0.05]	2.52	30.31	.017
Slave percentage	-0.01	[-0.03, 0.02]	-0.46	29.97	.646
Pop dens	0.00	[-0.02, 0.02]	-0.32	30.26	.752
Nonwhite exposure	0.03	[-0.02, 0.07]	1.19	30.27	.245
Percentage citizens	-0.02	[-0.06, 0.03]	-0.68	30.02	.501
Unemployment	0.00	[-0.02, 0.02]	0.04	30.01	.969
Sex	-0.08	[-0.08, -0.08]	-73.04	2668716.74	< .001
Age	0.00	[0.00, 0.00]	-4.48	2668555.70	< .001
Education	0.01	[0.01, 0.01]	10.19	2668721.53	< .001
Political orientation	-0.19	[-0.19, -0.19]	-325.53	2668558.87	< .001
Religion	-0.02	[-0.02, -0.02]	-29.86	2666022.83	< .001

Table 5

*Linear mixed-effect results of White participant d score model with slave population replacing confederate state*

Term	$\hat{\beta}$	95% CI	$t$	$df$	$p$
Intercept	0.11	[0.04, 0.19]	2.88	30.58	.007
Disease rates	0.03	[0.01, 0.06]	2.67	30.89	.012
Race exposure	0.00	[-0.02, 0.02]	0.05	30.64	.960
Gini coefficient	0.01	[-0.01, 0.03]	1.39	30.24	.175
Median income	0.02	[0.00, 0.04]	2.32	30.91	.027
Slave population	0.00	[-0.02, 0.01]	-0.47	30.22	.641
Pop dens	0.02	[0.00, 0.03]	2.45	30.74	.020
Nonwhite exposure	0.05	[0.02, 0.08]	3.09	30.94	.004
Percentage citizens	0.01	[-0.02, 0.04]	0.70	30.21	.489
Unemployment	0.00	[-0.02, 0.01]	-0.21	30.37	.835
Sex	-0.08	[-0.08, -0.07]	-59.23	2723255.43	< .001
Age	0.03	[0.03, 0.03]	45.83	2722187.15	< .001
Education	-0.03	[-0.03, -0.03]	-40.16	2723236.89	< .001
Political orientation	-0.14	[-0.14, -0.14]	-205.92	2722179.58	< .001
Religion	0.01	[0.00, 0.01]	8.49	2711698.82	< .001

Table 6

*Linear mixed-effects results of White participant attitude model with slave population replacing confederate state*

Term	$\hat{\beta}$	95% CI	$t$	$df$	$p$
Intercept	4.45	[4.37, 4.54]	104.95	30.14	< .001
Disease rates	0.03	[0.00, 0.06]	2.19	30.33	.037
Race exposure	-0.02	[-0.04, 0.00]	-1.89	30.18	.068
Gini coefficient	0.00	[-0.02, 0.02]	-0.19	29.95	.849
Median income	0.03	[0.01, 0.05]	2.96	30.33	.006
Slave population	0.00	[-0.02, 0.02]	0.47	29.94	.641
Pop dens	-0.01	[-0.03, 0.01]	-1.12	30.24	.270
Nonwhite exposure	0.02	[-0.01, 0.05]	1.28	30.36	.210
Percentage citizens	-0.01	[-0.04, 0.03]	-0.31	29.94	.761
Unemployment	0.00	[-0.01, 0.02]	0.31	30.03	.758
Sex	-0.08	[-0.09, -0.08]	-79.09	2530316.15	< .001
Age	0.01	[0.01, 0.02]	24.00	2530097.45	< .001
Education	0.03	[0.03, 0.03]	48.75	2530318.96	< .001
Political orientation	-0.16	[-0.16, -0.16]	-280.06	2530079.16	< .001
Religion	0.00	[0.00, 0.00]	3.55	2527242.97	< .001



Table 7

*Linear mixed-effect results of White participant Bayesian racism model  
with slave population replacing confederate state*

Term	$\hat{\beta}$	95% CI	$t$	$df$	$p$
Intercept	0.16	[0.08, 0.23]	3.99	30.88	< .001
Disease rates	0.04	[0.01, 0.06]	2.64	32.01	.013
Race exposure	0.00	[-0.02, 0.01]	-0.46	31.40	.650
Gini coefficient	0.00	[-0.02, 0.02]	-0.35	28.28	.727
Median income	-0.01	[-0.03, 0.01]	-0.85	34.77	.400
Slave population	0.01	[-0.01, 0.02]	0.59	28.39	.560
Pop dens	0.01	[0.00, 0.03]	1.49	32.08	.145
Nonwhite exposure	0.02	[-0.01, 0.05]	1.29	34.39	.207
Percentage citizens	0.02	[-0.01, 0.05]	1.09	28.52	.285
Unemployment	0.00	[-0.02, 0.01]	-0.52	29.26	.607
Sex	-0.11	[-0.12, -0.10]	-30.64	400445.52	< .001
Age	-0.02	[-0.02, -0.01]	-8.21	398871.29	< .001
Education	-0.06	[-0.07, -0.06]	-27.82	400148.12	< .001
Political orientation	-0.19	[-0.20, -0.19]	-96.61	399010.14	< .001
Religion	-0.02	[-0.03, -0.02]	-10.62	385052.55	< .001

Table 8

*Linear mixed-effect results of White participant thermometer model with slave population replacing confederate state*

Term	$\hat{\beta}$	95% CI	$t$	$df$	$p$
Intercept	0.27	[0.18, 0.37]	5.62	30.19	< .001
Disease rates	0.02	[-0.01, 0.05]	1.13	30.34	.266
Race exposure	-0.02	[-0.04, 0.00]	-2.07	30.21	.047
Gini coefficient	0.00	[-0.03, 0.02]	-0.18	30.03	.859
Median income	0.03	[0.01, 0.05]	2.67	30.33	.012
Slave population	0.00	[-0.02, 0.02]	0.03	30.02	.974
Pop dens	0.00	[-0.02, 0.02]	-0.32	30.27	.748
Nonwhite exposure	0.02	[-0.02, 0.06]	1.05	30.35	.301
Percentage citizens	-0.02	[-0.06, 0.02]	-1.07	30.02	.291
Unemployment	0.00	[-0.02, 0.02]	0.23	30.10	.819
Sex	-0.08	[-0.08, -0.08]	-73.04	2668716.56	< .001
Age	0.00	[0.00, 0.00]	-4.48	2668571.58	< .001
Education	0.01	[0.01, 0.01]	10.19	2668721.08	< .001
Political orientation	-0.19	[-0.19, -0.19]	-325.53	2668569.85	< .001
Religion	-0.02	[-0.02, -0.02]	-29.86	2666504.77	< .001

## References

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